



## **TECHNICAL ADVISORY COMMITTEE (TAC) REGULAR MEETING AGENDA**

**Thursday, June 18, 2020 - 9:00 a.m.**

**Location:** Corpus Christi Regional Transportation Authority (CCRTA) Building  
602 N. Staples Street, Suite 210, Corpus Christi, TX 78401

**1. Call to Order, Roll Call, and Quorum Determination quorum of 4!**

**2. Public Comments for Items not on the Agenda: NO IN-PERSON PUBLIC COMMENTS DUE TO COVID-19**

Opportunity for public comments for any items on OR not on the Agenda and within the TAC's jurisdiction (except in matters related to pending litigation). Proceedings are recorded.

Public Comments may be provided in writing, limited to 1,000 characters, by emailing [ccmpo@cctxmpo.us](mailto:ccmpo@cctxmpo.us) or by regular mail or hand-delivery to the Corpus Christi MPO offices at 602 N. Staples St., Suite 300, Corpus Christi, TX 78401, and MUST be submitted no later than 5 minutes after the start of a meeting in order to be provided for consideration and review at the meeting. All Public Comments submitted shall be placed into the record of the meeting.

*THESE WRITTEN COMMENTS SHALL SERVE AS THE REQUIRED PUBLIC TESTIMONY PURSUANT TO TEXAS GOVERNMENT CODE 551.007 AND SHALL CONSTITUTE PUBLIC TESTIMONY FOR ANY OTHER PURPOSES UNDER LAW.*

**3. Approval of the May 21, 2020 TAC Regular Meeting Minutes ☒ approved**

**4. DISCUSSION AND POSSIBLE ACTION ITEM**

**A. DRAFT FY 2021-2024 Transportation Improvement Program (TIP) ☒**

Action: Review, Discuss and Recommend to the Transportation Policy Committee

**B. TxDOT 2021 UTP Category 2 and Category 4U Funding Levels and Candidate Project Selection ☒**

Action: Review, Discuss and Recommend to the Transportation Policy Committee

**5. INFORMATION ONLY ITEMS**

**A. DRAFT FY 2021-2022 Unified Planning Work Program (UPWP) ☒**

**6. Regional Freight Topic**

**A. TxDOT 2020 Statewide Truck Parking Study Final Report: <https://www.dot.state.tx.us/move-texas-freight/studies/default.htm> [updated]**

**B. Bureau of Transportation Statistics (BTS) Freight Report: [Reduction in April 2020 Freight Movement Largest since 2009 Recession](#) (downloadable Excel tables available)**

**7. Member Agency Statements for Items of Community Interest: Upcoming events, holidays, or acknowledgements.**

**8. Upcoming Meetings:**

<b>A. FY 2021- FY 2024 TIP One-on-One Local Government Meetings:</b>	<b>Various Dates</b>
<b>B. Transportation Policy Committee:</b>	<b>Regular Meeting:</b>
	<b>July 2, 2020</b>
<b>C. Technical Advisory Committee:</b>	<b>Regular Meeting:</b>
	<b>July 16, 2020</b>

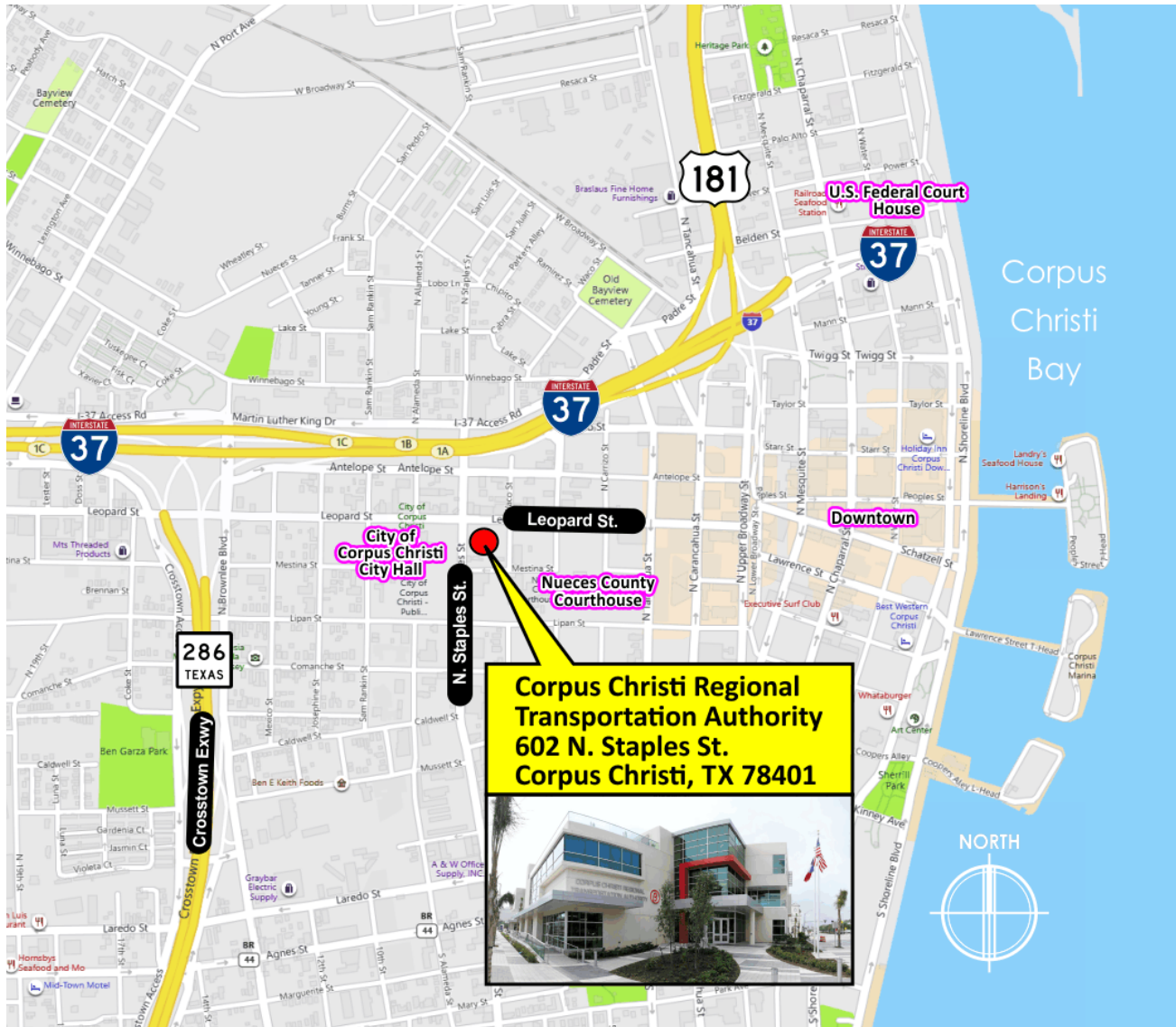
**9. Adjourn**

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☒ - Indicates attachment(s) for the agenda item.

## PUBLIC MEETING NOTIFICATION

All MPO Committee meetings are public meetings and open to the public. Any persons with disabilities who plan to attend this meeting and who may need auxiliary aids or services are requested to contact the MPO at (361) 884-0687 at least 48 hours in advance so that appropriate arrangements can be made.



**MEETING LOCATION MAP**

**CORPUS CHRISTI METROPOLITAN PLANNING ORGANIZATION (MPO)  
TECHNICAL ADVISORY COMMITTEE (TAC) MEETING MINUTES  
Thursday, May 21, 2020**

**1. Call to Order, Roll Call, and Quorum determination**

Mr. Brian DeLatte called the meeting to order at 9:02 A.M.

TAC Members Present:

Brian DeLatte, P.E. City of Portland	Howard Gillespie, San Patricio County
Juan Pimentel, P.E., Nueces County	Paula Sales-Evans, P.E., TxDOT – CRP (via Phone)
Gordon Robinson, PMP, Corpus Christi Regional Transportation Authority	
Jeff Pollack, AICP, Port of Corpus Christi Authority	

MPO Staff Present: Rob MacDonald, P.E.; Craig Casper, AICP; Daniel Carrizales, Victor Mendieta; and Yoshiko Boulan

**2. Public Comments for Items not on the agenda**

Public Comments opportunities were given via e-mail, phone, and mail until May 21, 2020 9:05 A.M. due to COVID-19; none were offered.

**3. Approval of February 20, 2020 TAC Meeting Minutes.**

Mr. Gillespie made a motion to approve the February 20, 2020 TAC Meeting Minutes. Mr. Pollack seconded; motion passed unanimously.

**4. DISCUSSION AND POSSIBLE ACTION**

**A. DRAFT FY 2021-2024 Transportation Improvement Program (TIP)**

The Corpus Christi MPO adopted the 2020-2045 Metropolitan Transportation Plan (MTP) that is a 25-year long-range transportation plan in February. Now the Corpus Christi MPO is working on another federally required document, a 4-year short-range transportation plan. A TIP must include a fiscally constrained project list. The Corpus Christi MPO staff projected Transit projects in FY 2024 based on the Corpus Christi Regional Transportation Authority (CCRTA)'s FY 2021-2024 Financial Plan and FY 2021-2023 TIP projects; once the CCRTA officially adopts FY 2024 projects, any changes will be made through TIP amendment process. The same is expected for the other partner agencies; once their official budget and capital plans are adopted, the FY 2021-2024 TIP will be amended accordingly.

The Corpus Christi MPO staff recommended that the TAC recommend the Transportation Policy Committee (TPC) to approve release of the DRAFT FY 2021-2024 TIP to the public. The public comment opportunities will be given if the TPC approves to release the DRAFT FY 2021-2024 TIP to the public on June 4, 2020 through July 9, 2020. The document will be posted on the Corpus Christi MPO website. There will be three public meetings with in-person public comment opportunities: June 10, 2020 Public Meeting/Open-House, June 18, 2020 TAC meeting, and the July 9, 2020 TPC meeting.

TAC members were requested to review the DRAFT FY 2021-2024 TIP for their comments before this meeting. Mr. MacDonald shared the following four comments from the Texas Department of Transportation (TxDOT) Corpus Christi District:

- Harbor Bridge Park Improvement Project (MPO-009) in Table 12 2020-2045 MTP Fiscally Constrained Project List should be included in the FY 2021-2024 TIP
- Harbor Bridge Project (TxDOT-001) was already financially obligated and should be removed from FY 2021-2024 TIP
- IH-37 (TxDOT-002), SH 35(TxDOT-003), US 77 (TxDOT-004, 005, 006) are outside of the Corpus Christi MPO boundary and these projects will be included in the State Transportation Improvement Program (STIP), thus these projects should be removed from the list, and
- the total project cost of US 181 Harbor Bridge Voluntary Relocation Program (MPO-008), \$71 million, needs to be verified.

Mr. MacDonald provided the Corpus Christi MPO staff's recommendations for these comments:

- Harbor Bridge Park Improvement Project (MPO-009) can be included in the FY 2021-2024 TIP with a funding adjustment of Category 7's \$1.7 million and \$3.5 million local fund from the City of Corpus Christi
- Harbor Bridge Project (TxDOT-001) is a project currently using or being reimbursed federal funds, thus it should be included in the FY 2021-2024 TIP
- IH-37 (TxDOT-002), SH 35(TxDOT-003), US 77 (TxDOT-004, 005, 006) will be removed, and
- the actual Category 7 money needed for US 181 Harbor Bridge Voluntary Relocation Program (MPO-008) is expected to be verified by the Port of Corpus Christi soon. The Corpus Christi MPO suggests amending the FY 2021-2024 TIP with the verified number as soon as it becomes available. However, the TIP table currently shows that the Category 7 funding of \$36 Million is reduced to \$31 million due to the re-allocation of \$5 million to the local/other funds category.

Ms. Sales-Evans suggested to create a separate table to show the Harbor Bridge (TxDOT-001) in the FY 2021-2024 TIP to avoid any confusion and Mr. MacDonald agreed to separate this project from the list. She agreed that the US 181 Harbor Bridge Voluntary Relocation Program (MPO-008) can be amended later with the numbers provided by the Port of Corpus Christi.

Mr. Pollack inquired about the cashflow of \$31 million of Category 7 funds and whether all Category 7 funds must be used for the Harbor Bridge Voluntary Relocation Program or an installment plan is possible. If all Category 7 funds are spent on the US 181 Harbor Bridge Voluntary Relocation Program, it is possible that the Corpus Christi MPO is unable to move any Category 7 projects forward. Ms. Sales-Evans said that it is possible that all Category 7 funds are allocated to the US 181 Harbor Bridge Voluntary Relocation Program (MPO-008) except for these Harbor Bridge mitigation programs that are linked to the Harbor Bridge project, or the Corpus Christi MPO can request that TxDOT Austin develop a payment plan within a TIP or Unified Transportation Program (UTP) funding window once the final relocation program number is verified.

Ms. Sales-Evans provided the following additional comments on the DRAFT FY 2021-2024 TIP:

- suggested changes should be made in all project list tables included in the DRAFT FY 2021-2024 TIP to be consistent
- the two projects selected for the congestion management corridor, Park Road 22 (MPO-016) and SH 35 (MPO-018), require determining the scopes of what kind of improvements to make. It was suggested to add a language that clarifies some of phases of these projects that will occur during the FY 2021-2024 TIP
- Table 1 Category Funding for the Corpus Christi MPO FY 2021-2024 TIP shows available Category 12 funding for FY 2021-2024 as \$82.9 million; however, Category 12 funds are project specific and only \$33 million is given to the TxDOT Corpus Christi District in the 2020 UTP. The \$82.9 million needs to be verified.

Mr. MacDonald agreed that (1) all changes for consistency will be made in the tables, (2) "phases of project" will be added in the description and the wording changed from "selected projects" to "identified projects," and (3) the amount of Category 12 fund should be changed from \$82.9 million to \$33 million. These changes will be shared with TAC members before the DRAFT FY 2021-2024 TIP is submitted to the TPC for their June 4, 2020 meeting.

Mr. Pollack inquired whether Exhibits 2-6 legend classifications can be reassessed for better understanding. Mr. DeLatte questioned if the Exhibit 2 and 6 color coding are accurate, and also stated that the colors of the Exhibit 4 legend are not matching.

Mr. MacDonald agreed that all exhibits will be reviewed and corrected as necessary and the legends will be revisited and discussed by the Corpus Christi MPO staff for a better description.

Mr. Pollack made a motion to recommend the TPC release the DRAFT FY 2021-2024 TIP to the public after all suggested changes and corrections are made. Mr. Gillespie seconded; motion passed unanimously.



## **5. INFORMATION ONLY ITEMS**

### **A. TxDOT 2021 UTP Category 2 and Category 4U Funding Levels and Candidate Project Identification**

Mr. Casper briefed the TAC members on the additional Category 2 (Urban Corridor) and Category 4U (Urban Connectivity) funding availability and the need of identify the projects for these funds. These funds can be used for the National Highway System and/or the State Highway System. The expected amounts are \$38 million for Category 2 and \$15 million for Category 4U. The Corpus Christi MPO staff is in discussions with the TxDOT Corpus Christi District about the candidate projects that must be in the 2020-2045 MTP. The FM 624/Northwest Boulevard project (MPO-033) is identified as a potential project.

Ms. Sales-Evans informed the TAC that this available funding is from the FY 2020 UTP due to the TxDOT Corpus Christi District's purposeful effort to make funding fully available in these categories or to allocate some of the funds to the other Corpus Christi MPO categories. Based on the discussion with TxDOT Divisions in Austin, the amount of 4U may be reduced from \$14.9 million to \$12.5 million. Further discussions with Austin during the development of 2021 UTP will give a better idea of the amount and project standing.

Mr. Casper stated that since the new Federal Transportation Bill is coming, the Corpus Christi MPO staff prefers having projects that complete the NEPA process and Preliminary Engineering and are shovel-ready when the funds becomes available.

## **6. Regional Freight Topic:**

### **A. Corpus Christi International Airport (CCIA) Freight Information**

The TAC serves as a Freight Advisory Committee and various freight topics are discussed every month. Mr. MacDonald provided the 2045 Corpus Christi freight data forecast information for the TAC members. Also, the information of Talking Freight Seminar: SHRP2 CP20 Project Spotlight – The Development and Implementation of a Ten County Freight Model held on May 20, 2020 was previously provided.

## **7. Member Agency Statements for Items of Interest: Projects, Events, and Activities**

No statement was offered.

## **8. Upcoming Meetings:**

<b>A. FY 2021-2024 TIP One-on-One Local Government Meetings:</b>	<b>Various Dates</b>
<b>B. Transportation Policy Committee:</b>	<b>Regular Meeting:</b>
<b>C. FY 2021-2024 TIP</b>	<b>Public Meeting/Open-House</b>
<b>D. Technical Advisory Committee:</b>	<b>Regular Meeting:</b>
	<b>June 4, 2020</b>
	<b>June 9-10, 2020 (TBD)</b>
	<b>June 18, 2020</b>

## **9. Adjourn**

The meeting adjourned at 9:48 A.M.



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**Date:** June 12, 2020  
**To:** Technical Advisory Committee (TAC)  
**From:** Robert MacDonald, Transportation Planning Director  
**Subject:** Item 4A: DRAFT FY 2021-2024 Transportation Improvement Program (TIP)  
**Action:** Review, Discuss and Recommend Approval to the TPC

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### **Summary**

Urbanized areas with populations of more than 50,000 are required by federal legislation to have a designated entity to help coordinate regional transportation projects; the Corpus Christi Metropolitan Planning Organization (MPO), which encompasses portions of Nueces and San Patricio counties, is that entity for the greater Corpus Christi area.

The Transportation Improvement Program (TIP) is prepared in compliance with the Statewide Planning Metropolitan Planning Rules jointly issued by the Federal Highway Administration (FHWA) (23 CFR Part 450) and the Federal Transit Administration (FTA) (49 CFR Part 613). This document is a four-year, fiscally constrained short-range transportation capital improvement plan. The FY 2021-2024 TIP planning process complies with a comprehensive, cooperative, and continuing (3-C) transportation planning framework for making transportation investment decisions. Ultimately, the MPO Transportation Policy Committee (TPC) and Governor will approve the plan for federal fiscal years 2021 to 2024 (October 2020 through September 2024).

The projects listed in the TIP are programmed in the most imminent portion of the Metropolitan Transportation Plan (MTP). The TIP is updated every two years cooperatively with local and state transportation entities within the MPO boundaries. To be eligible for any level of federal funding, a project must be in the MTP and the TIP. Once programmed into the TIP, these projects automatically become part of the Texas State Transportation Improvement Program (STIP).

Demonstrating financial constraint of the TIP first requires determining the amount of funds that can be reasonably expected to come to the Corpus Christi MPO, by type and by year, for each potential source. The funding allocations for each fiscal year were taken from the TxDOT apportionments outlined in the 2020 Unified Transportation Program (UTP). Programming these federal/state funds to projects is guided by the performance measures approved during the long-range planning (our 2020-2045 MTP) process. The FAST Act, which will expire before this TIP takes effect, included five years of funding authorizations (FY 2016-2020).

The financial plan of this FY 2021-2024 TIP was developed by the Corpus Christi MPO in cooperation with the Texas Department of Transportation (TxDOT), and the Corpus Christi Regional Transportation Authority (CCRTA). The CCRTA provided recent FTA apportionments and reasonably anticipated discretionary allocations. Local government entities provided preliminary draft budget estimates for FY 2021 and the MPO helped develop a reasonable forecast through year FY 2024. Each funding program is

financially balanced against available funds for FY 2021, FY 2022, FY 2023, and FY 2024; shown in Table 1 and 2, page 16 of the attached FY 2021-2024 TIP Document (see Attachment 1).

The Corpus Christi MPO staff has developed the DRAFT FY 2021-2024 TIP for review by the Technical Advisory Committee (TAC), Transportation Policy Committee (TPC) and our partner agencies initially prior to being released for public comment. The public was able to view the projects, funding and technical analyses of the 25-year 2020-2045 MTP from which the information in the 4-year FY 2021-2024 TIP was derived. After June 4, 2020, the public was able to review the entire document and provide comments in person at a public meeting held on June 10<sup>th</sup> as well as the future TAC and TPC meeting where the DRAFT FY 2021-2024 TIP was discussed. All comments received are provided in the TIP Appendices.

### **Recommendation**

MPO staff proposes that the TAC review the DRAFT FY 2021-2024 TIP and Appendices, TPC Comments from their June 4 meeting and any further public comments. The Corpus Christi staff recommends that the TAC recommend that the TPC approve the DRAFT FY 2021-2024 TIP.

Changes to the DRAFT FY 2021-2024 TIP from the TAC, TPC and the Public through June 11:

- Revised the Exhibits 2-6 that illustrate the TIP projects related to demographic information such as minority population, income, LEP, disability and CCRTA transit routes. We defined “low income” in the text on page 4
- Revised the text and table on pages 8-9 related to the identification of projects on the congestion management corridors as part of the Congestion Management Process (CMP)
- Revised Table 1 on page 16 to reflect a better estimate of total funding available for CAT. 7 (\$37,451,440) and CAT. 12 (\$33,000,000)
- Changed the title on Table 6, on page 24, to reflect a better description of the content of the table. “Adopted MPO Safety Targets” is more appropriate for the MPO document
- Table 13 was relabeled Table 13A and revised for project MPO-008 US 181 Harbor Bridge Voluntary Relocation Program to reflect a \$20 million amount for “Prior Funding” and \$31.0 million for CAT. 7. The total project cost remains at \$71.0 million to maintain fiscal constraint. Updated information will be provided as the program wraps up and final costs are known
- Removed project TxDOT-001 Harbor Bridge from the relabeled Table 13A and created a new Table 13B for this project and other state and local projects with prior funding commitments. These projects will be added a part of a future TIP Amendment
- Deleted projects TxDOT-003, 004, 005, 006 from the relabeled Table 13A as these projects are outside of the Corpus Christi MPO regional boundary
- Added project MPO-009 Harbor Bridge Park Improvements into the relabeled Table 13A for \$4.8 million with \$1.3 million from CAT 7 and \$3.5 million from local sources

### **Proposed Motion**

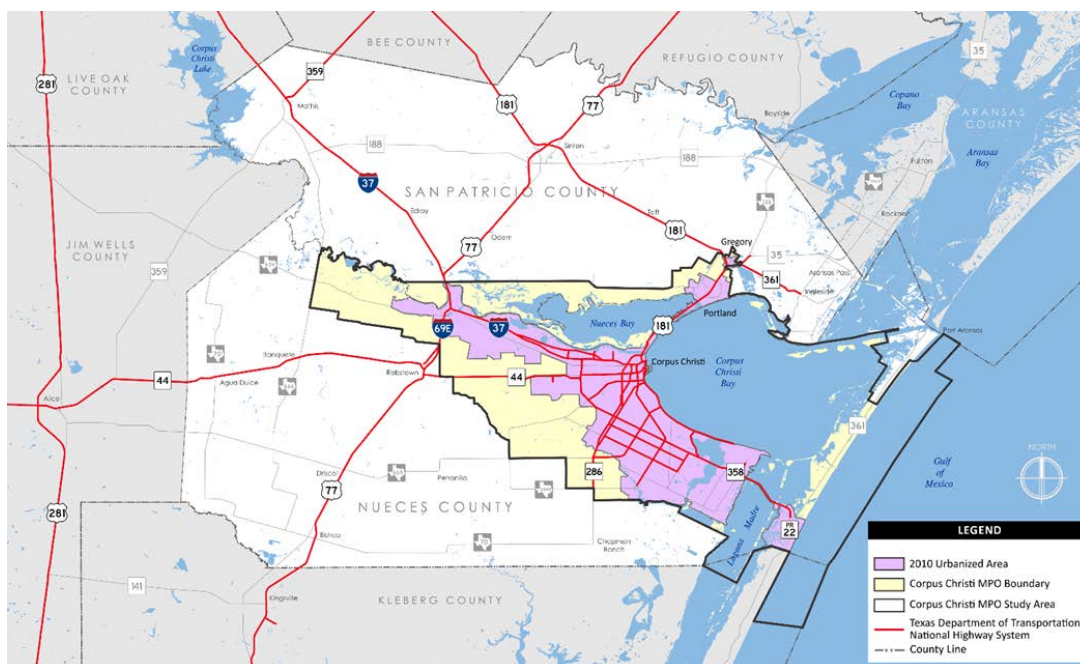
Move to recommend that the TPC approve the DRAFT FY 2021-2024 TIP and Appendices including TAC and public comments, corrections, and clarifications.

### **Background**

On December 4, 2015, President Obama signed into law P.L. 11494, Fixing America’s Surface Transportation Act (FAST Act). The FAST Act, which expires on September 30, 2020, was the first long-term comprehensive surface transportation legislation since the 2005 Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users Act (SAFETEA-LU). It continued and clarified much of the planning related content that was included in the Moving Ahead for Progress in the 21st Century Act (MAP-21). Specifically, under Title 23, Part 450, the Code of Federal Regulations (CFR) defines planning and lists the following mechanisms that determine the requirements for transportation planning. The boundaries described below are shown in Exhibit 1.

- **Urbanized Area** - Under these regulations, a Metropolitan Transportation Planning Process must be conducted for each US Census defined area of concentrated population containing at least 50,000 persons, as defined by Census 2010 and commonly referred to as the Urbanized Area. This area includes the City of Gregory, City of Portland, City of Corpus Christi, Nueces County, and San Patricio County. For the Corpus Christi Urbanized Area, the Corpus Christi MPO is designated by the State of Texas as the MPO responsible for coordinating the effort.
- **Metropolitan Planning Area** - Similarly, a Metropolitan Planning Area (MPA) must be defined, at a minimum, to encompass the entire existing Urbanized Area plus the contiguous area expected to become urbanized (the urbanizing area) within a 20-year forecast period of the Long-Range Transportation Plan (LRTP), now known as the Metropolitan Transportation Plan (MTP). The Urbanized Area was updated with information from Census 2010 and formalized in 2012 and the area expected to become urban were used to establish the Metropolitan Planning Area in 2012. This is the area within which the TPC selects projects and where Category 2, 4U, 7 and 9 funds can be spent.
- **Metropolitan Statistical Area** - Confusingly, a Metropolitan Statistical Area (MSA) is another standard metropolitan area. MSAs are defined by the U.S. Office of Management and Budget (OMB) and used by the Census Bureau and other federal government agencies for most non-transportation related statistical purposes. The MSA encompasses all of Aransas, San Patricio, and Nueces Counties.
- **Metropolitan Planning Organization** - A Metropolitan Planning Organization (MPO) shall be designated for each Urbanized Area and required to conduct a continuing, cooperative, and comprehensive performance-based multimodal transportation planning process (3-C Process) for its Metropolitan Planning Area (MPA), including the development of a Metropolitan Transportation Plan (MTP) and the mobility needs of people and freight Including accessible pedestrian walkways, bicycle transportation facilities, and intermodal facilities that support intercity transportation, including intercity buses and intercity bus facilities and commuter vanpool providers and foster economic growth and development, and takes into consideration resiliency needs, while minimizing transportation-related fuel consumption and air pollution and encouraging continued development and improvement of metropolitan transportation planning processes guided by the planning factors set forth under Title 23, Part 134(h) and Title 49, Part 5303(h) of the Code of Federal Regulations (CFR).

**Exhibit 1: Map of the Corpus Christi Metropolitan Planning Organization Area**



## TIP FINANCIAL PLAN

The Fixing America's Surface Transportation (FAST) Act (23 CFR Part 450.326(j)), states that the Transportation Improvement Program (TIP):

*"...shall include a financial plan that demonstrates how the approved TIP can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the TIP, and recommends any additional financing strategies for needed projects and programs."*

The TIP Financial Plan is also required to document, under 23 CFR §450.326(j), the ability of the MPO jurisdictions to fund any new projects while also continuing to fund necessary operations and maintenance (O&M) of the existing transportation system. The federal definition means that all roads classified as Local Collector and higher (not residential streets) must have local funds available to "adequately" operate and maintain these non-state (TxDOT) roads. The Corpus Christi MPO TPC must include, in the TIP, assurances that there are sufficient revenues available to municipalities and counties to adequately operate and maintain both highways (as defined by 23 U.S.C. 101(a)(5)) and public transportation (as defined by title 49 U.S.C. Chapter 53) that can achieve the adopted performance goals.

Demonstrating financial constraint of the TIP first requires determining the amount of funds that can be reasonably expected to come to the Corpus Christi MPO, by type and by year, for each potential source. The funding allocations for each fiscal year were taken from the TxDOT apportionments outlined in the 2020 Unified Transportation Program (UTP). Programming these federal/state funds to projects is guided by the performance measures approved during the 2020-2045 MTP as the long-range planning process. The FAST Act, which will expire before this TIP takes effect, included five years of funding authorizations (FY 2016-2020).

The financial plan of this FY 2021-2024 TIP was developed by the Corpus Christi MPO in cooperation with the Texas Department of Transportation (TxDOT), and the Corpus Christi Regional Transportation Authority (CCRTA). The CCRTA provided recent FTA apportionments and reasonably anticipated discretionary allocations. Local government entities provided preliminary draft budget estimates for FY 2021 and the MPO helped develop a reasonable forecast through year FY 2024. Each funding program is financially balanced against available funds for FY 2021, FY 2022, FY 2023, and FY 2024; shown in Tables 1-3 on pages 16-17 of the DRAFT FY 2021-2024 TIP.

Federal regulations also require that both regional TIPs and the Statewide Transportation Improvement Program (STIP) demonstrate fiscal constraint by including sufficient financial information to confirm that the projects in those documents can be implemented with the revenues that are reasonably available. They must also provide reasonable assurances that the federally supported transportation system is adequately operated and maintained.

The FAST Act expires at the end of Federal Fiscal Year 2020, which ends on September 30, 2020. This TIP takes effect at the beginning of Federal Fiscal Year 2021, which begins on October 1, 2020. The Federal funding for years beyond FY 2020 were assumed to continue along the same trajectory as legislated in the FAST Act.

### **Attachments:**

1. DRAFT FY 2021-2024 Transportation Improvement Program
2. DRAFT FY 2021-2024 TIP Fiscally Constrained Project List
3. Public Notice #20-6
4. Appendix G: Public Comments





**FY 2021-2024**  
**TRANSPORTATION IMPROVEMENT PROGRAM**  
**AND FINANCIAL PLAN PROJECTS WITH OBLIGATION AUTHORITY**

**DRAFT**

The preparation of this report has been financed in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] 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.

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**DRAFT FISCAL YEAR 2021-2024 TRANSPORTATION IMPROVEMENT PLAN (TIP)**

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## **I. INTRODUCTION**

The projects listed in the Transportation Improvement Program (TIP) are programmed in the most imminent portion of the Metropolitan Transportation Plan (MTP). The TIP is updated every two years cooperatively with local and state transportation entities within the MPO boundaries. To be eligible for any level of federal funding, a project must be in the MTP and the TIP. Once programmed into the TIP, these projects automatically become part of the Texas State Transportation Improvement Program (STIP).

Urbanized areas with populations of more than 50,000 are required by federal legislation to have a designated entity to help coordinate regional transportation projects; the Corpus Christi Metropolitan Planning Organization (Corpus Christi MPO), which encompasses portions of Nueces and San Patricio counties, is that entity for the greater Corpus Christi area. The MPO region is illustrated in Exhibit 1.

In 1973, the State Governor designated the City of Corpus Christi as the MPO to perform transportation planning for the metropolitan area. The MPO designation changed in June 2000, and the Transportation Policy Committee has been the designated MPO since that time. The Corpus Christi Transportation Plan's original signatories (City of Corpus Christi, City of Portland, Nueces County, San Patricio County, and the Texas Department of Transportation – Corpus Christi District) became the MPO's initial member agencies. To foster a multi-modal transportation planning process, the MPO also includes the Corpus Christi Regional Transportation Authority and Port of Corpus Christi Authority.

The TIP is prepared in compliance with the Statewide Planning Metropolitan Planning Rules jointly issued by the Federal Highway Administration (FHWA) (23 CFR Part 450) and the Federal Transit Administration (FTA) (49 CFR Part 613). This document is a four-year, fiscally constrained short-range transportation improvement plan. The TIP planning process complies with a comprehensive, cooperative, and continuing (3-C) transportation planning framework for making transportation investment decisions. Ultimately, the MPO Transportation Policy Committee (TPC) and Texas Governor will approve the plan for federal fiscal years 2021 to 2024 (October 2020 through September 2024).

## **II. BACKGROUND**

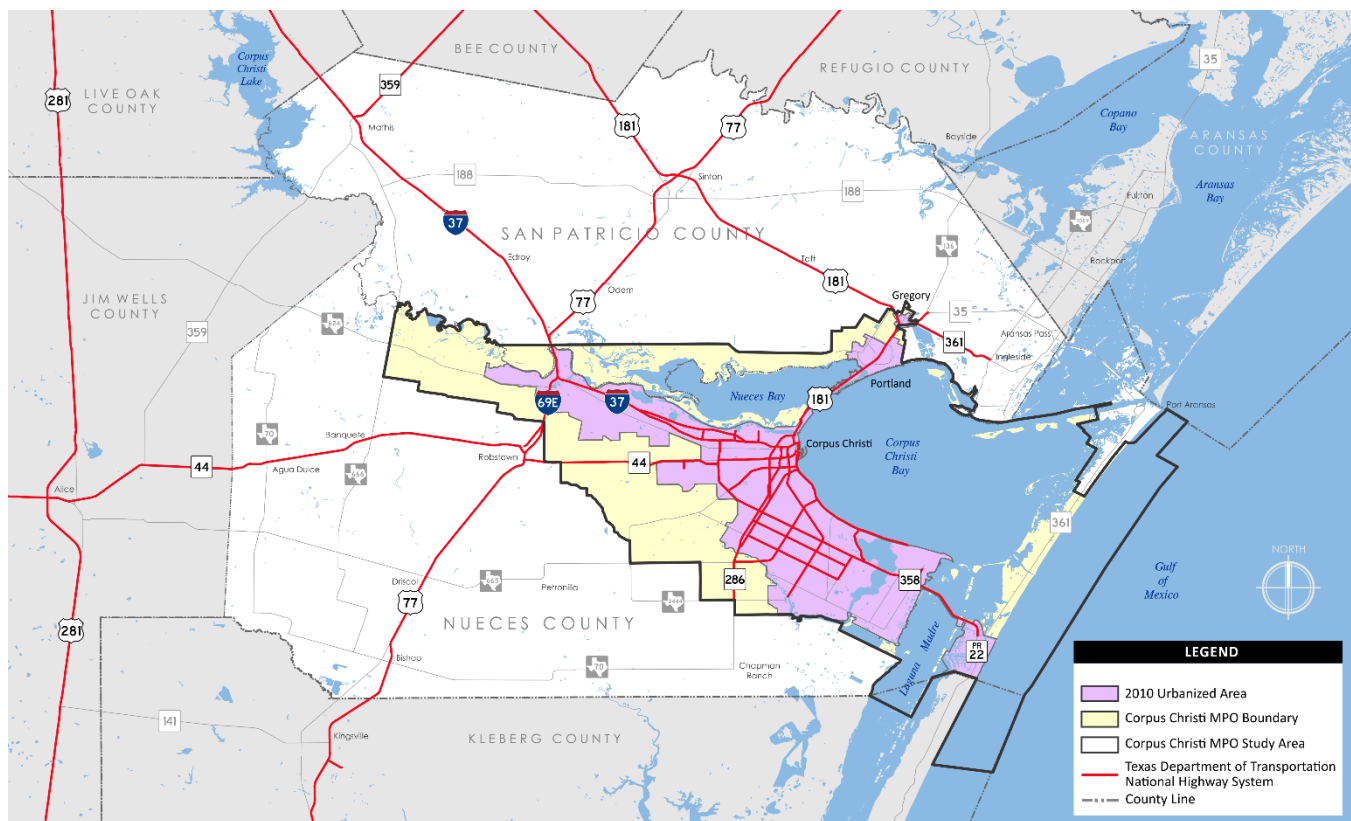
On December 4, 2015, President Obama signed into law P.L. 11494, Fixing America's Surface Transportation Act (FAST Act). The FAST Act, which expires on September 30, 2020, was the first long-term comprehensive surface transportation legislation since the 2005 Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users Act (SAFETEA-LU). It continued and clarified much of the planning related content that was included in the Moving Ahead for Progress in the 21st Century Act (MAP-21). Specifically, under Title 23, Part 450, the Code of Federal Regulations (CFR) defines planning and lists the following mechanisms that determine the requirements for transportation planning. The boundaries described below are shown in Exhibit 1.

- **Urbanized Area** - Under these regulations, a Metropolitan Transportation Planning Process must be conducted for each US Census defined area of concentrated population containing at least 50,000 persons, as defined by Census 2010 and commonly referred to as the Urbanized Area. This area includes the City of Gregory, City of Portland, City of Corpus Christi, Nueces County, and San Patricio County. For the Corpus Christi Urbanized Area, the Corpus Christi MPO is designated by the State of Texas as the MPO responsible for coordinating the effort.
- **Metropolitan Planning Area** - Similarly, a Metropolitan Planning Area (MPA) must be defined, at a minimum, to encompass the entire existing Urbanized Area plus the contiguous area expected to become urbanized (the urbanizing area) within a 20-year forecast period of the Long-Range Transportation Plan (LRTP), now known as the Metropolitan Transportation Plan (MTP). The Urbanized Area was updated with information from Census 2010 and formalized in 2012 and the area expected to become urban were used

to establish the Metropolitan Planning Area in 2012. This is the area within which the TPC selects projects and where Category 2, 4U, 7 and 9 funds can be spent.

- **Metropolitan Statistical Area** - Confusingly, a Metropolitan Statistical Area (MSA) is another standard metropolitan area. MSAs are defined by the U.S. Office of Management and Budget (OMB) and used by the Census Bureau and other federal government agencies for most non-transportation related statistical purposes. The MSA encompasses all of Aransas, San Patricio, and Nueces Counties.
- **Metropolitan Planning Organization** - A Metropolitan Planning Organization (MPO) shall be designated for each Urbanized Area and required to conduct a continuing, cooperative, and comprehensive performance-based multimodal transportation planning process (3-C Process) for its Metropolitan Planning Area (MPA), including the development of a Metropolitan Transportation Plan (MTP) and the mobility needs of people and freight Including accessible pedestrian walkways, bicycle transportation facilities, and intermodal facilities that support intercity transportation, including intercity buses and intercity bus facilities and commuter vanpool providers and foster economic growth and development, and takes into consideration resiliency needs, while minimizing transportation-related fuel consumption and air pollution and encouraging continued development and improvement of metropolitan transportation planning processes guided by the planning factors set forth under Title 23, Part 134(h) and Title 49, Part 5303(h) of the Code of Federal Regulations (CFR).

**Exhibit 1: Map of the Corpus Christi Metropolitan Planning Organization Area**



### III. ESSENTIAL ELEMENTS

#### A. Performance-Based Planning

The FAST Act, along with its predecessor, Moving Ahead for Progress in the 21st Century Act (MAP-21), established new requirements for performance management to ensure the most efficient investment of Federal Transportation Funds. These laws require MPOs, transit agencies and State Departments of Transportation to invest their federal resources in projects that best achieve individual targets and collectively make progress



toward achieving the national goals. As a starting point, state DOT's and MPOs must establish a benchmark, estimate the benefit from projects and policies, and then measure the actual outcome. Monitoring these performance measures assists MPOs and DOTs in setting goals, adjusting priorities, allocating resources, and developing policy.

The federal legislation specifies that Metropolitan Planning Organizations (Corpus Christi MPO), state Departments of Transportation (TxDOT), and the public transportation provider Corpus Christi Regional Transportation Authority (CCRTA) will jointly agree to the following:

1. Cooperatively develop and share information related to transportation performance data, the selection of performance measures, and the setting of performance targets.
2. Reporting of performance to be used in tracking progress toward attainment of critical outcomes for the region of the MPO (23 CFR 450.30d).
3. Collection of data for the Asset Management Plan for the National Highway System and Transit Asset Management (23 CFR 450.314h).

The seven national goals that investments must make progress toward are:

1. **Safety** – Achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
2. **Infrastructure Condition** – Maintain the highway infrastructure in a state of good repair.
3. **Congestion Reduction** – Achieve a significant reduction in congestion on the National Highway System (NHS).
4. **System Reliability** – Improve the efficiency of the surface transportation system.
5. **Freight Movement & Economic Vitality** – Improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
6. **Environmental Sustainability** – Enhance the performance of the transportation system while protecting and enhancing the natural environment.
7. **Reduce Project Delivery Delays** – Reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

Section V describes the specifics of the performance analyses in the Corpus Christi MPO. The Corpus Christi MPO has supported the same performance targets set by TxDOT for each required Performance Measure issued by the FTA and FHWA. Additionally, the Corpus Christi MPO supports the planning efforts by the Corpus Christi Regional Transportation Authority and their efforts in developing the Transit Asset Management (TAM) Plan.

## **B. Supporting Environmental Justice**

Executive Order 12898 of 1994, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, identifies and addresses “disproportionately high and adverse human health or environmental effects” on low income and minority populations. Executive Order 12898 evokes principles similar to Title VI of the Civil Rights Act of 1964. Title VI prohibits discrimination by recipients of federal financial assistance, including federal transportation funds, on the basis of race, color, and national origin, or matters related to language access for Limited English Proficient (LEP) persons.

In support of Executive Order 12898, the United States Department of Transportation (USDOT) issued an Order on Environmental Justice (USDOT Order 5610.2) in 1997, followed by a Federal Highway Administration (FHWA) Order on Environmental Justice (FHWA Order 6640.23) in 1998. The FHWA order requires the incorporation of Environmental Justice principles in all FHWA programs, policies, and activities. As a federally funded agency, the

Corpus Christi MPO is required to comply with both federal regulations. There are three core Environmental Justice principles:

- Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations
- Ensure full and fair participation of all potentially affected communities in the transportation decision-making process
- Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations

As shown below, identifying the locations of minority, low-income, and Limited English Proficiency (LEP) populations is a key step in complying with Title VI and Environmental Justice requirements. For the Title VI and Environmental Justice analysis, the Corpus Christi MPO used data from the Census Bureau's American Community Survey (ACS) 5-year estimates to identify census block groups and tracts that were above the regional average for minority populations, low-income populations, and LEP populations.

The MPO staff collects and analyzes demographic data in a geospatial format for Title VI Civil Rights evaluation. The MPO's Title VI procedures establish a protocol under which those who are not employees of the MPO can make complaints alleging discrimination in the MPO's provisions, services, or activities. Any person who believes the MPO, or any entity who receives federal financial assistance from or through the MPO (i.e., sub-recipients, sub-contractors, or sub-grantees), has subjected them or any specific class of individuals to unlawful discrimination may file a complaint of discrimination (see [Procedures & Forms](#)).

#### **C. Provide an Equitable Transportation System for all, regardless of Age, Ability, Race, Ethnicity, or Income**

The Corpus Christi MPO staff will evaluate the projects for conformity to the USDOT Title VI and Environmental Justice requirements. The purposes of these analytics are determining if there is a "mismatch" between who benefits, who pays, and who must tolerate the worst effects as well as making sure that protected populations receive benefits that are as timely and of the same magnitude as the general population. Exhibits 2 through 6 are examples of the types of population groups that are included in Title VI and Environmental Justice analyses.

Exhibit 2, page 5, Map of the Minority Population by Block Group, depicts the locations where higher concentrations of non-white peoples reside in relation to the locations of funded transportation projects. While the negative impacts of transportation projects are local in nature, the benefits of these projects accrue to areas beyond the project limits. The benefits of transportation projects are also highly correlated with areas of employment, which are not shown in these exhibits.

Exhibit 3, page 6, Map of the Low-Income Population by Block Group, depicts the locations where higher concentrations of low-income families reside in relation to the locations of funded transportation projects. Incomes greatly influence mode of travel, with many families being considered "transit-dependent". This means that a household has more workers than personal vehicles. There are 11,723 households in the 2-county area that do not have a vehicle at all, including 10,109 households in Nueces County. Low income is defined as the percent of a block group's population in households where the household income is less than or equal to 1.5 times the federal "poverty level".

Exhibit 4, page 7, Map of the Limited English Proficiency Population by Block Group, depicts the locations where higher concentrations of families who do not speak English as their primary language, AND who have a limited ability to read, speak, write, or understand English. The concentrations are compared against the locations of funded transportation projects.

Exhibit 2: Map of the Minority Population by Block Group

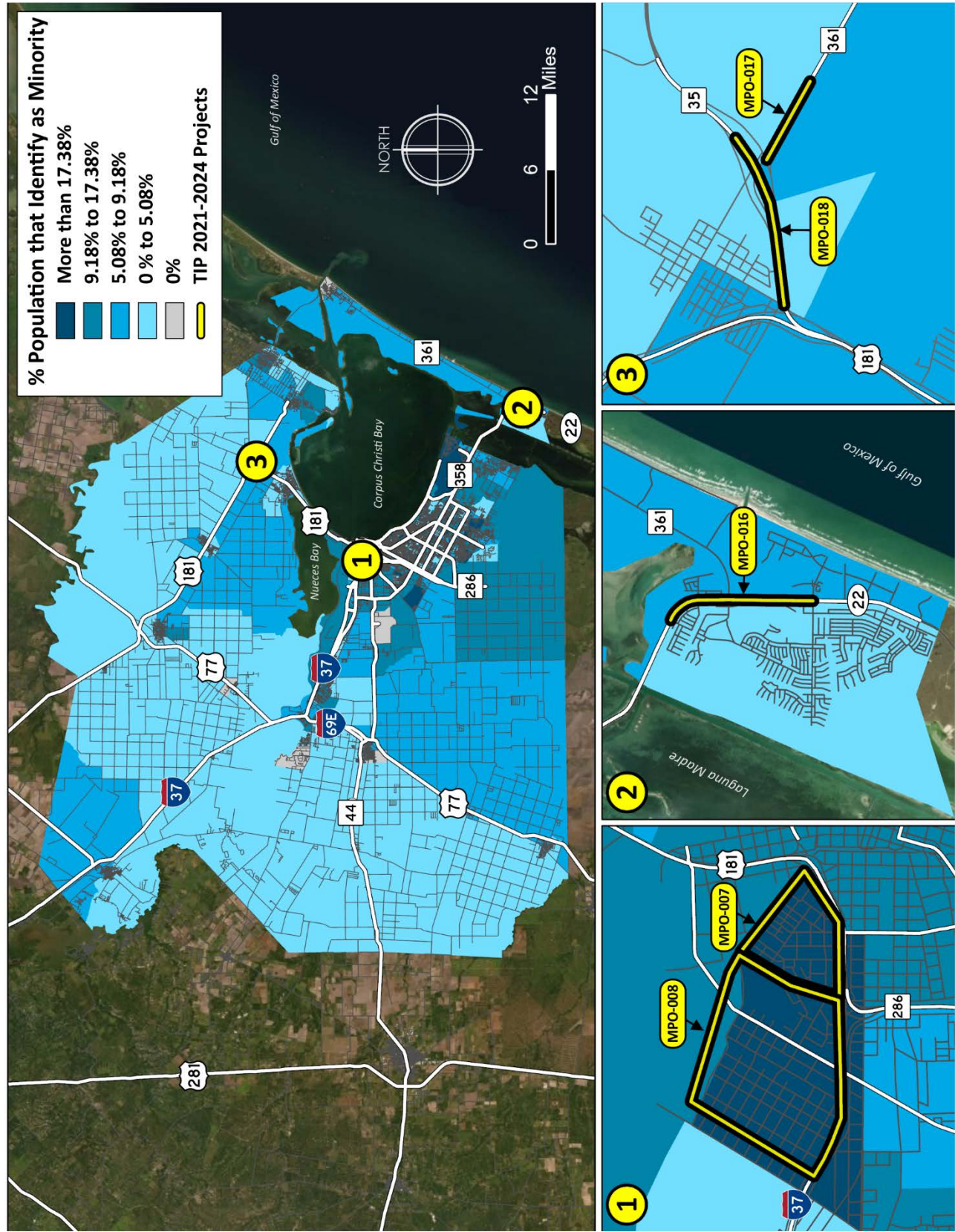
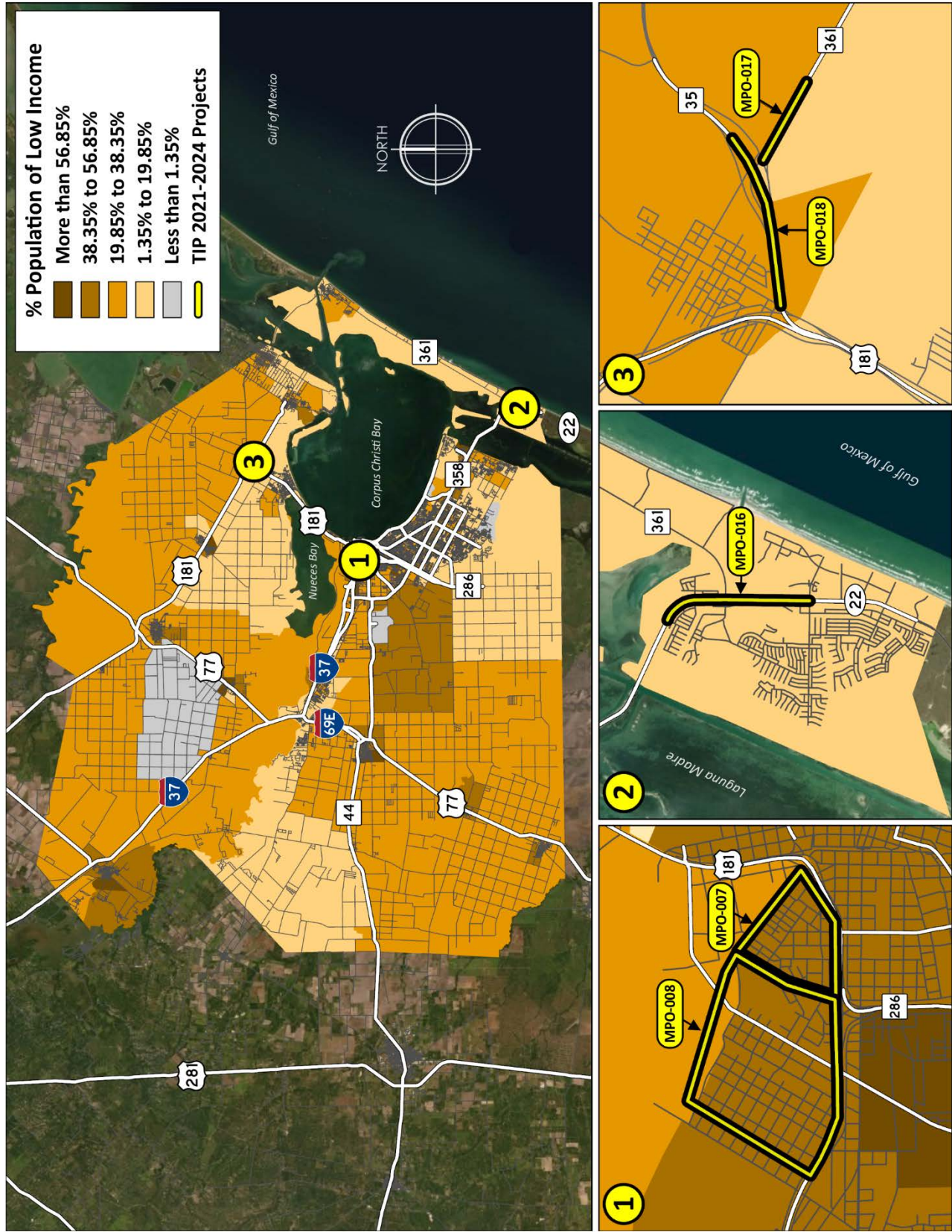




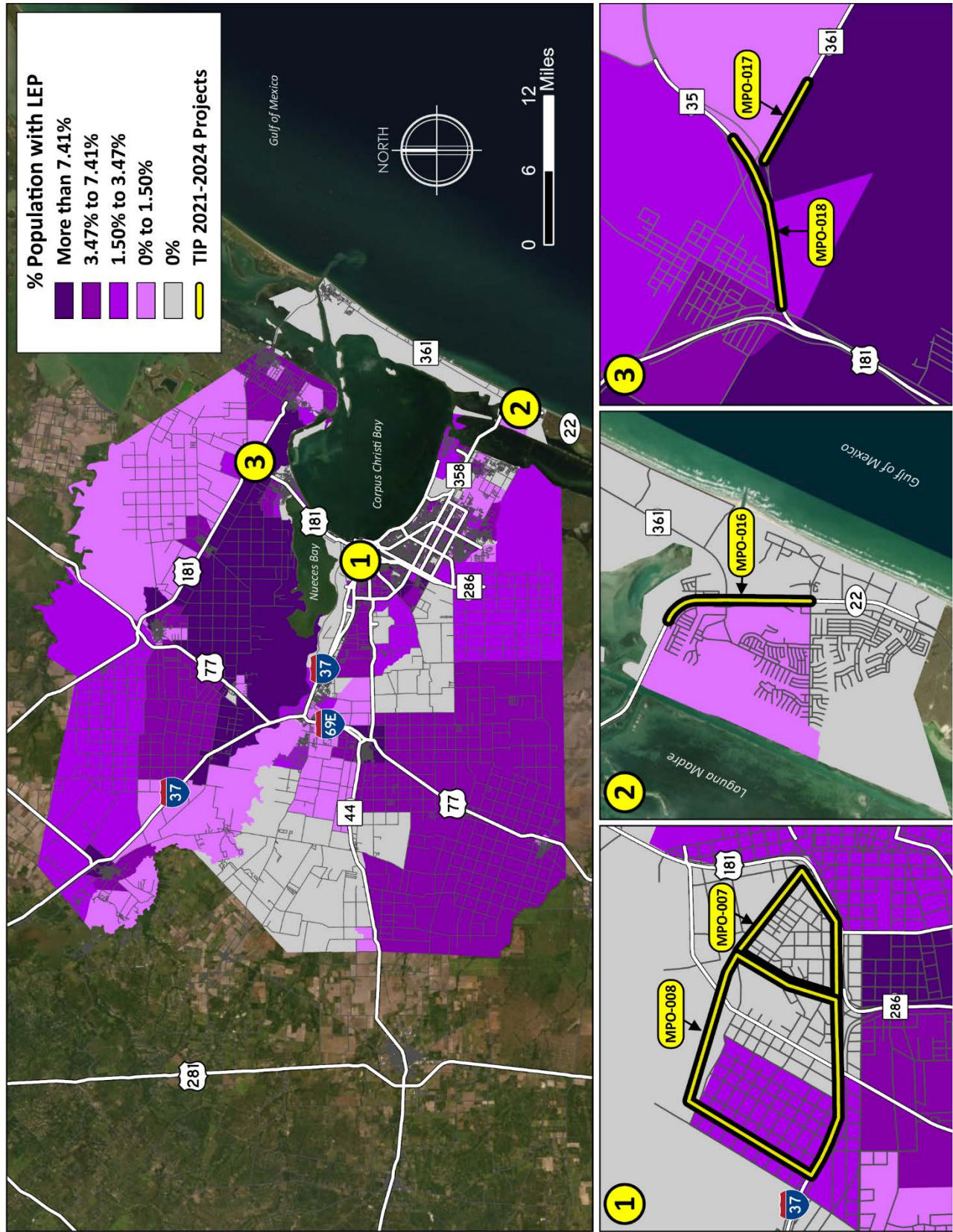
Exhibit 3: Map of the Low-Income Population by Block Group



Source: U.S. Census Bureau American Community Survey (ACS) 2013-2017 ACS 5-year Estimates



Exhibit 4: Map of the Limited English Proficiency (LEP) Population by Block Group



Source: U.S. Census Bureau American Community Survey (ACS) 2013-2017 ACS 5-year Estimates



#### **D. Engaging Public Participation**

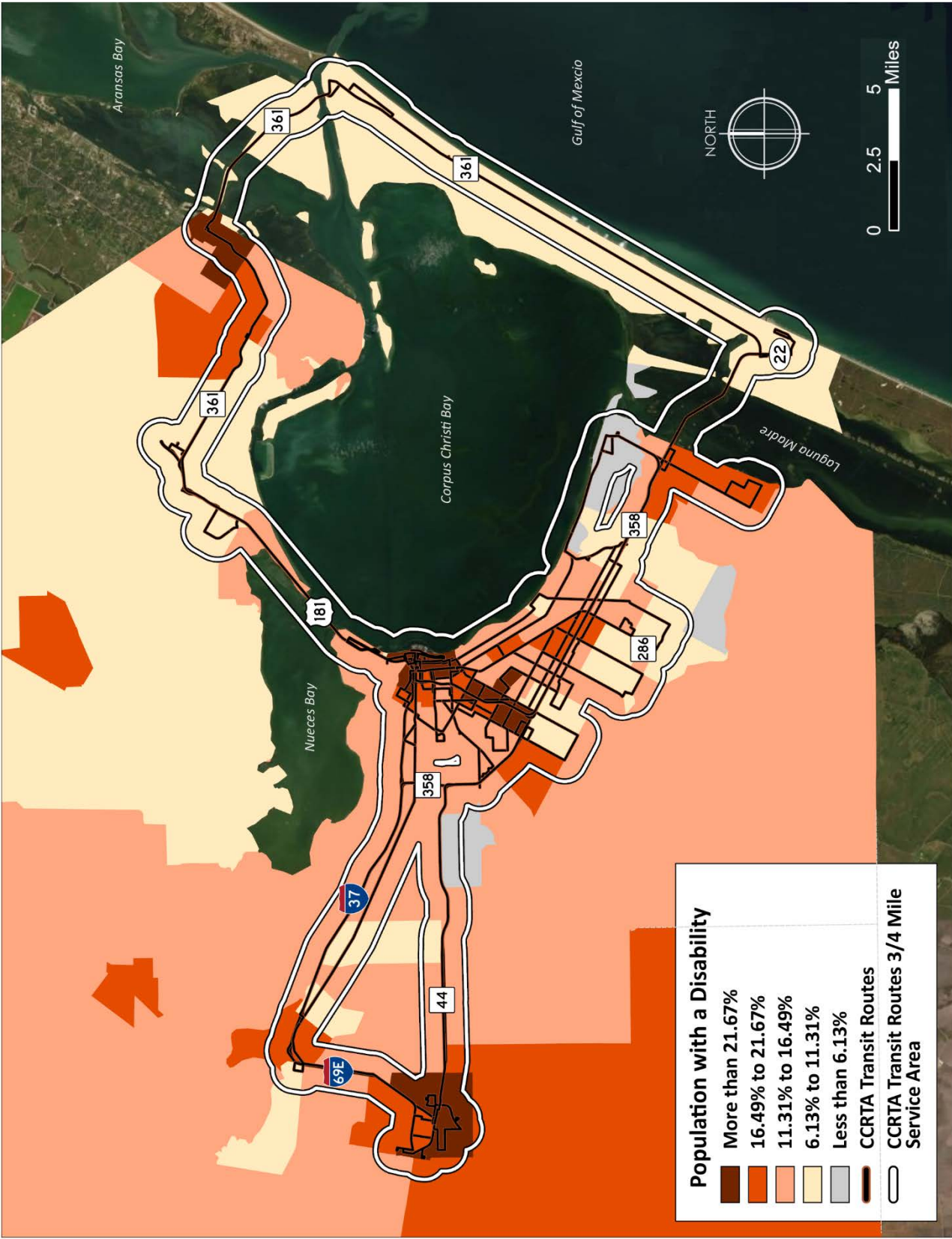
The Corpus Christi MPO Public Participation Plan (PPP) is compliant with Limited English Proficiency (LEP) requirements. This plan update, approved by the Corpus Christi MPO TPC in April 2018, describes the MPO's ongoing coordination with the Port of Corpus Christi Authority as well as private providers of transportation in the interest of enhanced integration and connectivity, as required by the FAST Act. The plan meets the standard for public participation in a transportation planning process per the principles of Environmental Justice and Title VI of the Civil Rights (Title VI) Act of 1964. The transportation planning process requires early and proactive public involvement by citizens and requires decision makers to allow them the opportunity and time to offer input and make informed decisions. The MPO continuously reviews the PPP and strives to improve the effectiveness of public involvement and outreach.

As defined by Executive Order 13166, LEP persons are those who do not speak English as their primary language and have limited ability to read, speak, write, or understand English. The MPO's LEP Plan helps identify reasonable steps for providing language assistance to persons with limited English proficiency who wish to access information provided. The plan outlines how to identify a person who may need language assistance and specifies the ways in which assistance may be provided. Public meetings for MPO's short- and long-range plans are conducted in accordance to Title VI to foster participation by low income and minority populations. Locations selected for public meetings comply with the Americans with Disability (ADA) Act of 1990 and are accessible and in close proximity to public transportation.

Environmental Justice (EJ) Orders described in section III B. Supporting Environmental Justice, page 3, strengthen support of Title VI regulations by requiring that each federal agency identify and address, disproportionately high adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. TxDOT and MPOs are responsible for developing procedures to collect statistical data (race, color, religion, sex, and national origin) of participants in, and beneficiaries of state highway programs (i.e. relocated or affected citizens and affected communities). Recipients of federally assisted programs shall keep documentation for federal review, demonstrating the extent to which members of target populations are beneficiaries of such programs.

Regional transit partners have procedures to uphold the requirements of the ADA. The CCRTA operates complimentary paratransit service in compliance with ADA and FTA regulations. Both CCRTA fixed route and paratransit revenue vehicles, along with other facilities are accessible by persons with disabilities. As shown in Exhibit 5 and 6, pages 10 and 11 respectively, the CCRTA's paratransit service is provided in all areas within a 3/4 mile of the fixed route service for those who cannot access the fixed route system due to physical barriers or a disability. The CCRTA Committee on Accessible Transportation (RCAT) provides guidance and insight to CCRTA Board of Directors on the development and operation of public transportation services which promote the inclusion and integration of people with disabilities. The CCRTA, Nueces County and the City of Corpus Christi work collaboratively to implement ADA compliant projects, which may include constructing curb cuts, sidewalks, and striping in order to provide accessible ramps for improved pedestrian access to and from bus stops. All other highway, bike, and pedestrian projects considered for federal funding include appropriate provisions for meeting the needs of individuals with disabilities.

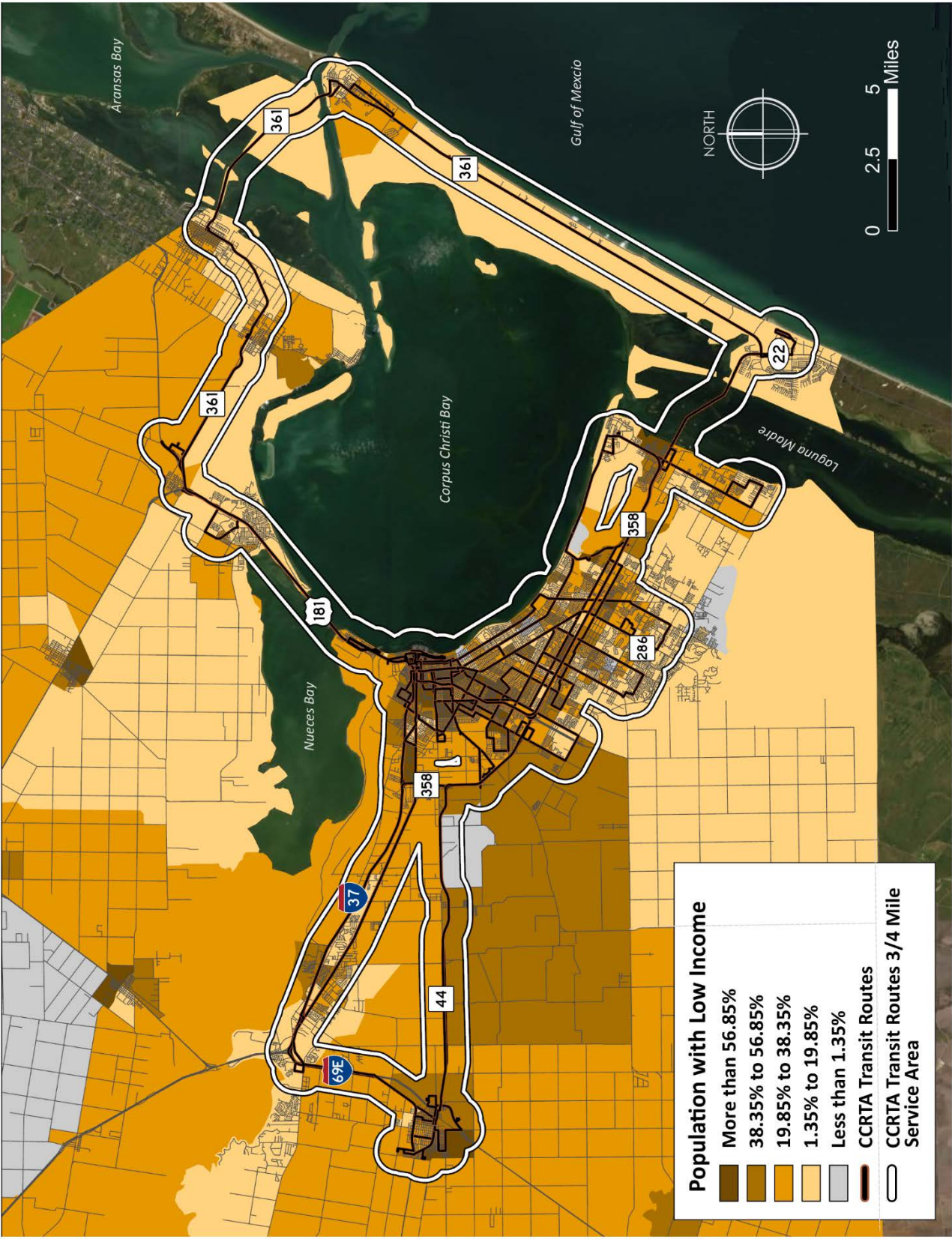
Exhibit 5: Map of Transit Service Coverage Area and Disability Populations



Source: U.S. Census Bureau American Community Survey (ACS) 2012-2016 ACS 5-year Estimates



Exhibit 6. Map of Transit Service Coverage Area and Low-Income Populations



Source: U.S. Census Bureau American Community Survey (ACS) 2012-2016 ACS 5-year Estimates

**E. Congestion Management Process**

On February 6, 2020, the Corpus Christi MPO TPC adopted a new Congestion Management Process for the Corpus Christi Transportation Management Area (TMA). First developed by the Corpus Christi MPO as a designated TMA in 1995, the update includes new data, tools, and best practices, particularly those related to the National Performance Management Research Data Set (NPMRDS). As part of establishing the Highway Performance Monitoring System (HPMS), the Federal Highway Administration contracted (originally with HERE from 2014-2016, then INRIX from February 2017 to present) to provide real-time travel data to State and MPO organizations. This data is collected in 5-minute epochs by GPS probes from commercial vehicles, connected cars, and cell phone applications. It includes archived speed and travel time data matched to associated location referencing data.

A principle function of the CMP is guiding the selection of which projects to fund in the TIP. As federally required, any project proposed for federal funding in the TIP that adds general-purpose lanes must demonstrate demand and operational management strategies are insufficient to satisfy the need for additional capacity, unless the project addresses an established bottleneck or is a safety improvement. This means trying policies or projects to reduce congestion without building new or wider roads, happens before the decision is made to build a new or wider road. This promotes efficient use of existing transportation infrastructure and allows limited federal funding to benefit a wider area. Projects that physically add lanes to increase Single Occupant Vehicle (SOV) capacity must result from the CMP.

The following projects were identified on the congestion management corridors and programmed into the 2021-2024 Corpus Christi MPO Transportation Improvement Program:

Project ID	Project Name	Description	From Limit	To Limit
MPO-016	Park Road 22	Phases of the corridor upgrade for pedestrian and access management improvements without adding capacity	Aquarius Street	Whitecap Boulevard
MPO-018	SH 35	Phases of the upgrade/add direct connectors	FM 3284	0.23 miles North of SH 361

**F. Resiliency and Reliability of the Transportation System**

System reliability is one of four Goal Areas in the MPO's performance-based planning framework. As defined in the MPO's CMP narrative, this framework identifies 14 discrete performance metrics in two topic area- Infrastructure Condition and Efficiency/Economic Competitiveness to help prioritize capital investments and to help evaluate the efficacy of the transportation system overall.

Situated in the low-lying Coastal Bend region of Texas, resiliency to extreme weather events and sea level rise is a fundamental consideration for the jurisdictions within the MPO. In an effort to stay at the forefront of resiliency planning and policy issues at the state level, MPO staff serve on both the Texas Coastal Resiliency Master Plan Technical Advisory Committee for the Texas General Land Office (TGLO) as well as on the TGLO Commissioner's Coastal Resiliency Advisory Group.

MPO staff has also led collaborative proposals in response to multiple FHWA solicitations related to resilience and adaptation. The MPO was successful in its most recent FHWA pilot program submittal for Resiliency and Durability to Extreme Weather. The proposed project addresses Laguna Shores Road which runs along the western shoreline of the Laguna Madre between SH 358 & Barney M. Davis Energy Center; it may eventually connect to Segment A of Regional Parkway Mobility Corridor (PEL completed 2016) to alleviate congestion on SH 358 and to facilitate evacuation. The MPO will use the FHWA grant funds to design a nature-based shoreline protection feature that will be implemented as an applied research pilot as part of the reconstruction of Laguna Shores Road by the City of Corpus Christi using non-federal/non-matching funds.

The MPO recognizes that the reliability of the mobility network overall and, in particular its efficacy under condition of evacuation due to extreme weather or other disaster is in large part a function of redundancy of key corridors.

## **G. Environmental Protection**

Stewardship is one of four Goal Areas in the MPO's performance-based planning framework.

### **1. Addressing Stormwater Quality**

The natural waterways of the Coastal Bend figure prominently in the lifestyle that residents cherish, and visitors seek. The Corpus Christi MPO includes several sensitive natural waterways that are receiving waters for stormwater runoff, including multiple that are listed as impaired on the Texas Integrated Report for Surface Water Quality and for which Total Maximum Daily Loads (TMDLs) for priority pollutants exist or are being established. The Stewardship Goal Area in the MPO's performance-based planning framework includes performance metrics to evaluate the relative impact of a proposed project to the local watershed by prioritizing projects that include best management practices that address stormwater quality. As with efforts to preserve air quality and the region's ozone attainment status, investments in water quality protection are critical to the region's economic vitality.

### **2. Addressing Wetlands and Habitats**

Transportation planning examines the complex interactions among social, economic, environmental, and political factors and identifies tradeoffs, especially when different stakeholder groups have conflicting interests. The Corpus Christi MPO uses an 8-step collaborative mitigation planning process described in the Corpus Christi MPOs document **Avoid, Minimize, Compensate: Infrastructure Mitigation Policy**, found as Appendix O of the 2020-2045 MTP. This Policy, when used in conjunction with the Corpus Christi MPOs document **Protecting Tomorrow: The Roles of Private For-Profit and Nonprofit Organizations in Mitigating Resource Impacts of Infrastructure Projects**, found as Appendix P identifies and adapts to conditions based on modeling, monitoring, and other research and analysis efforts. The Corpus Christi MPO **Mitigation Planning Protocol** is presented in Appendix Q. A consistent desire of these is to add value to other agencies' planning and mitigation efforts and reinforce their effectiveness. One such planning and mitigation effort is described by the Texas Parks and Wildlife Department (TPWD) in their Texas Conservation Action Plan (TCAP) Gulf Coast Prairies and Marshes Ecoregion Handbook. It includes a list of concerns from previous dealings with transportation agencies, including MPOs, along with a list of potential actions that could yield mutual benefit. The concerns listed in the TCAP include:

- Texas Department of Transportation coordinates with TPWD regarding potential natural resources impacts to listed species. However, during construction and mitigation there is little accommodation for sensitive habitats unless those features are federally protected. State-listed species habitats, SGCN, rare communities and the habitats on which they rely are for the most part unprotected. The transportation improvements proposed under regional upgrades of existing facilities and new construction may create barriers to fish and wildlife resources' daily and seasonal movements through armored culverts and concrete drainage ways, vectors and opportunities for non-native species invasions, water quality impacts through stormwater runoff, loss of non-jurisdictional wetlands, and import riparian, bottomland, prairie and savanna habitats that are not protected under regulation. In addition to these larger facilities, local connection transportation projects may also contribute to the same kinds of losses and may require even less coordination regarding environmental impacts from planning to implementation if no federal money is used.



- Mitigation for these large primary and smaller connector projects typically does not replace ecological function where it is lost. Non-native invasive grasses are used in reclamation, non-native trees are planted in sites where prairie is the desired ecological condition, and riparian areas are allowed to recolonize without direct restoration to prevent invasive species.

The TCAP also lists a possible collaborative path for agencies in the region, which is harmonious with the Corpus Christi MPO **Avoid, Minimize, Compensate: Infrastructure Mitigation Policy:**

- Focus outreach to core urban Metropolitan Planning Organizations, Councils of Government, Regional Transportation authorities, International Boundary Water Commission and planning entities which include urban and emerging / outlying communities so they consider SGCN, rare communities and habitats, such as native coastal prairies, riparian areas to floodplain extents, and all wetland features, as part of their first-round constraint process in development zoning and permitting.
- Large-scale conservation benefits could be realized by mapping existing conservation lands and practices, reviewing opportunities to share resources and improve land management through shared guidance, and identifying landowners and sites which could benefit landscape and conservation management connectivity in the long-term through landowner incentive programs.
- Identify key areas for the restoration and protection of coastal prairie, riparian buffers, and streamside management zones, thornscrub corridors, freshwater wetlands and marsh restoration, and connectivity in a network of managed lands (public and private) throughout the region.
- Establish a regional public lands management cooperative to evaluate conservation effectiveness on sites and the connectivity of the landscape, identify restoration needs and sites, invasive species removal priorities, trail development and recreation planning improvement, and management practice improvement opportunities.
- It would be helpful to have large areas identified where mitigation dollars would best be spent to offset specific types of impacts in the region: wetlands, water diversions, prairie loss, riparian loss. A network of potential areas in a north-south trajectory in the region may be most helpful to create “stepping-stone” prairie and riparian area connectivity, but sites should be large enough to function sustainably. Mitigation banking could be another type of landowner incentive.

The Corpus Christi MPO also reviewed Texas' Statewide Historic Preservation Plan 2011-2020. The Corpus Christi MPO will participate in the update to this plan and coordinate with the Nueces and San Patricio County Historical Commissions.

## **H. Economic Development**

Regional economic vitality depends on an efficient, reliable, safe, and secure regional transportation network; the MPO's ongoing effort to achieve regional objectives through its performance-based planning framework are part of a broader effort to promote economic development.

### **1. Travel and Tourism**

The greater Corpus Christi area boasts beautiful beaches and myriad natural waterways, which offer a tremendous range of attractions for nature-based tourism. Tourism is big business in Corpus Christi. It's the region's third largest industry. In 2017, more than 9.9 million people traveled to the region. Tourism generates \$1.3 billion for the community each year, according to the Corpus Christi Convention & Visitors Bureau (CVB). The member entities in the MPO recognize the importance of the regional mobility network in supporting tourism as a cornerstone of the regional economy.

The MPO's work in planning for active mobility is motivated, in part, by an interest in expanding bicycle and pedestrian mobility options to compliment the outdoor recreation opportunities that attract tourists

to the region. The MPO routinely coordinates with staff from the Corpus Christi Convention and Visitors Bureau and Corpus Christi United Chamber of Commerce, both of which have documented unmet demand for bicycle-based tourism in our region.

Visitation data confirms that the Coastal Bend is a primary driving destination for visitors from around the state. Several ongoing and upcoming MPO projects on key corridors on the state highway system (e.g. SH 358, I-37, US 181) will facilitate access to the region from other parts of the state and will facilitate mobility within the MPO once visitors arrive. The MPO recently funded an Access Management Study of PR 22 on Padre Island and is funding (as part of the FY 2019-2022 TIP) a feasibility study of the PR 22/SH 361 intersection at the nexus between Padre and Mustang Islands, which becomes more congested during peak tourism seasons. This effort will identify the appropriate treatments to enhance mobility and safety for visitors and residents who are enroute to destinations on Mustang Island. Likewise, this feasibility study will inform design of the upgrade of SH 361 along Mustang Island, which is a critical connection to key tourist destinations and is a critical evacuation route for island visitors and residents under extreme weather conditions.

#### **IV. TIP FINANCIAL PLAN**

The Fixing America's Surface Transportation (FAST) Act (23 CFR Part 450.326(j)), states that the Transportation Improvement Program (TIP):

*"...shall include a financial plan that demonstrates how the approved TIP can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the TIP, and recommends any additional financing strategies for needed projects and programs."*

The TIP Financial Plan is also required to document, under 23 CFR §450.326(j), the ability of the MPO jurisdictions to fund any new projects while also continuing to fund necessary operations and maintenance (O&M) of the existing transportation system. The federal definition means that all roads classified as Local Collector and higher (not residential streets) must have local funds available to "adequately" operate and maintain these non-state (TxDOT) roads. The Corpus Christi MPO TPC must include, in the TIP, assurances that there are sufficient revenues available to municipalities and counties to adequately operate and maintain both highways (as defined by 23 U.S.C. 101(a)(5)) and public transportation (as defined by title 49 U.S.C. Chapter 53) that can achieve the adopted performance goals.

Demonstrating financial constraint of the TIP first requires determining the amount of funds that can be reasonably expected to come to the Corpus Christi MPO, by type and by year, for each potential source. The funding allocations for each fiscal year were taken from the TxDOT apportionments outlined in the 2020 Unified Transportation Program (UTP). Programming these federal/state funds to projects is guided by the performance measures approved during the long-range planning process. The FAST Act, which will expire before this TIP takes effect, included five years of funding authorizations (2016-2020).

The financial plan of this FY 2021-2024 TIP was developed by the Corpus Christi MPO in cooperation with the Texas Department of Transportation (TxDOT), and the Corpus Christi Regional Transportation Authority (CCRTA). The CCRTA provided recent FTA apportionments and reasonably anticipated discretionary allocations. Local government entities provided preliminary draft budget estimates for FY 2021 and the MPO helped develop a reasonable forecast through year FY 2024. Each funding program is financially balanced against available funds for FY 2021, FY 2022, FY 2023, and FY 2024; shown in Table 1 and 2, page 16.

Federal regulations also require that both regional TIPs and the Statewide Transportation Improvement Program (STIP) demonstrate fiscal constraint by including sufficient financial information to confirm that the projects in those documents can be implemented with the revenues that are reasonably available. They must also provide

reasonable assurances that the federally supported transportation system is adequately operated and maintained.

The FAST Act expires at the end of Federal Fiscal Year 2020, which ends on September 30, 2020. This TIP takes effect at the beginning of Federal Fiscal Year 2021, which begins on October 1, 2020. The Federal funding for years beyond FY 2020 were assumed to continue along the same trajectory as legislated in the FAST Act.

### **Transportation Funding Forecast Uncertainty**

This financial plan, or any financing forecast that is predicated on achieving results in the future, contains a number of assumptions that increase the risk of inaccuracy. Risk considerations generally have likelihood of errors in both directions. The major risk elements that influence this financial plan are described below.

- The economic impacts of COVID-19 are significant across the country. Most experts agree that a full recession is inevitable at this point. The greatest fiscal impact is also where cities and states are most vulnerable, where revenue is generated: retail sales, income and wages, and real estate.
- A recession in a normal economic cycle occurs after a period of maximum growth, and the economy “corrects” itself by contracting. The Covid19 recession we are heading into has some similar characteristics to a typical one. The US has seen a record-long expansion that began in 2009. So even before COVID-19 hit, some economists warned that the economy could soon begin a correction and slow down. This current economic crisis is affecting the world in new ways most didn’t anticipate. For example, the price of US oil has turned negative for the first time in history.
- The International Monetary Fund has stated “The magnitude and speed of collapse in activity that has followed the pandemic is unlike anything experienced in our lifetimes, It is very likely that this year the global economy will experience its worst recession since the Great Depression.”
- Gasoline tax, fuel tax, and registration fee revenues are related to employment, population, and income growth. The future direction of measures will largely determine whether there are increases or decreases in revenues.
- Federal funding was assumed to correspond with the estimates related to the FAST Act.
- Traditionally, SUVs and light-duty trucks have been the fastest growing segment of the vehicle fleet. These vehicle types have below-average fuel economy, thus increasing gasoline tax revenues. Currently, hybrid and electric vehicles are attaining a market presence, and automobile manufacturers are developing models across categories (including SUVs) that will lead to fuel displacement and long-term decreases in gasoline tax revenues that are not included in these forecasts.
- Inflation forecasting has inherent risk. The costs of the needs identified in the plan are assumed to include inflation through 2024. Should inflation increase dramatically, there will be corresponding changes to funding needs.

**Revenue Projects**

The following exhibits and text describe all reasonably available funding for transportation projects in the Corpus Christi MPO region over the FY 2021-2024 time period. These collective revenues will allow implementation of the fiscally- constrained project list identified in this TIP. There is an estimated \$240 million of available funding for all modes of transportation by our regional partners that were part of the development of the 2021-2024 TIP.

Table 1 and 2, below, depict the state and federal highway funds that are reasonably available for use within the Corpus Christi urbanized area for the FY 2021-2024 time period.

**Table 1. Category Funding for the Corpus Christi MPO FY 2021-2024 TIP**

Funding Category	2020 UTP Statewide Funding Authorizations	2020 UTP TxDOT CRP District Funding	TxDOT-CRP District 25-Yr Projected Funding	2020 UTP 10-Yr CCMPO Funding	CCMPO 25-Yr MTP Projected Funding	FY 2021-2024 TIP
1. Preventive Maintenance and Rehabilitation	\$13,926,300,000	\$616,880,000	\$1,542,200,000	\$0	\$0	\$0
2. Metro and Urban Area Corridor Projects	\$11,481,710,000	\$0	\$0	\$150,990,000	\$377,475,000	\$62,096,000
3. Non-Traditionally Funded Transportation Projects	\$6,053,290,000	\$0	\$0	\$0	\$0	\$0
4. Statewide Urban Connectivity	\$5,018,580,000	\$0	\$0	\$66,000,000	\$165,000,000	\$64,480,000
4. Statewide Regional Connectivity Corridor	\$6,201,970,000	\$624,500,000				
5. Congestion Mitigation and Air Quality Improvement (CMAQ)	\$2,213,510,000	-	-	-	-	-
6. Structures Replacement and Rehabilitation (Bridges)	\$3,586,560,000	-	-	-	-	-
7. Metropolitan Mobility and Rehabilitation	\$4,588,130,000	-	-	\$88,880,000	\$222,200,000	\$37,451,440
8. Safety	\$4,031,750,000	-	-	-	-	-
9. Transportation Alternatives (Set-Aside)	\$910,500,000	-	-	\$5,800,000	\$14,500,000	\$2,388,800
10. Supplemental Transportation Projects	\$571,580,000	-	-	-	-	-
11. District Discretionary and Energy Sector Funding	\$3,233,380,000	\$168,640,000	\$94,125,000	-	-	-
12. Strategic Priority	\$15,740,000,000	\$33,000,000		\$33,000,000		\$33,000,000
<b>TOTAL</b>	<b>\$77,557,260,000</b>	<b>\$1,443,020,000</b>	<b>\$1,636,325,000</b>	<b>\$344,670,000</b>	<b>\$779,175,000</b>	<b>\$199,416,240</b>

**Table 2. Statewide Funding Levels TxDOT 2020 UTP (10-Yr)**

Funding Category	2020 UTP Statewide Funding Authorizations
1. Preventive Maintenance and Rehabilitation	\$13,926,300,000
2. Metro and Urban Area Corridor Projects	\$11,481,710,000
3. Non-Traditionally Funded Transportation Projects	\$6,053,290,000
4. Statewide Urban Connectivity	\$5,018,580,000
4 Statewide Regional Connectivity Corridor	\$6,201,970,000
5. Congestion Mitigation and Air Quality Improvement (CMAQ)	\$2,213,510,000
6. Structures Replacement and Rehabilitation (Bridges)	\$3,586,560,000
7. Metropolitan Mobility and Rehabilitation	\$4,588,130,000
8. Safety	\$4,031,750,000
9. Transportation Alternatives (Set-Aside)	\$910,500,000
10. Supplemental Transportation Projects	\$571,580,000
11. District Discretionary and Energy Sector Funding	\$3,233,380,000
12. Strategic Priority	\$15,740,000,000
<b>TOTAL UTP STATEWIDE FUNDING CATEGORIES 1-12</b>	<b>\$77,557,260,000</b>

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Adequate operations and maintenance of transit infrastructure is demonstrated in Table 3, below, which shows federal, state, and local transit funds that are reasonably available within the Corpus Christi MPO.

**Table 3. Corpus Christi Regional Transportation Authority (CCRTA) Projected FY 2021-2024 Financial Plan**

SOURCE OF FUNDS:	2018 Audited	2019 Projected	2020	2021	2022	2023	2024
<b>Revenues</b>							
Operating Revenues							
Fare Box Revenue	\$ 1,688,643	\$ 1,891,550	\$ 1,901,008	\$ 2,130,513	\$ 2,141,165	\$ 2,151,871	\$ 2,162,631
Bus Advertising	\$ 142,555	\$ 151,173	\$ 158,731	\$ 161,112	\$ 163,529	\$ 165,982	\$ 168,471
Other Income	\$ 614,707	\$ 630,628	\$ 561,041	\$ 561,322	\$ 561,602	\$ 561,883	\$ 562,164
<b>Total Operating Revenues</b>	<b>\$ 2,445,905</b>	<b>\$ 2,673,351</b>	<b>\$ 2,620,780</b>	<b>\$ 2,852,946</b>	<b>\$ 2,866,296</b>	<b>\$ 2,879,736</b>	<b>\$ 2,893,266</b>
Non-Operating Revenues							
Sales Tax Revenue	\$ 33,934,640	\$ 36,310,065	\$ 37,762,468	\$ 40,028,216	\$ 41,629,344	\$ 43,627,553	\$ 44,936,379
Staples Street Center	\$ 459,518	\$ 502,812	\$ 487,455	\$ 502,079	\$ 517,141	\$ 532,655	\$ 548,635
Transfer-in (From Unrestricted Reserves)	\$ -	\$ -	\$ 2,864,960	\$ -	\$ -	\$ -	\$ -
Interest Income	\$ 409,036	\$ 589,866	\$ 565,803	\$ 568,632	\$ 571,475	\$ 574,333	\$ 577,204
<b>Total Operating Revenues</b>	<b>\$ 34,803,194</b>	<b>\$ 37,402,743</b>	<b>\$ 41,680,686</b>	<b>\$ 41,098,926</b>	<b>\$ 42,717,960</b>	<b>\$ 44,734,541</b>	<b>\$ 46,062,219</b>
<b>Grants</b>							
Operating Related Grants	\$ 12,111	\$ 812,120	\$ 824,782	\$ 824,906	\$ 825,031	\$ 825,156	\$ 825,282
Sub-Recipients	\$ 46,299	\$ 28,890	\$ 49,694	\$ 49,942	\$ 50,192	\$ 50,443	\$ 50,695
Capital Grants	\$ 1,184,926	\$ 3,769,331	\$ 12,631,327	\$ 9,458,028	\$ 7,890,825	\$ 8,739,837	\$ 7,633,213
<b>Total Grant Revenue</b>	<b>\$ 1,243,336</b>	<b>\$ 4,610,341</b>	<b>\$ 13,505,803</b>	<b>\$ 10,332,876</b>	<b>\$ 8,766,048</b>	<b>\$ 9,615,436</b>	<b>\$ 8,509,190</b>
<b>TOTAL REVENUES</b>	<b>\$ 38,492,435</b>	<b>\$ 44,686,435</b>	<b>\$ 57,807,269</b>	<b>\$ 54,284,749</b>	<b>\$ 54,350,304</b>	<b>\$ 57,229,713</b>	<b>\$ 57,464,674</b>
Operating Expenses	\$ 30,660,806	\$ 31,249,455	\$ 34,409,881	\$ 35,786,276	\$ 37,217,727	\$ 38,706,436	\$ 40,254,693
Sub-Recipients	\$ 46,299	\$ 28,890	\$ 49,694	\$ 49,942	\$ 50,192	\$ 50,443	\$ 50,695
Street Maintenance Program	\$ 2,807,222	\$ 3,006,967	\$ 3,021,641	\$ 3,202,257	\$ 3,330,348	\$ 3,490,204	\$ 3,594,910
<b>Total Operating &amp; Non-Operating Expenses</b>	<b>\$ 33,514,327</b>	<b>\$ 34,285,312</b>	<b>\$ 37,481,216</b>	<b>\$ 39,038,475</b>	<b>\$ 40,598,266</b>	<b>\$ 42,247,083</b>	<b>\$ 43,900,299</b>
<b>Capital Program Expenses</b>	<b>\$ 1,681,599</b>	<b>\$ 6,671,951</b>	<b>\$ 17,604,320</b>	<b>\$ 12,463,480</b>	<b>\$ 10,903,327</b>	<b>\$ 12,152,202</b>	<b>\$ 10,435,203</b>
Other Cost Centers							
Staples Street Center	\$ 686,797	\$ 629,795	\$ 996,766	\$ 1,016,701	\$ 1,037,035	\$ 1,057,776	\$ 1,078,932
Special Project	\$ -	\$ 545,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Port Ayers Cost Center	\$ -	\$ 8,400	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Other Cost Centers</b>	<b>\$ 686,797</b>	<b>\$ 1,183,195</b>	<b>\$ 1,196,766</b>	<b>\$ 1,216,701</b>	<b>\$ 1,237,035</b>	<b>\$ 1,257,776</b>	<b>\$ 1,278,932</b>
<b>Debt Service/Other Fiscal Expenses</b>							
Cumulative Effect of Change in Account Principle	\$ 1,215,616	\$ 75,845.00	\$ -	\$ -	\$ -	\$ -	\$ -
Bond Principal	\$ 575,000	\$ -	\$ 840,000	\$ 905,000	\$ 930,000	\$ 945,000	\$ 975,000
Bond Interest	\$ 1,028,997	\$ 1,010,570	\$ 684,967	\$ 619,594	\$ 598,688	\$ 577,019	\$ 554,717
<b>Total Debt Expenses</b>	<b>\$ 2,819,613</b>	<b>\$ 1,086,415</b>	<b>\$ 1,524,967</b>	<b>\$ 1,524,594</b>	<b>\$ 1,528,688</b>	<b>\$ 1,522,019</b>	<b>\$ 1,529,717</b>
<b>TOTAL EXPENSES EXCLUDING DEPRECIATION</b>	<b>\$ 38,702,336</b>	<b>\$ 43,226,873</b>	<b>\$ 57,807,269</b>	<b>\$ 54,243,250</b>	<b>\$ 54,267,317</b>	<b>\$ 57,179,080</b>	<b>\$ 57,144,151</b>
<b>REVENUES OVER EXPENSES (DEPRECIATION EXCLUDED)</b>	<b>\$ (209,901)</b>	<b>\$ 1,459,562</b>	<b>\$ -</b>	<b>\$ 41,499</b>	<b>\$ 82,988</b>	<b>\$ 50,632</b>	<b>\$ 320,524</b>
<b>UNRESTRICTED RESERVES COMPONENTS</b>							
Assign for Operating Reserve	\$ 7,701,753	\$ 7,100,146	\$ 7,890,252	\$ 8,234,351	\$ 8,592,214	\$ 8,964,391	\$ 9,351,455
Assign for Health Care Cost Reserve	\$ 712,218	\$ 712,218	\$ 712,218	\$ 712,218	\$ 712,218	\$ 712,218	\$ 712,218
Assign for Capital Reserve	\$ 3,360,932	\$ 1,667,988	\$ 3,520,864	\$ 2,492,696	\$ 2,180,665	\$ 2,430,440	\$ 2,087,041
Assign for One-Time Pension Contribution	\$ 2,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Unrestricted Reserves (Available for Spending)	\$ 11,021,363	\$ 16,874,369	\$ 14,009,408	\$ 14,050,907	\$ 14,133,894	\$ 14,184,527	\$ 14,505,051
<b>TOTAL UNRESTRICTED PORTION OF FUND BALANCE</b>	<b>\$ 25,296,266</b>	<b>\$ 26,354,720</b>	<b>\$ 26,132,742</b>	<b>\$ 25,490,172</b>	<b>\$ 25,618,991</b>	<b>\$ 26,291,576</b>	<b>\$ 26,655,764</b>

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Projects included within the TIP have a source of funding identified and committed to the project. TxDOT's 12 funding categories are listed in the following table. Typically, MPO projects may reflect use of **Category 2, 7, 9, Prop 1, and/or Prop 7**.

**Table 4. FY 2021-2024 TIP Funding Categories**

Funding Category	General Guidance	Project Selection/Approval	Project Selection/Ranking	Programming POC
<b>Category 1</b> Preventive Maintenance & Rehabilitation	Category 1 addresses preventive maintenance and rehabilitation of the existing state highway system, including pavement, signs, traffic signals, and other infrastructure assets. The category can be used to supplement mobility project funding as an open funding line.	TxDOT districts select projects using a performance-based prioritization process that assesses district-wide maintenance and rehabilitation needs. Selections are made in accordance with each district's Pavement Management Plan.	District Scoring/Ranking Methodologies	Districts coordinate with FIN-Letting engagement (FIN-LM)
<b>Category 2</b> Metropolitan & Urban Area Corridor Projects	Category 2 addresses mobility and added capacity projects on urban corridors to mitigate traffic congestion, traffic safety, and roadway maintenance or rehabilitation. Projects must be located on the state highway system.	MPOs, in consultation with TxDOT districts, select projects within the constraint of their Category 2 10-year planning targets. MPOs use a performance-based prioritization process that assesses mobility needs within the MPO boundaries. Project funding must be authorized by the Texas Transportation Commission through the annual UTP adoption.		Districts coordinate with FIN-LM and forecasting
<b>Category 3</b> Design-Build	Category 3 Design-Build addresses non-construction costs associated with Design-Build projects fully funded, approved for contract, and within the constraints of project development LAR approval. These costs include those associated with design, utilities and other development costs approved in the Design Build Guidance Document.	Projects selected for Design-Build are evaluated by PFD, selected, and recommended by Administration. Once a project has been designated for Design Build and is listed on the approved 2-year Design-Build schedule, it is eligible for Cat 3 Design-Build funds. Design-Build development fund sources are approved through FIN Forecasting. (Silvia Morales)	Scored and ranked by PFD Design-Build selection criteria	Districts submit projects for approval administrative revision to TPP and FINLM.
<b>Category 4</b> Urban Connectivity	Category 4 Urban addresses mobility on major state highway system corridors, which provide connectivity in urban areas. Projects must be located within the MPO boundaries on the designated highway connectivity network that includes: - The Texas Trunk System - National Highway System (NHS) - Connections to major seaports or border crossings - National Freight Network - Hurricane evacuation routes	Districts select projects within the constraint of their Category 4U 10-year planning targets. Districts submit projects to TPP during the UTP Project Call. Projects are considered for approval by the Commission.	For each project submitted for Category 4U funding in the UTP Project Call, districts must provide a project score to TPP to demonstrate performance-based selection. TPP additionally scores projects statewide to assign each project a tier ranking (1, 2, or 3) in the UTP document.	Districts submit projects for approval administrative revision to TPP-UTP.
<b>Category 4</b> Regional Connectivity	Category 4 Regional addresses mobility on major state highway system corridors, which provide connectivity between urban areas and other statewide corridors. Projects must be located outside of the MPO boundaries on the designated highway connectivity network that includes: - The Texas Trunk System - National Highway System (NHS) - Connections to major seaports or border crossings - National Freight Network - Hurricane evacuation routes	Districts submit candidate projects to TPP through the annual UTP Project Call. Projects are recommended by TPP leadership and approved by the TTC.	For each project submitted for Category 4R funding in the UTP Project Call, districts must provide a project score to demonstrate performance-based selection at the district level. TPP additionally scores Category 4R candidate projects statewide and uses	Districts submit projects for approval administrative revision to TPP-UTP. this score as a factor in recommending projects for funding authorization. The statewide scores are also used to assign each project a tier ranking (1, 2, or 3) in the UTP document.



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Funding Category	General Guidance	Project Selection/Approval	Project Selection/Ranking	Programming POC
<b>Category 5</b> CMAQ	Category 5 addresses attainment of National Ambient Air Quality Standard in non-attainment areas (currently the Dallas-Fort Worth, Houston, San Antonio, and El Paso metro areas). Each project is evaluated to quantify its air quality improvement benefits. Funds cannot be used to add capacity for single-occupancy vehicles.	MPOs select the project in coordination with the districts.	Local Scoring/Ranking Methodologies	MPOs coordinate with TxDOT districts who then submit program funding to FIN-Letting Management.
<b>Category 6</b> Structures Replacement and Rehabilitation (Bridge)	Category 6 addresses bridge improvements through the following sub-programs: Highway Bridge Program: For replacement or rehabilitation of eligible bridges on and off the state highway system that are considered functionally obsolete or structurally deficient. Bridges with a sufficiency rating below 50 are eligible for replacement. Bridges with a sufficiency rating of 80 or less are eligible for rehabilitation. A minimum of 15% of the funding must go toward replacement and rehab of off-system bridges. Railroad Grade Separation: For re-placement elimination of at-grade highway-railroad crossings through the construction of highway overpasses or railroad underpasses, and rehab or replacement of deficient railroad underpasses on the state highway system. Bridge Maintenance and Improvement Program (BMIP): For rehab of eligible bridges on the state highway system.	Category 6 funding is allocated to TxDOT's Bridge Division, which selects projects statewide based on district submissions in the bridge project call.	Bridge Division scores projects based on the following: Highway Bridge projects are ranked first by deficiency categorization (e.g. structurally deficient) and then by sufficiency ratings. Railroad Grade Separation projects are selected based on a cost-benefit analysis of factors such as vehicle and train traffic, accident rates, casualty costs, and delay costs for at-grade railroad crossings. Projects in the BMIP are selected statewide based on identified bridge maintenance/improvement needs.	Districts submit projects for approval administrative revision to BRG
<b>Category 7</b> Metropolitan Mobility and Rehabilitation	Category 7 addresses transportation needs within the boundaries of MPOs with populations of 200,000 or greater known as transportation management areas (TMAs). This funding can be used on any roadway with a functional classification greater than a local road or rural minor collector (FC 6 or 7). Common project types include roadway widening (both freeway and non-freeway), new-location roadways, and interchange improvements.	MPOs select the project in coordination with the districts.	Local Scoring/Ranking Methodologies	MPOs coordinate with TxDOT districts who then submit program funding to FIN-Letting Management.
<b>Category 8</b> Safety	Category 8 addresses highway safety improvements through the following sub-programs. <b>Highway Safety Improvement Program (HSIP):</b> Safety-related projects on and off the state highway system. High Risk Rural Roads projects previously authorized remain in Category 8. Safe Routes to School projects previously authorized remain in Category 8. Future Safe Routes to School projects will be managed under Category 9. <b>Safety Bond Program:</b> Allocations for the safety bond program are approved by the Texas Transportation Commission, with the program managed as an allocation program on a statewide basis. <b>Systemic Widening Program:</b> Roadway widening projects on the state highway system. <b>Federal Railway Set-Aside:</b> Funding set aside from HSIP for safety improvements to reduce fatalities, injuries, and crashes at public at-grade crossings. <b>Road to Zero:</b> Funding on the state highway system dedicated to target and reduce fatalities and suspected serious injuries in the three highest contributing categories: roadway and lane departure, intersection safety, and pedestrian safety.	Category 8 funding is allocated to TxDOT's Traffic Safety Division, which selects projects statewide based on district submissions in the safety project call.	Highway Safety Projects are evaluated using three years of crash data and ranked by safety improvement index. Safety Bond Program: Projects are evaluated using the safety improvement index, roadway safety characteristics, and anticipated time required to complete a candidate project. Systemic Widening Program: Projects are evaluated by roadway safety features for preventable severe crash types using total risk factor weights. Federal Railway Set-Aside: Projects are evaluated by roadway safety factors, crash reduction factors, the safety improvement index, and time required to complete a candidate project. All evaluation factors are directly tied to the targeted top three contributing categories in fatalities and suspected serious injuries.	Districts submit projects for approval administrative revision to TRF.

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Funding Category	General Guidance	Project Selection/Approval	Project Selection/Ranking	Programming POC
<b>Category 9</b> Transportation Alternatives Set-Aside Program	<p>Category 9 includes the federal Transportation Alternatives (TA) Set-Aside Program. These funds may be awarded for the following activities:</p> <ul style="list-style-type: none"> <li>- Construction of sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic-calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act.</li> <li>- Construction of infrastructure-related projects that provide safe routes for non-drivers.</li> <li>- Conversion and use of abandoned railroad corridors for trails for pedestrian, bicyclists, or other non-motorized transportation users.</li> <li>- Construction of infrastructure-related projects to improve the ability of students to walk and bicycle to school.</li> </ul>	<p>TxDOT allocates 50% of Category 9 funds to MPOs designated as TMAs (areas with a population over 200,000). The other 50% is designated for statewide flexible use under other federal programs. For TMAs, MPOs select projects in consultation with TxDOT districts. In small urban areas (with populations below 200,000) and rural areas, funds are administered by TxDOT's Public Transportation Division through a competitive process.</p>	<p>Local scoring/ranking methodologies.</p>	<p>MPOs coordinate with TxDOT districts who then submits program funding to FIN-Letting Management.</p>
<b>Category 10</b> Supplemental Transportation Programs	<p>Category 10 addresses a variety of transportation improvements through the following sub-programs:</p> <p><b>Federal Lands Access Program (FLAP):</b> Addresses transportation facilities that are located on, are adjacent to, or provide access to federal lands. <b>Texas Parks and Wildlife Department (TPWD):</b> Construction and rehabilitation of roadways within or adjacent to state parks and other TPWD properties. Subject to memorandum of agreement between TxDOT and TPWD. <b>Green Ribbon Program:</b> Projects to plant trees and other landscaping to help mitigate the effects of air pollution in air quality non-attainment or near non-attainment counties. <b>Curb Ramp Program:</b> Addresses construction or replacement of curb ramps at on-system intersections to make the intersections more accessible to pedestrians with disabilities. <b>Landscape Incentive Awards:</b> Allows TxDOT to execute joint landscape development projects in nine locations based on population categories in association with the Keep Texas Beautiful Governor's Community Achievement Awards Program. The awards recognize participating cities' or communities' efforts in litter control, quality of life issues, and beautification programs and projects. <b>Railroad Grade Crossing and Replanking Program:</b> Replacement of rough railroad crossing surfaces on the state highway system (approximately 50 installations per year statewide). <b>Railroad Signal Maintenance Program:</b> Financial contributions to each railroad company in the state for signal maintenance.</p>	<p>In FLAP, project applications are scored and ranked by the Programming Decision Committee (PDC). Projects selected under FLAP are managed by TPP. <b>Texas Parks and Wildlife Department (TPWD)</b> selects State Park Roads projects in coordination with TxDOT districts. Green Ribbon allocations are based on one-half percent of the estimated letting capacity for the TxDOT districts that contain or are near air quality non-attainment counties and managed by the TxDOT Design Division. <b>Curb Ramp Program</b> projects are selected based on conditions of curb ramps or locations of intersections without ramps and are managed by Design Division. <b>Landscape Incentive Awards</b> are managed by the TxDOT Design Division. TxDOT Rail Division in coordination with TxDOT districts selects <b>Railroad Grade Crossing Replanking and Railroad Signal Maintenance</b> projects.</p>		<p>Districts coordinate with FIN-Letting Management.</p>

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Funding Category	General Guidance	Project Selection/Approval	Project Selection/Ranking	Programming POC
<b>Category 10</b> Coordinated Border Infrastructure	Category 10 Coordinated Border Infrastructure (CBI) addresses improvements to the safe movement of motor vehicles at or across the land border between the United States and Mexico. Awarded to the El Paso, Laredo and Pharr Districts for projects within 50 miles of the international border.	CBI projects selected by districts with FHWA review and approval. Cat 10 CBI projects must be listed in the UTP. FHWA approved Cat 10 CBI projects must be submitted in the UTP Project Call, then approved by the TTC during UTP adoption.	Federal Railway Set-Aside: Projects are evaluated using the railroad crossing index.	Districts submit projects for approval administrative revision to TPP-Freight & International Trade. Projects must be approved in the UTP prior to programming.
<b>Category 11</b> District Discretionary	Category 11 addresses district transportation needs at the discretion of each TxDOT District. Most projects should be on the state highway system. However, some projects may be selected for construction off the state highway system on roadways with a functional classification greater than a local road or rural minor collector. Funds from this program should not be used for right of way acquisition. Common Category 11 project types include roadway maintenance or rehab, added passing lanes (Super 2), and roadway widening (non-freeway). The program can be used to supplement mobility project funding.	Districts select projects on energy sector corridors (see Statewide Planning Map) and within their Category 11ES planning targets. Projects must be vetted through the Energy Sector Program Manager, a role that may rotate among members of TxDOT division or district leadership as assigned by ADM. See TPP- UTP for the current program manager. Districts must submit projects to TPP for approval by ADM.	Scored and ranked by districts and Energy Sector Committee Program Manager.	Districts coordinate with FIN-LM (once approved by Energy Sector Program Manager and TPP).
<b>Category 12</b> Texas Clear Lanes	The Category 12 Texas Clear Lanes subprogram is dedicated to large congestion projects in the five metropolitan TxDOT districts (AUS, DAL, FTW, HOU, SAT). These projects must be vetted through the Congestion Task Force and are selected at the Texas Transportation Commission's discretion.	Projects must be presented and vetted through the Congestion Task Force. Once vetted, districts submit projects to TPP during the annual UTP Project Call. Projects are selected and approved by the TTC.	For each project submitted for Category 12 funding in the UTP Project Call, districts must provide a project score to demonstrate performance-based selection at the district level. TPP additionally scores Category 12 candidate projects statewide and uses this score as a factor in recommending projects for funding authorization. The statewide scores are also used to assign each project a tier ranking (1, 2, or 3) in the UTP document.	Districts submit projects for approval to TPP-UTP.
<b>Category 12</b> Strategic Priority	Category 12 addresses projects with specific importance to the state, as determined by the Texas Transportation Commission (TTC), including those that improve: - Congestion and connectivity - Economic opportunity - Energy sector access - Border and port connectivity - Efficiency of military deployment routes or retention of military assets in response to the Federal Military Base Realignment and Closure Report- The ability to respond to both man-made and natural emergencies Common project types include roadway widening (both freeway and non-freeway), interchange improvements, and new-location roadways.	Districts submit candidate projects to TPP during the annual UTP Project Call. Projects are selected and approved by the TTC.	For each project submitted for Category 12 funding in the UTP Project Call, districts must provide a project score to demonstrate performance-based selection at the district level. TPP additionally scores Category 12 candidate projects statewide and uses this score as a factor in recommending projects for funding authorization. The statewide scores are also used to assign each project a tier ranking (1, 2, or 3) in the UTP document.	Districts submit projects for approval to TPP-UTP.

**Table 5. TxDOT Authorized Users of State Funding Sources**

The table below is a guide to the funding restrictions associated with each of TxDOT's state funding sources and financing tools. While some sources are allowable for non-highway transportation needs, such as aviation, ports, rail, and public transportation, a large majority of TxDOT's funding is dedicated to improvement of the state highway system.

PROJECT TYPE →		Non-Tolled Highways	Tolled Highways	Rail - Passenger	Rail - Freight	Transit	Aviation	Ports
FUNDING SOURCE	Proposition 1 Funds	•						
	Proposition 7 Funds	•						
	State Highway Fund - Dedicated <sup>1</sup>	•	•					
	Proposition 14 Bonds	•	•					
	Proposition 12 Bonds <sup>2</sup>	•	•					
	Texas Mobility Fund - Revenue <sup>3</sup>	•		•		•		
	Texas Mobility Fund - Bond Proceeds <sup>4</sup>	•	•	•		•		
	State Highway Fund - Non-Dedicated <sup>5</sup>	•	•	•	•	•	•	•
	Regional Subaccounts <sup>6</sup>	•	•	•	•	•	•	•
TEXAS MOBILITY FUND, PROPOSITION 14 AND PROPOSITION 12 BOND PROGRAMS ARE UNAVAILABLE OR SUSPENDED.								

**1.** State Highway Fund-Dedicated includes state motor fuel and lubricant taxes and motor vehicle registration fees. It also includes federal reimbursements that are not reflected in the above grid, as a small amount of them may at times be used for other modes of transportation.

**2.** Proposition 12 bond proceeds may be used to provide funding for highway improvement projects, with no distinction between tolled and non-tolled highways.

**3.** Texas Mobility Fund revenues in excess of funds required to pay Texas Mobility Fund debt service are prohibited to pay for toll expenditures as part of 2015 legislation.

**4.** The Texas Constitution allows Texas Mobility Fund bonds to be used to develop and construct state highways, "to provide participation by the

state in the payment of a portion of the costs of constructing and providing publicly owned toll roads and other public transportation projects." "Other public transportation projects" is undefined and therefore may be available for more types of transportation projects than what is listed here.

**5.** "State Highway Fund—Non-Dedicated" includes limited revenue sources. An annual transfer of approximately \$150 million goes to the Texas Emissions Reduction Program (TERP) Fund.

**6.** Regional Subaccount funds may only be used for transportation, highway and air quality projects as defined by Section 228.001 of the Transportation Code in the region where the project from which those funds were derived is located. The revenues are deposited to the State Highway Fund but are not dedicated by the Texas Constitution.



## **V. PERFORMANCE BASED PROGRAMMING**

Performance-based planning and programming is a strategic approach to connect investment and policy decisions to performance goals. Performance measures are quantitative criteria used to evaluate progress. Performance measure targets are the benchmarks against which collected data is gauged. Federal law requires State DOTs, MPOs and transit agencies conduct performance-based planning by adopting performance measures, establishing a baseline, and tracking changes in performance against the adopted measures. The Corpus Christi Metropolitan Planning Organization (Corpus Christi MPO) adopted the State's performance targets for PM1, PM2, and PM3. This Corpus Christi MPO TIP was developed and is actively managed with cooperation with the TxDOT and the CCRTA. It reflects the investment priorities established in the Corpus Christi MPO's 2020-2045 MTP and documents local and federal funds used for Safety, based on state and regional priorities from previous years.

The FAST Act directed the U. S. Secretary of Transportation to promulgate rules to establish performance measures and standards for the National Highway System (NHS), the Highway Safety Improvement Program (HSIP), the Congestion Mitigation and Air Quality Program (CMAQ), and national freight movement on the Interstate System that requires the State Departments of Transportation to:

- Establish performance targets for the new National Performance Measure Rules (PMs) on Safety (PM1), Pavement/Bridge Conditions (PM2), and System Performance/Freight/CMAQ (PM3).
- Report on the condition and performance of the NHS.
- Show progress in achieving the performance targets.

Performance-based planning encourages the most efficient investment of federal transportation funds by increasing accountability, transparency, and providing for better investment decisions that focus on key outcomes related to the seven national goals. Performance Measure Adoption Documentation for the Corpus Christi MPO is provided below and within the appendix of this document. For additional information on Performance Based Planning, please reference the following:

- FHWA Final Rule: <http://www.fhwa.dot.gov/tpm/rule.cfm>
- FTA Final Rule: <https://www.transit.dot.gov/tags/final-rule>
- Performance Based Planning and Programming Guidebook: [https://www.fhwa.dot.gov/planning/performance\\_based\\_planning/pbpp\\_guidebook/](https://www.fhwa.dot.gov/planning/performance_based_planning/pbpp_guidebook/)

The Corpus Christi MPO has a Memorandum of Understanding (MOU), adopted April 5, 2018 by the Corpus Christi MPO TPC, the TxDOT-CRP and the Corpus Christi RTA, for cooperatively developing and sharing transportation performance data as well as the establishment and tracking of performance targets used to demonstrate progress toward attaining these critical regional outcomes.

The MPO developed the 2020 – 2045 Metropolitan Transportation Plan (MTP) utilizing a performance-based planning process with an emphasis on project selection by incorporating specific performance measures pertaining to System Reliability (Preservation), Safety, Multi-modal Use & Opportunity, and Stewardship into the project ranking and prioritization process.

At the core of the Corpus Christi MPO's performance process are measurable metrics used to evaluate the effectiveness of specific functions of the regional transportation system. The Corpus Christi MPO performance measures were distilled from required state and federal measures, as listed in the Decision Lens tool provided by TxDOT. Performance measures must be:

- Quantifiable – Comparable to some standard of acceptability over time
- Easily understood – Explicable in simplified terms to both technical and nontechnical people
- Practical – Developed in a cost-effective manner, relying as much as possible on existing, readily available data sources.

## Safety

Safety is the first national goal (PM1) identified in the FAST Act. In March of 2016, the Highway Safety Improvement Program (HSIP) and Safety Performance Management Measures Rule (Safety PM Rule) was finalized and published in the Federal Register. The rule required MPOs to set targets for the following safety-related performance measures and report progress to the State DOT:

- Number of fatalities (The total number of persons suffering fatal injuries in a motor vehicle crash during a calendar year).
- Rate of fatalities per 100 million vehicle miles traveled (VMT) (The ratio of total number of fatalities to the number of vehicle miles traveled (VMT expressed in 100 Million VMT) in a calendar year).
- Number of serious injuries (The total number of persons suffering at least one serious injury in a motor vehicle crash during a calendar year).
- Rate of serious injuries per 100 million VMT (The ratio of total number of serious injuries to the number of VMT (VMT expressed in 100 Million VMT) in a calendar year).
- Number of non-motorized fatalities and number of non-motorized serious injuries combined (The combined total number of non-motorized fatalities and non-motorized serious injuries involving a motor vehicle during a calendar year).

Safety is the highest priority in the Corpus Christi region and crashes are the single largest cause of non-recurring congestion in the Corpus Christi MPO region. Safety goals call for reducing both the number and rate of fatalities and serious injury crashes. In order to reduce non-recurring congestion, it is also necessary to reduce the number of Property Damage Only (PDO) crashes and the amount of time these crashes individually impact travel on the roads. Incident management is an essential component of congestion management. The general perception is that crash frequency increases with increasing congestion levels while injury severity decreases due to slower speeds. Generally, the most intense congestion occurs when crashes happen in locations that are congested on a recurring basis, (i.e. without a crash).

The 2020 Texas Strategic Highway Safety Plan (SHSP) is the statewide plan focusing on how to accomplish the vision of eliminating fatalities and reducing serious injuries on all public roads. The Corpus Christi MPO supports the TxDOT Safety targets, agreeing to plan and program projects into this TIP that will, once implemented, make progress toward achieving the safety targets. TxDOT's 2019 adopted goal is to work towards reducing the number of deaths on Texas roadways by half by the year 2035 and to zero by the year 2050.

**Table 6. Adopted MPO Safety Targets**

Annual Performance Measure							Anticipated Effects	Adopted Targets	
	2013	2014	2015	2016	2017	2018	2024	2035	2045
Number of Fatal Crashes	25	33	35	33	37	35	30	18	6
Rate of Fatal Crashes per 100 million VMT	1.22	1.57	1.18	1.05	1.18	1.11	1.02	0.55	0.13
Number of Serious Injury Crashes	167	126	112	132	111	124	107	62	13
Rate of Serious Injury Crashes per 100 million VMT	8.14	5.98	3.77	4.20	3.53	3.92	3.64	1.96	0.28
Number of Non-motorized Fatal and Serious Injury Crashes	22	29	32	30	30	39	35	20	5

## Bridge/Pavement Condition Targets (PM2): Adopted in November 2018 by the Corpus Christi MPO

In January 2017, USDOT published the Pavement and Bridge Condition Performance Measures Final Rule, which is also referred to as the PM2 rule. Federal rules require TxDOT and the Corpus Christi MPO to set bridge and pavement performance targets and monitor progress towards achieving those targets. The Corpus Christi MPO

must have four-year targets for all six measures, listed below. The Corpus Christi MPO agreed to support the TxDOT targets for the following six performance measures:

- Percent of Interstate pavements in good condition;
- Percent of Interstate pavements in poor condition;
- Percent of non-Interstate National Highway System (NHS) pavements in good condition;
- Percent of non-Interstate NHS pavements in poor condition;
- Percent of NHS bridges by deck area classified as in good condition; and
- Percent of NHS bridges by deck area classified as in poor condition.

For the pavement measures, five pavement metrics are used to assess condition:

- International Roughness Index (IRI);
- Cracking Percent;
- Rutting;
- Faulting; and
- Present Serviceability Rating (PSR) for lower speed roads.

The condition of transportation assets impact congestion in several ways:

- Roads in poor condition generally lead to slower traffic as drivers seek to avoid potholes and other roadway impediments, and significant congestion and delays can be attributed to vehicles slowing down to avoid potholes or rough pavement.
- An increasing frequency of crashes also can be caused by unexpected changes in surface conditions because of reduction of road friction which affects the stopping ability and maneuverability of vehicles.
- Scheduled and unscheduled maintenance of roads and utility infrastructure under or near roads is the second leading cause of non-recurring congestion, after crashes, in the Corpus Christi MPO area.
- Arterials in the Corpus Christi MPO area are more congested than similar travel in other small MPO areas in the country. The condition of the roads in the Corpus Christi MPO area may be worse than those other MPOs.

The bridge measure assesses the condition of a bridge's deck, superstructure, substructure, and culverts. Good condition suggests that no major investment is needed, and poor condition suggests major reconstruction investment is needed. The Corpus Christi MPO supports the TxDOT Pavement and Bridge Condition targets, shown in the table below, thus agreeing to plan and program projects into this TIP that will, once implemented, make progress toward achieving the Pavement and Bridge Condition targets. The Corpus Christi MPO's performance measures for PM2 are:

#### Pavement Condition

- Percentage of Interstate Highway (IH) pavement in "Good" condition
- Percentage of IH pavement in "Poor" condition
- Percentage of non-IH NHS pavement in "Good" condition
- Percentage of non-IH NHS pavement in "Poor" condition

#### Bridge Condition

- Percentage of IH and NHS bridge deck area in "Good" condition
- Percentage of IH and NHS bridge deck area in "Poor" condition

**Table 7. Federal Performance Measures**

Pavement Condition	Baseline	2020 Target	2022 Target	Anticipated Effects 2024
Percentage of Interstate Highway pavement in “Good” condition	--	--	66.4%	67.0%
Percentage of Interstate Highway pavement in “Poor” condition	--	--	0.3%	0.3%
Percentage of non-Interstate Highway NHS pavement in “Good” condition	54.9%	52.0%	52.3%	53.0%
Percentage of non-Interstate Highway NHS pavement in “Poor” condition	14.0%	14.3%	14.3%	14.0%
Bridge Condition				
Percentage of NHS bridge deck area in “Good” condition	50.7%	50.6%	50.4%	50.6%
Percentage of NHS bridge deck area in “Poor” condition	0.9%	0.8%	0.8%	0.8%

The Corpus Christi MPO TIP was developed and is managed with cooperation with the TxDOT and the CCRTA.

**System Performance and Freight (PM3): Adopted in November 2018**

The PM3 rule requires state DOTs and MPOs to establish two-year and/or four-year performance targets for each PM3 measure. For all targets, the current two-year and four-year targets represent expected performance at the end of calendar years 2019 and 2021, respectively. TxDOT established targets as follows:

- Percent of person-miles on the Interstate system that are reliable – two-year and four-year targets
- Percent of person-miles on the non-Interstate NHS that are reliable – four-year targets
- Truck Travel Time Reliability – two-year and four-year targets

Another adopted National Goal is to “...achieve a significant reduction in congestion on the National Highway System.” There are two primary performance measures for this goal.

- (Reducing) Annual hours of peak-hour excessive delay per capita
- (Increasing) Percent of non-single-occupant vehicle travel

The Corpus Christi MPO supports the TxDOT Operational Performance and Congestion targets, shown below, thus agreeing to plan and program projects into this TIP that will, once implemented, make progress toward achieving the System Performance and Congestion targets.

**Reduce Congestion on Regionally Significant Corridors**

In January 2017, USDOT published the System Performance/Freight Performance Measures Final Rule to establish measures to assess passenger and freight performance on the Interstate and non-Interstate National Highway System (NHS). The rule, which is referred to as the PM3 rule, requires the Corpus Christi MPO to set targets for the following performance measures:

- Percent of person-miles on the Interstate system that are reliable, also referred to as Level of Travel Time Reliability (LOTTR);
- Percent of person-miles on the non-Interstate NHS that are reliable (LOTTR);
- Truck Travel Time Reliability index (TTTR);
- Annual hours of peak hour excessive delay per capita; and
- Percent of non-single occupant vehicle travel (Non-SOV).

In the Corpus Christi MPO, traffic congestion and travel time reliability metrics are, at a system-wide level, trending in a wrong direction. Two key metrics that are monitored are delay per capita and the duration of the congested period.



### Operational Performance and Congestion Targets (PM3)

The Corpus Christi MPO adopted the following System Performance and Freight Performance Measures based on the Travel Time Reliability (TTR) Index on Interstate Highway, TTR index on Non-Interstate Highway, and Truck Travel Time Reliability (TTTR) Index.

**Table 8. Federal Performance Measures for System Performance and Freight**

System Performance	Baseline	2020 Target	2022 Target	Anticipated Effects 2024
Travel Time Reliability Index on Interstate Highway	79.5%	61.2%	56.6%	65.0%
Travel Time Reliability Index on non-Interstate Highway	--	--	50.0%	53.0%
Freight Performance				
Truck Travel Time Reliability Index	1.40%	1.70%	1.79%	1.50%

**Table 9. Operational Performance and Congestion Targets**

Travel Time Reliability Index	2015 Measured	2016 Measured	2017 Measured	2020 Measured	2022 Measured	Anticipated Effects 2024
Travel Time Reliability (TTR)	100%	100%	98%	97%	95%	98%
Statewide TTR	79%	78%	79%	80%	67%	--
Corpus Christi MPO Non-Interstate TTR	95%	94%	97%	87%	85%	95%
Statewide Non-Interstate TTR	60%	59%	80%	71%	62%	--

Source: TxDOT Crash Reporting Information System, TxDOT Multi-Year Roadway Data Tables

### Transit Asset Management Performance (TAM) Target

On July 26, 2016, FTA published the final Transit Asset Management rule. This rule applies to all recipients and subrecipients of Federal transit funding that own, operate, or manage public transportation capital assets. The rule defines the term “state of good repair,” requires that public transportation providers develop and implement transit asset management (TAM) plans, and establishes state of good repair standards and performance measures for four asset categories: rolling stock, equipment, transit infrastructure, and facilities. The rule became effective on October 1, 2018. The table below identifies performance measures outlined in the final rule for transit asset management.

**Table 10. FTA Transit Asset Management (TAM) Final Rule Performance Measures**

Asset Category	Performance Measurement
Equipment	Percentage of non-revenue, support-service and maintenance vehicles that have met or exceeded their useful life benchmark
Rolling Stock	Percentage of revenue vehicles within a particular asset class that have either met or exceeded their useful life benchmark
Infrastructure	Percentage of track segments with performance restrictions
Facilities	Percentage of facilities within an asset class rated below condition 3 on the TERM scale

As part of the FAST Act, performance measures were incorporated for transit agencies, primarily through the Transit Asset Management (TAM) assessment and planning requirements. The Corpus Christi Regional Transportation Authority (CCRTA) TAM plan was developed to meet the FTA’s requirements. All assets owned by

CCRTA were examined using the Federal Transit Administration (FTA) Transit Economic Requirements Model (TERM) which uses a scale of one to five to determine the quality of the asset. The scale is as follows:

- 1 = Poor; The asset is critically damaged or in need of immediate repair; well past useful life.
- 2 = Marginal Defective or deteriorated; in need of replacement; exceeded useful life.
- 3 = Adequate; Moderately deteriorated or defective; has not exceeded useful life.
- 4 = Good; Good condition, no longer new, may be slightly defective/deteriorated but is functional.
- 5 = Excellent; No visible defects, new or near new, may still be under warranty if applicable.

The CCRTA adopted the following performance targets and it was approved by the Corpus Christi MPO Transportation Policy Committee in December 2018.

**Table 11. Corpus Christi Regional Transportation Authority Adopted Performance Targets**

Asset Class	Performance Measures	FY 2019 Target
Non-Revenue Vehicles	Age	Target % should not exceed 6.82% or Useful Life Benchmark to maintain the SGR
Revenue Vehicles (Rolling Stock)	Mileage	Target % should not exceed 0.0 % or Useful Life Benchmark to maintain the SGR
Facilities	Condition	Target % should not exceed 15.38% or Useful Life Benchmark to maintain the SGR

SGR – State of Good Repair

The MPO will cooperatively work with the CCRTA to select transit projects that achieve these performance targets. The May Transportation Improvement Program (TIP) amendment is to add preventive maintenance projects in each year with \$1,000,000 budget to achieve the TAM performance targets.

#### **FY 2021-2024 TIP Fiscally Constrained Project List**

The development of the approved list of projects started with the 25-year long-range Transportation Plan, the 2020-2045 Metropolitan Transportation Plan (2020-2045 MTP) for the Corpus Christi MPO. The 2020-2045 MTP list of fiscally constrained projects in Chapter 7 of the approved document serves as the list of projects eligible for this FY 2021-2024 TIP. This list of projects is shown in **Table 12. 2020-2045 MTP Fiscally Constrained Project List (FY 2021-2024 TIP Eligible List)**. Using the performance measures, and allocating available funding as well as input from the public, technical staff and elected officials from the local governments and partner agencies, the following list of fiscally constrained projects was developed. **Table 13. FY 2021-2024 TIP Fiscally Constrained Project List** presents the projects for the FY 2021-2024 TIP.

#### **Project Stages**

Projects progress through various stages of development prior to becoming operational. Transportation investments, particularly new facilities, typically take several years of planning before construction can begin. Prior to construction, transportation projects often require sponsors conduct feasibility studies, route studies, public hearings, environmental and social impact assessments, and purchase of right-of-way. The TxDOT current process is summarized below.

#### **TxDOT Project Development Process**

1. **Project Initiation:** This phase of the project includes all the steps between needs identification, through programming, up to the execution of the legal agreement (AFA) between the local government and TxDOT. The MTP and TIP will identify the needs, objectives, priorities, and specific activities that will be performed by each project or program. The product of the project initiation phase includes, at a minimum:
  - Description of the project or program: In a performance-based planning and programming process, project identification begins with determining the need for the project based on crash frequency and

severity, pavement condition, bridge condition, conformance with current geometric standards, security, issues associated with demand for moving people and goods, resiliency, and other adopted MPO goals and objectives. The evaluation of need is based on measured current and forecast future conditions, not on an assumption that prior decisions are still valid. Providing analyses and/or data to support problems or unsatisfactory conditions identified in the need sentence is required. Project descriptions will be detailed enough to be understandable to the general public with regard to scope of the project, its location, schedule and costs. It will also provide enough detail to allow forecast and evaluation of the relative performance-based merits of the various projects against each other.

- **Cost:** The preparation of a project cost estimate is a constantly evolving process that begins prior to programming and continues throughout the lifecycle of the project. Funding needs for a project includes the construction cost estimate, both the preliminary and final design plans, the environmental analysis, mitigation activities, and a separate right of way (ROW) cost estimate. The estimate will utilize the description that is used for evaluation purposes.
  - **Funding sources:** Twelve specific purpose categories of funds have been established by federal and state legislation and commission policy for highway transportation programs (See Section G above). Funding categories have formally established target LET dates and are either allocated state or district-wide programs or project specific.
  - **Schedule:** The schedule shown in the TIP should include the year that each phase will begin, with detail realistic enough to provide reasonable assurance that projects will achieve federally required funding milestones, including completion of expenditures within four years of funding obligation.
  - **RPIC:** Prior to beginning work, the local government and TxDOT will each designate a “responsible person in charge” (RPIC) for the project. The local government is also required to assign a “qualified person” to the project.
  - **Minute Order:** Obtain from the Texas Transportation Commission approval of minute orders as appropriate. A minute order is a formal expression of direction or intent approved by the Texas Transportation Commission to authorize actions by TxDOT.
2. **Advance Funding Agreement:** An Advance Funding Agreement (AFA) is a contract under which TxDOT and the local government allocate participation in a transportation improvement project. The AFA defines the scope of work, labor and material resources, and cash funding responsibilities to be contributed by each party that are necessary to accomplish a transportation project. These agreements are used when local entities participate in funding projects or programs. The local government funding may be directed toward preliminary engineering, construction, right of way, utility relocation costs, maintenance or as a match for federal funds for any other project expense.

The executed AFA will state the party responsible to perform each project development activity and the funding obligations of each party to the agreement. TxDOT is required to determine if the local government is qualified and has adequate resources and controls to perform the desired project work elements prior to the department's authorizing the entity to perform the project work. This is accomplished through the Local Government Risk Assessment process. Standard templates for Voluntary AFAs and AFAs are available from the standard contracts webpage on the Contract Services Division Crossroads website. This process can take 12-18 months. This timeframe should be considered during programming of project funds.

If there is a significant change in the scope of work, funding or schedule, the district will prepare an AFA amendment that sets forth the change and the reason for the change. An amendment to the AFA will frequently trigger a change order in the related bid documents or scope of services. Any change in the scope of the project must be consistent with TxDOT's change order policy. If the proposed change is outside of the change order policy, the district must coordinate with TxDOT's Design Division to get a new minute order from the Transportation Commission to authorize the new project.

After a contract (AFA) is executed between the local entity and TxDOT, the local entity must request and obtain authorization to proceed with the project work. This authorization is a State Letter of Authority (SLOA). The SLOA must be issued on all projects whether the work is done by the local entity or contractors. For non-construction projects, a single SLOA is required prior to initiation of work on the project. For transportation projects that include construction up to three SLOAs may be required during the course of the overall project. The first SLOA is required prior to the Preliminary Engineering phase, the second SLOA is required prior to the acquisition of right of way or the accommodation of utilities and the third is required prior to initiation of advertising for construction.

In addition to the SLOA, a Federal Project Authorization and Agreement (FPAA) is required for both non-construction and construction projects that use federal funds. Upon completion of the FPAA form, the use of federal funds is authorized between FHWA and TxDOT for reimbursement of the approved costs.

**The FPAA is required prior to TxDOT issuing each SLOA.**

3. **Environmental Compliance:** The impacts of a project or program upon the social, economic, and environmental conditions of a region are considered during the earliest stages of planning and development for any federally funded project. In many projects, the Environmental Compliance phase is performed concurrently with the preliminary design (30 percent design). The Environmental Compliance phase must be completed prior to right-of-way acquisition or utility accommodation.

During development of an MTP the combined impacts of all funded projects are estimated, and appropriate mitigation is identified. The three major categories of environmental study are: Class I - environmental impact statement (EIS) is very detailed and is used when the project is expected to have significant impacts on the human or natural environment. Class II – Categorically Excluded (CE). Projects which do not have cumulative or significant effects. Class III – Environmental Assessment (EA). Projects in this category are not Class I or Class II. Costs for this activity vary considerably, with four percent (4%) of initial construction cost often used as a starting point.

4. **Preliminary Engineering and 30% Design:** During this step, project sponsors work with TxDOT and partner entities to define the project location, develop concepts to satisfy the project need, and agree on parameters (such as horizontal curve radii and super elevation, grades and stopping sight distances) for the final design. Parameters for the design may be established if they don't affect objective consideration of alternatives in the NEPA review process or cause adverse environmental impacts. Preliminary design must include an identification of the environmental issues and commitments that must be considered during the project development.

The Design Summary Report (DSR) contains the record of project development and design and constitutes an understanding of basic features of the project by FHWA, TxDOT divisions, TxDOT district office, and local government agencies. Costs for this activity generally five percent (5%) of initially estimated project construction costs. This activity generally takes 18 months, which should be considered during programming and reprogramming of project funds.

5. **Right-of-Way and Utilities:** Determine existing Right-of-Way (ROW) limits, ownership of the properties that abut ROW, and ownership of any properties that may be temporarily or permanently acquired. It also includes identification of owners of any utilities that are in the existing ROW or on the proposed ROW. Above ground utility information may be obtained by standard land surveying methods. Underground utility locations may be determined by conventional survey methods, newer technologies, or by Subsurface Utility Engineering (SUE). During a Preliminary Design Concept Conference, proposed project limits, impacts, and physical and



financial constraints are studied. Preliminary ROW data is used to adjust alignments and minimize ROW impacts to properties. Acquisition of ROW requires a separate cost estimate, which should be noted in the TIP and STIP. The schedule for ROW acquisition can greatly delay a project and should be considered during programming / reprogramming of project construction funds.

6. **Final (100%) Plans, Specifications, and Estimate Development (PS&E):** The Design Concept Conference (DCC) is the beginning of PS&E preparation and occurs after most of the background data is gathered. The DCC finalizes fundamental aspects, concepts, and design criteria of the project. The Design Summary Report (DSR) developed during Preliminary Engineering is updated as these activities are performed. The DSR is the auditable record of project development and is stored in the project File of Record. Make a site visit to inspect existing conditions pertinent to sequence of construction. Outcomes include determining the need for construction speed zoning and traffic control requirements at intersections, prepare preliminary staging plans using typical sections with plan views showing complex areas, and developing detours and road closures plan to ensure safe, continuous operation for motorcyclists, pedestrians and bicyclists, along with work zone safety for the traveling public, department employees, and contractor's employees. It may also be necessary to determine time of day limitations for construction activities to avoid impacts to traffic and adjacent properties. Costs for this activity are generally five percent (5%) of initially estimated project construction costs. This activity generally takes 18 months, which should be considered during programming and reprogramming of project funds.
7. **Letting and Award:** Letting is the process to award a contract, for the erection of public works, to one of several bidders. Bids to construct projects are forwarded to the Transportation Commission for approval and the approved contract is awarded (let) to the lowest responsive bid submitted by a qualified bidder. On an annual basis, the Letting Management Section of the Financial Management Division (FIN) requires districts establish the three-year letting schedule. The one-year letting schedule is a planning document and is subject to change, typically advancing or delaying projects from the following 2 years. Letting schedules are posted on the Internet.
8. **Construction:** Highway construction means construction activities carried out in relation to a highway. This includes the act of locating, supervising and mapping of an area for a highway. The construction of highways is usually done by state or local communities. The construction of highways will conform to federal or the state laws. Construction plans are the drawings approved by the engineer, or true reproductions thereof, which show the location, character, dimensions, and details of the work and which are a part of the contract.
9. **Project Closeout and Maintenance:** Upon completion of the project, the department prepares a Statement of Cost to document actual project costs incurred by the department. If any additional funds are owed by the local government, Financial Management Division sends an invoice to the local government. Any overpayment by the local government, after all cost and claims are paid, is returned.

Table 12. 2020-2045 MTP Fiscally Constrained Project List (FY 2021-2024 TIP Eligible List)

Plan Period	Rank	MTP ID	Project Name	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Construction Cost (\$, millions)	CAT 1	CAT 2	CAT 4	CAT 6	CAT 7	CAT 9	CAT 12	Local / Other	Prior Funding	Total Project Cost (\$, millions)
TIP / STIP	1	MPO-001	SH 358 (SPID) Ramp Reversal	Ramp reversal Phase II-B	Nile Drive	Staples Street	TxDOT-CRP	On	2	\$35.00	--	\$35.00	--	--	--	--	--	--	--	\$45.43
TIP / STIP	1	MPO-002	I-37	Widen freeway by constructing additional 2 travel lanes northbound and 1 additional travel lane southbound	Redbird Lane (Overpass)	Nueces River	TxDOT-CRP	On	2 / 4U / 12	\$60.00	--	\$12.00	\$15.00	--	--	--	\$33.00	--	--	\$77.88
TIP / STIP	1	MPO-003	US 181	Widen freeway by constructing 1 additional travel lane in each direction	North of FM 3296 (Buddy Ganem Drive)	FM 2986 (Wildcat Drive)	TxDOT-CRP	On	2 / 4U	\$14.00	--	\$2.00	\$12.00	--	--	--	--	--	--	\$18.17
TIP / STIP	1	MPO-004	US 181 Ramp Reversals	Reverse entrance and exit ramps in Northbound direction	FM 3296 (Buddy Ganem Drive)	FM 2986 (Wildcat Drive)	TxDOT-CRP	On	2	\$4.00	--	\$4.00	--	--	--	--	--	--	--	\$5.19
TIP / STIP	1	MPO-005	SH 286 (Crosstown)	Extend 4-lane divided freeway by constructing mainlanes, overpasses, and frontage roads	FM 43 (Weber Road)	South of FM 2444 (Staples Street)	TxDOT-CRP	On	2	\$40.00	--	\$40.00	--	--	--	--	--	--	--	\$51.92
TIP / STIP	1	MPO-006	FM 893 (Moore Avenue)	Upgrade from 2-lane roadway to 5-lane urban roadway by constructing additional 2 lanes and CLTL	CR 3685 (Stark Road)	0.2 miles West of CR 79 (Gum Hollow)	TxDOT-CRP	On	2	\$7.00	--	\$7.00	--	--	--	--	--	--	--	\$9.09
TIP / STIP	2	MPO-007	Harbor Bridge Hike and Bike - Connectivity	Construct pedestrian and bike facilities	On various city streets from Coles High School	Williams Memorial Park	City of Corpus Christi	Off	7	\$1.42	--	--	--	--	\$1.42	--	--	--	--	\$1.84
TIP / STIP	2	MPO-008	US 181 Harbor Bridge Voluntary Relocation Program	US 181 Harbor Bridge Voluntary Relocation Mitigation Program	N/A	N/A	MPO	Off	7 / Local / ROW	\$71.00	--	--	--	--	\$36.00	--	--	\$20.00	\$15.00	\$92.15
TIP / STIP	2	MPO-009	Harbor Bridge Park Improvements	Park mitigation for Harbor Bridge	At various city parks including	Ben Garza, TC Ayers, and new location	City of Corpus Christi	Off	7	\$4.80	--	--	--	--	\$4.80	--	--	--	--	\$6.23
TIP / STIP	3	MPO-010	Pedestrian and Bike	Pedestrian and bike facility improvements	At Various Locations on Brewster Street	N/A	City of Corpus Christi	On	7	\$1.42	--	--	--	--	--	--	--	--	\$1.42	\$1.84
TIP / STIP	4	MPO-011	Schanen Ditch Hike and Bike Trail: Phase IV	Construct and design Hike and Bike Trail	Killarmet Drive	Holly Road	City of Corpus Christi	Off	9	\$0.39	--	--	--	--	--	\$0.39	--	--	--	\$0.39
TIP / STIP	4	MPO-012	Region-wide Bike Boulevard Wayfinding Initiative	Designation of bicycle boulevards with pavement markings and signage	Various Locations in Corpus Christi and Portland	N/A	City of Corpus Christi	Off	9	\$0.62	--	--	--	--	--	\$0.62	--	--	--	\$0.62
TIP / STIP	4	MPO-013	Portland Bicycle Lanes	Construct one way cycle track and buffered bike lanes	At Various Locations in Portland	N/A	City of Portland	On	9	\$0.36	--	--	--	--	--	\$0.36	--	--	--	\$0.36
TIP / STIP	4	MPO-014	Dr Hector P Garcia Park Hike & Bike Trail: Phase II	Construct & design Hike & Bike Trail	At Garcia on Trojan Dr	Horne Road	City of Corpus Christi	Off	9	\$0.70	--	--	--	--	--	\$0.70	--	--	--	\$0.70
TIP / STIP	16	MPO-015	PR 22	Feasibility study: intersection improvements	At SH 361/PR 22 intersection	Zahn Road	TBD	On	7	\$1.20	--	--	--	--	\$1.20	--	--	--	--	\$1.56
10-Year	1	MPO-016	PR 22	Corridor upgrade for pedestrian and access management improvements without adding capacity	Aquarius Street	Whitecap Boulevard	TxDOT-CRP	On	2	\$16.00	--	\$16.00	--	--	--	--	--	--	--	\$19.20
10-Year	1	MPO-017	SH 361	Upgrade/add direct connectors	At SH 35 interchange	0.6 miles Southeast on SH 361	TxDOT-CRP	On	2	\$38.50	--	\$38.50	--	--	--	--	--	--	--	\$46.20
10-Year	1	MPO-018	SH 35	Upgrade/add direct connectors	FM 3284	0.23 North of SH 361	TxDOT-CRP	On	4U	\$21.50	--	--	\$21.50	--	--	--	--	--	--	\$25.80
10-Year	9	MPO-019	SS 544 (Agnes Street / Laredo Street)	Operational improvements without adding capacity	SH 286 (Crosstown)	Coopers Alley	City of Corpus Christi	Off	7	\$5.50	--	--	--	--	\$5.50	--	--	--	--	\$6.60
10-Year	12	MPO-020	Holly Road Travel Lanes	Construct Phase II by adding 2 additional travel lanes	SH 286	Greenwood Drive	City of Corpus Christi	Off	7	\$4.73	--	--	--	--	\$4.73	--	--	--	--	\$5.68
10-Year	13	MPO-021	Regional Parkway / Rodd Field Road Extension	NEPA Process for new location 4-lane roadway (Segment B) and Rodd Field Road	Yorktown Boulevard	SH 286 (Crosstown)	City of Corpus Christi	Off	7	\$1.89	--	--	--	--	\$1.89	--	--	--	--	\$2.27
10-Year	13	MPO-022	Regional Parkway	NEW Location: Construct Phase I consisting of 4-lane roadway (Segment B)	Rodd Field Road	SH 286 (Crosstown)	City of Corpus Christi	Off	7	\$45.00	--	--	--	--	\$45.00	--	--	--	--	\$54.00
10-Year	13	MPO-023	Rodd Field Road Extension	Construct Phase I consisting of 2-lane roadway with raised medians on new location	Yorktown Boulevard	Future Regional Parkway (South of Oso Creek)	City of Corpus Christi	Off	7	\$25.00	--	--	--	--	\$25.00	--	--	--	--	\$30.00
10-Year	14	MPO-024	Yorktown Boulevard	Construct 2 additional travel lanes with turn lanes. Elevate and widen bridge.	Rodd Field Road	Laguna Shores Road	City of Corpus Christi	Off	7	\$39.41	--	--	--	--	\$39.41	--	--	--	--	\$47.29
10-Year	15	MPO-025	Timon Boulevard / Surfside Boulevard	Rehabilitate without additional capacity, construct bicycle facilities	Beach Avenue	Burleson Street	City of Corpus Christi	Off	7	\$20.00	--	--	--	--	\$20.00	--	--	--	--	\$24.00
10-Year	19	MPO-026	Flour Bluff Drive	Upgrade to 5-lane urban roadway by constructing additional 2-lanes and CLTL	South of Don Patricio Road	Yorktown Boulevard	City of Corpus Christi	Off	7	\$17.00	--	--	--	--	\$17.00	--	--	--	--	\$20.40
10-Year	22	MPO-027	CR 72	Construct 2 additional travel lanes (CTWLTL)	FM 2986 (Wildcat Drive)	CR 2032	City of Portland	Off	7	\$5.92	--	--	--	--	\$5.92	--	--	--	--	\$7.10

Table 12. 2020-2045 MTP Fiscally Constrained Project List (FY 2021-2024 TIP Eligible List)

Plan Period	Rank	MTP ID	Project Name	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Construction Cost (\$, millions)	CAT 1	CAT 2	CAT 4	CAT 6	CAT 7	CAT 9	CAT 12	Local / Other	Prior Funding	Total Project Cost (\$, millions)
10-Year	23	MPO-028	Joe Fulton International Trade Corridor (JFITC) Realignment	Corridor improvements	0.5 miles west of Navigation Boulevard	0.5 miles east of Navigation Boulevard	Port of Corpus Christi	Off	7	\$5.00	--	--	--	--	\$5.00	--	--	--	--	\$6.00
10-Year	32	MPO-029	US 181 Companion Drainage Project	Construction of the companion drainage project across the TxDOT right-of-way	Sunset Road	FM 3239 (Buddy Ganem Drive)	TxDOT-CRP	On	2 / 7 / Local	\$7.00	--	--	--	--	--	--	--	\$7.00	--	\$8.40
10-Year	35	MPO-030	Future Category 9 Projects	Projects selected through competitive process	N/A	N/A	TBD	On/Off	9	\$12.43	--	--	--	--	--	\$12.43	--	--	--	\$12.43
Long Range	5	MPO-031	SH 358 (SPID) Ramp Reversal	Ramp Reversal Phase II-C (Braided ramps)	Airline Road	Everhart Road	TxDOT-CRP	On	2	\$35.00	--	\$35.00	--	--	--	--	--	--	--	\$42.00
Long Range	6	MPO-032	SH 286 (Crosstown)	Construct 1 additional northbound travel lane with ramp upgrades	SS 544 (Agnes Street / Laredo Street)	SH 358 (SPID)	TxDOT-CRP	On	2	\$80.00	--	\$80.00	--	--	--	--	--	--	--	\$96.00
Long Range	7	MPO-033	FM 624 (Northwest Boulevard)	Upgrade from 4-lane roadway to 6-lane roadway including raised medians	CR 69	FM 73	TxDOT-CRP	On	2 / 4U / 7	\$18.00	--	\$6.00	\$10.00	--	\$2.00	--	--	--	--	\$21.60
Long Range	8	MPO-034	I-37 / SH 358 Interchange	Reconstruct Interchange to provide 2-lane direct connectors from SB I-37 to EB SH 358 and WB SH 358 to NB I-37	At I-37/SH 358 interchange	N/A	TxDOT-CRP	On	2 / 4U	\$100.00	--	\$60.00	\$40.00	--	--	--	--	--	--	\$120.00
Long Range	10	MPO-035	FM 43 (Weber Road)	Upgrade to 5-lane roadway by constructing additional 2 lanes and CLTL	SH 286 (Crosstown)	FM 665 (Old Brownsville Road)	TxDOT-CRP	On	2 / 4U	\$40.00	--	\$15.00	\$25.00	--	--	--	--	--	--	\$48.00
Long Range	11	MPO-036	SH 286 (Crosstown) Braided Ramp	Construct braided ramps northbound from Holly to SH 358	South of Holly Road	SH 358 (SPID)	TxDOT-CRP	On	2 / 4U	\$60.00	--	\$25.00	\$35.00	--	--	--	--	--	--	\$72.00

Table 13a. FY 2021-2024 TIP DRAFT Fiscally Constrained Project List

TIP Fiscal Year	Project ID	Project Name	Project Phase	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Construction Cost (\$,millions)	CAT 1	CAT 2	CAT 4	CAT 7	CAT 9	CAT 12	Local/Other	Prior Funding	Total Project Cost (\$,millions)
2021	MPO-001	SH 358 (SPID) Ramp Reversal	NEPA, ROW, Design, or Construction	Ramp reversal Phase II-B	Nile Drive	Staples Street	TxDOT-CRP	On	2	\$35.00		\$35.00							\$45.43
2021	MPO-002	I-37	NEPA, ROW, Design, or Construction	Widen freeway by constructing additional 2 travel lanes northbound and 1 additional travel lane southbound	Redbird Lane (Overpass)	Nueces River	TxDOT-CRP	On	2 / 4U / 12	\$60.00		\$12.00	\$15.00			\$33.00			\$77.88
2021	MPO-003	US 181	NEPA, ROW, Design, or Construction	Widen freeway by constructing 1 additional travel lane in each direction	North of FM 3296 (Buddy Ganem Drive)	FM 2986 (Wildcat Drive)	TxDOT-CRP	On	2 / 4U	\$14.00		\$2.00	\$12.00						\$18.17
2021	MPO-004	US 181 Ramp Reversals	NEPA, ROW, Design, or Construction	Reverse entrance and exit ramps in Northbound direction	FM 3296 (Buddy Ganem Drive)	FM 2986 (Wildcat Drive)	TxDOT-CRP	On	2	\$4.00		\$4.00							\$5.19
2021	MPO-005	SH 286 (Crosstown)	NEPA, ROW, Design, or Construction	Extend 4-lane divided freeway by constructing mainlanes, overpass, and frontage roads	FM 43 (Weber Road)	South of FM 2444 (Staples Street)	TxDOT-CRP	On	2	\$40.00		\$40.00							\$51.92
2021	MPO-006	FM 893 (Moore Avenue)	NEPA, ROW, Design, or Construction	Upgrade from 2-lane roadway to 5-lane urban roadway by constructing additional 2 lanes and CLTL	CR 3685 (Stark Road)	0.2 miles West of CR 79 (Gum Hollow)	TxDOT-CRP	On	2	\$7.00		\$7.00							\$9.09
2024	MPO-007	Harbor Bridge Hike and Bike - Connectivity	NEPA, ROW, Design	Construct pedestrian and bike facilities	On various city streets from Coles High School	Williams Memorial Park	City of Corpus Christi	Off	7	\$1.42				\$1.42					\$1.84
2021	MPO-008	US 181 Harbor Bridge Voluntary Relocation	NEPA, ROW, Design, or Construction	US 181 Harbor Bridge Voluntary Relocation Mitigation Program	N/A	N/A	MPO	Off	7/ Local/ ROW	\$71.00				\$31.00			\$20.00	\$20.00	\$92.15
2021	MPO-009	Harbor Bridge Park Improvements	NEPA, ROW, Design, or Construction	Park mitigation for Harbor Bridge	At various city parks	Ben Garza, TC Ayers and new location	City of Corpus Christi	Off	7/ Local	\$4.80				\$1.30			\$3.50		\$6.23
2021	MPO-011	Schanen Ditch Hike and Bike Trail: Phase IV	NEPA, ROW, Design, or Construction	Construct and design Hike and Bike Trail	Killarmet Drive	Holly Road	City of Corpus Christi	Off	9	\$0.39					\$0.39				\$0.39
2021	MPO-012	Region-wide Bike Boulevard Wayfinding Initiative	NEPA, ROW, Design, or Construction	Designation of bicycle boulevards with pavement markings and signage	Various locations in Corpus Christi and Portland	N/A	City of Corpus Christi	Off	9	\$0.62					\$0.62				\$0.62
2021	MPO-013	Portland Bicycle Lanes	NEPA, ROW, Design, or Construction	Construct one way cycle track and buffered bike lanes	At various locations in Portland	N/A	City of Portland	On	9	\$0.36					\$0.36				\$0.36
2021	MPO-014	Dr. Hector P. Garcia Hike & Bike Trail: Phase II	NEPA, ROW, Design, or Construction	Construct & design Hike & Bike Trail	At Garcia on Trojan Dr.	Horne Road	City of Corpus Christi	Off	9	\$0.70					\$0.70				\$0.70
2024	MPO-016	PR 22	NEPA, ROW, Design, or Construction	Corridor upgrade fro pedestrian and access management improvements without adding capacity	Aquarius Street	Whitecap Boulevard	TxDOT-CRP	On	2	\$16.00		\$16.00							\$19.20
2024	MPO-017	SH 361	NEPA, ROW, Design, or Construction	Upgrade/add direct connectors	At SH 35 interchange	0.6 miles Southeast on SH 361	TxDOT-CRP	On	2	\$38.50		\$38.50							\$46.20
2024	MPO-018	SH 35	NEPA, ROW, Design, or Construction	Upgrade/add direct connectors	FM 3284	0.23 North of SH 361	TxDOT-CRP	On	4U	\$21.50			\$21.50						\$25.80
2024	MPO-030	Future Category 9 Projects	NEPA, ROW, Design, or Construction	Projects selected through competitive process	N/A	N/A	TBD	On/Off	9	\$2.39					\$2.39				\$2.39
2021	TxDOT-002	IH 37	NEPA, ROW, Design, or Construction	Widen freeway	Nueces River	IH 37/US 77 Interchange	TxDOT-CRP	On	4	\$22.00			\$22.00						\$22.00
2021	CCRTA-036	FY 21 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.86							\$0.86		\$0.86
2021	CCRTA-037	FY 21 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2021	CCRTA-038	FY 21 Support/Relief Vehicles	Capital	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.21							\$0.21		\$0.21
2021	CCRTA-039	FY 21 Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$7.37							\$7.37		\$7.37
2021	CCRTA-040	FY 21 Bus Support Equipment and Facilities/Hardware/Software	Transit Maintenance/Operations	Bus Support Equipment and Facilities/Hardware/Software	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.21							\$0.21		\$0.21
2021	CCRTA-041	FY 21 Engine Overhaul Program	Transit Maintenance/Operations	Engine Overhaul Program	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.64							\$0.64		\$0.64
2021	CCRTA-042	FY 21 Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	Transit Maintenance/Operations	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	N/A	N/A	Corpus Christi RTA	Off	5339	\$0.05							\$0.05		\$0.05
2021	CCRTA-043	FY 21 Bus Support Equipment and Facilities/Hardware/Software	Transit Maintenance/Operations	Bus Support Equipment and Facilities/Hardware/Software	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.21							\$1.21		\$1.21
2021	CCRTA-044	FY 21 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.85							\$0.85		\$0.85
2021	CCRTA-045	FY 21 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00



Table 13a. FY 2021-2024 TIP DRAFT Fiscally Constrained Project List

TIP Fiscal Year	Project ID	Project Name	Project Phase	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Construction Cost (\$,millions)	CAT 1	CAT 2	CAT 4	CAT 7	CAT 9	CAT 12	Local/Other	Prior Funding	Total Project Cost (\$,millions)
2021	CCRTA-046	FY 21 Mobile Bus Lift	Transit Maintenance/Operations	Mobile Bus Lift	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.05							\$0.05		\$0.05
2021	CCRTA-047	FY 21 5310 Sub-recipient	Transit Maintenance/Operations	5310 Sub-recipient	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40
2021	CCRTA-048	FY 21 Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2022	CCRTA-049	FY 22 5310 Sub-recipient	Transit Maintenance/Operations	5310 Sub-recipient	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40
2022	CCRTA-050	FY 24 Westside Station near DMC West Campus	Capital	Westside Station near DMC West Campus	N/A	N/A	Corpus Christi RTA	Off	5307	\$5.10							\$5.10		\$5.10
2022	CCRTA-051	FY 22 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.86							\$0.86		\$0.86
2022	CCRTA-052	FY 22 Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2022	CCRTA-053	FY 22 Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$6.58							\$6.58		\$6.58
2022	CCRTA-054	FY 22 Support/Relief Vehicles	Capital	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.34							\$0.34		\$0.34
2022	CCRTA-055	FY 22 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.50							\$0.50		\$0.50
2022	CCRTA-056	FY 24 Support Equipment and Facilities/Hardware/Software	Transit Maintenance/Operations	Bus Support Equipment and Facilities/Hardware/Software	N/A	N/A	Corpus Christi RTA	Off	5339	\$1.09							\$1.09		\$1.09
2023	CCRTA-057	FY 23 Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$8.54							\$8.54		\$8.54
2023	CCRTA-058	FY 23 Support/Relief Vehicles	Transit Maintenance/Operations	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.31							\$0.31		\$0.31
2023	CCRTA-059	FY 23 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.50							\$0.50		\$0.50
2023	CCRTA-060	FY 23 Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2023	CCRTA-061	FY 23 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.99							\$0.99		\$0.99
2023	CCRTA-062	FY 23 Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	Transit Maintenance/Operations	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	N/A	N/A	Corpus Christi RTA	Off	5339	\$0.05							\$0.05		\$0.05
2023	CCRTA-063	FY 23 Section 5310 Sub-recipients	Transit Maintenance/Operations	Section 5310 Sub-recipients	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40
2024	CCRTA-064	FY 24 (est. by MPO) Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$8.54							\$8.54		\$8.54
2024	CCRTA-065	FY 24 (est. by MPO) Support/Relief Vehicles	Capital	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.31							\$0.31		\$0.31
2024	CCRTA-066	FY 24 (est. by MPO) Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.50							\$0.50		\$0.50
2024	CCRTA-067	FY 24 (est. by MPO) Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2024	CCRTA-068	FY 24 (est. by MPO staff) Bus Stop amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.99							\$0.99		\$0.99
2024	CCRTA-069	FY 24 (est. by MPO) Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	Transit Maintenance/Operations	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	N/A	N/A	Corpus Christi RTA	Off	5339	\$0.05							\$0.05		\$0.05
2024	CCRTA-070	FY 24 (est. by MPO staff) Section 5310 Sub-recipients	Transit Maintenance/Operations	Section 5310 Sub-recipients	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40

Table 13b. FY 2021-2024 TIP DRAFT Roll Forward with Prior Funding Project List

TIP Fiscal Year	Project ID	Project Name	Project Phase	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Construction Cost (\$,millions)	CAT 1	CAT 2	CAT 4	CAT 7	CAT 9	CAT 12	Local/Other	Prior Funding	Total Project Cost (\$,millions)
2021	TxDOT-001	Harbor Bridge	Design or Construction	Construct New Bridge, Approaches, Interchanges, and Highway Improvements	North Beach Ave	Morgan Ave @ Crosstown Expwy	TxDOT-CRP	On	2M,6,7,12	\$807.80		\$12.60		\$19.20		\$485.00			\$807.80

## **VI. APPENDIX**

**APPENDIX A**  
Transit Project List

FY 2021-2024 TIP Transit Project List

TIP Fiscal Year	Project ID	Project Name	Project Phase	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Construction Cost (\$,millions)	CAT 1	CAT 2	CAT 4	CAT 7	CAT 9	CAT 12	Local/Other	Prior Funding	Total Project Cost (\$,millions)
2021	CCRTA-036	FY 21 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.86							\$0.86		\$0.86
2021	CCRTA-037	FY 21 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2021	CCRTA-038	FY 21 Support/Relief Vehicles	Capital	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.21							\$0.21		\$0.21
2021	CCRTA-039	FY 21 Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$7.37							\$7.37		\$7.37
2021	CCRTA-040	FY 21 Bus Support Equipment and Facilities/Hardware/Software	Transit Maintenance/Operations	Bus Support Equipment and Facilities/Hardware/Software	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.21							\$0.21		\$0.21
2021	CCRTA-041	FY 21 Engine Overhaul Program	Transit Maintenance/Operations	Engine Overhaul Program	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.64							\$0.64		\$0.64
2021	CCRTA-042	FY 21 Bus Support/Equipment and Facilities/MiscellaneousShop and Garage Equipment	Transit Maintenance/Operations	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	N/A	N/A	Corpus Christi RTA	Off	5339	\$0.05							\$0.05		\$0.05
2021	CCRTA-043	FY 21 Bus Support Equipment and Facilities/Hardware/Software	Transit Maintenance/Operations	Bus Support Equipment and Facilities/Hardware/Software	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.21							\$1.21		\$1.21
2021	CCRTA-044	FY 21 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.85							\$0.85		\$0.85
2021	CCRTA-045	FY 21 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2021	CCRTA-046	FY 21 Mobile Bus Lift	Transit Maintenance/Operations	Mobile Bus Lift	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.05							\$0.05		\$0.05
2021	CCRTA-047	FY 21 5310 Sub-recipient	Transit Maintenance/Operations	5310 Sub-recipient	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40
2021	CCRTA-048	FY 21 Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2022	CCRTA-049	FY 22 5310 Sub-recipient	Transit Maintenance/Operations	5310 Sub-recipient	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40
2022	CCRTA-050	FY 22 Westside Station near DMC West Campus	Capital	Westside Station near DMC West Campus	N/A	N/A	Corpus Christi RTA	Off	5307	\$5.10							\$5.10		\$5.10
2022	CCRTA-051	FY 22 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.86							\$0.86		\$0.86
2022	CCRTA-052	FY 22 Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2022	CCRTA-053	FY 22 Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$6.58							\$6.58		\$6.58
2022	CCRTA-054	FY 22 Support/Relief Vehicles	Capital	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.34							\$0.34		\$0.34
2022	CCRTA-055	FY 22 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.50							\$0.50		\$0.50
2022	CCRTA-056	FY 22 Bus Support Equipment and Facilities/Hardware/Software	Transit Maintenance/Operations	Bus Support Equipment and Facilities/Hardware/Software	N/A	N/A	Corpus Christi RTA	Off	5339	\$1.09							\$1.09		\$1.09
2023	CCRTA-057	FY 23 Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$8.54							\$8.54		\$8.54
2023	CCRTA-058	FY 23 Support/Relief Vehicles	Transit Maintenance/Operations	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.31							\$0.31		\$0.31
2023	CCRTA-059	FY 23 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.50							\$0.50		\$0.50
2023	CCRTA-060	FY 23 Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2023	CCRTA-061	FY 23 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.99							\$0.99		\$0.99
2023	CCRTA-062	FY 23 Bus Support/Equipment and Facilities/MiscellaneousShop and Garage Equipment	Transit Maintenance/Operations	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	N/A	N/A	Corpus Christi RTA	Off	5339	\$0.05							\$0.05		\$0.05
2023	CCRTA-063	FY 23 Section 5310 Sub-recipients	Transit Maintenance/Operations	Section 5310 Sub-recipients	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40



FY 2021-2024 Transit Project List

TIP Fiscal Year	Project ID	Project Name	Project Phase	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Construction Cost (\$,millions)	CAT 1	CAT 2	CAT 4	CAT 7	CAT 9	CAT 12	Local/Other	Prior Funding	Total Project Cost (\$,millions)
2024	CCRTA-064	FY 24 (est. by MPO) Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$8.54							\$8.54		\$8.54
2024	CCRTA-065	FY 24 (est. by MPO) Support/Relief Vehicles	Capital	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.31							\$0.31		\$0.31
2024	CCRTA-066	FY 24 (est. by MPO) Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.50							\$0.50		\$0.50
2024	CCRTA-067	FY 24 (est. by MPO) Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2024	CCRTA-068	FY 24 (est. by MPO staff) Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.99							\$0.99		\$0.99
2024	CCRTA-069	FY 24 (est. by MPO staff) Bus Support/ Equipment and Facilities/Miscellaneous Shop and Garage Equipment	Transit Maintenance/Operations	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	N/A	N/A	Corpus Christi RTA	Off	5339	\$0.05							\$0.05		\$0.05
2024	CCRTA-070	FY 24 (est. by MPO staff) Section 5310 Sub-recipients	Transit Maintenance/Operations	Section 5310 Sub-recipients	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40



## CORPUS CHRISTI REGIONAL TRANSPORTATION AUTHORITY

**Date:** February 27, 2020  
**To:** Technical Advisory Committee (TAC)  
**From:** Christina A. Perez, Director of Procurement  
**Subject:** Item 4A: FY 2019-2022 Transportation Improvement Program (TIP) Amendment #5 - Corpus Christi Regional Transportation Authority (CCRTA) New Projects  
**Action:** Review, Discuss, and Approve TIP Amendments

### Summary

The Corpus Christi Regional Transportation Authority (CCRTA) requests the Corpus Christi MPO include additional funds for one existing FY 2019-2022 TIP project and add a total of 22 additional projects to the existing FY 2019-2022 TIP, and the 2020-2045 Metropolitan Transportation Plan (MTP), as identified in the tables below. Attachment #1 illustrates the proposed new/modified projects in **“red” font**.

### **Amending FY 2019 Project:**

Program Year	Project Name/Description	Funding	Currently Approved Total Project Cost	Amended Total Project Cost	MPO Project Number
FY 2019	Paratransit Fleet Replacement	5307	\$1,760,000	\$3,083,100	T-116-19

The currently approved total project cost is \$1,760,000. In reviewing the needs of our paratransit fleet, the cost of 12 (twelve) paratransit vehicles are approximately \$3,083,100.

### **Addition of 10 Projects in FY 2020:**

Program Year	Project Name/Description	Funding	Total Project Cost
FY 2020	Engine Overhaul Program	5307	\$815,100
FY 2020	CNG De-fueling Station	5307	\$60,000
FY 2020	Sidewalk Improvements (ADA) – Corpus Christi	5307	\$1,500,000
FY 2020	Supervisor /Relief Vehicles (Apportionment FFY 2018)	5307	\$392,000
FY 2020	Supervisory/Relief Vehicles (Apportionment FFY 2019)	5307	\$226,700
FY 2020	Rolling Stock/Paratransit Fleet Replacements (all variety of rolling stock)	5307	\$4,574,000
FY 2020	Bus Stop Shelter Amenities	5307	\$523,800
FY 2020	Bus Support/Equipment and Facilities	5307	\$31,100
FY 2020	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment (Apportionment FFY 2017)	5339	\$47,000
FY 2020	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment (Apportionment FFY 2018)	5339	\$236,000
<b>FY 2020 Project Total</b>			<b>\$8,405,700</b>

**Addition of 8 Projects in FY 2021:**

<b>Program Year</b>	<b>Project Name/Description</b>	<b>Funding</b>	<b>Total Project Cost</b>
FY 2021	Bus Stop Amenities	5307	\$862,700
FY 2021	Bus Stop Improvements	5307	\$1,000,000
FY 2021	Support/Relief Vehicles	5307	\$212,000
FY 2021	Rolling Stock (All variety of rolling stock)	5307	\$7,369,000
FY 2021	Bus Support/Equipment and Facilities/Hardware/Software	5307	\$205,000
FY 2021	Engine Overhaul Program	5307	\$635,800
FY 2021	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	5339	\$45,000
FY 2021	Bus Support Equipment and Facilities/Hardware/Software	5339	\$1,210,000
	<b>FY 2021 Project Total</b>		<b>\$11,539,500</b>

**Addition of 4 Projects in FY 2022:**

<b>Program Year</b>	<b>Project Name/Description</b>	<b>Funding</b>	<b>Total Project Cost</b>
FY 2022	Rolling Stock (All variety of rolling stock)	5307	\$6,579,300
FY 2022	Support/Relief Vehicles	5307	\$344,500
FY 2022	Bus Stop Improvements	5307	\$500,000
FY 2022	Bus Support Equipment and Facilities/Hardware/Software	5307	\$1,090,000
	<b>FY 2022 Project Total</b>		<b>\$8,513,800</b>

**Addition of 7 Projects in FY 2023:**

<b>Program Year</b>	<b>Project Name/Description</b>	<b>Funding</b>	<b>Total Project Cost</b>
FY 2023	Rolling Stock (All variety of rolling stock)	5307	\$8,543,500
FY 2023	Support/Relief Vehicles	5307	\$307,100
FY 2023	Bus Stop Improvements	5307	\$500,000
FY 2023	Preventive Maintenance	5307	\$1,000,000
FY 2023	Bus Stop Amenities	5339	\$987,000
FY 2023	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	5339	\$54,000
FY 2023	Section 5310 Sub-recipients	5310	\$400,000
	<b>FY 2023 Project Total</b>		<b>\$11,791,600</b>

CCRTA is adding these additional projects to TIP FY 2019-2022 and the 2020-2045 Metropolitan Transportation Plan (MTP), due to the requirements set forth by the Federal Transit Administration (FTA). Adding these additional projects will allow CCRTA to apply for yearly formula funds granted the CCRTA.

**APPENDIX B**

FY 2021-2024 TIP DRAFT Fiscally Constrained Project List

DRAFT FISCAL YEAR 2021-2024 TRANSPORTATION IMPROVEMENT PLAN (TIP)

Table 13a. FY 2021-2024 TIP DRAFT Fiscally Constrained Project List

TIP Fiscal Year	Project ID	Project Name	Project Phase	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Construction Cost (\$,millions)	CAT 1	CAT 2	CAT 4	CAT 7	CAT 9	CAT 12	Local/Other	Prior Funding	Total Project Cost (\$,millions)
2021	MPO-001	SH 358 (SPID) Ramp Reversal	NEPA, ROW, Design, or Construction	Ramp reversal Phase II-B	Nile Drive	Staples Street	TxDOT-CRP	On	2	\$35.00		\$35.00							\$45.43
2021	MPO-002	I-37	NEPA, ROW, Design, or Construction	Widen freeway by constructing additional 2 travel lanes northbound and 1 additional travel lane southbound	Redbird Lane (Overpass)	Nueces River	TxDOT-CRP	On	2 / 4U / 12	\$60.00		\$12.00	\$15.00			\$33.00			\$77.88
2021	MPO-003	US 181	NEPA, ROW, Design, or Construction	Widen freeway by constructing 1 additional travel lane in each direction	North of FM 3296 (Buddy Ganem Drive)	FM 2986 (Wildcat Drive)	TxDOT-CRP	On	2 / 4U	\$14.00		\$2.00	\$12.00						\$18.17
2021	MPO-004	US 181 Ramp Reversals	NEPA, ROW, Design, or Construction	Reverse entrance and exit ramps in Northbound direction	FM 3296 (Buddy Ganem Drive)	FM 2986 (Wildcat Drive)	TxDOT-CRP	On	2	\$4.00		\$4.00							\$5.19
2021	MPO-005	SH 286 (Crosstown)	NEPA, ROW, Design, or Construction	Extend 4-lane divided freeway by constructing mainlanes, overpass, and frontage roads	FM 43 (Weber Road)	South of FM 2444 (Staples Street)	TxDOT-CRP	On	2	\$40.00		\$40.00							\$51.92
2021	MPO-006	FM 893 (Moore Avenue)	NEPA, ROW, Design, or Construction	Upgrade from 2-lane roadway to 5-lane urban roadway by constructing additional 2 lanes and CLTL	CR 3685 (Stark Road)	0.2 miles West of CR 79 (Gum Hollow)	TxDOT-CRP	On	2	\$7.00		\$7.00							\$9.09
2024	MPO-007	Harbor Bridge Hike and Bike - Connectivity	NEPA, ROW, Design	Construct pedestrian and bike facilities	On various city streets from Coles High School	Williams Memorial Park	City of Corpus Christi	Off	7	\$1.42				\$1.42					\$1.84
2021	MPO-008	US 181 Harbor Bridge Voluntary Relocation	NEPA, ROW, Design, or Construction	US 181 Harbor Bridge Voluntary Relocation Mitigation Program	N/A	N/A	MPO	Off	7/ Local/ ROW	\$71.00				\$31.00			\$20.00	\$20.00	\$92.15
2021	MPO-009	Harbor Bridge Park Improvements	NEPA, ROW, Design, or Construction	Park mitigation for Harbor Bridge	At various city parks	Ben Garza, TC Ayers and new location	City of Corpus Christi	Off	7/ Local	\$4.80				\$1.30			\$3.50		\$6.23
2021	MPO-011	Schanen Ditch Hike and Bike Trail: Phase IV	NEPA, ROW, Design, or Construction	Construct and design Hike and Bike Trail	Killarmet Drive	Holly Road	City of Corpus Christi	Off	9	\$0.39					\$0.39				\$0.39
2021	MPO-012	Region-wide Bike Boulevard Wayfinding Initiative	NEPA, ROW, Design, or Construction	Designation of bicycle boulevards with pavement markings and signage	Various locations in Corpus Christi and Portland	N/A	City of Corpus Christi	Off	9	\$0.62					\$0.62				\$0.62
2021	MPO-013	Portland Bicycle Lanes	NEPA, ROW, Design, or Construction	Construct one way cycle track and buffered bike lanes	At various locations in Portland	N/A	City of Portland	On	9	\$0.36					\$0.36				\$0.36
2021	MPO-014	Dr. Hector P. Garcia Hike & Bike Trail: Phase II	NEPA, ROW, Design, or Construction	Construct & design Hike & Bike Trail	At Garcia on Trojan Dr.	Horne Road	City of Corpus Christi	Off	9	\$0.70					\$0.70				\$0.70
2024	MPO-016	PR 22	NEPA, ROW, Design, or Construction	Corridor upgrade fro pedestrian and access management improvements without adding capacity	Aquarius Street	Whitecap Boulevard	TxDOT-CRP	On	2	\$16.00		\$16.00							\$19.20
2024	MPO-017	SH 361	NEPA, ROW, Design, or Construction	Upgrade/add direct connectors	At SH 35 interchange	0.6 miles Southeast on SH 361	TxDOT-CRP	On	2	\$38.50		\$38.50							\$46.20
2024	MPO-018	SH 35	NEPA, ROW, Design, or Construction	Upgrade/add direct connectors	FM 3284	0.23 North of SH 361	TxDOT-CRP	On	4U	\$21.50			\$21.50						\$25.80
2024	MPO-030	Future Category 9 Projects	NEPA, ROW, Design, or Construction	Projects selected through competitive process	N/A	N/A	TBD	On/Off	9	\$2.39					\$2.39				\$2.39
2021	TxDOT-002	IH 37	NEPA, ROW, Design, or Construction	Widen freeway	Nueces River	IH 37/US 77 Interchange	TxDOT-CRP	On	4	\$22.00			\$22.00						\$22.00
2021	CCRTA-036	FY 21 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.86							\$0.86		\$0.86
2021	CCRTA-037	FY 21 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2021	CCRTA-038	FY 21 Support/Relief Vehicles	Capital	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.21							\$0.21		\$0.21
2021	CCRTA-039	FY 21 Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$7.37							\$7.37		\$7.37
2021	CCRTA-040	FY 21 Bus Support Equipment and Facilities/Hardware/Software	Transit Maintenance/Operations	Bus Support Equipment and Facilities/Hardware/Software	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.21							\$0.21		\$0.21
2021	CCRTA-041	FY 21 Engine Overhaul Program	Transit Maintenance/Operations	Engine Overhaul Program	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.64							\$0.64		\$0.64
2021	CCRTA-042	FY 21 Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	Transit Maintenance/Operations	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	N/A	N/A	Corpus Christi RTA	Off	5339	\$0.05							\$0.05		\$0.05
2021	CCRTA-043	FY 21 Bus Support Equipment and Facilities/Hardware/Software	Transit Maintenance/Operations	Bus Support Equipment and Facilities/Hardware/Software	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.21							\$1.21		\$1.21
2021	CCRTA-044	FY 21 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.85							\$0.85		\$0.85
2021	CCRTA-045	FY 21 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00



DRAFT FISCAL YEAR 2021-2024 TRANSPORTATION IMPROVEMENT PLAN (TIP)

Table 13a. FY 2021-2024 TIP DRAFT Fiscally Constrained Project List

TIP Fiscal Year	Project ID	Project Name	Project Phase	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Construction Cost (\$,millions)	CAT 1	CAT 2	CAT 4	CAT 7	CAT 9	CAT 12	Local/Other	Prior Funding	Total Project Cost (\$,millions)
2021	CCRTA-046	FY 21 Mobile Bus Lift	Transit Maintenance/Operations	Mobile Bus Lift	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.05							\$0.05		\$0.05
2021	CCRTA-047	FY 21 5310 Sub-recipient	Transit Maintenance/Operations	5310 Sub-recipient	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40
2021	CCRTA-048	FY 21 Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2022	CCRTA-049	FY 22 5310 Sub-recipient	Transit Maintenance/Operations	5310 Sub-recipient	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40
2022	CCRTA-050	FY 24 Westside Station near DMC West Campus	Capital	Westside Station near DMC West Campus	N/A	N/A	Corpus Christi RTA	Off	5307	\$5.10							\$5.10		\$5.10
2022	CCRTA-051	FY 22 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.86							\$0.86		\$0.86
2022	CCRTA-052	FY 22 Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2022	CCRTA-053	FY 22 Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$6.58							\$6.58		\$6.58
2022	CCRTA-054	FY 22 Support/Relief Vehicles	Capital	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.34							\$0.34		\$0.34
2022	CCRTA-055	FY 22 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.50							\$0.50		\$0.50
2022	CCRTA-056	FY 24 Support Equipment and Facilities/Hardware/Software	Transit Maintenance/Operations	Bus Support Equipment and Facilities/Hardware/Software	N/A	N/A	Corpus Christi RTA	Off	5339	\$1.09							\$1.09		\$1.09
2023	CCRTA-057	FY 23 Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$8.54							\$8.54		\$8.54
2023	CCRTA-058	FY 23 Support/Relief Vehicles	Transit Maintenance/Operations	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.31							\$0.31		\$0.31
2023	CCRTA-059	FY 23 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.50							\$0.50		\$0.50
2023	CCRTA-060	FY 23 Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2023	CCRTA-061	FY 23 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.99							\$0.99		\$0.99
2023	CCRTA-062	FY 23 Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	Transit Maintenance/Operations	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	N/A	N/A	Corpus Christi RTA	Off	5339	\$0.05							\$0.05		\$0.05
2023	CCRTA-063	FY 23 Section 5310 Sub-recipients	Transit Maintenance/Operations	Section 5310 Sub-recipients	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40
2024	CCRTA-064	FY 24 (est. by MPO) Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$8.54							\$8.54		\$8.54
2024	CCRTA-065	FY 24 (est. by MPO) Support/Relief Vehicles	Capital	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.31							\$0.31		\$0.31
2024	CCRTA-066	FY 24 (est. by MPO) Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.50							\$0.50		\$0.50
2024	CCRTA-067	FY 24 (est. by MPO) Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2024	CCRTA-068	FY 24 (est. by MPO staff) Bus Stop amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.99							\$0.99		\$0.99
2024	CCRTA-069	FY 24 (est. by MPO) Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	Transit Maintenance/Operations	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	N/A	N/A	Corpus Christi RTA	Off	5339	\$0.05							\$0.05		\$0.05
2024	CCRTA-070	FY 24 (est. by MPO staff) Section 5310 Sub-recipients	Transit Maintenance/Operations	Section 5310 Sub-recipients	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40

Table 13b. FY 2021-2024 TIP DRAFT Roll Forward with Prior Funding Project List

TIP Fiscal Year	Project ID	Project Name	Project Phase	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Construction Cost (\$,millions)	CAT 1	CAT 2	CAT 4	CAT 7	CAT 9	CAT 12	Local/Other	Prior Funding	Total Project Cost (\$,millions)
2021	TxDOT-001	Harbor Bridge	Design or Construction	Construct New Bridge, Approaches, Interchanges, and Highway Improvements	North Beach Ave	Morgan Ave @ Crosstown Expwy	TxDOT-CRP	On	2M,6,7,12	\$807.80		\$12.60		\$19.20		\$485.00			\$807.80

**APPENDIX C**

Public Notice #20-6 – May 31, 2020



## **PUBLIC NOTICE #20-6**

**May 31, 2020**

The **Corpus Christi Metropolitan Planning Organization** (Corpus Christi MPO) is seeking public input and comments on the **DRAFT FY 2021-2024 Transportation Improvement Program (TIP)**. The TIP identifies how the region plans to invest in the transportation system during the next 4 years. In accordance with the Corpus Christi MPO Public Participation Plan, the MPO is seeking to inform those who are interested in or affected by transportation decisions with opportunities to provide input on both the overall TIP and on projects that are funded within the TIP.

The **DRAFT FY 2021-2024 Transportation Improvement Program (TIP)** is being released to the public on June 4, 2020 and public input is invited through July 9, 2020 at the following public meetings:

### **NO IN-PERSON PUBLIC COMMENTS DUE TO COVID-19**

Public Comments may be provided in writing, limited to 1,000 characters, by emailing [ccmpo@cctxmpo.us](mailto:ccmpo@cctxmpo.us) or by regular mail or hand-delivery to the Corpus Christi MPO offices at 602 N. Staples St., Suite 300, Corpus Christi, TX 78401, and **MUST** be submitted no later than 5 minutes after the start of a meeting in order to be provided for consideration and review at the meeting. All Public Comments submitted shall be placed into the record of the meeting.

**June 4, 2020, 2:00 p.m.\***

MPO Transportation Policy Committee

Corpus Christi City Hall - Council Chambers  
1201 Leopard Street, Corpus Christi, TX 78401

**June 10, 2020, 4:30 p.m.\***

MPO Public Meeting

Corpus Christi Regional Transportation Authority  
602 N. Staples Street, 2nd Floor Board Room  
Corpus Christi, TX 78401

### **NO IN-PERSON PUBLIC COMMENTS DUE TO COVID-19**

**June 18, 2020, 9:00 a.m.\***

MPO Technical Advisory Committee

Corpus Christi Regional Transportation Authority  
602 N. Staples Street, 2nd Floor Board Room  
Corpus Christi, TX 78401

**July 2, 2020, 2:00 p.m.\***

MPO Transportation Policy Committee

Corpus Christi City Hall - Council Chambers  
1201 Leopard Street, Corpus Christi, TX 78401

*\*Meeting location and time subject to change, check MPO website for final location.*

[www.corpuschristi-mpo.org](http://www.corpuschristi-mpo.org)

The **Corpus Christi Regional Transportation Authority (CCRTA)** hereby gives notice that coordination actions with the Corpus Christi Metropolitan Planning Organization (MPO) have occurred to assure that the procedures established in the MPO's public participation plan, including public notice and times established for public review and comment on the TIP, satisfy the Requirement of public participation in the development of the program of projects and grant application requirements of the Federal Transit Administration (FTA) Urbanized Area Formula Program, Section 5307; and other formula funds. The public participation requirements of 49 U.S.C. Section 5307

(b) (1) through (b) (7) (as amended by the FAST Act) are integrated into the MPO's adopted "Public Participation Plan". The CCRTA therefore is a participant with the MPO in the public process for the FY 2021-2024 TIP.

All MPO Committee meetings are public meetings and open to the public subject to the COVID-19 policies mentioned above. Any persons with disabilities who plan to attend this meeting and who may need auxiliary aids or services are requested to contact the MPO at (361) 884-0687 at least 48 hours in advance so that appropriate arrangements can be made.

## **APPENDIX D**

Transportation Policy Committee Minutes – July 2, 2020



## **MPO Transportation Policy Committee July 2, 2020 Meeting Minutes**

(To be inserted here)

## **APPENDIX E**

### MPO Committee Members List

**CORPUS CHRISTI METROPOLITAN PLANNING ORGANIZATION  
TRANSPORTATION POLICY COMMITTEE MEMBERSHIP**

<b>VOTING MEMBERS</b>		
<b>Hon. David Krebs</b>	County Judge	San Patricio County
<b>Chair</b>		
<b>Charles W. Zahn, Jr.</b>	Board Chairman	Port Corpus Christi
<b>Vice-Chair</b>		
<b>Hon. Barbara Canales</b>	County Judge	Nueces County
<b>Hon. Cathy Skurow</b>	Mayor	City of Portland
<b>Hon. Joe McComb</b>	Mayor	City of Corpus Christi
<b>Edward Martinez</b>	Board Chairman	Corpus Christi Regional Transportation Authority
<b>Valente Olivarez, Jr., P.E.</b>	District Engineer	Texas Department of Transportation Corpus Christi District

<b>EX-OFFICIO NON-VOTING MEMBERS</b>		
<b>Anthony M. Jones</b>	Transportation Planner	Federal Highway Administration – Texas Division
<b>Tony Ogboli</b>	Community Planner	Federal Highway Administration – Region VI
<b>Sara Garza</b>	Transportation Planner	Texas Department of Transportation – Transportation Planning & Programming (TPP)
<b>Lynn Hayes</b>	Community Planner	Federal Highway Administration – Region VI
<b>John Buckner</b>	Representative	Coastal Bend Council of Governments
<b>State Legislators or Member of U.S. Congress</b>		Texas Legislators / United States Congress (District included in the MPO Study Area)

## CORPUS CHRISTI METROPOLITAN PLANNING ORGANIZATION TECHNICAL ADVISORY COMMITTEE MEMBERSHIP

VOTING MEMBERS		
<b>Brian DeLatte, P.E.*</b>	Deputy City Manager	City of Portland
<b>Chair</b>		
<b>Gordon Robinson, AICP, PMP*</b>	Director of Planning	Corpus Christi Regional Transportation Authority
<b>Vice-Chair</b>		
<b>Howard Gillespie</b>	County Commissioner Pct. 4	San Patricio County
<b>Sarah Munoz, P.E.</b>	Executive Director of Public Works	City of Corpus Christi
<b>Jeff Pollack, AICP, ENV SP</b>	Director of Planning	Port of Corpus Christi
<b>Juan Pimentel, P.E.</b>	Director of Public Works	Nueces County
<b>Paula Sales-Evans, P.E.</b>	Director Transportation Planning & Development	Texas Department of Transportation - Corpus Christi District

EX-OFFICIO NON-VOTING MEMBERS		
<b>Anthony M. Jones</b>	Transportation Planner	Federal Highway Administration – TX Division
<b>Tony Ogboli</b>	Community Planner	Federal Transit Administration Region VI
<b>Lynn Hayes</b>	Community Planner	Federal Transit Administration Region VI
<b>Richard Bullock</b>	Director of Planning & Development	Coastal Bend Council of Governments (CBCOG)
<b>Sara Garza</b>	Transportation Planner	Texas Department of Transportation – Transportation Planning & Programming (TPP)
<b>State Legislators or Member of U.S. Congress</b>		Texas Legislators / U.S. Congress (District included in the MPO Study Area)

\* Designated Alternate

**APPENDIX F**  
Glossary of Terms



**3-C - Continuing, Cooperative, and Comprehensive:** The federally mandated planning process for state departments of transportation and metropolitan planning organizations.

**AADT - Average Annual Daily Traffic:** The number of vehicles passing a fixed point in a year, averaged over 365 days.

**Accessibility:** a measure of how easy it is to reach (and interact with) destinations or activities around a city or county.

**ADA - Americans with Disabilities Act of 1990:** Federal law that requires public facilities (including transportation services) to be accessible to persons with disabilities including those with mental disabilities, temporary disabilities, and the conditions related to substance abuse.

**ADT - Average Daily Traffic:** The number of vehicles passing a fixed point in a day, averaged over a number of days. The number of count days included in the average varies with the intended use of data.

**AMPO - Association of Metropolitan Planning Organizations:** Nonprofit membership organization serving the interests of metropolitan planning organizations nationwide.

**AVO - Average Vehicle Occupancy:** The ratio of person trips to vehicle trips; often used as a criteria in judging the success of trip reduction programs.

**AVR - Average Vehicle Ridership:** The number of employees scheduled to start work during specified period divided by the number of vehicles arriving at the site during that same period.

**CCRTA - Corpus Christi Regional Transportation Authority:** "The B" as it is locally known, is the designated recipient of federal transit planning funds and the urban public transportation service provider. Operations began in January 1986 with services to the citizens of the Coastal Bend, including the cities of Agua Dulce, Banquete, Bishop, Corpus Christi, Driscoll, Gregory, Port Aransas, Robstown, and San Patricio City.

**CMP - Congestion Management Process:** A systematic process that addresses congestion in the metropolitan area. It emphasizes effective management and operations and shall include methods to monitor and evaluate the performance of the multi-modal transportation systems, identify causes of congestion, identify and evaluate alternative actions, provide information supporting the implementation of actions, and evaluate the efficiency and effectiveness of implementation actions.

**DOT - Department of Transportation:** Agency responsible for transportation at the local, state, or federal level. For title 23 U.S.C. federal-aid highway actions, this would mean the Federal Highway Administration and for federal-aid transit actions under title 49 U.S.C, this would mean the Federal Transit Administration.

**EIS - Environmental Impact Statement:** A National Environmental Policy Act (NEPA) document that explains the purpose and need for a project, presents project alternatives, analyzes the likely impact of each, explains the choice of a preferred alternative, and finally details measures to be taken in order to mitigate the impacts of the preferred alternative.

**Environmental Justice:** Describes the impact of transportation plans or projects, either positive or negative, on a particular community or population. Derived from Title VI of the Civil Rights Act of 1964. Environmental Justice strives to ensure public involvement of low income and minority groups in decision making, to prevent disproportionately high and adverse impacts on low income and minority groups, and to assure that these groups receive equal benefits from transportation improvements.

**ETJ: Extraterritorial Jurisdiction:** Geographic area subject to urban municipality ordinance and platting requirements.

**FHWA - Federal Highway Administration:** U.S. Department of Transportation - Division responsible for administering federal highway transportation programs under title 23 U.S.C.

**Fiscal Constraint:** A requirement, that all plans be financially – constrained, programmed expenditures are not more than the reasonably expected sources of funding over the period of the Transportation Improvement Plan (TIP) or the Metropolitan Transportation Plan (MTP).

**FTA - Federal Transit Administration:** Federal entity responsible for transit planning and programs under title 49 U.S.C.

**Funding Category** - The Texas Transportation Commission (Commission) and TxDOT use the Unified Transportation Plan (UTP) as TxDOT's ten-year plan to guide transportation project development and construction. The UTP has two major groups: Preservation & Safety and Mobility.

**F. CLASS - Functional Classification:** Categorizes streets and highways according to their ability to 1) move traffic, and 2) provide access to adjacent properties. It also determines eligibility for federal funds.

**FY - Fiscal Year:** A federal fiscal or budget year; runs from October 1 through September 30 for the MPO and the federal government.

**Goals:** The description of a desired outcomes. The purpose toward which funding is directed. (e.g., provide safe and secure transportation across modes.)

**HOV - High Occupancy Vehicle:** In Texas, vehicles carrying two (2) or more people receive this designation and may travel on freeways, expressways and other large volume roads in lanes designated for high occupancy vehicles.

**IMS - Incident Management System:** A systematic process required under federal transportation law to provide information on accidents and identify causes and improvements to the transportation system to increase safety of all users.

**Indicator:** A performance measure that is used to identify relevant background conditions and trends.

**Intergovernmental Agreement:** Legal instrument describing tasks to be accomplished and/or funds to be paid between government agencies.

**ITE - Institute of Transportation Engineers:** An international society of professionals in transportation and traffic engineering; publishes Trip Generation (a manual of trip generation rates by land use type).

**ITS - Intelligent Transportation System:** A range of advanced computer and communications technologies that improve mobility, enhance safety, maximize the use of existing transportation facilities, conserve energy resources and reduce adverse environmental effects.

**LCA – Lifecycle Cost Analysis:** a methodology for assessing the sum of project costs for all stages of the life-span of a transportation project. This includes: planning, design, construction, environmental impact mitigation, operations, preventive maintenance, and reconstruction.

**LEP - Limited English Proficiency:** Clarifies the responsibilities of recipients of federal financial assistance and assist them in fulfilling their responsibilities to LEP persons, pursuant to Title VI of the Civil Rights Act of 1964 and its implementing regulations.

**LOS - Level of Service:** A qualitative assessment of a road's operating condition, generally described using a scale of A (little congestion) to E/F (severe congestion).

**MAP-21 - Moving Ahead for Progress in the 21st Century Act:** Enacted July 6, 2012, the federal law creates a streamlined and performance-based surface transportation program and builds on highway, transit, bike, and pedestrian programs and policies established in 1991.

**Mobility:** The ability to move or be moved freely and easily. It is typically used in conjunction with accessibility. This term is also used by TxDOT for one of the major groups of transportation funds.

**MPA – Metropolitan Planning Area:** An area that, at a minimum, to encompasses the entire existing Urbanized Area (UZA) plus the contiguous area expected to become urbanized (the urbanizing area) within a 20-year forecast period. It is the area that an MPO is responsible for conducting transportation planning and programming activities within.

**MPO - Metropolitan Planning Organization:** The forum of local elected officials responsible for cooperative transportation decision-making; required for urbanized areas with populations over 50,000.

**MTP - Metropolitan Transportation Plan:** 25-year forecast required of MPOs and state planning agencies; considers a range of social, environmental, energy, and economic factors in determining overall regional goals and how transportation can best meet these goals

**NHS - National Highway System:** Specific major roads to be designated September 30, 1995; the NHS will consist of 155,000 (plus or minus 15%) miles of road and represents one category of roads eligible for federal funds under ISTEA.

**Officials:** Are people who have governmental decision-making, planning or administrative responsibilities that relate to MPO activities.

**Operations:** The implementation of policies, projects, and technologies to improve road performance. The overriding objectives of operations programs include minimizing congestion (and its side effects), improving safety, and enhancing overall mobility.

**Performance Based Planning and Programming:** The process developed to evaluate and select transportation projects. This includes monitoring progress toward achieving goals and objectives at the agency strategic, decision-making and project delivery levels.

**PHASE:** Project phases for federal funding - **PE:** Preliminary Engineering; **ROW:** Right of Way Acquisition; **CON:** Construction

**PMS - Pavement Management System:** A systematic process utilized by state agencies and MPOs to analyze and summarize pavement information for use in selecting and implementing cost-effective pavement construction, rehabilitation, and maintenance programs; required for roads in the National Highway System; the extent to which the remaining public roads are included in the process is left to the discretion of state and local officials; criteria found in 23 CFR 500.021-209.

**Preservation & Safety:** Funding category of the Unified Transportation Plan (UTP) includes maintenance and rehabilitation projects to maintain the existing transportation system and to improve certain safety aspects. Categories are: **CAT 1:** Preventive Maintenance and Rehabilitation; **CAT 6:** Structures Replacement and Rehabilitation (Bridges); **CAT 8:** Safety

**MPO-###: Project Identification Number:** Identification number assigned by the MPO for local tracking and identification. Used to relate projects to the MTP.

**PTMS - Public Transportation Facilities and Equipment Management System:** A systematic process utilized by state agencies and MPOs to collect and analyze information on the condition and cost of transit assets on a continual basis; data is to be used to help people choose cost effective strategies for providing and keeping transit facilities and equipment in good condition; process must be

developed in Transportation Management Areas (TMAs); the use of CMS in non-TMAs is left to the discretion of state and local officials.

**PPP - Public Participation Plan:** Is an integral part of a planning or major decision-making process. It provides opportunities for the public to be involved with the MPO in an exchange of data and ideas. Citizen participation offers an open process in which the rights of the community, to be informed to provide comments to the Government and to receive a response from the Government, are met through a full opportunity to be involved and to express needs and goals.

**Public:** Includes citizens, public agencies, advocacy groups and the private sectors that have an interest in or may be affected by MPO activities.

**RCAT - RTA Committee on Accessible Transportation:** Members act as ambassadors on transportation ridership issues related to transportation disadvantaged riders and services.

**Resurfacing:** Projects that are intended to preserve the structural integrity of highway pavements by rehabilitation, minor reconstruction, and pavement milling and recycling.

**ROW - Right-of-Way:** Real property that is used for transportation purposes; defines the extent of the corridor that can be used for the road and associated drainage.

**Routine Maintenance:** Operations that may be predicted and planned in advance. These operations (e.g.: cleaning and debris removals, regular inspections, mowing, preventive maintenance, etc.), which may be preventive or corrective in nature, should be conducted on a regularly scheduled basis using standard procedures.

**RTDM - Regional Travel Demand Model:** This is a tool for forecasting impacts of urban developments on travel patterns as well as testing various transportation alternative solutions to traffic patterns. The travel patterns are determined from US census results and in simple terms tell where residents live and where they go to work or school on a regional wide basis.

**Safety Analysis:** A comprehensive assessment of safety outcomes with and without a specific project under consideration, including a general analysis of historical crash data on the facility under consideration, a detailed review of fatal crashes and their causes.

**SHSP – Strategic Highway Safety Plan:** A Federally required plan to reduce crashes on all public roads adopted by TxDOT in 2019. The current plan includes 7 emphasis areas.

**SIB - State Infrastructure Bank:** Method of financing large capital projects by taking advantage of borrowing against future state revenues.

**SMP - Statewide Mobility Plan:** TxDOT's 10-year plan for adding capacity to the system by using the Mobility Category Funds of Federal and State Transportation funding. It is one half of the overall 10-year Unified Transportation Plan.

**Sponsoring Agencies:** Organizations or governmental units, which enter into agreements with the MPO to undertake transportation related activities. They are responsible for actually constructing the projects or enforcing the policies.

**SPP - Statewide Preservation Plan:** TxDOT's 10-year plan for maintaining the system using the preservation categories of Federal and State Transportation funding. It is one half of the overall 10-year Unified Transportation Plan (UTP).

**Stakeholders:** Individuals and groups with an interest in the outcomes of policy decisions and actions.

**STIP - State Transportation Improvement Program:** The TxDOT Five Year Work Program as prescribed by federal law. It incorporates the TIPs from all MPO in the state without modification. Projects included in the STIP must be consistent with the regional and state long-range transportation plan.

**TAC - Technical Advisory Committee:** A standing committee of most metropolitan planning organizations (MPOs); function is to provide advice on plans or actions of the MPO from planners, engineers and other staff members (not general citizens).

**TCEQ:** Texas Commission on Environmental Quality

**TCI - Texas Congestion Index:** An index to measure the magnitude of congestion in a single performance measure across the state. The index measures the mobility of people and goods in each Texas metropolitan area, with attention to the delay time experienced by drivers.

**TIP - Transportation Improvement Program:** A priority list of transportation projects developed by a metropolitan planning organization that is to be carried out within the four (4) year period following its adoption; must include documentation of federal and state funding sources for each project and be consistent with adopted MPO long range transportation plans and local government comprehensive plans.

**Title VI - Civil Rights Act:** As a recipient of federal funds, the MPO ensures that no person shall, on the grounds of race, religion, color, national origin, sex, age, or disability be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any agency programs or activities.

**TMA - Transportation Management Area:** An area designated by the U.S. Department of Transportation given to all urbanized areas with a population over 200,000 (or other area when requested by the Governor and MPO); these areas must comply with special transportation planning requirements regarding congestion management systems, project selection and certification; requirements identified in 23 CFR - 450.300-33.6.

**TMMP - Texas Metropolitan Mobility Plan:** This is a state-based requirement intended to serve as a framework for identifying unmet transportation needs in the state's larger metropolitan areas. The TMMP is a needs-based plan which quantifies transportation needs beyond the fiscal constraint barrier.

**TPC - Transportation Policy Committee:** The decision-making body for the MPO. This committee was created to serve as spokespersons for the citizens of the metropolitan area and to prioritize and direct federal transportation funds to local projects. The TPC is comprised of elected officials from the cities and two counties in the urbanized area, along with TXDOT, CCRTA, and the Corpus Christi Port Authority. TPC meetings are open to the public on the first Thursday of each month at 1:30 P.M. at the Corpus Christi City Hall, City Council Chambers.

**Transportation Disadvantaged:** People who are unable to transport themselves or to purchase transportation due to disability, income status or age.

**Transportation Enhancements:** Specific activities which can be funded with Surface Transportation Program (STP) funds; activities include pedestrian/bicycle facilities, acquisition of scenic easements and scenic historic sites, scenic or historic highway programs, scenic beautification, historic preservation, rehabilitation/operation of historic transportation structures, railway corridor preservation, control/removal of outdoor advertising, archeological planning/research and mitigation of highway runoff water pollution.

**TSMO - Transportation Systems Management and Operations:** Strategies to improve the efficiency of the transportation system through operational improvements such as the use of bus priority or reserved lanes, signalization, access management, turn restrictions, etc.



**TTI - Texas Transportation Institute:** A legislatively created research center, located at Texas A&M University, whose purpose is to conduct and facilitate research and serve as an information exchange on issues related to urban transportation problems in Texas.

**TxDOT - Texas Department of Transportation:** State agency responsible for transportation issues in Texas.

**UAB - Urbanized Area Boundary:** A Census-designated area consisting of a central core and adjacent densely settled territory with populations of 50,000 residents or more.

**UPWP - Unified Planning Work Program:** Developed by MPOs to identify transportation and planning activities anticipated within the next one to two years, including a schedule for the completion of the identified tasks and activities.

**UTP - Unified Transportation Plan:** This is the state's 10-year Transportation Plan with the first 10 years programmed and the second 15 years of projects under design. This document has two parts: The Statewide Mobility Plan (SMP) and Statewide Preservation Plan (SPP) respectively.

**UZA – Urbanized Area:** US Census defined area of concentrated population containing at least 50,000 persons. The Corpus Christi Urbanized Area includes the City of Gregory, City of Portland, City of Corpus Christi, Nueces County, and San Patricio County.

**V/C Ratio Volume over Capacity Ratio:** This is a roadway performance measure to show how a highway volume compares with a highway's capacity.

**VMT - Vehicle Miles Traveled:** Measures the amount of travel for all vehicles in a geographic region over a given period of time, typically a one-year period. It is calculated as the sum of the number of miles traveled by each vehicle.

**YOE - Year of Expenditure:** YOE dollars are dollars that are adjusted for inflation from the present time to the expected year of construction. The annual rate of inflation for cost estimates is usually four percent (4%) for project costs. Using the YOE dollars produces a more accurate cost estimate for a project, which is used for planning, programming and implementation.

**APPENDIX G**  
Public Comments

## **Appendix G: Public Comments**

### **Corpus Christi MPO Technical Advisory Committee Meeting, May 21, 2020 at Corpus Christi Regional Transportation Authority 2<sup>nd</sup> floor Board Room**

- Include the Harbor Bridge Park Improvement Project (MPO-009) in FY 2021-2024 TIP Project Table
- Create a separate table for the Harbor Bridge Project (TxDOT-001)
- Remove IH-37 (TxDOT-002), SH 35 (TxDOT-003), and US 77 (TxDOT-004, 005 and 006)
- Verify the project cost of US 181 Harbor Bridge Voluntary Relocation Program (MPO-008)
- Make all tables included in the FY 2021-2024 TIP consistent
- Add “phases” into the two projects, PR 22 (MPO-016) and SH 35 (MPO-018) identified as Congestion Management Corridors
- Correct the amount of Category 12 from \$82.9 million to \$33 million in Table 1 Category Funding
- Reassess Exhibit 2-6 legend classifications
- Verify the color coding of Exhibits

### **Corpus Christi MPO Transportation Policy Committee Meeting, June 4, 2020 at City of Corpus Christi Council of Chambers**

- Rodd Field Road project should be given the high priority due to the rapid development in the Southside are, especially the construction of the Del Mar College South Campus and its projected traffic.
- Suggested to use the Census Block Number instead of the names of cities

### **Public Meeting #1, June 10, 4:30 – 7:00 p.m. at Corpus Christi Regional Transportation Authority 2<sup>nd</sup> floor Board Room**

- No comments were offered.

### **Corpus Christi Technical Advisory Committee Meeting, June 18, 2020 at Corpus Christi Regional Transportation Authority 2<sup>nd</sup> floor Board Room**

DRAFT FISCAL YEAR 2021-2024 Transportation Improvement Plan (TIP) Project List

Table 12. FY 2021-2024 TIP DRAFT Fiscally Constrained Project List

TIP Fiscal Year	Project ID	Project Name	Project Phase	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Construction Cost (\$,millions)	CAT 1	CAT 2	CAT 4	CAT 7	CAT 9	CAT 12	Local/Other	Prior Funding	Total Project Cost (\$,millions)
2021	MPO-001	SH 358 (SPID) Ramp Reversal	NEPA, ROW, Design, or Construction	Ramp reversal Phase II-B	Nile Drive	Staples Street	TxDOT-CRP	On	2	\$35.00		\$35.00							\$45.43
2021	MPO-002	I-37	NEPA, ROW, Design, or Construction	Widen freeway by constructing additional 2 travel lanes northbound and 1 additional travel lane southbound	Redbird Lane (Overpass)	Nueces River	TxDOT-CRP	On	2 / 4U / 12	\$60.00		\$12.00	\$15.00			\$33.00			\$77.88
2021	MPO-003	US 181	NEPA, ROW, Design, or Construction	Widen freeway by constructing 1 additional travel lane in each direction	North of FM 3296 (Buddy Ganem Drive)	FM 2986 (Wildcat Drive)	TxDOT-CRP	On	2 / 4U	\$14.00		\$2.00	\$12.00						\$18.17
2021	MPO-004	US 181 Ramp Reversals	NEPA, ROW, Design, or Construction	Reverse entrance and exit ramps in Northbound direction	FM 3296 (Buddy Ganem Drive)	FM 2986 (Wildcat Drive)	TxDOT-CRP	On	2	\$4.00		\$4.00							\$5.19
2021	MPO-005	SH 286 (Crosstown)	NEPA, ROW, Design, or Construction	Extend 4-lane divided freeway by constructing mainlanes, overpass, and frontage roads	FM 43 (Weber Road)	South of FM 2444 (Staples Street)	TxDOT-CRP	On	2	\$40.00		\$40.00							\$51.92
2021	MPO-006	FM 893 (Moore Avenue)	NEPA, ROW, Design, or Construction	Upgrade from 2-lane roadway to 5-lane urban roadway by constructing additional 2 lanes and CLTL	CR 3685 (Stark Road)	0.2 miles West of CR 79 (Gum Hollow)	TxDOT-CRP	On	2	\$7.00		\$7.00							\$9.09
2024	MPO-007	Harbor Bridge Hike and Bike - Connectivity	NEPA, ROW, Design	Construct pedestrian and bike facilities	On various city streets from Coles High School	Williams Memorial Park	City of Corpus Christi	Off	7	\$1.42				\$1.42					\$1.84
2021	MPO-008	US 181 Harbor Bridge Voluntary Relocation Program	NEPA, ROW, Design, or Construction	US 181 Harbor Bridge Voluntary Relocation Mitigation Program	N/A	N/A	MPO	Off	7 / Local / ROW	\$71.00				\$36.00			\$20.00	\$15.00	\$92.15
2021	MPO-011	Schanen Ditch Hike and Bike Trail: Phase IV	NEPA, ROW, Design, or Construction	Construct and design Hike and Bike Trail	Killarmet Drive	Holly Road	City of Corpus Christi	Off	9	\$0.39					\$0.39				\$0.39
2021	MPO-012	Region-wide Bike Boulevard Wayfinding Initiative	NEPA, ROW, Design, or Construction	Designation of bicycle boulevards with pavement markings and signage	Various locations in Corpus Christi and Portland	N/A	City of Corpus Christi	Off	9	\$0.62					\$0.62				\$0.62
2021	MPO-013	Portland Bicycle Lanes	NEPA, ROW, Design, or Construction	Construct one way cycle track and buffered bike lanes	At various locations in Portland	N/A	City of Portland	On	9	\$0.36					\$0.36				\$0.36
2021	MPO-014	Dr. Hector P. Garcia Park Hike & Bike Trail: Phase II	NEPA, ROW, Design, or Construction	Construct & design Hike & Bike Trail	At Garcia on Trojan Dr.	Horne Road	City of Corpus Christi	Off	9	\$0.70					\$0.70				\$0.70
2024	MPO-016	PR 22	NEPA, ROW, Design, or Construction	Corridor upgrade for pedestrian and access management improvements without adding capacity	Aquarius Street	Whitecap Boulevard	TxDOT-CRP	On	2	\$16.00		\$16.00							\$19.20
2024	MPO-017	SH 361	NEPA, ROW, Design, or Construction	Upgrade/add direct connectors	At SH 35 interchange	0.6 miles Southeast on SH 361	TxDOT-CRP	On	2	\$38.50		\$38.50							\$46.20
2024	MPO-018	SH 35	NEPA, ROW, Design, or Construction	Upgrade/add direct connectors	FM 3284	0.23 North of SH 361	TxDOT-CRP	On	4U	\$21.50			\$21.50						\$25.80
2024	MPO-030	Future Category 9 Projects	NEPA, ROW, Design, or Construction	Projects selected through competitive process	N/A	N/A	TBD	On/Off	9	\$2.39					\$2.39				\$2.39
2021	TxDOT-001	Harbor Bridge	Design, or Construction	Construct New Bridge, Approaches, Interchanges, and Highway Improvement	North Beach Ave	Morgan Ave at Crosstown Expwy	TxDOT-CRP	On	2M, 6, 7, 12	\$807.80		\$12.60		\$19.20		\$485.00			\$807.80
2021	TxDOT-002	IH 37	NEPA, ROW, Design, or Construction	Widen freeway	Nueces River	IH 37/US 77 interchange	TxDOT-CRP	On	4	\$22.00			\$22.00						\$22.00
2021	TxDOT-003	SH 35	NEPA, ROW, Design, or Construction	Construct Grade Separation	On SH 35 at Corpus Christi St Interchange	N/A	TxDOT-CRP	On	4	\$15.00			\$15.00						\$15.00
2021	TxDOT-004	US 77	NEPA, ROW, Design, or Construction	Upgrade to Freeway	Chiltipin Creek St.	Business North Sinton	TxDOT-CRP	On	4	\$40.00			\$40.00						\$40.00
2021	TxDOT-005	US 77	NEPA, ROW, Design, or Construction	Upgrade to Freeway	Business South Sinton	Chiltipin Creek St.	TxDOT-CRP	On	4	\$40.00			\$40.00						\$40.00
2021	TxDOT-006	US 77	NEPA, ROW, Design, or Construction	Upgrade to Freeway at IH 37	IH 37 and Interchange	South of Odem	TxDOT-CRP	On	4	\$127.50			\$127.50						\$127.50
2021	CCRTA-036	FY 21 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.86							\$0.86		\$0.86
2021	CCRTA-037	FY 21 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2021	CCRTA-038	FY 21 Support/Relief Vehicles	Capital	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.21							\$0.21		\$0.21
2021	CCRTA-039	FY 21 Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$7.37							\$7.37		\$7.37
2021	CCRTA-040	FY 21 Bus Support Equipment and Facilities/Hardware/Software	Transit Maintenance/Operations	Bus Support Equipment and Facilities/Hardware/Software	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.21							\$0.21		\$0.21
2021	CCRTA-041	FY 21 Engine Overhaul Program	Transit Maintenance/Operations	Engine Overhaul Program	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.64							\$0.64		\$0.64

DRAFT FISCAL YEAR 2021-2024 Transportation Improvement Plan (TIP) Project List

Table 12. FY 2021-2024 TIP DRAFT Fiscally Constrained Project List

TIP Fiscal Year	Project ID	Project Name	Project Phase	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Construction Cost (\$,millions)	CAT 1	CAT 2	CAT 4	CAT 7	CAT 9	CAT 12	Local/Other	Prior Funding	Total Project Cost (\$,millions)
2021	CCRTA-042	FY 21 Bus Support/Equipment and Facilities/MiscellaneousShop and Garage Equipment	Transit Maintenance/Operations	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	N/A	N/A	Corpus Christi RTA	Off	5339	\$0.05							\$0.05		\$0.05
2021	CCRTA-043	FY 21 Bus Support Equipment and Facilities/Hardware/Software	Transit Maintenance/Operations	Bus Support Equipment and Facilities/Hardware/Software	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.21							\$1.21		\$1.21
2021	CCRTA-044	FY 21 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.85							\$0.85		\$0.85
2021	CCRTA-045	FY 21 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2021	CCRTA-046	FY 21 Mobile Bus Lift	Transit Maintenance/Operations	Mobile Bus Lift	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.05							\$0.05		\$0.05
2021	CCRTA-047	FY 21 5310 Sub-recipient	Transit Maintenance/Operations	5310 Sub-recipient	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40
2021	CCRTA-048	FY 21 Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2022	CCRTA-049	FY 22 5310 Sub-recipient	Transit Maintenance/Operations	5310 Sub-recipient	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40
2022	CCRTA-050	FY 22 Westside Station near DMC West Campus	Capital	Westside Station near DMC West Campus	N/A	N/A	Corpus Christi RTA	Off	5307	\$5.10							\$5.10		\$5.10
2022	CCRTA-051	FY 22 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.86							\$0.86		\$0.86
2022	CCRTA-052	FY 22 Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2022	CCRTA-053	FY 22 Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$6.58							\$6.58		\$6.58
2022	CCRTA-054	FY 22 Support/Relief Vehicles	Capital	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.34							\$0.34		\$0.34
2022	CCRTA-055	FY 22 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.50							\$0.50		\$0.50
2022	CCRTA-056	FY 22 Bus Support Equipment and Facilities/Hardware/Software	Transit Maintenance/Operations	Bus Support Equipment and Facilities/Hardware/Software	N/A	N/A	Corpus Christi RTA	Off	5339	\$1.09							\$1.09		\$1.09
2023	CCRTA-057	FY 23 Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$8.54							\$8.54		\$8.54
2023	CCRTA-058	FY 23 Support/Relief Vehicles	Transit Maintenance/Operations	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.31							\$0.31		\$0.31
2023	CCRTA-059	FY 23 Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.50							\$0.50		\$0.50
2023	CCRTA-060	FY 23 Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2023	CCRTA-061	FY 23 Bus Stop Amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.99							\$0.99		\$0.99
2023	CCRTA-062	FY 23 Bus Support/Equipment and Facilities/MiscellaneousShop and Garage Equipment	Transit Maintenance/Operations	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	N/A	N/A	Corpus Christi RTA	Off	5339	\$0.05							\$0.05		\$0.05
2023	CCRTA-063	FY 23 Section 5310 Sub-recipients	Transit Maintenance/Operations	Section 5310 Sub-recipients	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40
2024	CCRTA-064	FY 24 (est. by MPO) Rolling Stock (All variety of rolling stock)	Capital	Rolling Stock (All variety of rolling stock)	N/A	N/A	Corpus Christi RTA	Off	5307	\$8.54							\$8.54		\$8.54
2024	CCRTA-065	FY 24 (est. by MPO) Support/Relief Vehicles	Capital	Support/Relief Vehicles	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.31							\$0.31		\$0.31
2024	CCRTA-066	FY 24 (est. by MPO) Bus Stop Improvements	Transit Maintenance/Operations	Bus Stop Improvements	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.50							\$0.50		\$0.50
2024	CCRTA-067	FY 24 (est. by MPO) Preventive Maintenance	Transit Maintenance/Operations	Preventive Maintenance	N/A	N/A	Corpus Christi RTA	Off	5307	\$1.00							\$1.00		\$1.00
2024	CCRTA-068	FY 24 (est. by MPO staff) Bus Stop amenities	Transit Maintenance/Operations	Bus Stop Amenities	N/A	N/A	Corpus Christi RTA	Off	5307	\$0.99							\$0.99		\$0.99
2024	CCRTA-069	FY 24 (est. by MPO staff) Bus Support/ Equipment and Facilities/Miscellaneous Shop and Garage Equipment	Transit Maintenance/Operations	Bus Support/Equipment and Facilities/Miscellaneous Shop and Garage Equipment	N/A	N/A	Corpus Christi RTA	Off	5339	\$0.05							\$0.05		\$0.05
2024	CCRTA-070	FY 24 (est. by MPO staff) Section 5310 Sub-recipients	Transit Maintenance/Operations	Section 5310 Sub-recipients	N/A	N/A	Corpus Christi RTA	Off	5310	\$0.40							\$0.40		\$0.40





## **PUBLIC NOTICE #20-6**

**May 31, 2020**

The **Corpus Christi Metropolitan Planning Organization** (Corpus Christi MPO) is seeking public input and comments on the **DRAFT FY 2021-2024 Transportation Improvement Program (TIP)**. The TIP identifies how the region plans to invest in the transportation system during the next 4 years. In accordance with the Corpus Christi MPO Public Participation Plan, the MPO is seeking to inform those who are interested in or affected by transportation decisions with opportunities to provide input on both the overall TIP and on projects that are funded within the TIP.

The **DRAFT FY 2021-2024 Transportation Improvement Program (TIP)** is being released to the public on June 4, 2020 and public input is invited through July 9, 2020 at the following public meetings:

### **NO IN-PERSON PUBLIC COMMENTS DUE TO COVID-19**

Public Comments may be provided in writing, limited to 1,000 characters, by emailing [ccmpo@cctxmpo.us](mailto:ccmpo@cctxmpo.us) or by regular mail or hand-delivery to the Corpus Christi MPO offices at 602 N. Staples St., Suite 300, Corpus Christi, TX 78401, and **MUST** be submitted no later than 5 minutes after the start of a meeting in order to be provided for consideration and review at the meeting. All Public Comments submitted shall be placed into the record of the meeting.

**June 4, 2020, 2:00 p.m.\***

MPO Transportation Policy Committee

Corpus Christi City Hall - Council Chambers  
1201 Leopard Street, Corpus Christi, TX 78401

**June 10, 2020, 4:30 p.m.\***

MPO Public Meeting

Corpus Christi Regional Transportation Authority  
602 N. Staples Street, 2nd Floor Board Room  
Corpus Christi, TX 78401

### **NO IN-PERSON PUBLIC COMMENTS DUE TO COVID-19**

**June 18, 2020, 9:00 a.m.\***

MPO Technical Advisory Committee

Corpus Christi Regional Transportation Authority  
602 N. Staples Street, 2nd Floor Board Room  
Corpus Christi, TX 78401

**July 9, 2020, 2:00 p.m.\***

MPO Transportation Policy Committee

Corpus Christi City Hall - Council Chambers  
1201 Leopard Street, Corpus Christi, TX 78401

*\*Meeting location and time subject to change, check MPO website for final location.*

[www.corpuschristi-mpo.org](http://www.corpuschristi-mpo.org)

The **Corpus Christi Regional Transportation Authority (CCRTA)** hereby gives notice that coordination actions with the Corpus Christi Metropolitan Planning Organization (MPO) have occurred to assure that the procedures established in the MPO's public participation plan, including public notice and times established for public review and comment on the TIP, satisfy the Requirement of public participation in the development of the program of projects and grant application requirements of the Federal Transit Administration (FTA) Urbanized Area Formula Program, Section 5307; and other formula funds. The public participation requirements of 49 U.S.C. Section 5307

(b) (1) through (b) (7) (as amended by the FAST Act) are integrated into the MPO's adopted "Public Participation Plan". The CCRTA therefore is a participant with the MPO in the public process for the FY 2021-2024 TIP.

All MPO Committee meetings are public meetings and open to the public subject to the COVID-19 policies mentioned above. Any persons with disabilities who plan to attend this meeting and who may need auxiliary aids or services are requested to contact the MPO at (361) 884-0687 at least 48 hours in advance so that appropriate arrangements can be made.

## **Appendix G: Public Comments**

### **Corpus Christi MPO Technical Advisory Committee Meeting, May 21, 2020 at Corpus Christi Regional Transportation Authority 2<sup>nd</sup> floor Board Room**

- Include the Harbor Bridge Park Improvement Project (MPO-009) in FY 2021-2024 TIP Project Table
- Create a separate table for the Harbor Bridge Project (TxDOT-001)
- Remove IH-37 (TxDOT-002), SH 35 (TxDOT-003), and US 77 (TxDOT-004, 005 and 006)
- Verify the project cost of US 181 Harbor Bridge Voluntary Relocation Program (MPO-008)
- Make all tables included in the FY 2021-2024 TIP consistent
- Add “phases” into the two projects, PR 22 (MPO-016) and SH 35 (MPO-018) identified as Congestion Management Corridors
- Correct the amount of Category 12 from \$82.9 million to \$33 million in Table 1 Category Funding
- Reassess Exhibit 2-6 legend classifications
- Verify the color coding of Exhibits

### **Corpus Christi MPO Transportation Policy Committee Meeting, June 4, 2020 at City of Corpus Christi Council of Chambers**

- Rodd Field Road project should be given the high priority due to the rapid development in the Southside are, especially the construction of the Del Mar College South Campus and its projected traffic.
- Suggested to use the Census Block Number instead of the names of cities

### **Public Meeting #1, June 10, 4:30 – 7:00 p.m. at Corpus Christi Regional Transportation Authority 2<sup>nd</sup> floor Board Room**

- No comments were offered.

### **Corpus Christi Technical Advisory Committee Meeting, June 18, 2020 at Corpus Christi Regional Transportation Authority 2nd floor Board Room**



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**Date:** June 12, 2020  
**To:** Technical Advisory Committee (TAC)  
**Through:** Robert MacDonald, Transportation Planning Director  
**From:** Craig Casper, Senior Transportation Planner  
**Subject:** Item 4B: TxDOT 2021 UTP Category 2 and Category 4U Funding Levels and Candidate Project Identification for the 2021 Unified Transportation Program (UTP)  
**Action:** Review, Discuss and Recommend to the TPC

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### **Summary**

TxDOT staff is asking the TAC for guidance and potential projects for Categories 2, 4U and 7 as part of the 2021 Unified Transportation Program (UTP) development process. With additional funding available for projects in the Corpus Christi MPO region, TxDOT would like TAC members to discuss projects that should move forward into planning, design and construction phases with this funding. Category 7 funds are still uncertain, and dependent upon costs of the Harbor Bridge Relocation Program.

The current estimate for the Harbor Bridge Relocation project is 306 acquisitions for a total cost of \$57,300,000. The Port of Corpus Christi has paid \$20,000,000 of this amount, leaving \$37,300,000. The Corpus Christi MPO allocated \$15,000,000 in FY2019 as the first installment. This leaves \$22,300,000 in Category 7 liability for years 2021 through 2024. TxDOT has provided an estimate of \$37,451,500 in Category 7 available for the Corpus Christi MPO in years 2021-2024. This means that approximately \$15,151,500 may be available for programming into projects. The years that these funds are available are dependent upon the exact repayment schedule. The resulting estimates for available funding, by Category, are:

**Category 2:** \$38.2 million  
**Category 4U:** \$12.5 million  
**Category 7:** \$15.1 million

The most readily available projects to receive additional funding are those projects contained in the recently approved 2020-2045 MTP. The list of the MPO-only projects are provided as two attachments: the Fiscally Constrained Project List and the Illustrative Project List. Once selected, the projects can be added to the 2021 UTP and amended into the FY 2021-2024 TIP. Current projects for consideration are:

- FM 624 (Northwest Boulevard), MPO-033: Upgrade from 4-lane roadway to 6-lane roadway including raised medians. Estimated Construction Cost: \$18 million
- FM 43 (Weber Road), MPO-035: Upgrade to 5-lane roadway by constructing additional 2 lanes including CLTL. Estimated Construction Cost: \$40 million
- PR 22 Intersection Improvements per Feasibility Study at SH 361, MPO-039. Estimated Total Project Cost: \$53.26 million

**Recommendation**

Review and propose project funding prioritization to the TPC for approval.

**Proposed Motion**

Move to approve the following projects as the priorities for the Corpus Christi MPO for additional Category 2, 4U and 7 funds:

- FM 624 (Northwest Boulevard), MPO-033: Upgrade from 4-lane roadway to 6-lane roadway including raised medians. Estimated Construction Cost: \$18 million
- FM 43 (Weber Road), MPO-035: Upgrade to 5-lane roadway by constructing additional 2 lanes including CLTL. Estimated Construction Cost: \$40 million
- PR 22 Intersection Improvements per Feasibility Study at SH 361, MPO-039. Estimated Total Project Cost: \$53.26 million

**Attachments:**

1. 2020-2045 MTP Fiscally Constrained Project List (FY 2021-2024 TIP Eligible List)
2. 2020-2045 MTP Illustrative Project List



2020-2045 MTP Fiscally Constrained Project List (FY 2021-2024 TIP Eligible List)

Plan Period	Rank	MTP ID	Project Name	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Construction Cost (\$, millions)	CAT 1	CAT 2	CAT 4	CAT 6	CAT 7	CAT 9	CAT 12	Local / Other	Prior Funding	Total Project Cost (\$, millions)
TIP / STIP	1	MPO-001	SH 358 (SPID) Ramp Reversal	Ramp reversal Phase II-B	Nile Drive	Staples Street	TxDOT-CRP	On	2	\$35.00	--	\$35.00	--	--	--	--	--	--	--	\$45.43
TIP / STIP	1	MPO-002	I-37	Widen freeway by constructing additional 2 travel lanes northbound and 1 additional travel lane southbound	Redbird Lane (Overpass)	Nueces River	TxDOT-CRP	On	2 / 4U / 12	\$60.00	--	\$12.00	\$15.00	--	--	--	\$33.00	--	--	\$77.88
TIP / STIP	1	MPO-003	US 181	Widen freeway by constructing 1 additional travel lane in each direction	North of FM 3296 (Buddy Ganem Drive)	FM 2986 (Wildcat Drive)	TxDOT-CRP	On	2 / 4U	\$14.00	--	\$2.00	\$12.00	--	--	--	--	--	--	\$18.17
TIP / STIP	1	MPO-004	US 181 Ramp Reversals	Reverse entrance and exit ramps in Northbound direction	FM 3296 (Buddy Ganem Drive)	FM 2986 (Wildcat Drive)	TxDOT-CRP	On	2	\$4.00	--	\$4.00	--	--	--	--	--	--	--	\$5.19
TIP / STIP	1	MPO-005	SH 286 (Crosstown)	Extend 4-lane divided freeway by constructing mainlanes, overpasses, and frontage roads	FM 43 (Weber Road)	South of FM 2444 (Staples Street)	TxDOT-CRP	On	2	\$40.00	--	\$40.00	--	--	--	--	--	--	--	\$51.92
TIP / STIP	1	MPO-006	FM 893 (Moore Avenue)	Upgrade from 2-lane roadway to 5-lane urban roadway by constructing additional 2 lanes and CLTL	CR 3685 (Stark Road)	0.2 miles West of CR 79 (Gum Hollow)	TxDOT-CRP	On	2	\$7.00	--	\$7.00	--	--	--	--	--	--	--	\$9.09
TIP / STIP	2	MPO-007	Harbor Bridge Hike and Bike - Connectivity	Construct pedestrian and bike facilities	On various city streets from Coles High School	Williams Memorial Park	City of Corpus Christi	Off	7	\$1.42	--	--	--	--	\$1.42	--	--	--	--	\$1.84
TIP / STIP	2	MPO-008	US 181 Harbor Bridge Voluntary Relocation Program	US 181 Harbor Bridge Voluntary Relocation Mitigation Program	N/A	N/A	MPO	Off	7 / Local / ROW	\$71.00	--	--	--	--	\$36.00	--	--	\$20.00	\$15.00	\$92.15
TIP / STIP	2	MPO-009	Harbor Bridge Park Improvements	Park mitigation for Harbor Bridge	At various city parks including	Ben Garza, TC Ayers, and new location	City of Corpus Christi	Off	7	\$4.80	--	--	--	--	\$4.80	--	--	--	--	\$6.23
TIP / STIP	3	MPO-010	Pedestrian and Bike	Pedestrian and bike facility improvements	At Various Locations on Brewster Street	N/A	City of Corpus Christi	On	7	\$1.42	--	--	--	--	--	--	--	--	\$1.42	\$1.84
TIP / STIP	4	MPO-011	Schanen Ditch Hike and Bike Trail: Phase IV	Construct and design Hike and Bike Trail	Killarmet Drive	Holly Road	City of Corpus Christi	Off	9	\$0.39	--	--	--	--	--	\$0.39	--	--	--	\$0.39
TIP / STIP	4	MPO-012	Region-wide Bike Boulevard Wayfinding Initiative	Designation of bicycle boulevards with pavement markings and signage	Various Locations in Corpus Christi and Portland	N/A	City of Corpus Christi	Off	9	\$0.62	--	--	--	--	--	\$0.62	--	--	--	\$0.62
TIP / STIP	4	MPO-013	Portland Bicycle Lanes	Construct one way cycle track and buffered bike lanes	At Varioius Locations in Portland	N/A	City of Portland	On	9	\$0.36	--	--	--	--	--	\$0.36	--	--	--	\$0.36
TIP / STIP	4	MPO-014	Dr Hector P Garcia Park Hike & Bike Trail: Phase II	Construct & design Hike & Bike Trail	At Garcia on Trojan Dr	Horne Road	City of Corpus Christi	Off	9	\$0.70	--	--	--	--	--	\$0.70	--	--	--	\$0.70
TIP / STIP	16	MPO-015	PR 22	Feasibility study: intersection improvements	At SH 361/PR 22 intersection	Zahn Road	TBD	On	7	\$1.20	--	--	--	--	\$1.20	--	--	--	--	\$1.56
10-Year	1	MPO-016	PR 22	Corridor upgrade for pedestrian and access management improvements without adding capacity	Aquarius Street	Whitecap Boulevard	TxDOT-CRP	On	2	\$16.00	--	\$16.00	--	--	--	--	--	--	--	\$19.20
10-Year	1	MPO-017	SH 361	Upgrade/add direct connectors	At SH 35 interchange	0.6 miles Southeast on SH 361	TxDOT-CRP	On	2	\$38.50	--	\$38.50	--	--	--	--	--	--	--	\$46.20
10-Year	1	MPO-018	SH 35	Upgrade/add direct connectors	FM 3284	0.23 North of SH 361	TxDOT-CRP	On	4U	\$21.50	--	--	\$21.50	--	--	--	--	--	--	\$25.80
10-Year	9	MPO-019	SS 544 (Agnes Street / Laredo Street)	Operational improvements without adding capacity	SH 286 (Crosstown)	Coopers Alley	City of Corpus Christi	Off	7	\$5.50	--	--	--	--	\$5.50	--	--	--	--	\$6.60
10-Year	12	MPO-020	Holly Road Travel Lanes	Construct Phase II by adding 2 additional travel lanes	SH 286	Greenwood Drive	City of Corpus Christi	Off	7	\$4.73	--	--	--	--	\$4.73	--	--	--	--	\$5.68
10-Year	13	MPO-021	Regional Parkway / Rodd Field Road Extension	NEPA Process for new location 4-lane roadway (Segment B) and Rodd Field Road	Yorktown Boulevard	SH 286 (Crosstown)	City of Corpus Christi	Off	7	\$1.89	--	--	--	--	\$1.89	--	--	--	--	\$2.27
10-Year	13	MPO-022	Regional Parkway	NEW Location: Construct Phase I consisting of 4-lane roadway (Segment B)	Rodd Field Road	SH 286 (Crosstown)	City of Corpus Christi	Off	7	\$45.00	--	--	--	--	\$45.00	--	--	--	--	\$54.00
10-Year	13	MPO-023	Rodd Field Road Extension	Construct Phase I consisting of 2-lane roadway with raised medians on new location	Yorktown Boulevard	Future Regional Parkway (South of Oso Creek)	City of Corpus Christi	Off	7	\$25.00	--	--	--	--	\$25.00	--	--	--	--	\$30.00
10-Year	14	MPO-024	Yorktown Boulevard	Construct 2 additional travel lanes with turn lanes. Elevate and widen bridge.	Rodd Field Road	Laguna Shores Road	City of Corpus Christi	Off	7	\$39.41	--	--	--	--	\$39.41	--	--	--	--	\$47.29
10-Year	15	MPO-025	Timon Boulevard / Surfside Boulevard	Rehabilitate without additional capacity, construct bicycle facilities	Beach Avenue	Burleson Street	City of Corpus Christi	Off	7	\$20.00	--	--	--	--	\$20.00	--	--	--	--	\$24.00
10-Year	19	MPO-026	Flour Bluff Drive	Upgrade to 5-lane urban roadway by constructing additional 2-lanes and CLTL	South of Don Patricio Road	Yorktown Boulevard	City of Corpus Christi	Off	7	\$17.00	--	--	--	--	\$17.00	--	--	--	--	\$20.40
10-Year	22	MPO-027	CR 72	Construct 2 additional travel lanes (CTWLTL)	FM 2986 (Wildcat Drive)	CR 2032	City of Portland	Off	7	\$5.92	--	--	--	--	\$5.92	--	--	--	--	\$7.10

2020-2045 MTP Fiscally Constrained Project List (FY 2021-2024 TIP Eligible List)

Plan Period	Rank	MTP ID	Project Name	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Construction Cost (\$, millions)	CAT 1	CAT 2	CAT 4	CAT 6	CAT 7	CAT 9	CAT 12	Local / Other	Prior Funding	Total Project Cost (\$, millions)
10-Year	23	MPO-028	Joe Fulton International Trade Corridor (JFITC) Realignment	Corridor improvements	0.5 miles west of Navigation Boulevard	0.5 miles east of Navigation Boulevard	Port of Corpus Christi	Off	7	\$5.00	--	--	--	--	\$5.00	--	--	--	--	\$6.00
10-Year	32	MPO-029	US 181 Companion Drainage Project	Construction of the companion drainage project across the TxDOT right-of-way	Sunset Road	FM 3239 (Buddy Ganem Drive)	TxDOT-CRP	On	2 / 7 / Local	\$7.00	--	--	--	--	--	--	--	\$7.00	--	\$8.40
10-Year	35	MPO-030	Future Category 9 Projects	Projects selected through competitive process	N/A	N/A	TBD	On/Off	9	\$12.43	--	--	--	--	--	\$12.43	--	--	--	\$12.43
Long Range	5	MPO-031	SH 358 (SPID) Ramp Reversal	Ramp Reversal Phase II-C (Braided ramps)	Airline Road	Everhart Road	TxDOT-CRP	On	2	\$35.00	--	\$35.00	--	--	--	--	--	--	--	\$42.00
Long Range	6	MPO-032	SH 286 (Crosstown)	Construct 1 additional northbound travel lane with ramp upgrades	SS 544 (Agnes Street / Laredo Street)	SH 358 (SPID)	TxDOT-CRP	On	2	\$80.00	--	\$80.00	--	--	--	--	--	--	--	\$96.00
Long Range	7	MPO-033	FM 624 (Northwest Boulevard)	Upgrade from 4-lane roadway to 6-lane roadway including raised medians	CR 69	FM 73	TxDOT-CRP	On	2 / 4U / 7	\$18.00	--	\$6.00	\$10.00	--	\$2.00	--	--	--	--	\$21.60
Long Range	8	MPO-034	I-37 / SH 358 Interchange	Reconstruct Interchange to provide 2-lane direct connectors from SB I-37 to EB SH 358 and WB SH 358 to NB I-37	At I-37/SH 358 interchange	N/A	TxDOT-CRP	On	2 / 4U	\$100.00	--	\$60.00	\$40.00	--	--	--	--	--	--	\$120.00
Long Range	10	MPO-035	FM 43 (Weber Road)	Upgrade to 5-lane roadway by constructing additional 2 lanes and CLTL	SH 286 (Crosstown)	FM 665 (Old Brownsville Road)	TxDOT-CRP	On	2 / 4U	\$40.00	--	\$15.00	\$25.00	--	--	--	--	--	--	\$48.00
Long Range	11	MPO-036	SH 286 (Crosstown) Braided Ramp	Construct braided ramps northbound from Holly to SH 358	South of Holly Road	SH 358 (SPID)	TxDOT-CRP	On	2 / 4U	\$60.00	--	\$25.00	\$35.00	--	--	--	--	--	--	\$72.00

2020-2045 Metropolitan Transportation Plan Illustrative Project List

Plan Period	Rank	MTP ID	Project Name	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Total Project Cost (\$, millions)
Unfunded Needs List	11	MPO-037	I-69	Construct braided ramps northbound from FM 624 to I-37	FM 624 (Northwest Boulevard)	I-37	TxDOT-CRP	On	2 / 4U	\$60.00
Unfunded Needs List	11	MPO-038	I-37 (Violet Road Overpass)	Replace bridge, increase vertical clearance, widen overpass to include shoulders and turnabouts	At Violet Road	N/A	TxDOT-CRP	On	2 / 4U / Other	\$21.60
Unfunded Needs List	17	MPO-039	PR 22	Intersection improvements per Feasibility study	At SH 361/PR 22 intersection	Zahn Road	TxDOT-CRP	On	2 / 4U	\$53.26
Unfunded Needs List	18	MPO-040	Holly Road	Upgrade to 5-lane urban roadway by constructing additional 2 lanes	Rodd Field Road (SH 357)	Paul Jones Avenue	City of Corpus Christi	Off	7	\$11.36
Unfunded Needs List	20	MPO-041	FM 665 (Old Brownsville Road)	Upgrade to 5-lane roadway by constructing additional 2 lanes and CLTL	SH 358 (SPID)	SH 357 (Saratoga Boulevard)	TxDOT-CRP	On	2	\$17.75
Unfunded Needs List	21	MPO-042	FM 2292 (Rand Morgan Road) 5-lane	Construct additional travel lanes for 5 lane roadway	I-37	South of McNorton Road	TxDOT-CRP	On	7	\$20.00
Unfunded Needs List	24	MPO-043	Williams Drive	Construct 4-lane roadway with TWTL and drainage on new location	Rodd Field Road (SH 357)	Ennis Joslin Road	City of Corpus Christi	Off	7	\$8.00
Unfunded Needs List	25	MPO-044	SH 357 (Saratoga Boulevard)	Construct 2 additional lanes with CLTL	FM 665 (Old Brownsville Road)	Calle Cuernavaca	TxDOT-CRP	On	2	\$11.99
Unfunded Needs List	26	MPO-045	Akins Drive	Construct 2 additional travel lanes	Lang Road	Wildcat Drive (FM 2986)	City of Portland	Off	7	\$6.00
Unfunded Needs List	27	MPO-046	North Staples Extension	Extend North Staples Street by constructing 2-lane roadway with bicycle and pedestrian facilities on new location	West Broadway Street	North Tancahua Street	City of Corpus Christi	Off	7 / 9	\$8.00
Unfunded Needs List	28	MPO-047	Kay Bailey Hutchison Road Extension	Construct 2-lane roadway on new location	US 181	FM 2986 (Wildcat Drive)	Port of Corpus Christi	Off	7	\$5.92
Unfunded Needs List	29	MPO-048	Oso Pedestrian Connection	Construct pedestrian and bicycle bridge across Oso to Momentum Campus	Momentum Campus at Ennis Joslin Road	TAMUCC Campus	TBD	Off	7 / 9	\$5.00
Unfunded Needs List	30	MPO-049	Holly Road Railroad Trestle	Rehabilitate Railroad Trestle to establish bike and pedestrian bridge connections	East end of Oso wetland preserve	West shore of Flour Bluff Drive	City of Corpus Christi	Off	7 / 9	\$2.50
Unfunded Needs List	31	MPO-050	Intelligent Transportation Systems	Integrated Corridor Management - ITS improvements	Various Locations possible including	IH 37, SH 358, US 181, SH 286, PR 22, SH 361	Multiple	On	2 / 7	\$11.84
Unfunded Needs List	33	MPO-051	I-37	Construct ramp improvements	FM 1694	I-69 Interchange	TxDOT-CRP	On	2 / 4	\$70.00
Unfunded Needs List	34	MPO-052	SH 361	Construct additional 2 lanes for 4-lane divided section	Access Road 1 in Port Aransas	PR 22	TxDOT-CRP	On	2	\$125.00
Unfunded Needs List	36	MPO-053	Regional Parkway	NEW Location:Construct segment of independent utility (Segment A)	PR 22	Rodd Field Road (SH 357)	City of Corpus Christi	Off	7	\$190.00
Unfunded Needs List	37	MPO-054	Regional Parkway	NEPA Process for new location 4-lane roadway (Segment A)	PR 22	Rodd Field Road (SH 357)	City of Corpus Christi	Off	7	\$1.89
Unfunded Needs List	38	MPO-055	Regional Parkway	NEPA Process for new location 4-lane roadway (Segment C)	SH 286 (Crosstown)	CR 57	City of Corpus Christi	Off	7	\$1.89
Unfunded Needs List	39	MPO-056	Regional Parkway	NEPA Process for new location 4-lane roadway (Segment D)	CR 57	US 77	City of Corpus Christi	Off	7	\$1.89
Unfunded Needs List	40	MPO-057	Regional Parkway	NEPA Process for new location 4-lane roadway (Segment E)	US 77	SH 44	City of Corpus Christi	Off	7	\$1.89
Unfunded Needs List	41	MPO-058	Regional Parkway	NEPA Process for new location 4-lane roadway (Segment F)	SH 44	FM 624 (Northwest Bouelvard)	City of Corpus Christi	Off	7	\$1.89
Unfunded Needs List	42	MPO-059	Regional Parkway	NEPA Process for new location 4-lane roadway (Segment G)	FM 624 (Northwest Boulevard)	I-37	City of Corpus Christi	Off	7	\$1.89
Unfunded Needs List	43	MPO-060	Regional Parkway	NEW Location:Construct segment of independent utility (Segment C)	SH 286 (Crosstown)	CR 57	City of Corpus Christi	Off	7	\$27.00
Unfunded Needs List	44	MPO-061	Regional Parkway	NEW Location:Construct segment of independent utility (Segment D)	CR 57	US 77	City of Corpus Christi	Off	7	\$50.00
Unfunded Needs List	45	MPO-062	Regional Parkway	NEW Location:Construct segment of independent utility (Segment E)	US 77	SH 44	City of Corpus Christi	Off	7	\$20.00
Unfunded Needs List	46	MPO-063	Regional Parkway	NEW Location:Construct segment of independent utility (Segment F)	SH 44	FM 624 (Northwest Bouelvard)	City of Corpus Christi	Off	7	\$24.00
Unfunded Needs List	47	MPO-064	Regional Parkway	NEW Location:Construct segment of independent utility (Segment G)	FM 624 (Northwest Boulevard)	I-37	City of Corpus Christi	Off	7	\$38.00



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**Date:** June 12, 2020  
**To:** Technical Advisory Committee (TAC)  
**From:** Craig Casper, Senior Transportation Planner  
**Through:** Robert MacDonald, Transportation Planning Director  
**Subject:** Item 5A: FY 2021-2022 Unified Planning Work Program (UPWP) Development  
**Action:** Review and Discussion

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### **Summary**

As discussed previously, all metropolitan planning organizations (MPO) are required to develop a Unified Planning Work Program (UPWP). We continue to develop the details of the FY 2021- 2022 UPWP document that serves as the scope of work for the MPO. The Preliminary Draft is attached for review.

This month, we are asking the TAC members to review the preliminary draft document and provide any additional details, fact sheets, scopes of service or project descriptions for any transportation planning efforts that may occur in the next two fiscal years (October 2020 through September 2022). This will help the MPO meet the requirements for a UPWP for describing all transportation planning efforts that will occur within the MPO Planning Area during the next two-year period. These projects are included in the UPWP regardless of who is conducting the work or what type of funds (local, state, federal) are used to fund the effort.

We are compiling a list of projects in the region that should be included in the UPWP. This information will be distributed for your information at the TAC meeting. We are requesting any additional projects that you believe are related to the MPO UPWP efforts.

### **Attachment**

Preliminary FY 2021-2022 Unified Planning Work Program (UPWP)



**DRAFT FY-2021 & FY-2022**  
**Unified Planning Work Program**



FY-2021 & FY-2022  
Unified Planning Work Program

for the



**To Be Approved by the**  
Corpus Christi MPO Transportation Policy Board on:  
August 6, 2020

**Prepared in Cooperation With:**

Texas Department of Transportation  
Federal Highway Administration  
Federal Transit Administration  
Corpus Christi Regional Transportation Authority  
City of Corpus Christi  
City of Portland  
Nueces County  
San Patricio County  
Port of Corpus Christi Authority

This document was prepared with financial assistance from the Federal Highway Administration and the Federal Transit Administration of the U.S. Department of Transportation through the Texas Department of Transportation. The Corpus Christi Metropolitan Planning Organization is solely responsible for its content.



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## SECTION I. INTRODUCTION AND SUMMARY

Metropolitan Planning Organizations (MPOs) were formed to give local communities a stronger voice in achieving their transportation goals and improving regional transportation planning while avoiding duplication of planning efforts. MPOs exist throughout the United States in all urbanized areas of more than 50,000 people and have the authority to plan, prioritize, and program federal funding for transportation projects in urban/metropolitan areas. The Corpus Christi MPO Transportation Policy Committee (TPC) is the designated forum for municipalities, tribal governments, counties, transit agencies, state and private agencies to address regional transportation issues. The U.S. Department of Transportation (USDOT) has established policy guidelines to improve regional transportation planning and give local communities a stronger voice in achieving their transportation goals while avoiding duplication of planning efforts. As the designated metropolitan planning organization Corpus Christi MPO is responsible for carrying out the:

*“...continuing, cooperative and comprehensive multimodal transportation planning process, including the development of a metropolitan transportation plan and a transportation improvement program (TIP), that encourages and promotes the safe and efficient development, management, and operation of surface transportation systems to serve the mobility needs of people and freight (including accessible pedestrian walkways and bicycle transportation facilities) and foster economic growth and development, while minimizing transportation-related fuel consumption and air pollution” (23 CFR 450.300).*

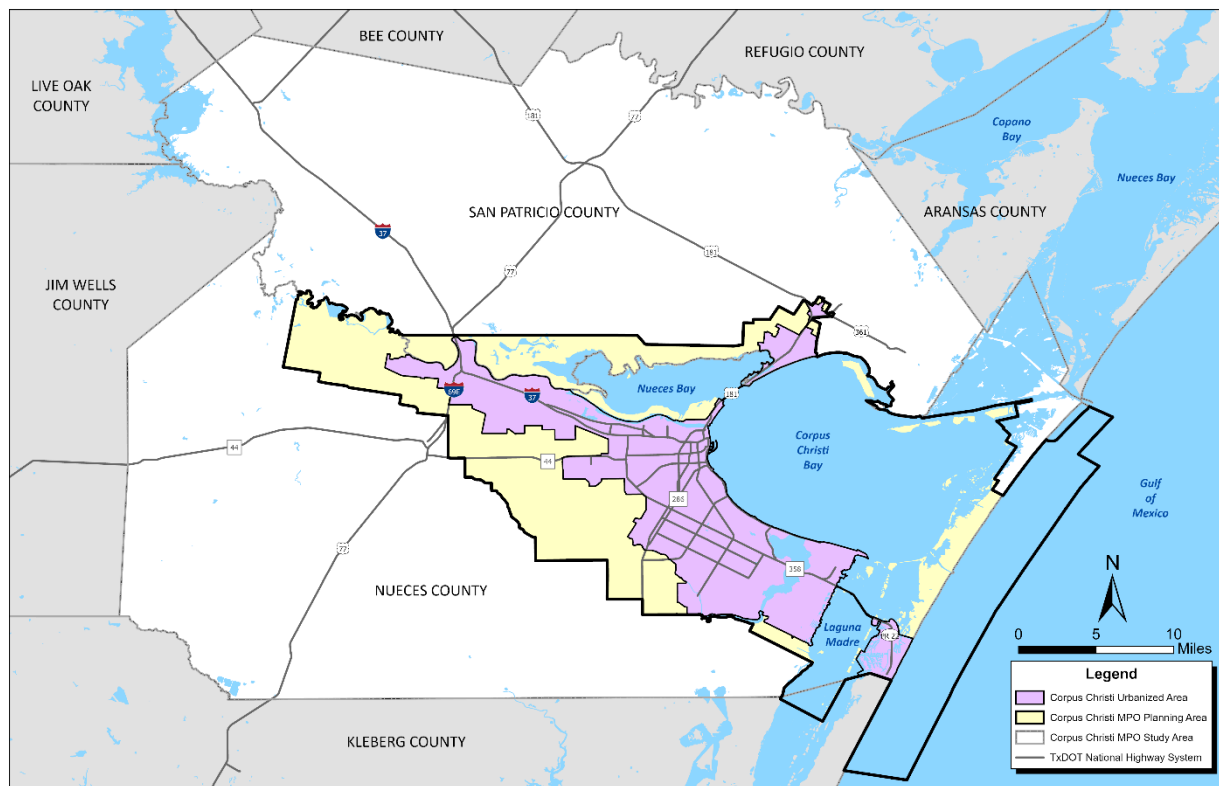
This Unified Planning Work Program (UPWP) identifies all transportation and related planning activities, no matter who is performing the work and the source of funding, if it is undertaken within the Corpus Christi Metropolitan Planning Area (MPA) during the federal years beginning October 1, 2020, and ending September 30, 2022. This work program was developed to serve these specific objectives:

1. Define transportation planning activities to meet the transportation needs of local, state, and federal agencies.
2. Identify funding sources for planning studies.
3. Coordinate transportation planning activities and relationships (both internal and external).
4. Promote the wise use of public resources through sound decision-making and interagency coordination.

The Corpus Christi Metropolitan Planning Organization (Corpus Christi MPO) and its Transportation Policy Committee (TPC) have been responsible for conducting the cooperative, comprehensive, and continuing (3C) transportation planning process since 1973. First, as the Corpus Christi Urban Transportation Study, then in Year 2000, as the Corpus Christi Metropolitan Planning Organization. The Corpus Christi MPO Planning Area includes portions of Nueces County and San Patricio County (see Exhibit 1).

This UPWP is required as a basis and condition for all federal funding assistance for transportation planning by the joint planning regulations of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). The guidance from the Federal agencies states: *“At a minimum, an UPWP includes a description of the planning work and resulting products, whom will perform the work, time frames for completing the work, the cost of the work, and the source(s) of funds.” (23 C.F.R. 450.308)*

## Exhibit 1: Map of the Corpus Christi Metropolitan Planning Organization Area



This FY-2021 & FY-2022 UPWP documents all the transportation planning activities in the Corpus Christi MPO Planning Area. While the primary focus of this document is the transportation planning performed by Corpus Christi MPO staff, other transportation-related planning activities that are conducted within the boundaries of the Corpus Christi MPO Planning Area by member agencies and partners are also documented.

While the UPWP documents only the activities to be undertaken during the 2-years covered by the UPWP, the basis of the work program is grounded in the on-going requirements of the 5-year metropolitan transportation planning process. The six foundational requirements of a metropolitan planning organization are:

1. Involve the public in the transportation decision-making process.
2. Develop and maintain the Unified Planning Work Program (UPWP);
3. Develop and maintain the Metropolitan Transportation Plan (MTP);
4. Develop and maintain the Transportation Improvement Program (TIP);
5. Develop and maintain the Congestion Management Process (CMP); and
6. Coordinate the development of these products with the State's planning process

The following five Subtask areas summarize the regional transportation planning activities for the Corpus Christi MPO in FY 2021- FY 2022:

- **Task 1.0 – Administration and Outreach:** describes administrative support activities such as financial management, contract management, public outreach, travel, equipment purchases, training and education, and the general management of the MPO.
- **Task 2.0 – Data Development and Maintenance:** describes the collection and cleaning of data. It also involves creating and operating models to analyze existing and forecast future conditions in the region. These activities include the development of socio- economic models, pavement management models,

corridor operations models, social and environmental impact models, economic and financial models, and travel demand models to support regional transportation decision-making.

- **Task 3.0 – Short-Range Planning:** addresses planning for activities taking place within a three- to ten-year timeframe, including the Transportation Improvement Program (TIP), the Ten-Year Unified Transportation Plan, as well as transit studies, ongoing initiatives regarding specialized transit planning, regional bicycle and pedestrian planning and operations improvement planning. Subtask 3.2 also includes a major update to both the ITS Architecture Plan and ITS Strategic Implementation Plan, Subtask 3.8 includes efforts to improve traffic safety in the region.
- **Task 4.0 – Metropolitan Transportation Planning:** describes planning activities for the long-term including development and maintenance of the Metropolitan Transportation Plan (MTP), developing baseline conditions, monitoring changes and reporting progress towards the goals.
- **Task 5.0 – Special Studies:** includes special one-time planning activities, including major corridor studies/analyses, surveys and outreach, and tool development activities.
- **Task 6.0 – Direct Expenses:**

## **BUDGET SUMMARY**

The following table provides a summary of all funding available for Corpus Christi MPO Staff activities by Subtask and source. A total of \$2,520,000 is available over the 2 years of this work program. Approximately 96 percent of these funds are federal for transportation planning purposes. This balance also includes some Consolidated Planning Grant (CPG) from previous years (carryover) funds that have accumulated. Please note that annual operating costs for the organization consume much of the annually appropriated funds, and some Corpus Christi MPO contracts extend beyond the 2-years of this UPWP. Maintaining a reserve sufficient for these contracts is good accounting practice. Some of this accumulated funding is needed to address major planning and development and simulation model support. *All carryover FTA planning funds are allocated to work tasks in this UPWP.* FHWA “carryover” funds were budgeted to continue major contractual activities in preparation for the 2050 MTP development in each of the next two UPWP program years. Similar programming is planned in the subsequent two year work program to complete the FY 2023-FY 2026 TIP, further reducing the carryover balance, leaving some in reserve to address continuity of operations in the event of disruption in federal funding post-FAST Act, for staff operational costs plus open contractual commitments.

**Exhibit 2 – Corpus Christi MPO 2-Year Budget Summary– FY 2021 & FY 2022**

UPWP Task	Description	2-Year TPF <sup>1</sup> Federal Funds	FY 2021 Federal Funds	FY 2022 Federal Funds	State Funds	Other Funds	Total Funds
1.0	Administration- Management	\$ 427,000	\$ 213,000	\$214,000	\$ 0	\$ 0	\$ 427,000
2.0	Data Development and Maintenance	\$ 405,000	\$ 207,000	\$ 198,000	\$ 0	\$ 0	\$ 405,000
3.0	Short Range Planning	\$ 362,000	\$181,000	\$ 181,000	\$ 0	\$ 0	\$ 362,000
4.0	Metropolitan Transportation Plan	\$ 235,000	\$ 114,000	\$ 121,000	\$ 0	\$ 0	\$ 235,000
5.0 <sup>2</sup>	Special Studies	\$80,000	\$ 40,000	\$ 40,000	\$ 0	\$ 100,000	\$ 180,000
6.0	Direct Expenses	\$911,000	\$ 458,000	\$ 453,000	\$ 0	\$ 0	\$ 911,000
	<b>TOTAL</b>	\$2,420,000	\$ 1,213,000	\$ 1,207,000	\$ 0	\$ 100,000	\$ 2,520,000

<sup>1</sup> TPF – This includes both FHWA PL-112 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 man-hours, they are not reflected in the funding tables.

<sup>2</sup> Strategic Reserves funded special projects TBD by TPC. Estimated cost: \$100,000. (\$50,000 annually).

Combined Transportation Planning Funds <sup>3</sup>	\$	2,516,450
Estimated Unexpended Carryover	\$	3,550
TOTAL Transportation Planning Funds	\$	2,520,000

<sup>3</sup> Estimate based on prior years' authorizations

The revenue utilized for Corpus Christi MPO 's work activities documented in the FY 2021 & FY 2022 UPWP originates from federal and non-federal sources (See Section 2). These funds are allocated to work activities in accordance with appropriate regulations and are used to pay for program expenditures by the MPO Transportation Planning Program. Federal planning funds, available from both FHWA (PL funds) and FTA (5303 funds), are administered by TxDOT through the Consolidated Planning Grant (CPG) Program. CPG funds are allocated to Corpus Christi MPO. Non-federal funds are provided to Corpus Christi MPO from contributions paid by its member entities, and through grants and other ad hoc funding sources.

#### **A. PURPOSE**

This Unified Planning Work Program (UPWP) identifies all transportation planning and significant transportation-related planning activities, irrespective of funding source, that will occur within the Corpus Christi Metropolitan Planning Area (MPA) during the federal years beginning October 1, 2020; and ending September 30, 2022. This work program serves these specific objectives:

- List all transportation planning and related activities conducted by local, state, and federal agencies.
- Identify funding sources for planning studies.
- Coordinate transportation planning activities within the region (both internal and external).
- Promote the wise use of public resources through sound decision-making and interagency coordination.



The Corpus Christi MPO must also develop and implement a Public Participation Process (PPP) that provides complete information, timely notification, and public access to the planning process. The most recent version of this was adopted April 5, 2018. The PPP is designed to educate and inform the public about transportation and to provide the public with opportunities to contribute their ideas and opinions early and often throughout the planning process. MPO staff will design activities to develop partnerships with, and enhance the participation in the transportation planning process, by groups and individuals of “traditionally underserved” communities. Thus, creating a transportation planning process that is accessible, inclusive, and proactive.

In addition to proactive public outreach incorporating Environmental Justice and Title VI considerations, federal regulations require extensive coordination with federal, state, and local agencies. 23 US Code § 134(h) identifies ten specific factors of the metropolitan transportation planning process, these are described in detail below, in Section 1.5.

Federal transportation legislation now requires using performance-based planning and programming processes. These increase the accountability and transparency of the Federal-aid highway program and improve project decision-making. MPOs are required to establish performance measures for the first six of the seven national goals outlined in U.S.C. 23 Sec 150(b), although national measures were only established for National Goals 1, 2, 3, and 5.

### **Exhibit 3 – Adopted National Goals**

1. **Safety** - Achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
2. **Infrastructure condition** - Maintain the highway infrastructure asset system in a state of good repair.
3. **Congestion reduction** - Achieve a significant reduction in congestion on the National Highway System.
4. **System reliability** - Improve the efficiency of the surface transportation system.
5. **Freight movement and economic vitality** - Improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
6. **Environmental sustainability** - Enhance the performance of the transportation system while protecting and enhancing the natural environment.
7. **Reduced project delivery delays** - Reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

### **B. DEFINITION OF AREA: THE CORPUS CHRISTI METROPOLITAN PLANNING AREA**

Based on the 2010 Census, the Census Bureau made only minor adjustments to the boundary for the Corpus Christi urbanized area, (See Exhibit 1) which includes the cities of Corpus Christi, Portland, and Gregory, along with unincorporated areas in Nueces and San Patricio Counties. Exhibit 1 maps the Census Designated UZA, the Adopted MPO metropolitan planning area boundary, and the Metropolitan Study Area. Growth in population and expansion of the developed areas may lead to adjustments in the boundaries based on the 2020 Census. By federal definition, the MPO's planning area must at least include the urbanized area (as defined by the U.S. Census Bureau) and the contiguous area that may reasonably be expected to become urbanized in the next 20 years. The 2010 Census designated urbanized area has a population of 320,069 in a 120 square mile land area.

### **C. ORGANIZATION**

Nueces County is the fiscal agent for the Corpus Christi MPO. The Transportation Policy Committee (TPC) was designated as the governing Board for the Corpus Christi MPO in June 2000. The Corpus Christi MPO TPC has seven voting positions (4 are Elected, 3 are Appointed) and up to 10 non-voting members.

The seven Voting Members of the Transportation Policy Committee are:

1. Mayor, City of Portland
2. Mayor, City of Corpus Christi
3. County Judge, San Patricio County
4. County Judge, Nueces County
5. An Official Designated by the, Corpus Christi Regional Transportation Authority
6. An Official Designated by the, Port of Corpus Christi Authority
7. An Official Designated by the District Engineer, Texas Department of Transportation, Corpus Christi District

There are ten potential Non-Voting Members of the Transportation Policy Committee, they are:

1. One representative of the Federal Highway Administration
2. One representative of the Federal Transit Administration
3. One representative of the Coastal Bend Council of Governments
4. One representative of the Texas Natural Resource Conservation Commission
5. United States Congress, Texas 27th District: (Michael Cloud)
6. Texas State Senate District 20: (Juan Chuy Hinojosa)
7. Texas State Senate District 21 (Judith Zaffirini)
8. State Representative District 34: (Abel Herrero)
9. State Representative District 32 (Todd Hunter)
10. State Representative District 43 (J. M. Lozano)

Rules of the Corpus Christi MPO (Bylaws) are maintained by the organization. The Rules and other documents noted above are kept on file and are readily available for review at the Corpus Christi MPO office and on the Corpus Christi MPO website: [http://www.corpuschristi-mpo.org/02\\_bylaws/corpuschristimpo\\_bylaw\\_20160916.pdf](http://www.corpuschristi-mpo.org/02_bylaws/corpuschristimpo_bylaw_20160916.pdf)

The Corpus Christi MPO TPC's responsibilities, defined in the Bylaws are:

1. Approve goals and objectives of the transportation planning process.
2. Review and adopt changes in transportation planning concepts.
3. Review and approve the Unified Planning Work Program (UPWP).
4. Review and adopt the Transportation Improvement Program (TIP) including project priorities and approve any changes in the priority schedule.
5. Review and adopt the Metropolitan Transportation Plan (MTP) and its revisions.
6. Ensure the efficient and effective use of the Federal Highway Administration (FHWA) Section 112 and the Federal Transit Administration (FTA) Section 5303 planning funds.
7. Encourage the development, implementation, and surveillance of plans to reduce transportation generated air pollution within the study area.
8. Serve as liaison representatives between various governmental units in the study area to obtain optimum cooperation of all governmental units in implementing various elements of the plan.
9. Ensure citizen participation in the transportation planning process through a proactive policy.
10. Hire, terminate, evaluate, and supervise the Transportation Planning Director.
11. Establish for the MPO staff the salary, salary range, annual or more frequent personnel performance reviews and salary increases based on performance and cost of living indices.
12. Adopt personnel policies and procedures adapted from the personnel policies and procedures of Nueces County for the conduct, rights, and responsibilities of the MPO Staff.

The Corpus Christi MPO responsibilities listed in the Metropolitan Transportation Planning Agreement with TxDOT, are:

1. Document planning activities in a UPWP to indicate who will perform the work, the schedule for completing it, and all products that will be produced. In cooperation with the Department and public transportation operators as defined by 23CFR Part 450, the MPO must annually or bi-annually develop a UPWP that meets federal requirements.
2. Prepare and submit to the Department an annual performance and expenditure report of progress no later than December 31 of each year. A uniform format for the annual report will be established by the Department, in consultation with the MPOs.
3. Use funds provided in accordance with 43 Texas Administrative Code 16.52 and Article 2 of this agreement to develop and maintain a comprehensive regional transportation planning program in conformity with the requirements of 23USC134, 49USC5303 and the Texas Comptroller of Public Accounts Uniform Grant Management Standards.
4. Develop a Metropolitan Transportation Plan (MTP), a Transportation Improvement Program (TIP), and a UPWP for the Metropolitan Planning Area (MPA), all of which are consistent with the Statewide Long-Range Transportation Plan (SLRTP), as required by the state and federal law. At a minimum, the MPO shall consider in their planning process the applicable factors outlined in 23USC134.
5. Assemble and maintain an adequate, competent staff with the knowledge and experience that will enable them to perform all appropriate MPO activities required by law.
6. Forecast, collect, and maintain appropriate socio-economic, roadway, and travel data on a timely basis, in cooperation with the Department.
7. Prepare all required plans, programs, reports, data, and obtain required certifications in a timely manner.
8. Share information with the Department and information sources concerning transportation planning issues.
9. Use funds provided in accordance with Article 2, Section 1 of MTPC to develop and maintain a comprehensive regional transportation planning program in conformity with requirements of 23 USC Section 134(f) and 49 USC Section 5303.
10. Develop and adopt an MTP that meets federal and state laws, a Transportation Improvement Program (TIP) that is incorporated without modification into the STIP, and a UPWP, along with other planning documents and reports required by state and federal laws and regulations.

The Corpus Christi MPO Technical Advisory Committee (TAC) includes seven voting members and up to 10 non-voting members could be appointed by the TPC. The Technical Advisory Committee reports directly to the Transportation Policy Committee and works closely with the MPO staff. The Technical Advisory Committee has the following responsibilities:

1. Assist the Transportation Policy Committee with technical tasks associated with developing the Unified Planning Work Program (UPWP) and recommend its adoption by the Transportation Policy Committee.
2. Review transportation related studies within the Corpus Christi Metropolitan Planning Area and make recommendations to the Transportation Policy Committee and other agencies.
3. Provide technical support in the preparation of Metropolitan Transportation Plan and recommend its adoption by the Transportation Policy Committee.
4. Review the Transportation Improvement Program (TIP) and other high priority projects. Recommend its adoption by the Transportation Policy Committee.
5. Advise the Transportation Policy Committee on technical matters and, if specifically authorized by the Transportation Policy Committee, on the policy matters with accompanying recommendations and supporting rationale.

#### **D. PRIVATE SECTOR INVOLVEMENT**

The private sector is actively involved in planning efforts outlined in this 2021-2022 UPWP. The Corpus Christi MPO will accomplish some work tasks identified in the UPWP with specialized assistance from consultants. Consultants will be under contract with Corpus Christi MPO during FY 2021 and 2022 to assist with travel and land use model development and applications, public involvement efforts, and in several planning studies. These are noted in the applicable work items.

The Corpus Christi MPO utilizes the Nueces County Procurement Policy to guide the procurement process. It is likely that on-call Service Agreements will be solicited from multiple planning firms to assist with these varied efforts. As part of the development and implementation of the UPWP, the Corpus Christi MPO staff, in cooperation with local governments and TxDOT identify work subtasks that consultant assistance is likely. As individual projects move forward, a Request for Proposals (RFP), which includes an overview of the work, is issued for each of these projects. The Corpus Christi MPO publishes a notice of intent to retain consultant services on the Corpus Christi MPO website. A review committee is established to review proposals and provide recommendations to the Corpus Christi MPO TPC. The Subtasks and Task that private sector consultants may participate in include:

- Subtask 1.7 Public Outreach
- Subtask 2.2 Travel Demand and Corridor Model Development and Update
- Subtask 2.3 Socio-economic and Land-use Model
- Subtask 2.4 Crash Data and Analyses Model
- Subtask 3.3 Active and Micro-mobility Transportation Planning
- Subtask 3.5 Transit Coordination and Subtask
- Subtask 3.9 Regional Specialized Transit Coordination Plan Update
- Task 4.0 Metropolitan Transportation Plan (MTP)

#### **E. PLANNING ISSUES AND EMPHASIS**

The Fixing America's Surface Transportation (or FAST) Act became law on December 4, 2015. The FAST Act, as enumerated in CFR 450.306, includes 11 total factors; the eight (8) factors originally outlined in SAFETEA-LU (adopted on August 10, 2005), as well as three additional considerations that the metropolitan planning process must explicitly consider and analyze. These areas are issues of national concern. Specifically, and in alphabetical order as opposed to any implied priority, FAST compliant metropolitan and statewide planning processes must consider transportation projects and strategies that will:

- Emphasize the preservation of the existing transportation system.
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Enhance travel and tourism
- Improve transportation system resiliency and reliability
- Increase accessibility and mobility of people and freight
- Increase the safety of the transportation system for motorized and non-motorized users
- Increase the security of the transportation system for motorized and non-motorized users
- Promote efficient system management and operation

- Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns
- Reduce (or mitigate) the stormwater impacts of surface transportation
- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency

The FAST Act continues to promote an efficient and effective Federal surface transportation program by focusing on transportation issues of national significance, while giving regional transportation decision-makers flexibility for solving transportation problems in their communities. Under FAST, metropolitan and statewide transportation planning processes are continued, but changes made by the previous federal transportation act, Moving Ahead for Progress in the 21st Century (MAP-21) Act (MAP21), were continued to enhance the planning process for surface transportation; some of these changes add flexibility and efficiency, while others add new consultation and environmental planning requirements. Consultation requirements for states and MPOs remain significantly expanded; and requirements continue for plans to address environmental mitigation, improved performance, multimodal capacity, and enhancement activities. Bicycle, pedestrian, and disabled interests must also be represented.

In addition, during the planning and programming processes, the Corpus Christi MPO will consider the principles adopted by the United States Department of Transportation as a result of its partnership with both the United States Department of Housing and Urban Development and the United States Environmental Protection Agency. These principles are:

1. Provide more transportation choices to decrease household transportation costs, reduce our dependence on foreign oil, improve air quality and promote public health.
2. Expand location and energy efficient housing choices for people of all ages, incomes, races and ethnicities to increase mobility and lower the combined cost of housing and transportation.
3. Improve economic competitiveness of neighborhoods by giving people reliable access to employment centers, educational opportunities, services and other basic needs.
4. Target federal funding toward existing communities through transit-oriented and land recycling to revitalize communities, reduce public works costs, and safeguard rural landscapes.
5. Align federal policies and funding to remove barriers to collaboration, leverage funding and increase the effectiveness of programs to plan for future growth.
6. Enhance the unique characteristics of all communities by investing in healthy, safe and walkable neighborhoods, whether rural, urban or suburban.

UPWP's in Texas are organized into Tasks. Tasks 1.0 through 5.0 relate to activities accomplished directly by the Corpus Christi MPO staff and are formatted to show the purpose, objective, methodology, expected products, schedule, previous accomplishments, and budget summary. Task 6.0 documents expected direct expenses, including contract services, printing, travel, training, office supplies, support services, memberships and publications, equipment, and maintenance expenditures. This FY 2021 and FY 2022 UPWP addresses many interrelated multimodal transportation issues that support implementing transportation projects and programs to reduce crashes, reduce congestion and improve mobility and accessibility. Specific areas of emphasis are highlighted below.

## **Crash Reduction and Safety Enhancement**

Safety on the transportation system is a national, state, regional and local priority. Data collection, analysis, training, education, and enforcement are key aspects of improving transportation system safety. The Corpus Christi MPO will use available data, intense data analysis, and collaborate with stakeholders to improve safety on the region's roads. Locations and types of crashes to focus on are determined by the data, as well as characteristics such as the types of facilities and roadway conditions (e.g. wet weather, lighting). The FY 2021 and FY 2022 UPWP will allow MPO staff to acquire data and develop tools and processes to identify locations, projects and policies to reduce injuries and fatalities and speed up incident clearance times.

## **Lifecycle Planning**

Traditionally, in an effort to construct the greatest number of new projects within limited capital budgets, high importance was placed on construction costs, with little attention given to future costs. As infrastructure ages it is apparent that improving long-term decision-making requires planners and policy-makers to think more strategically about how to operate and maintain the transportation network and manage related assets. Shifting the focus of funding toward system preservation requires greater use of analysis that looks at both upfront and long-term costs while considering the viability of future budgets and better management of vital infrastructure. Life-cycle Cost Analysis (LCCA) calculates up-front development, capital and financing costs, discounted operating and maintenance costs, and end-of-life costs associated with a specific asset or project. LCCA can also factor in uncertainty, risk, and other elements including environmental and equity considerations. When performed correctly, LCCA enables a more accurate and less biased comparison of differing life cycle costs between transportation projects and alternatives.

## **Improving Roadway Operations**

Increasing traffic congestion is an issue in the region. Faced with growing travel demand and limited resources, planners and policymakers will develop strategies to improve the operation of the existing system. Although major capital investments are needed, operational management strategies can postpone the need for major expansion projects until funding sources are identified. The results are a more efficient and effective transportation system, increased mobility and leveraging of resources. The MPO will provide proper support in updating the Regional ITS Architecture and Deployment Plan and begin work toward a regional Transportation System Management and Operations Plan.

## **Data Collection and Enhanced Model Development**

The Corpus Christi MPO will find data gathering synergies among agencies to magnify individual effort effectiveness and maximize regional efficiency. The Corpus Christi MPO will collaborate with local agencies to assess existing land use and develop future land use scenarios along CMP Corridors. These scenarios will aid planning for the future transportation system and evaluate land use policy regulation and operations for each CMP Corridor that address the overall community vision, goals, and objectives. The Corpus Christi MPO will collaborate with local agencies to develop and analyze land use scenarios to support the vision for the corridor. The 2020 Census data will begin arriving during the operational times of this UPWP. These data will be combined with other land-use data to create tools to refine growth and development forecasting that is essential to transportation forecasting.

Travel-related data and models are building blocks of a performance-based planning and programming process. The data and models provide analytical capability to objectively analyze different projects or policies and create consistent and useful information to aid decision-making. During Fiscal Years 2021 and 2022, the emphasis on data collection and improvements to the travel model and implementation of other performance target related



models will continue. The data collection initiatives include the following: traffic counts on the mainline as well as turning movement counts, bicycle counts where appropriate, and related transportation surveys.

### **Coordinate Planning Documents**

Environmental stewardship in transportation is a key requirement of the FAST Act. The Corpus Christi MPO will undertake efforts to improve coordination between transportation planning and conservation and community planning processes. These efforts will benefit the region by incorporating environmental and community values into transportation decisions earlier in the planning process and identifying strategies to reduce negative impacts during planning, design, construction, and operations. Determining negative impacts earlier in the transportation planning process promotes more efficient decision making and minimizes duplication of effort, promotes stewardship, and reduces delays in project implementation. In FY 2021 and FY 2022, the Corpus Christi MPO will strive to develop closer partnerships with development and resource agencies and stakeholders to identify key issues (related to both the natural and built environs), identify mitigation strategies for transportation impacts and build partnerships with aimed at environmental stewardship.

### **Incorporating Technology**

According to the Federal Highway Administration:

*“Transportation is in the midst of disruptive change from new technologies (automated and connected vehicles); new institutions (shared mobility firms); and changing attitudes (reduced car ownership). Across the nation, transportation planners are under pressure to develop performance-oriented policies, plans, and investment decisions that consider an increasingly complex transportation landscape. In the process, planners need to consider, but cannot yet reliably predict, the potential impact of disruptive and transformational Connected Vehicle (CV) and Automated Vehicle (AV) technologies on safety, vehicle ownership, road capacity, VMT, land-use, roadway design, future investment demands, and economic development, among others. While some forms of CV and AV are already being deployed across the United States, significant unknowns exist regarding the rate of technology adoption, which types of technologies will prevail in the marketplace, the interaction between CV/AV vehicles and various forms of shared mobility services, and the impacts of interim and widespread levels of CV/ AV usage.”*

Adopting and supporting innovative technologies and business practices may lead to great improvements in safety, transportation choices, and regional quality of life for our visitors and the local economy. Though there is a great deal of speculation and uncertainty of the potential impacts these technologies will have, MPOs need to determine how best to address the challenges and opportunities presented to them by ACES vehicles. There is a substantial level of interest in Automated/Connected/Electric/Shared-Use (ACES) Vehicles and the potential impacts of these technologies on the transportation system. There is also a great deal of speculation and uncertainty of the potential impacts from these technologies. ACES may lead to great changes in safety, transportation choices, and quality of life. The Corpus Christi MPO supports innovative technologies and business practices to address the challenges and opportunities presented by ACES vehicles. The MPO will increasingly incorporate emerging technologies into the metropolitan planning process. Activities in FY 2021 and FY 2022 will plan for the arrival of these vehicles, focusing on the implications of automated vehicles on travel demand, land-use, and congestion. Planning tools, including travel forecasting models, will need to account for these emerging technologies in the system. Automated vehicles are also being discussed in the context of freight, transit, and people mover/shuttle systems.

## **Freight Planning**

Freight facilities and services are strongly linked to regional economic competitiveness and quality of life and, from a transportation perspective, freight shipments continue to grow steadily across all modes. Planning for freight is also an effective means of addressing safety, security, environmental, and air quality issues. An objective of the freight program is to initiate and sustain meaningful outreach to the local freight community and to build awareness and expertise among planners and the general public. The Technical Advisory Committee (TAC) also serves as the Corpus Christi MPO's Freight Advisory Committee will be the focal point of this effort.

## **Resiliency Planning**

The Corpus Christi Metropolitan Study Area is susceptible to a wide range of natural hazards, including floods, hurricanes and tropical storms, drought, extreme heat, lightning, coastal erosion, hailstorms, tornados, dam and levee failure, land subsidence, expansive soils, and wildfire. These life-threatening hazards can destroy property, disrupt the economy, and lower the overall quality of life for residence. The impact of hazards can be lessened in terms of their effect on people and property through effective hazard mitigation action planning and implementation. The MPO will participate more fully in Resiliency Planning and Evacuation activities. The focus of resiliency planning is to reduce future losses within the Study Area by identifying mitigation strategies based on a detailed hazard risk analysis, including both an assessment of regional hazards and vulnerability. The mitigation strategies will identify potential loss-reduction opportunities. The goal of this effort is to work towards more disaster-resistant and resilient communities.

## **Micro-mobility and Nonmotorized Planning**

An ongoing challenge facing planners and public officials grasping emerging micro-mobility modes, such as electric scooters, electric bikes, and powered skateboards. While shared micro-mobility devices look like they might garner a measurable share of the urban transportation market, at this stage, planners and decision-makers around the country are primarily working to understand the impacts of micro-mobility and how to incorporate it into existing transportation systems. Confusion about how to classify these new vehicles and services and what to call them is contributing to vague regulations. The Corpus Christi MPO will monitor and explore possibilities for this emerging mode while also supporting the implementation of the Transportation Policy Council's adopted pedestrian and bicycle policy goals and recommended actions. This includes maintenance of the MPO's Mobility Planning documents in conjunction with the 2045 MTP, provision of technical support to local governments, and the hosting of training sessions for best practices.

## **Military-Community Planning**

A major economic generator in the Corpus Christi region is military and defense spending, anchored by Naval Air Station (NAS) and the Corpus Christi Army Depot (CCAD), the US Department of Defense funds compatible use efforts with the goals of helping communities grow in a way that preserves the military mission while also enhancing quality of life for surrounding communities that may be impacted by the military installations.

## **F. CORPUS CHRISTI MPO AGREEMENTS**

Agreements in-force among the participating agencies relative to the metropolitan transportation planning process include:

- **Corpus Christi MPO / TXDOT Planning / Nueces County Fiscal Agent MOA signed May 22, 2018**
- **Corpus Christi MPO / TXDOT TIP / STIP Amendment MOA signed April 1, 2009.**
- **Corpus Christi MPO / CCRTA MOA signed September 8, 2010**
- 

## **G. Status of Core Corpus Christi MPO Planning Documents**

The table below lists the core work products of the Corpus Christi MPO, the adoption date, planning horizon and the time when the next update is due.

**Exhibit 3: Planning Document Status**

ITEM	DATE ADOPTED	TIME SPAN	UPDATE DUE
2019-2020 Unified Planning Work Program	May 3, 2018	2 years	August 2020
2019-2022 Transportation Improvement Program	April 5, 2018	2 years	July 2020
Annual Self-Certification	June 11, 2018	1 year	June 2019
Public Participation Plan	April 5, 2018	4 years	April 2022
Title VI / EJ Plan	March 20, 2019	2 years	March 2021
Congestion Management Process	Feb 6, 2020	5 years	Feb 2025
Metropolitan Transportation Plan (2045)	February 6, 2020	5 years	February 2025

## **SECTION II.**

### **TASK 1.0 – ADMINISTRATION AND MANAGEMENT**

Task 1.0 is managing and administering the federal transportation planning requirements in and for the Corpus Christi Metropolitan Planning Organization.

#### **Objective**

Coordinate the transportation planning activities of the 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 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 include 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 will meet the technical objectives of the organization regarding computer equipment and/or software packages.

#### **Specific Activities and Products**

##### **Budget/Finance**

- Maintain current planning agreements and execute annual contracts and amendments for planning funds;
- Prepare and monitor annual operating budgets;
- Consider an annual audit to certify that the proper financial procedures are being considered
- Participate in semi-annual UPWP monitoring meetings with TXDOT;

##### **UPWP**

- Prepare updates to the FY 2021 & FY 2022 UPWP and amend FY 2022 funding.
- Prepare the FY 2023 - FY 2024 Unified Planning Work Program.

##### **APER –Prepare Annual Performance and Expenditure Report on the FY 2020-2021 UPWP;**

- Complete and approve the annual budget and annual performance and expenditures completion report.

##### **Cooperative Planning**

- Provide data for program reviews and certification. Guidance will be provided to MPO planning partners on various topics related to MPO activities. Of particular importance is the review and assessment of existing and proposed legislation and issues relevant to MPO transportation planning. This will assist in the effective use of member government staff time and clearly identify the roles and responsibilities for MPO partners.
- Regular coordination and consultation will occur between the Corpus Christi MPO staff and state and federal personnel on the development and implementation of all plans and programs. Staff will participate in state, federal, MPO, and locally-sponsored meetings relevant to the MPO transportation planning process. Appropriate reports, maps, documents and other forms of technical transportation assistance will be made available as necessary to the general public and government entities.
- Staff will participate in local planning studies carried out by the Corpus Christi MPO partner entities, as appropriate. These may include, but not are limited to, the planning activities described in Section 4.
- Cooperatively work with transportation-related working groups.
- Work with regional, Federal, and State partners to coordinate transportation planning efforts including transit agencies and adjacent COG planning efforts.

- Monitor best practices for transportation planning by attending workshops and conferences and by participating in industry associations such as Texas Association of MPOs (TEMPO), Transportation for America, American Planning Association, National Academies of Science Transportation Research Board, Association of Metropolitan Planning Organizations, Institute of Transportation Engineers, American Society of Civil Engineers, Texas Transportation Institute, among others.
- Cooperatively work with TxDOT to establish the administrative and technical procedures required to meet federal planning requirements; prepare and review contractual agreements as necessary; participate in MPO meetings; distribute special and annual reports and study documents; review and analyze individual transportation planning projects and studies; and undertake general administrative activities in support of the metropolitan planning program.

#### Personnel

- Conduct personnel evaluations;
- Improve the professional capabilities of staff by attending and participating in local, regional, state and national workshops, conferences and coordination meetings;

#### Committees

- Administer monthly technical and policy meetings including preparing agendas, minutes, materials, and publicizing the information to citizens.
- Staff will continue its ongoing support and participation on the Corpus Christi MPO technical committees, including the Transportation Advisory Committee (TAC),
- Live streaming and recording Committee Meetings.

#### Public Participation Plan

- Periodic review of the Public Participation Plan for effectiveness according to 23 CFR 450.210 and 450.316).
- Participate TxDOT's annual PPP audit as requested.
- Evaluate new strategies to enhance current social media activities as a public involvement tool into the Public Participation Plan.
- Update the Public Participation Plan as necessary and follow the procedures when notifying the public. Evaluate the effectiveness of the plan for engaging disadvantaged communities in the decision-making process.

#### Public Outreach

- Inform the public about federal-aid improvement projects for the area through a project update report at public meetings and through electronic means.
- Social media, website updates, public notices, media coverage, and news releases to allow the general public to be "in the know". Staff will also answer inquiries electronically, through social media, or in person.
- Continue to maintain/update the Corpus Christi MPO public contact list

#### EJ/Title VI

- Monitor and survey local government's Title VI /ADA programs.
- Provide technical support to local governments for development and implementation of their Title VI plans.
- Develop annual Title VI Goals and Accomplishments Report and add to the appendix of the Title VI Implementation Plan.
  - Ensure that all interested parties are treated equally including but not limited to the elderly, disabled, low income, LEP, and minority populations.
  - Create Title VI programs and update the LEP plan as needed. Determine Environmental Justice and Title VI funding spent in these areas. Ensure that LPAs comply with nondiscrimination requirements and monitor implementation of their Title VI program.

- Provide Title VI, ADA, and LEP awareness training annually to staff.

#### General Administrative Function

- Submit monthly billings for reimbursement;
- Perform general administrative functions such as purchasing, account payable, account receivable, filing, etc.
- Coordinate with the Fiscal Agent on AR, AP activities and monthly billings
- Monitor UPWP task hours and submit the timesheets
- Monitor and manage the Strategic Reserve Fund for Special Projects as required

#### Federal Compliance/Review/Certification

- Monitor laws and ordinances including the FAST Act.
- Update the Planning MOA to address FAST Act requirements especially in the sharing, selection, reporting, and data collection of performance targets.
- Continue to monitor LPA's Americans with Disabilities Act Transition Plans and other ADA compliance requirements. Concentrations around transit facilities, schools, disadvantaged populations, social services, and medical areas will be of concern.
- Activities to assist in the FHWA Certification Review and to address any opportunities listed in the report.

#### MPO documentation

- Continue to amend the MPO Employee Handbook policies as needed
- Continue to update/amend the MPO Bylaws as needed
- Prepare updates to the Memorandum of Agreement between the MPO, TxDOT, and CCRTA.
- Continue to update/amend the Committee member orientation book

#### Previous Accomplishments

- Prepared UPWP annual Scope of Work reports and associate updates;
- Submitted monthly financial reports and billings;
- Prepared UPWP progress reports;
- Reviewed and Amended FY-2019 & FY-2020 UPWP (adoption May 2018);
- Attended conferences and training sessions;
- Attended partner agencies workshops, public meetings (GLO, Air Quality Group, Harbor Bridge, CBCOG, etc.);
- Submit Single Audit Statement annually to TxDOT;
- Issued 6 Public Notices,
- Held 6 Open-House Public Meetings;
- Closely coordinated with the TxDOT Field Representative and Transportation Project Programming Division for State Required documentation;
- Worked with FHWA for Federal Required documentation (CMP, MTP submission)

#### Schedule

- CPG contract and financial reports prepared monthly; mid-year UPWP review each April; UPWP annual reports scheduled for completion each December; UPWP amendments as needed; adoption of FY-2023 & FY-2024 UPWP is scheduled for June 2021.

**SUBTASKS** – The subtasks and their objectives are listed in detail on the following pages.

Subtask 1.1            Program Coordination and Direction

Subtask 1.2	Unified Planning Work Program (UPWP) Development
Subtask 1.3	Monthly Billing and Financial Management
Subtask 1.4	Staff Training and Education
Subtask 1.5	Community Planning and Development Activities
Subtask 1.6	Computer Maintenance and Website Management
Subtask 1.7	Public Outreach
Subtask 1.8	Program Evaluation

Full-time staff members will, with the assistance of outside contractors, as needed, perform administrative and technical activities to accomplish the tasks listed in the UPWP. Time is allocated to each employee based on an estimate of anticipated scope of each subtask.

**Exhibit 4 – Task 1.0 Administration and Management Budget Summary**

Subtask	Responsible Agency	Transportation Planning Funds (TPF) <sup>1</sup>		Local	Total		
		FY 2021	FY 2022		FY 2021	FY 2022	2-Year
<b>1.1</b>	MPO	\$10,000	\$10,000	\$0	\$10,000	\$10,000	<b>\$20,000</b>
<b>1.2</b>	MPO	\$7,000	\$8,000	\$0	\$7,000	\$8,000	<b>\$15,000</b>
<b>1.3</b>	MPO	\$30,000	\$30,000	\$0	\$30,000	\$30,000	<b>\$60,000</b>
<b>1.4</b>	MPO	\$30,000	\$30,000	\$0	\$30,000	\$30,000	<b>\$60,000</b>
<b>1.5</b>	MPO	\$50,000	\$50,000	\$0	\$50,000	\$50,000	<b>\$100,000</b>
<b>1.6</b>	MPO	\$21,000	\$21,000	\$0	\$21,000	\$21,000	<b>\$42,000</b>
<b>1.7</b>	MPO	\$50,000	\$50,000	\$0	\$50,000	\$50,000	<b>\$100,000</b>
<b>1.8</b>	MPO	\$3,000	\$3,000	\$0	\$3,000	\$3,000	<b>\$6,000</b>
<b>TOTAL</b>		<b>\$213,000</b>	<b>\$214,000</b>	<b>\$0</b>	<b>\$213,000</b>	<b>\$214,000</b>	<b>\$427,000</b>

**Subtask 1.1 PROGRAM COORDINATION AND DIRECTION**

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

**Subtask 1.2 UNIFIED PLANNING WORK PROGRAM (UPWP)**

In this subtask, Corpus Christi MPO staff will maintain and revise the current UPWP for fiscal years by developing and processing changes for any future amendments. Develop the Annual Project Listing (APL) for the transportation projects that used federal aid in FY 2021 and FY 2022. Corpus Christi MPO staff will also develop the FY 2023 and FY 2024 Unified Planning Work Program under this subtask.

**Subtask 1.3 MONTHLY BILLING AND FINANCIAL MANAGEMENT**

Prepare budgets, maintain financial records, equipment inventory and ensure monies are spent appropriately. Process timesheets, billing and invoicing, budgeting and management of transportation planning funds; the cost of operating the MPO, office lease, furniture, equipment lease/rental. An Annual Performance and Expenditure



Report (APER) will be prepared at the end of each fiscal year (FY 2021 & 2022) in accordance with TxDOT policy and procedures for tasks that utilized FHWA and FTA planning funds. The Corpus Christi MPO will seek state recommendation / federal approval for any expenditure exceeding \$25,000.

#### **Subtask 1.4 STAFF TRAINING AND EDUCATION**

Subtask 1.4 is the MPO staff professional development and training program. Transportation planning funds will allow staff members of the MPO to travel and attend transportation planning and professional development conferences, workshops, and training. The MPO will organize training sessions for the Transportation Policy Committee, the Technical Advisory Committee, and any subcommittee members, and to local governments and participating agencies. For out of state travel, the Corpus Christi MPO will seek prior TxDOT approval as appropriate. MPO staff will attend trainings provided by, but not limited, to the following associations:

- American Association of State Highway and Transportation Officials (AASHTO)
- American Society of Civil Engineers (ASCE)
- American Planning Association (APA)
- American Public Transportation Association (APTA)
- Association of Metropolitan Planning Organization (AMPO)
- Environmental Systems Research Institute (ESRI)
- Institute of Transportation Engineers (ITE)
- Texas Association of MPOs (TEMPO)
- Texas Department of Transportation (TxDOT)
- Transportation Research Board (TRB)
- National Transit Institute (NTI)
- National Highway Institute (NHI)

#### **Subtask 1.5 COMMUNITY PLANNING AND DEVELOPMENT 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 by-law/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 will utilize 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).

#### **Subtask 1.6 COMPUTER MAINTENANCE AND WEBSITE MANAGEMENT**

This subtask supports the efficient operation of the MPO office computer equipment and software and updates the MPO website. Acquire supplies, services, software, and equipment to support 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) require prior State and Federal approval.

The system administrator assures the working order of 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 will continue updating MPO equipment; audio/video equipment, server computers, personal computer hardware and software, to include license maintenance of state of practice platforms like ESRI and Caliper. Staff must also stay abreast of current trends in technology. A description of computer hardware and software purchases in excess of \$5,000 will be submitted to TxDOT for approval prior to acquisition. Maintenance of the LAN Network System requires various annual licensing agreements for proprietary software, GIS server support, and web hosting expenses. Website information is updated as information becomes available and agendas and committee packets are published to the website monthly.

#### **Subtask 1.7 PUBLIC OUTREACH**

It is difficult to engage the public in transportation planning. Many community members are not familiar with technical terms and concepts. Good communication efforts are very different between the public, planners, and decision-makers. Within a performance-based planning and programming process, the goal is 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 will use 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 supports the development and implementation of the Public Participation Plan including the day-to-day responses to the public (via email and/or phone), monitor social media, conduct of community outreach and public meetings/hearings as needed with emphasis on Environmental Justice populations. The Corpus Christi MPO will monitor, evaluate and implement Title VI Civil Rights/Environmental Justice compliance, guidance and requirements for plans and programs; continue to collect and analyze data related to minority or low income populations and the effect of the transportation programs and system on those populations; identify ways to mitigate impacts of the system and programs on the identified populations; expand the database of citizens and businesses in low income or minority areas to facilitate effective outreach to those Populations. General information about MPO activities and events will be posted publicly as part of the Public Participation Process and will provide the opportunity for all stakeholders to provide comments.

The Public Participation Plan is designed to facilitate participation by a 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 will provide an array of opportunities for meaningful public involvement and ensure compliance with all applicable federal regulations. Outreach efforts will be undertaken as necessary in support of transportation planning activities as they occur.

#### **Engage diverse stakeholders by “going to them” and integrating all voices into the decision-making process.**

The Corpus Christi MPO will identify events with other agencies and organizations as possible opportunities for outreach. The intent is to do 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 2021 and 2022 the MPO will hold 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 MPO and soliciting input on the region's transportation needs and long-range plan. Staff will have ongoing one-on-one meetings with newly elected officials and provide 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 must include a process for *“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 can involve ranking different goals or outcomes to help support making tradeoffs and prioritizing investments. The Corpus Christi MPO will solicit public opinion via an electronic survey. The MPO will continue to gather data on public opinion using thorough outreach efforts such as the update to the Metropolitan Transportation Plan, as well as through general outreach such as surveys.

#### **Inform the public through collateral, e-dashboard, website, media and social media**

As the Corpus Christi MPO gathers increasing amounts of data and expands our analysis capabilities, we will work to provide this wealth of information to the public in an interactive way. Having readily accessible information about performance can not only help drive performance-based planning but can also strengthen outreach to stakeholders and other agencies. By enhancing the website, users can efficiently access MPO materials, including meeting agendas, reports and studies. Staff will continue to engage with the media on the progress of the regional priorities and other transportation issues impacting transportation. The Corpus Christi MPO will develop and maintain a data dashboard which provides members with transportation data specific to their municipalities and the region.

**Use Visualizations:** Visualizations help 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 is 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.

#### **Subtask 1.8 PROGRAM EVALUATION**

The MPO will review and evaluate the work accomplished during the previous fiscal year under this subtask. This effort will provide analysis for 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 will develop an After-Action Report to identify strengths of planning and programming processes that should be maintained and built upon, as well as identifying potential areas for improvement. This includes developing / reviewing processes of the Transportation Improvement Program, Metropolitan Transportation Plan and other planning products; develop and use questionnaires, online surveys, and other participation techniques; and provide bilingual materials and translations as appropriate to ensure the Corpus Christi MPO’s plans, programs and activities 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. Implementing the Limited English Proficiency Plan and updating that plan as needed. For each major step in the MTP and TIP processes answers to the following questions will be 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?

### **SECTION III.**

### **TASK 2.0 – DATA DEVELOPMENT AND ANALYSES.**

The Corpus Christi MPO intends to develop a systematic data collection or performance monitoring processes sufficient to meet the multitude of federal performance-based planning and programming requirements. The MPO team will update information describing existing and forecast transportation conditions and other related social, economic, and ecological conditions to support analyses and comparing performance against adopted goals and objectives. The data must support the 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 will collect data primarily using collaborative partnerships with member agencies, including local governments, TxDOT, CCRTA, and other partner agencies. When data must be directly acquired, the Corpus Christi MPO uses a 3-tier system to economize collection efforts: Corridors of Concern, Corridors of Note, and Areas of Interest. Gathering socio-economic data, traffic count data, travel speed data, accident surveillance and analysis, infrastructure condition data, and non- motorized and transit usage data to provide the information upon which all other planning and programming activities will draw. 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 are vital components 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 can also keep 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 can also assist 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 is 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 is 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 maintains and expands the transportation, socioeconomic, environmental, and land-use data and encompasses the development of models to forecast future conditions. The data will support statistical analyses for a wide variety of performance-based planning activities.

## **Specific Activities and Products**

### **(GIS Database Management)**

- Maintain an up-to-date GIS portal that is publicly accessible through the MPO website
- Dissemination, upon request and as appropriate, of data to inform regional planning efforts
- Maintain an up-to-date GIS database that incorporates Census Bureau and Census Transportation Planning Package (CTPP) 2010 data, Traffic Analysis Zone (TAZ) data, and the Travel Demand Model database.
- Technical support to partners to facilitate effective use of the data generated by the updated model

### **(TDM and Corridor Model)**

- Beginning in 2021, and continuing at regular intervals as needed, the Corpus Christi MPO will identify intersections and hire consultants to obtain peak hour and off-peak turning movement counts. These counts, and counts from other agencies, will be coded into traffic models to aid analyses of conditions, needs and solutions.
- The Corpus Christi MPO staff will collaborate with TxDOT and consulting staff to update the Travel Demand Model with enhancements including dynamic traffic assignment, more times-of-day, intersection controls, tours in place of trips, and multiple socio-economic scenarios. Stakeholders from around the region will review and reconcile the updated model with other forecasting efforts. All assumptions, discussions, factors and results shall be documented in sufficient detail to enable an outside observer to validate the model development and usage. The model will consider emerging technologies and services such as electrification, automation, and sharing, and use these to represent traffic flow on the regionally classified network. The modes may include networks for standard vehicles, autonomous vehicles, freight, transit, on demand shuttle services, regional bicycle and pedestrian movements. If deemed necessary, large traffic analysis zones will be subdivided to “enrich” the number of zones and provide additional detail for land-use scenarios and travel movements. Identify and evaluate impedances, centroids, external points, screenlines and other factors that may require alternations from the regional model to develop the Updated Model. The value of time will be estimated, and calibration to both travel volumes and travel speeds will be investigated.
- Mesoscopic / Microscopic Simulation Models for each Corridor of Concern and Corridor of Note will be developed. Emphasis is on showing problematic traffic flows including consideration of differing vehicle types, driver behavior, and relationships with roadway characteristics.
- As part of the Regional ITS system, tools designed to develop optimal signal phasing and timing plans for isolated signal intersections, arterial streets, or signal networks will be reviewed and acquisition explored.

### **(Socio-economic Allocation Model) –**

- Develop a land use model that helps predict the pattern of 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. This tool will inform policy makers' decisions with relation to long-run patterns of growth and development, as well as infrastructure investments.

### **(Crash Analysis Model)**

- Identify a tool and implement a Highway Safety Manual Compliant suite of crash predictive, diagnostic and economic evaluation tools.
- Utilize the diagnostic capabilities of the crash analysis tools, a library of crash modification factors and economic evaluation capabilities to provide effective and defensible risk management platform for safety decisions.
- Conduct observational Before-After Studies to evaluate effectiveness of constructed improvements correcting for Regression to the Mean Bias using the Empirical Bayes method

(Bridge, Culvert, and Pavement Model) –

- Acquire and harmonize pavement condition data from local and state agencies.
- Populate and calibrate a HERS-ST model for regional analysis.
- Work with TxDOT to acquire bridge condition data and an estimate of maintenance needs.
- Acquire culvert information and a method of estimating maintenance needs.

#### **EXPECTED PRODUCTS**

- TxDOT Data Collection - To conduct travel surveys and/or traffic saturation counts in the MPO region for use in the travel demand model and transportation analysis for pavement and geometric design. Work is being conducted by TxDOT and funding is being provided through the Texas State Planning and Research (SPR) Work Program Part I.
- Turning movement counts to assist with crash analysis and operational evaluation of non-freeway roads.
- Travel Speed data for the National Highway System.
- Refined Crash Data and detailed analysis. Consultants may aid this endeavor.
- Refined HERS-ST Model. Consultants may aid this endeavor.
- Refined socio-economic allocation model. Consultants may aid this endeavor.

**PREVIOUS WORK** – The MPO developed a GIS database that reflects Census 2010 population, household, income, and employment data. The MPO made these data accessible through the MPO website and by direct distribution, as appropriate, upon request. The Corpus Christi MPO has maintained an up-to-date GIS database to inform internal and external planning processes. As part of this work, the Corpus Christi MPO has reviewed and converted CTPP 2010 data into the standard ESRI format and has converted TIP data transfer into the GIS format.

Corpus Christi MPO staff refined TDM TAZ boundaries various scenarios and ran traffic assignments and travel forecasts for specific corridor scenarios. Staff refined TDM roadway networks and ran traffic assignments and travel forecasts for specific corridor alternatives in support of the MTP. Corpus Christi MPO staff prepared the input for the emission model and provided technical support for the initiation of the City of Corpus Christi's TDM Study. The Corpus Christi MPO supported the initiation of the City of Corpus Christi's Strategic Integration (Travel Demand Model) Feasibility Study in FY 2017 to implement Travel Demand Model enhancements to include factors such as dynamic traffic assignment, time-of-day, intersection control, land use, and transit information.

MPO staff completed production of demographic data sets, utilizing Census 2010 data, including population, income, household, and employment data in five year increments; data sets were delivered to TxDOT for use in updating the MPO's Travel Demand Model to a 2045 forecast year. The completion of demographic data acquisition built upon other tasks that were undertaken to prepare for the model update, including: calibration of the 2040 TDM to prepare transportation forecasts for specific corridor alternatives.

**SUBTASKS** – The subtasks and their objectives are listed in detail on the following pages.

Subtask 2.1	MPO GIS Database Management
Subtask 2.2	Travel Demand and Corridor Model Development and Update
Subtask 2.3	Socio-Economic and Land Use Allocation Model
Subtask 2.4	Crash Data and Analysis Model
Subtask 2.5	Bridge and Pavement Data and Analysis Model



## Exhibit 5 – Task 2.0 Data Development and Maintenance Budget Summary

Subtask	Responsible Agency	Transportation Planning Funds (TPF) <sup>1</sup>		FTA Sect. 5307	Local	Total		
		FY 2021	FY 2022			FY 2021	FY 2022	2-Year
2.1	MPO	\$52,000	\$43,000	\$0	\$0	\$52,000	\$43,000	\$95,000
2.2	MPO	\$50,000	\$45,000	\$0	\$0	\$50,000	\$45,000	\$95,000
2.3	MPO	\$10,000	\$40,000	\$0	\$0	\$10,000	\$40,000	\$50,000
2.4	MPO	\$45,000	\$25,000	\$0	\$0	\$45,000	\$25,000	\$70,000
2.5	MPO	\$15,000	\$45,000	\$0	\$0	\$15,000	\$45,000	\$60,000
<b>TOTAL</b>		<b>\$207,000</b>	<b>\$198,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$207,000</b>	<b>\$198,000</b>	<b>\$205,000</b>

**Note:** 1) TPF – Includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

### SUBTASK 2.1 – MPO GEOGRAPHIC INFORMATION SYSTEM (GIS) DATABASE MANAGEMENT

This subtask allows staff to manage and update the GIS database as part of the MPO's continuous planning process. Data for state and national performance measures are collected and updated annually. Data for regional performance measures (i.e. measures used to evaluate the performance of the metropolitan transportation system overall) will also be 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 are efficiencies that will be gained by coordinating this data collection. The Corpus Christi MPO may need to use financial resources to acquire data directly. Examples could include the hiring of firms to collect data and conduct surveys as occurred in 2009 and 2010. This may be especially effective if done in conjunction with the 2020 US Census. It could also take the form of purchasing regionally specific data from one or more of the "Big Data" compiler agencies.

A brief, not wholly inclusive, list of these potential sources includes:

- <https://tti.tamu.edu/>
- <https://www.cattlab.umd.edu/>
- <https://www.streetlightdata.com/>
- <https://www.innovarytech.com/turning-movement-counts/>
- <https://www.here.com/products>
- <https://mysidewalk.com/>
- <https://www.strava.com/>
- <https://www.waze.com/>
- [https://www.tomtom.com/en\\_gb/traffic-index/](https://www.tomtom.com/en_gb/traffic-index/)
- <http://www.ihsglobalinsight.com/ProductsServices/ProductDetail838.htm>
- <https://www.airsage.com/>
- <http://inrix.com/>

*\* 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.*

The Corpus Christi MPO acquires, aggregates, reviews, and formats data in a geospatial format to inform internal planning processes and the activities of the broader planning community. Analysis of the 2020 census demographic and land use data will be performed for the geographic distribution and aggregation. The Corpus

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

#### **SUBTASK 2.2 – TRAVEL DEMAND AND CORRIDOR MODEL DEVELOPMENT AND UPDATE**

Corpus Christi MPO staff will coordinate with TxDOT to update the regional Travel Demand Model and develop meso- and micro-scale corridor models as appropriate to assist with Congestion Management Process enhancements and Transportation System Management Operations that improve efficient traffic flows. A consulting firm may be hired to acquire travel volumes, travel speeds, origin and destination information, anonymized routing information, and turning movement counts to aid planning and forecasting processes. These counts, and counts from other agencies, will be coded into various models to aid analyses of conditions, needs and solutions. Implementation of the Travel Demand Model enhancements including dynamic traffic assignment, time-of-day, intersection control, tours, land use, and transit information.

The 2019 CMP identified turning movement counts as a priority effort. In the past, Corpus Christi MPO hired consultants to acquire turning movements at key intersections throughout the region as part of the Regional Traffic Signal Coordination Plan. Beginning in either FY 2021 or FY 2022, and continuing at regular intervals as needed, the Corpus Christi MPO will identify intersections to acquire peak hour and off-peak turning movement counts. The analyzed results will be released bi-annually.

#### **SUBTASK 2.3 – SOCIO-ECONOMIC ALLOCATION / LAND-USE MODEL ACQUISITION AND CALIBRATION**

Review local land use files, property information, employment information and U.S. Census databases and update databases as needed. Develop population, income, household, and employment data that are used in the Corpus Christi MPO's planning and forecasting processes. Explore, and implement with consultant help, an advanced allocation model such as Urbansim.

The socioeconomic database is compiled and maintained 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.

#### **SUBTASK 2.4 – CRASH DATA ACQUISITION AND CRASH MODEL CALIBRATION**

Unlike other performance measures applicable only to the National Highway System (NHS), the safety performance measures apply to all public roads. The Traffic Engineering Accident Analysis System (TEAAS) is a tool to analyze 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 will acquire and refine crash data and supporting information such as traffic volumes and turning movement counts. These data will be input into appropriate models, possibly with consultant help, to create a locally calibrated crash analysis model that highlights unusual locations. Activities will also include participation in multi-disciplinary safety initiatives at the local, regional, or state level.

#### **SUBTASK 2.5 – INFRASTRUCTURE CONDITION DATA AGGREGATION AND ANALYSES MODELS**

The public clearly wants good roads, but lacking a rigorous forecast of pavement conditions, while there is a forecast of congestion conditions, creates an unbalanced system and impacts public and elected official opinions. The Corpus Christi MPO staff will acquire infrastructure condition data from local and state sources, and possibly with consulting help, will refine the data into a calibrated regional HERS-ST model that uses engineering concepts to identify deficiencies and apply economic principles to determine the outcome of different investment strategies.

HERS-ST can estimate future pavement conditions for specific investment levels, it can also evaluate the impacts of alternative types of investment strategies, develop scenarios for the best use of a limited amount of funds, and determine what the total cost is to completely repair and maintain all roads in the region in 5, 10, and 25 year increments.

## **SECTION IV. TASK 3.0 – SHORT RANGE PLANNING.**

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 will simplify and harmonize metropolitan transportation planning efforts and lead 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 MPO carries out various planning studies to assess the need for other projects that have not yet been identified in the MTP or TIP. Such studies may function to guide capital investments and project prioritization by municipalities and other entities in the MPO area.

### **METHODOLOGY**

- Maintenance of an up-to-date FY 2021-2024 TIP
- Creation of the 2023-2026 TIP
- Identify EJ/Title VI funding and project list in the TIP and MTP.
- Acquisition and compilation (annually) of myriad Performance Metric data—including seven congestion-specific metrics—relating to eight Performance Measurement topics and four regional Goal Areas, per the MPO's performance-based planning framework, as defined in the CMP. These data, which are acquired from multiple sources, are used to prioritize capital projects and assess the functionality of the regional transportation network, including evaluating the severity of congestion.
- Collaboration with local partners to collect freight origin/destination data to augment the existing hazardous materials commodity flows dataset
- An updated Regional Public Transportation Coordination Plan from the 2017-2021 version
- Compilation of traffic count data from various multiple sources to inform the evaluation of the degree of congestion on various segments
- An updated Coordinated Human Services Transportation Plan.
- CMP / TSMO / ITS Architecture Plan
- Active and Micro-mobility Transportation Planning
- Regional Freight Planning
- Transit Coordination
- Regional and Project Economic Analyses Whitepaper
- Infrastructure Lifecycle Analysis Report
- Crash Analysis and Incident Management Planning

### **EXPECTED PRODUCTS –**

- Amendments to adopted FY 2021-2024 TIP
- A new 2023-2026 TIP
- An active and Micro-mobility Transportation Planning Issues Report

- Updated Congestion Management Program corridor information
- Updated Regional ITS Architecture Plan
- Updated Regional ITS Strategic Implementation Plan
- Updated designated National Freight Network routes in the Corpus Christi MPO area
- Updated Functional Classification Map
- Updated Transit Route and Transit Service Coverage Maps
- Regional and Project Economic Analyses Whitepaper
- Calibrated Economic Analysis Model
- Infrastructure Lifecycle Analysis Report
- Calibrated Crash Model
- Top 20 Intersection Crash Locations
- An updated Coordinated Human Services Transportation Plan.

#### **PREVIOUS WORK –**

- Maintenance of an up-to-date FY 2019-2022 TIP
- Implementation of various bicycle and pedestrian mobility planning products as subsequent phases of the Strategic Plan for Active Mobility
- Evaluation of strategies for enhancing freight efficiency and minimizing risk on the Harbor Bridge Replacement Project
- Collaboration with local partners to collect freight origin/destination data to augment the existing hazardous materials commodity flows dataset
- Technical assistance to regional partners in the interest of sustaining initiatives outlined in the Regional Public Transportation Coordination Plan 2017-2021
- Technical assistance in support of the CCRTA's Comprehensive Operational Analysis to evaluate operational efficiency in all aspects of CCRTA operations
- Compilation of traffic count data from various multiple sources to inform the evaluation of the degree of congestion on various segments
- Identification of possible access management improvement opportunities to address congestion
- Identification of transportation and traffic improvements that are effective and efficient while enhancing safety and minimizing social and environmental impacts.
- Progress toward creation of a bicycle friendly business accreditation in collaboration with Corpus Christi United Chamber of Commerce
- Creation of various bicycle and pedestrian mobility planning products as part of the Strategic Plan for Active Mobility
- Quarterly updates to online Implementation Status Map depicting build out of the Bicycle Mobility Network
- Initiate Category (CAT) 9 Transportation Alternative Set-aside projects for FY 2019 and 2020
- Reassign CAT 9 FY 2018 Region-wide Bike Blvd Wayfinding Initiative to FY 2019 (per City request) for project completion\*
- Strategic Plan for Active Mobility follow-up survey regarding priorities for community cycling programs and supporting infrastructure
- Evaluation of strategies for enhancing freight efficiency and minimizing risk on the Harbor Bridge Replacement Project
- Hosting FHWA and Center for Transportation Excellence (CTE) teleconference workshops and webinars related to freight issues, transportation technology, and safety for member agencies and interested public

- Continued collaboration with regional partners to collect freight origin/destination data to augment the existing Hazardous Material Commodity Flow data set in order to inform whether to voluntarily undertake a routing process for non-radioactive hazardous materials (NRHM)
- Continued collaboration with Port Corpus Christi to promote the PCC's truck queuing project on the Joe Fulton International Trade Corridor as a regional case study within the Texas Innovation Alliance.
- Technical assistance in support of the CCRTA's Comprehensive Operational Analysis to implement innovative Flex Route services, streamline route alignments, improve travel time, and evaluate operational efficiencies in all aspects of CCRTA operations to increase ridership levels.
- Continued collaboration with CCRTA and Texas A&M University - Corpus Christi to promote a collaborative autonomous campus shuttle pilot project as a regional case study within the Texas Innovation Alliance.
- An updated Travel Demand Model (to be delivered by TxDOT) per demographic data collected by the MPO in FY 2018
- Update of the FY 2019-2028 Ten-Year Plan
- On-going coordination with regional air quality partners to inform reporting about efforts to curb emissions through transportation planning
- Completion of the Strategic Integration (Travel Demand Model) Feasibility Study by a consultant (\$460K)
- Various interim data products in support of the planned update of the TDM using the 2012 base year for the forecast year 2045
- Technical support to partners to facilitate effective use of the data generated by the updated model
- Develop a fiscally constrained 2020-2045 MTP
- Identification of segments that may merit intervention to address congestion
- Assessment of feasibility of integrating ITS resources into the incident management strategies
- Identification of opportunities to partner or leverage public resources into operations and maintenance projects
- Identification of locally relevant performance measures amidst state and federal performance measures, when published, that will be integrated into the project selection process
- Maintain an up-to-date 10-Year Plan for period FY 2019-2028
- Identify opportunities to partner and leverage public resources for projects Participation in City of Corpus Christi Air Quality Committee and Technical Working Group on Mobile Sources
- Coordination with the Pollution Prevention Partnership on federal reporting and regional outreach
- Narrative and data contributions to annual Ozone Advance and other regional reporting documents

**SUBTASKS** - The subtasks and their objectives are listed in detail on the following pages.

Subtask 3.1 Transportation Improvement Program (TIP)

Subtask 3.2 CMP / TSMO / ITS Architecture Plan

Subtask 3.3 Active and Micro-mobility Transportation Planning

Subtask 3.4 Regional Freight Planning

Subtask 3.5 Transit Coordination

Subtask 3.6 Regional and Project Economic Analyses

Subtask 3.7 Infrastructure Lifecycle Analysis and Reporting

Subtask 3.8 Crash Analysis and Incident Management Planning

Subtask 3.9 Regional Specialized Transit Coordination Plan Update

**Exhibit 6 – Task 3.0 Short Range Planning Budget Summary**

Subtask	Responsible Agency	Transportation Planning Funds (TPF) <sup>1</sup>		FTA Sect. 5307	Local	Total		
		FY 2021	FY 2022			FY 2021	FY 2022	2-Year
<b>3.1</b>	MPO	\$15,000	\$25,000	\$0	\$0	\$15,000	\$25,000	\$40,000
<b>3.2</b>	MPO	\$25,000	\$25,000	\$0	\$0	\$25,000	\$25,000	\$50,000
<b>3.3</b>	MPO	\$35,000	\$35,000	\$0	\$0	\$35,000	\$35,000	\$70,000
<b>3.4</b>	MPO	\$15,000	\$15,000	\$0	\$0	\$15,000	\$15,000	\$30,000
<b>3.5</b>	MPO	\$15,000	\$15,000	\$0	\$0	\$15,000	\$15,000	\$30,000
<b>3.6</b>	MPO	\$16,000	\$20,000	\$0	\$0	\$16,000	\$20,000	\$36,000
<b>3.7</b>	MPO	\$20,000	\$20,000	\$0	\$0	\$20,000	\$20,000	\$40,000
<b>3.8</b>	MPO	\$35,000	\$21,000	\$0	\$0	\$35,000	\$21,000	\$56,000
<b>3.9</b>	MPO	\$5,000	\$5,000	\$0	\$0	\$5,000	\$5,000	\$10,000
<b>TOTAL</b>		<b>\$181,000</b>	<b>\$181,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$181,000</b>	<b>\$181,000</b>	<b>\$362,000</b>

<sup>1</sup> TPF – Includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

**SUBTASK 3.1 – TRANSPORTATION IMPROVEMENTS PROGRAM (TIP)**

One of the primary responsibilities of the MPO is the development of 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 will be used, as well as all projects that have regional significance and are funded using local or private funds. The Corpus Christi MPO staff will maintain and amend the FY 2021-2024 TIP as needed to reflect changes in area priorities, scope, accessibility, and funding for roadways and transit projects. A cooperative interagency input process is part of the public involvement component of this task.

Future project applications will provide, in an easily understood manner and with sufficient detail, the design concept and scope descriptions of all existing and proposed transportation facilities to permit develop cost estimates for major transportation investments for which analyses are not complete. 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 allocating funds to those projects and programs. The Corpus Christi MPO will also monitor the delivery of capital projects to support on-time and on-budget construction. Another focus is on developing priority projects to the level that allows the Corpus Christi Metropolitan area to compete nationally for discretionary funds.

This task will also produce 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.

### **SUBTASK 3.2 –CMP / TSMO / ITS ARCHITECTURE PLAN**

The Corpus Christi MPO will convene a CMP Committee and update the previous regional documents: ITS Architecture Plan and ITS Strategic Implementation Plan, to include current technologies, along with connected and autonomous vehicle systems. After completion of the updated travel models, each Corridor of Concern 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. Corridors of Note will be evaluated as appropriate.

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 will work with cognizant agencies to identify 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 will identify technologies to improve mobility, increase safety, and reduce delays. ITS improves the existing roadway system’s operations in a cost-effective manner.

### **SUBTASK 3.3 – ACTIVE AND MICRO-MOBILITY TRANSPORTATION PLANNING**

The Corpus Christi MPO strives to reflect non-vehicular and micro-mobility modes of transportation in its transportation planning. This subtask will continue to build on the work previously conducted and will ensure that the MTP and TIP for the Corpus Christi MPO shall provide for “...*the development and integrated management and operation of transportation systems and facilities (including accessible pedestrian walkways and bicycle transportation facilities) that will function as an intermodal transportation system in the metropolitan planning area and as an integral part of an intermodal transportation system for the State and the United States.*” USC 49 Section 5303 c(2)

### **SUBTASK 3.4 – REGIONAL FREIGHT 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 will work with TxDOT, the Port of Corpus Christi and other significant freight stakeholders to update the designation of national freight network routes in the region. The Corpus Christi MPO will also continue to collaborate with regional emergency management partners to explore strategies for mitigating risk associated with freight operations in the face of industrial growth.

### **SUBTASK 3.5 – TRANSIT COORDINATION**

The Corpus Christi MPO strives to support transit services that enhance regional economic growth and universal access to goods and services. The MPO will continue to participate and provide technical support to Corpus Christi Regional Transportation Authority (CCRTA) in an attempt to ensure that plan recommendations are consistent with current needs and resources of public providers, private providers, and the health and human



services community. This is an ongoing task with Corpus Christi MPO staff serving as an engaged stakeholder in the process.

The Corpus Christi MPO maintains active engagement with CCRTA Operations and Planning departments. The MPO remains committed to supporting the Regional Public Transportation Coordination Plan, from the Transportation Coordination Network of the Coastal Bend (TCN).

### **SUBTASK 3.6 – ECONOMIC ANALYSES OF PROJECTS AND PORTFOLIOS**

The Corpus Christi MPO staff will work with consultants to develop appropriate econometric model(s) to complete analyses of potential economic impacts/benefits of both individual projects and portfolios of projects in the region. Planning and promoting economic development is important in developing and sustaining a strong and vibrant community. It is important for the Corpus Christi MPO to collaborate with agencies throughout the region to encourage economic growth, be responsive to the needs of the business community, and work to strengthen the region's position in attracting and retaining businesses. However, those efforts must be undertaken within the context of sustaining what the region already enjoys – a tight-knit community with a rich history and vibrant culture.

Investment decisions are typically based on analyses of benefit-cost analysis (BCA), and/or cost-effectiveness analysis (CEA), to appraise economic viability. Increasingly BCA or CEA are complemented by multicriteria analysis (MCA) to capture the multiple dimensions that affect decision-making – social, economic, environmental, and financial. For projects evaluated and financed by federal agencies, TxDOT, or the Corpus Christi MPO, guidelines are available for economic analysis of investment projects.

### **SUBTASK 3.7 – INFRASTRUCTURE LIFECYCLE ANALYSIS AND REPORTING**

The need to maximize the benefits of limited funding and stabilize budgets is particularly acute for the preservation of infrastructure. TxDOT and local agencies are grappling with the fact that many critical bridges, roadways, and drainage networks are in need of substantial repair or replacement. Maintenance, upgrades, and replacements are a growing need, and with limited resources it is even more important that decisionmakers prudently plan and spend current and future budgets. When the cost of a project is estimated only for design and construction, the long-term costs associated with maintenance, operation, and the reconstruction of a project are often overlooked. Similarly, comparing project design alternatives by their initial costs can lead to shortsighted decisions. Without careful examination of the full life cycle costs, investment decisions today could cost an agency even more in years ahead. Something as simple as a bridge replacement provides the opportunity to construct an asset, sometimes with higher upfront costs, in a way that reduces the needs for future revenues dedicated to that asset, often referred to as “sustaining capital.” A poor choice today can be amplified in future decades as the inflexible and long-life nature of infrastructure can create unaffordable requirements in the future.

This subtask utilizes the HERS-ST model developed in Task 2.5 and other studies to begin approximating the lifecycle burden of the transportation infrastructure in the region, with a focus on the NHS. This will produce a description of the condition of the assets and the costs of operations and maintenance activities. Performance deficiencies will be identified, and lifecycle cost analysis can suggest potential investment strategies for local entities to undertake. In combination with the financial planning, this can encourage conversations about long-term goals, issues, opportunities, and revenue needs. Examples of Questions that HERS-ST will answer are:

- How will a reduction (or increase) of x percent in maintenance investment levels affect the condition of the roadway system over the next 5, 10, or 25 years?
- What level of future investment is required in a roadway system to ensure that average pavement condition is maintained?
- What level of investment is required to make all economically beneficial improvements on the system (e.g., those projects where benefits exceed costs)?
- What are reasonable performance targets given forecast funding, policy, and customer satisfaction objectives?

### **SUBTASK 3.8 – CRASH ANALYSES AND TRAFFIC INCIDENT MANAGEMENT PLANNING**

This subtask comprises the rigorous analysis of crashes on all public roads in the region. The activities will include 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 trainings and workshops on safety related issues for agencies and regional implementers, if available or needed.

A complete regional study of fatal and serious injury crashes will be undertaken, documenting regional trends and influencing factors. Emphasis will begin with implementing systemic operations and engineering improvements but may include assisting enforcement activities. It will identify different categories of factors from the regional TDM: accident exposure factors, socio-economic factors and network factors.

The Corpus Christi MPO will explore using a regional safety committee to explore strategies to address identified issues. This committee will help inform local planning and programming efforts to improve transportation safety and achieve/exceed the region's roadway safety targets.

A site-specific phase will explore various strategies to address locations with unusual characteristics. This effort will help inform local planning and programming efforts to improve transportation safety and achieve/exceed the region's roadway safety targets.

FHWA encourages the MPOs to consider Traffic Incident Management (TIM) activities as part of their UPWPs. TIM directly supports multiple planning factors related to safety, mobility freight movement, air quality and transportation system reliability. TIM addresses the non-recurring congestion which causes delay that impacts all travelers, including just in time freight haulers. TIM also improves safety by reducing the likelihood of a secondary crash and responders being struck. Furthermore, TIM impacts the economy by reducing delay that impacts consumers, and results in wasted fuel. The Corpus Christi MPO may:

- Propose TIM to elected officials
- Facilitate TIM Responder Training
- Facilitate working groups and activities
- Foster relationships with private haulers and Law Enforcement Agencies
- Facilitate After Action Reviews
- Fund ITS Projects
- Compile data for Performance Measures

### **SUBTASK 3.9 – COORDINATED PUBLIC TRANSIT- HUMAN SERVICES TRANSPORTATION PLAN UPDATE**

Multiple local, state, and federal programs from the United States Departments of: Agriculture, Education, Health and Human Services, Veterans Affairs fund or support transportation services for their clients. Many of these "human service transportation" funding programs are independent from the transportation funding and services provided by the U.S. Department of Transportation - Federal Transit Administration (FTA). Because of the variety of different missions, agency rules, federal regulations, and bureaucratic processes, human service and public transportation programs are not always mutually supportive or coordinated. The lack of coordination results in duplication of some systems and programs and overly complex, expensive, and difficult to understand rules for use. The goal of coordination planning is untangling the separate systems and encouraging agencies and programs to complement each other and work towards an accessible, easy to use system.

As a practice, mobility management emphasizes the coordination of transportation services to enhance the mobility and special needs of seniors and individuals with disabilities, older adults, and others with barriers to transportation. As stipulated in Federal Transit Administration (FTA) Circular 9070.1G the current Coordinated Public Transit - Human Services Transportation Plan (CPTHSTP) must identify the transportation needs of individuals with disabilities, seniors and people with low incomes; provide strategies for meeting those local needs; and prioritize transportation services and projects for funding and implementation. 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 will emphasize coordination among all the key players including public transit providers, private operators, and volunteer driver programs. It will also include the customers, staff, and stakeholders from human services and health care agencies.

The Corpus Christi region is working 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 will fulfill 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 shall require 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.

## **SECTION V. TASK 4.0 METROPOLITAN TRANSPORTATION PLAN (MTP) UPDATE.**

Task 4.0 reflects efforts in support of developing and maintaining the 25-year Metropolitan Transportation Plan (MTP). Key activities for FY 2021 and FY 2022 are processing any necessary plan amendments; evaluating the process used in plan development and proposing improved methodologies; and anticipating potential impacts from new federal legislation. Initial activities for the 2050 MTP will begin during this UPWP time-period. Development of the 2050 MTP has several subcomponents inherent in an update, including but not limited to:

- 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

### **Objective**

The Corpus Christi MPO will perform preparatory and early long-range and regional transportation planning activities to support developing, maintaining and implementing the metropolitan transportation plan; and participate in local and statewide transportation planning and coordination efforts.

### **Methodology**

Corpus Christi MPO staff will support implementation of the preferred strategies within the developing *2050 MTP*. These activities will include:

- Non-motorized (bicycle and pedestrian) planning;
- Participation on transportation working groups;
- Technical support and coordinating transportation plan development with ongoing local transportation planning activities;
- Pursuing innovative funding strategies to accelerate needed improvements;
- Participation in statewide and local agency (i.e. Port of Corpus Christi) long-range transportation planning activities;
- Providing transit planning assistance to member entities;
- Continued coordination for implementation of the recommendations from the Specialized Transportation and Transit Plans;
- Continuing coordination with TSMO / ITS Subtasks;
- Preparing and processing amendments to the *2050 MTP*, if necessary; and
- Preparing Metropolitan Systems Performance Report updates.

### **FY-2021 and FY-2022 Expected Products**

A discussion of types of potential environmental mitigation activities and potential areas to carry out

these activities, including activities that may have the greatest potential to restore and maintain environmental functions in habitats throughout the region.

- Refined Vision and Goals
- Refined Performance Measures and Evaluation Criteria
- Updated Needs and Deficiencies
- Begin updating the Financial Plan
- Develop, Analyze, and Refine Scenarios for Analysis and Investment
- Update Document Plan and Processes
- Begin Collaboration for Mitigation
- Process Evaluation and Debrief Reports

### **Schedule**

CPG contract and financial reports prepared monthly; mid-year UPWP review each April; UPWP annual reports scheduled for completion each December; UPWP amendments as needed; adoption of FY-2023 & FY-2024 UPWP is scheduled for June 2021.

### **Previous Accomplishments.**

- Maintain an up-to-date fiscally reasonable 10-Year Unified Transportation Plan for period FY 2019-2028
- Identify opportunities to partner and leverage public resources for projects
- Participation in City of Corpus Christi Air Quality Committee and Technical Working Group on Mobile Sources
- Coordination with the Pollution Prevention Partnership on federal reporting and regional outreach
- Narrative and data contributions to annual Ozone Advance and other regional reporting Documents
- Develop a fiscally constrained 2020-2045 MTP
- Identification of segments that may merit intervention to address congestion
- Assessment of feasibility of integrating ITS resources into the incident management strategies
- Identification of opportunities to partner or leverage public resources into operations and maintenance projects
- Identification of locally relevant performance measures amidst state and federal performance measures, when published, that will be integrated into the project selection process
- Various interim data products in support of the planned update of the TDM using the 2012 base year for the forecast year 2045
- Technical support to partners to facilitate effective use of the data generated by the updated model
- The Corpus Christi MPO maintained a compliant 2015-2040 MTP through extensive collaboration with member agencies and other stakeholders in the community. Widespread public outreach was implemented to assure that the 2020-2045 MTP reflected regional needs and is in compliance with regulatory requirements.
- The Corpus Christi MPO maintained a compliant 2020-2045 MTP through extensive collaboration with member agencies and other stakeholders in the community. Widespread public outreach was implemented to assure that the 2020-2045 MTP reflected regional needs and complied with regulatory requirements.

- The Corpus Christi MPO approved a compliant 2020-2045 MTP Financial Plan using collaboration with member agencies and other stakeholders in the community. This is a routine work effort.
- Attended conferences and training sessions.

**SUBTASKS** – The subtasks and their objectives are listed in detail on the following pages.

- Subtask 4.1 Refine Vision and Goals
- Subtask 4.2 Refine Performance Measures and Evaluation Criteria
- Subtask 4.3 Identify Needs and Approve Deficiencies
- Subtask 4.4 Develop and Approve Financial Plan
- Subtask 4.5 Develop, Analyze, and Refine Scenarios for Analysis and Investment
- Subtask 4.6 Document Plan and Processes
- Subtask 4.7 Evaluate Impacts and Develop Mitigation
- Subtask 4.8 Process Evaluation and Debrief
- Subtask 4.9 Scenario Planning

The Corpus Christi MPO staff will, with the assistance of outside contractors as needed, perform the technical activities to accomplish the tasks listed below.

**Exhibit 7 – Task 4.0 Metropolitan Transportation Plan (MTP) Budget Summary**

Subtask	Responsible Agency	Transportation Planning Funds (TPF) <sup>1</sup>		FTA Sect. 5307	Local	Total		
		FY 2021	FY 2022			FY 2021	FY 2022	2-Year
<b>4.1</b>	MPO	\$20,000	\$10,000	\$0	\$0	\$20,000	\$10,000	\$30,000
<b>4.2</b>	MPO	\$30,000	\$10,000	\$0	\$0	\$30,000	\$10,000	\$40,000
<b>4.3</b>	MPO	\$30,000	\$10,000	\$0	\$0	\$30,000	\$10,000	\$40,000
<b>4.4</b>	MPO	\$20,000	\$10,000	\$0	\$0	\$20,000	\$10,000	\$30,000
<b>4.5</b>	MPO	\$30,000	\$10,000	\$0	\$0	\$30,000	\$10,000	\$40,000
<b>4.6</b>	MPO	\$20,000	\$9,000	\$0	\$0	\$20,000	\$9,000	\$29,000
<b>4.7</b>	MPO	\$20,000	\$10,000	\$0	\$0	\$20,000	\$10,000	\$30,000
<b>4.8</b>	MPO	\$30,000	\$20,000	\$0	\$0	\$30,000	\$20,000	\$50,000
<b>4.9</b>	MPO	\$35,000	\$25,000	\$0	\$0	\$35,000	\$25,000	\$60,000
<b>TOTAL</b>		<b>\$235,000</b>	<b>\$114,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$235,000</b>	<b>\$114,000</b>	<b>\$349,000</b>

<sup>1</sup> TPF – Includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

**SUBTASK 4.1 – REFINE VISION AND GOALS**

While most transportation plans involve the public and stakeholders in defining a vision, a performance-based plan requires clear agreed-upon goals and objectives, since the strategic direction of goals and objectives are used to define performance measures. Consequently, it is critical for public involvement and stakeholder engagement to have a forum for rationally discussing priorities and trade-offs. These discussions will lead to developing and selecting achievable targets and in defining desired outcomes. In a performance-based plan, the public and stakeholders are involved in not just providing general concepts, but clearly defining or prioritizing goals and specific objectives, which leads to performance measures and achievable targets that are used in assessing plan options and/or selecting investments.

The Corpus Christi MPO staff will bring together stakeholders with in-depth knowledge of transportation and community related goal areas to refine the goals and objectives in the MTP. The goals and objectives of other agency plans will 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 objective from different plans, identify potential conflicts and commonalities, and create a prioritization system.

**SUBTASK 4.2 – REFINE PERFORMANCE MEASURES AND EVALUATION CRITERIA**

Selecting performance measures in a performance-based plan is often thought of as a “data-driven” process. Actually, the public and stakeholders play a critical role in defining performance measures. It is important to work with the public and stakeholders to clearly define what is important and meaningful to them. Engaging participants helps define what is meant by different objectives and what metric is most appropriate. Goals associated with mobility, accessibility, and quality of life manifest themselves in



different ways, and stakeholders have different views of what different terms mean. Working with stakeholders to define how to measure performance helps to clarify what is most critical to the public and guides the analysis of strategies in the plan. The materials produced will actively and continuously strive to use plain language and to ensure that measures used in the plan are understood by the stakeholder community.

The Corpus Christi MPO staff will report the specific criteria and analysis procedures that will compare portfolios and scenarios comprised of distinct projects and policies for progress toward achieving the regional, state, and national performance goals.

#### **SUBTASK 4.3 – IDENTIFY NEEDS AND DEFICIENCY LOCATIONS**

Use the performance goals and measured conditions to identify specific corridors, roads and areas which are deficient in one or more ways. This dataset is the basis for problems and opportunities that can be addressed by “projects or policies”. Using the adopted goals, metrics and baseline conditions; the Corpus Christi MPO TPC will establish list of needs for at least: pavement condition, bridge condition, crashes, and congestion.

Corpus Christi MPO staff will identify the location of transportation deficiencies where both the current and future system experience safety issues, unacceptable roadway condition, operational problems, lack of interconnectivity, congestion, or other issues.

#### **SUBTASK 4.4 – DEVELOP A FINANCIAL PLAN OF REASONABLY AVAILABLE FUNDING**

Transportation systems are challenged to accommodate many competing needs, and fiscal constraint is vital to prioritizing resources to address those needs. Fiscal constraint also helps clarify what is possible with existing funding sources and can inform debate about a need for new funding. Providing realistic funding and revenue forecasts from the outset supports decision-maker, stakeholder, and public trust by providing understanding of the limits of funding to support implementation of strategies.

The Corpus Christi MPO staff will, in cooperation with CCRTA, local municipalities and counties, and TxDOT, develop this financial plan. This effort will require forecasting reasonably foreseeable revenue resources using realistic and collaboratively developed assumptions about existing funding sources, potential funding sources, alternative financing strategies, and inflation rate. It will provide forecasts in both future year and current year dollar values.

The financial plan shall compare the estimated revenue from existing and proposed funding sources that can reasonably be expected to be available for transportation uses, and the estimated costs of constructing, maintaining and operating the total (existing plus planned) transportation system over the period of the plan. The estimated revenue by existing revenue source (local, State, and Federal and private) available for transportation projects shall be determined and any shortfalls identified. Proposed new revenues and/or revenue sources to cover shortfalls shall be identified, including strategies for ensuring their availability for proposed investments. Existing and proposed revenues shall cover all forecasted capital, operating, and maintenance costs. All cost and revenue projections shall be based on the data reflecting the existing situation and historical trends.

The effort will include a methodology for identifying costs of individual capital projects and on-going maintenance and operations programs, along with acknowledging restrictions and requirements associated with each funding source. Revenue forecasts, life-cycle costs, and inflationary assumptions for projects and programs will be developed for immediate (existing + committed), short-term (next 2023-2026 TIP) midterm (UTP years 2035) and long-term (2050) investments. Financial information and

estimates of risk of shortfalls compared against the lifecycle expenses of the transportation will be available in one-year increments through year 2035 and five-year increments through year 2050.

Corpus Christi MPO staff will create an easily understood document that summarizes available revenues and likely costs of construction, operations, and maintenance of projects and programs, taking into account inflation and year of expenditure. This task establishes the revenue basis for fiscal constraint of both the MTP as well as the funding sources for the TIP. Using the same revenue projections for the long-range plan and the TIP ensures financial consistency between the plan and program.

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

Scenario planning helps decision-makers prepare for an unknowable future by providing a framework for comparing and contrasting various forces. The FHWA Scenario Planning Guidebook provides assistance on using scenario planning. As part of scenario planning, stakeholders shape alternative descriptions or scenarios of what the future could look like. These alternative scenarios are then assessed using transportation models, sketch-planning tools, or other quantitative methods to estimate the differences between the alternative visions of the future on performance measures or indicators of desired outcomes. The Corpus Christi MPO staff will work with regional leaders and local economic groups to adopt unified data and methodologies for existing and future population for households and employment by type.

#### **SUBTASK 4.6 – DOCUMENT PLAN AND PROCESSES**

Transparency promotes accountability by providing the public with information about what the Corpus Christi MPO is doing. Corpus Christi MPO will inventory information currently available for download and foster the public's use of this information to increase public knowledge and promote public scrutiny of processes. The Corpus Christi MPO will increase agency accountability and responsiveness; improve public knowledge of the agency and its operations and respond to need and demand as identified through public consultation.

#### **SUBTASK 4.7 – EVALUATE IMPACTS AND DEVELOP MITIGATION**

Transportation planning requires examining the complex interactions among social, economic, environmental, and political factors and identifying tradeoffs, especially when different stakeholder groups have conflicting interests. The Corpus Christi MPO MTP is required to be consistent with local land-use development, historic preservation, and environmental protection plans in the region. The Corpus Christi MPO uses an 8-step collaborative mitigation planning. A consistent desire of the Corpus Christi MPO is to add value to other agencies' planning and mitigation efforts and reinforce their individual effectiveness. One crucial example is the Texas Parks and Wildlife Department's (TPWD) Texas Conservation Action Plan (TCAP) Gulf Coast Prairies and Marshes Ecoregion Handbook. This document includes a list of concerns and potential actions that could yield mutual benefit.

The Corpus Christi MPO staff will support of regional planning to address mitigation of environmental, historic preservation, stormwater and air quality impacts of transportation in alignment of environmentally related performance measures.

#### **SUBTASK 4.8 – PLANNING AND PROGRAMMING PROCESS EVALUATION AND DEBRIEF**

This effort will provide analysis for 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.

Corpus Christi MPO staff will develop an After-Action Report to identify strengths of planning and programming processes that should be maintained and built upon, as well as identifying potential areas of improvement. For each step in the MTP and TIP processes the following questions will be answered.

- What did we want to accomplish?
- How did this change as you progressed?
- What did we accomplish?
- Why was there a difference between what we wanted 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?

#### **SUBTASK 4.9 – PROCESS DOCUMENTATION AND ENHANCEMENT**

MPO staff will reflect efforts in support of regional transportation planning to address mitigation of storm water impacts and air quality impacts of transportation in alignment of environmentally related performance measures.

## SECTION VI. TASK 5.0 SPECIAL STUDIES

### Purpose

Task 5.0 encompasses the special projects to be undertaken by the Corpus Christi MPO.

### FY-2019 and FY-2020 Major Accomplishments

- At the request of TTI, the MPO is participating in a TTI pilot where they are developing a web-based platform to extract travel speed data from the INRIX dataset. There are no consultant costs associated with this collaborative effort with TTI.
- Establish a network that will be used to monitor congestion

### FY 2021 and FY 2022 Expected Products

- Completion of FHWA Resiliency Pilot Project on Laguna Shores Road
- Projects To-Be-Determine by the TPC with input from the TAC and local governments

### Schedule

Complete in 1 year.

**Exhibit 8 – Task 5.0 Special Studies and Partner Agency Coordination Budget Summary**

Subtask	Responsible Agency	Transportation Planning Funds (TPF) <sup>1</sup>		FTA Sect. 5307	Local	Total		
		FY 2021	FY 2022			FY 2021	FY 2022	2-Year
5.1	MPO	\$25,000	\$40,000	\$0	\$0	\$25,000	\$40,000	\$65,000
5.2	MPO	\$15,000	\$0	\$0	\$0	\$15,000	\$0	\$15,000
5.3	MPO	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL</b>		<b>\$40,000</b>	<b>\$40,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$40,000</b>	<b>\$40,000</b>	<b>\$80,000</b>

<sup>1</sup>TPF – Includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

### SUBTASK 5.1 – REGIONAL SAFETY PLANNING

**OBJECTIVE** – A significant part of the Corpus Christi MPO responsibility is working with our State and local government partners to convert data into information that is useful for decision making. From these efforts the Corpus Christi MPO will identify opportunity areas as they relate to collaborating with our State and local government partners. This subtask will build upon and enhance current transportation planning efforts, especially safety planning efforts, related to data, analysis, and project selection, with a focus on:

- Data visualization: Make data analysis and insights accessible to policy-makers and project implementers through clear, compelling data visualizations.
- Data integration: Integrate existing databases and new data sources to answer safety questions.
- Predictive insights: Use advanced analytic techniques to identify risk patterns and develop insights that anticipate and mitigate safety risk to reduce injuries and fatalities.

**EXPECTED PRODUCTS** – This project is a collaborative effort, wherein MPO’s staff will utilize specialized software to conduct detailed analyses of intersections for unusual crash patterns. This effort will engage an interdisciplinary team of specialized experts from the academic, municipal, and private sectors to:

- Assess baseline crash conditions,
- Identify high crash locations,
- Examine crash occurrences in areas where normal maintenance activities are occurring,
- Identify interventions that will likely ameliorate the frequent crash types in the above locations.

#### **SUBTASK 5.2 – RESILIENCE AND DURABILITY TO EXTREME WEATHER PILOT PROJECT**

**OBJECTIVE** – FHWA grant funds continue to support design work by a consultant for a nature-based solution to enhance the resiliency to extreme weather of Laguna Shores Road along the western shore of the Laguna Madre.

**EXPECTED PRODUCTS** – The pilot project is a collaborative effort, wherein MPO’s staff will manage an interdisciplinary team of specialized experts from the academic, environmental, non-profit, municipal, and private sectors to:

- Monitor Implementation of Laguna Shores Road Resiliency Pilot Project
- Monitor project effectiveness in terms of habitat development and shoreline condition to evaluate the utility of the pilot technique(s) to enhance the durability of other segments of Laguna Shores Road and other, similarly vulnerable transportation infrastructure.

## **SECTION VII.**

### **TASK 6.0 DIRECT EXPENSES**

Direct Expenses are 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 include: 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. The specific items are presented in Tasks 6.1 through 6.10 below.

#### **FY-2019 and FY-2020 Major Accomplishments**

- Approval of the 2020-2045 Metropolitan Transportation Plan (MTP);
- Approval of the Future Demographic Forecasts for the 2045 MTP;
- Provided technical support to coordinate long-range transportation plan development with ongoing local transportation planning activities; participated in Statewide long-range transportation planning activities; and participated in member entity transit planning efforts.

#### **FY-2021 and FY-2022 Expected Products**

- Beginning technical work for the development of the *2050 MTP*;
- Participation in statewide freight planning activities;
- Monitoring and updating a Metropolitan System Performance Monitoring Process and Report;
- Updates to the NHS and functional classification of MPO area roads, as appropriate;
- Assistance with public transportation planning and support of member entities' transit-planning efforts;
- Analyze urban household travel in the Corpus Christi area; and

The Corpus Christi MPO staff will provide information to and involve its Technical Advisory Committee (TAC) on these activities as they are undertaken.

#### **Schedule**

UPWP tasks are implemented continuously.

**Exhibit 9. Task 6.0 DIRECT EXPENDITURES BUDGET SUMMARY**

Budget items shown below for direct expenses are detailed on the following pages.

<b>Task 6.0 Funding Sources and Expenditures by Task:</b>			
<b>FY2021 – FY 2022 Direct Expense Revenues by Source</b>		<b>FY 2021</b>	<b>FY 2022</b>
	Federal Funds	<b>\$408,000</b>	<b>\$403,000</b>
	Other Funds	<b>\$50,000</b>	<b>\$50,000</b>
<b>FY2021 – FY2022 Direct Expense Expenditures by Task:</b>		<b>FY 2021</b>	<b>FY 2022</b>
	<b>Direct Expense</b>	<b>Amount</b>	<b>Amount</b>
TASK-6.1	Contract Services: Fiscal Agent, Office Rent, Traffic and Special Studies, Consultant Assistance as needed	\$408,000	\$408,000
TASK-6.2	Printing/Reproduction Services	\$3,500	\$3,500
TASK-6.3	Education/Training/Conference	\$4,000	\$4,000
TASK-6.4	Travel Out-of-State	\$5,500	\$5,500
TASK-6.5	Travel In-State	\$2,500	\$2,500
TASK-6.6	Supplies	\$6,000	\$6,000
TASK-6.7	Support Services	\$5,500	\$5,500
TASK-6.8	Memberships/Subscriptions/Publications	\$2,500	\$2,500
TASK-6.9	Maintenance – Software and Equipment	\$5,500	\$5,500
TASK-6.10	Capital – Software/Furniture/Equipment	\$15,000	\$10,000
<b>Sub-Total TASK-606</b>	<b>Direct Expenses</b>	<b>\$458,000</b>	<b>\$453,000</b>

**TASK-6.1 Contract Services & Supplies**

Work includes annual software maintenance agreements costs. Budgeted dollars shown in the above table may also include consultation services for the following efforts during FY-2021 & 2022:

- ArcGIS and other data acquisition;
- Travel Demand Model Development and supporting forecasting software and supporting data;
- Crash analysis software and data;
- Accessibility data and analysis;
- Public participation/information;
- Traffic counts and other transportation-related data acquisition;
- Socioeconomic model revision;
- Travel demand model support and maintenance;
- Congestion Management Process (CMP) Corridor Analysis;
- eTIP website;
- Regional Advanced Mitigation Process;
- Acquisition of data and expertise to refine HERS-ST; and
- Other future enhancements to the Regional Modeling System.

Specific work scopes and funding details for activities not eligible for the on-call contracts will be provided to TxDOT prior to release of any requests for proposals. The Corpus Christi MPO TPC and/or the Transportation Planning Director must approve all contractual support services. The actual budget for contract services is heavily dependent upon the amount of carry-over funds.

All arrangements necessary to retain funding for multi-year contract services are subject to approval by TxDOT and the TPC.

#### **TASK 6.2 Printing/Reproduction Services**

Work includes document printing and related services when outside (vendor) services are used.

#### **TASK 6.3 Education/Training/Conference**

Work includes registration and related fees for education, training and conferences for Transportation Planning Program staff development. In FY-2021 and FY-2022 conferences and training may include TEMPO, TxDOT, AMPO, APA, ASCE, ITE, ESRI (GIS), TRB, travel demand model user groups and others as necessary to support the MPO Work Program.

#### **TASK 6.4 Travel Out-of-State**

Work includes travel, lodging, subsistence expenses and related items of expense incurred for the Corpus Christi MPO staff traveling out-of-State on official business. Trips may include, but are not limited to, TEMPO, TxDOT, AMPO, APA, ITE, ASCE, ESRI (GIS), NHI trainings, FHWA training, and TRB conferences.

#### **TASK 6.5 Travel In-State**

Work includes travel, lodging, subsistence expenses and related items of expense incurred for the Corpus Christi MPO staff traveling within the State of Texas on official business.

#### **TASK 6.6 Supplies**

Work includes purchase of materials and supplies specifically for accomplishing UPWP Subtasks.

#### **TASK 6.7 Support Services**

Work includes advertising for public meetings, filling staff positions and miscellaneous support needs, such as communication interpreters for public meetings.

#### **TASK 6.8 Memberships/Subscriptions/Publications**

Work includes the costs of the Corpus Christi MPO 's membership in business, technical, and professional organizations; subscriptions to or purchase of business, professional and technical periodicals/books.

#### **TASK 6.9 Maintenance - Equipment**

Work includes general computer maintenance costs, as needed. Specific annual items may include, but are not limited to: IT systems, phone systems, PC's, laptops, printers and copier maintenance.

#### **TASK 6.10 Capital – Furniture/Equipment**

The budgeted dollar amount is to support computer hardware and other furniture and/or equipment necessities.



## **SECTION VIII. BUDGET SUMMARY – Revenue Information**

This section describes revenue sources used by the Corpus Christi MPO. The revenue utilized for work activities identified in the UPWP originate from two basic sources: federal transportation planning funds and non-federal sources. Exhibit 10 provides estimates of FY 2021 and FY 2022 revenues and expenses. Actual revenue amounts are calculated following the beginning of the Federal fiscal year, October 1, when Congress appropriates the funds.

### **4.1 Federal Funding Sources**

The United States Department of Transportation (USDOT), FHWA and FTA grant planning funds are authorized through *23 USC 104(f)* and *49 USC 5305(d)*. These funds are allocated to work activities in accordance with appropriate regulations and are used for program expenditures by the Corpus Christi MPO.

Metropolitan Planning Organizations (MPOs) in the state of Texas have received federal metropolitan transportation planning funds via a Consolidated Planning Grant (CPG) that lists all of the Transportation Planning Funds (TPF). The aspects of this process are currently as follows:

- The approved UPWP allocates federal transportation planning funds to individual work items in the Work Program performed by Corpus Christi MPO and is the basis for the CPG.
- The Corpus Christi MPO transportation planning tasks are funded through a two-year CPG that combines the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) into metropolitan transportation planning funds (TPF).
- TxDOT and CCRTA federal transportation planning funds are not included in the CPG; however, metropolitan transportation planning activities by TxDOT and CCRTA are included in the UPWP with the appropriate sources of federal funding listed.
- The FTA transfers FTA Section 5303 funds allocated for metropolitan transportation planning in the UPWP to FHWA.
- FHWA consolidates the transferred FTA funds with Metropolitan Planning (PL) and Category 7 (STP) funds allocated for metropolitan transportation planning in the UPWP and makes a CPG to the TxDOT.
- TxDOT administers the CPG through a contract with Corpus Christi MPO and reimburses the Corpus Christi MPO monthly for transportation planning activities in the UPWP.
- The UPWP includes additional Corpus Christi MPO work efforts not funded through the CPG.

Federal Consolidated Planning Grant funds are allocated using a matching ratio of 82.79% Federal and 17.21% local funds. In lieu of local funds, the Texas Department of Transportation applies federally approved transportation development credits in sufficient volume to match both the FHWA PL and FTA Section 5303 funding programs. As the credits reflect neither cash nor person-hours, they are not shown in the funding tables.

Surface Transportation Block Grant funds (Category 7) are commonly used for Metropolitan Planning purposes and may be requested for specific needed projects that do not have sufficient revenues from PL / FTA 5303.

There are also several federal grant programs that can be competed for nationally, including safety and resiliency projects. The Corpus Christi MPO staff applied for a safety grant in FY 2020. Although not funded in this selection process, the MPO staff will continue to look for opportunities to leverage additional transportation planning funds.

## **4.2 State Funding Sources**

Any potential State funds used by the Corpus Christi MPO originate from grants received for specific Subtasks. These are a non-federal source of funds.

## **4.3 Other Non-Federal Funding Sources**

Non-federal funds used by the Corpus Christi MPO typically originate from annual contributions for services paid by local entities to Corpus Christi MPO. Other funds, if any, are directly attributable to the governmental unit identified or through a project specific funding partnership. This includes in-kind services.

## **4.4 Planning Funds Allocation Process**

Federal planning funds allocated to the State of Texas are distributed according to a formula developed by the State, in consultation with Texas's metropolitan planning organizations, and is formalized in a memorandum of understanding approved by the USDOT. As directed by legislation, the formula to distribute federal planning funds considers population, status of planning, attainment of air quality standards, metropolitan area transportation needs, and other factors necessary to provide for an appropriate distribution of funds to carry out the requirements of *23 USC 134* and other applicable sections of Federal law.

According to the Memorandum of Understanding between TXDOT, FHWA and FTA, the distribution formula for the CPG is based on the MPO's percentages of the total urbanized area (UZA) population, as defined by the 2010 U.S. Census. For the purpose of calculating FY-2021 and FY-2022 federal planning funding, the portion of the 2010 statewide urban population allocated to the Texas Corpus Christi Urbanized Area is 14.5 percent.

**Exhibit 10: Corpus Christi MPO 2-Year Budget Summary for FY 2021 & FY 2022**

UPWP Task	Description	2-Year TPF <sup>1</sup> Federal Funds	FY 2021 Federal Funds	FY 2022 Federal Funds	State Funds	Other Funds	Total Funds
1.0	Administration- Management	\$ 427,000	\$ 213,000	\$214,000	\$ 0	\$ 0	\$ 427,000
2.0	Data Development and Maintenance	\$ 405,000	\$ 207,000	\$ 198,000	\$ 0	\$ 0	\$ 405,000
3.0	Short Range Planning	\$ 362,000	\$181,000	\$ 181,000	\$ 0	\$ 0	\$ 362,000
4.0	Metropolitan Transportation Plan	\$ 235,000	\$ 114,000	\$ 121,000	\$ 0	\$ 0	\$ 235,000
5.0 <sup>2</sup>	Special Studies	\$80,000	\$ 40,000	\$ 40,000	\$ 0	\$ 100,000	\$ 180,000
6.0	Direct Expenses	\$911,000	\$ 458,000	\$ 453,000	\$ 0	\$ 0	\$ 911,000
	<b>TOTAL</b>	\$2,420,000	\$ 1,213,000	\$ 1,207,000	\$ 0	\$ 100,000	\$ 2,520,000

<sup>1</sup> TPF – This includes both FHWA PL-112 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 man-hours, they are not reflected in the funding tables.

<sup>2</sup> Strategic Reserves funded special projects TBD by TPC. Estimated cost: \$100,000. (\$50,000 annually).

Combined Transportation Planning Funds <sup>3</sup>	\$	2,516,450
Estimated Unexpended Carryover	\$	3,550
TOTAL Transportation Planning Funds	\$	2,520,000

<sup>3</sup> Estimate based on prior years' authorizations

**Exhibit 11 – Corpus Christi MPO – FY 2021 & FY 2022 Revenue Sources**

<b>Transportation Planning Funds</b>	
FY 2021 FHWA CPG (PL-112 + FTA Section 5303)	\$ 760,000
FY 2022 FHWA CPG (PL-112 + FTA Section 5303)	\$ 760,000
Programmed TPF Carryover	\$ 577,000
Estimated Unprogrammed TPF Carryover	\$ 3,500
Total TPF Available to Program	\$2,420,000
<b>Total 2-Year TPF Programmed</b>	<b>\$ 2,420,000</b>
TPF Programmed in FY2021	\$ 1,350,000
TPF Programmed in FY2022	\$ 1,070,000
TPF Unprogrammed Balance	\$3,500
<b>Other Planning Funds</b>	
Local Contributions Paid to Corpus Christi MPO	\$ 100,000
TBD	\$ 0
TBD	\$ 0
<b>Total Other Funds Programmed</b>	<b>\$ 100,000</b>
<b>TOTAL FUNDS PROGRAMMED</b>	<b>\$ 2,520,000</b>

## **SECTION IX. PARTNER AGENCY PLANNING STUDY COORDINATION**

### **Other Regionally Significant Transportation-Related Planning Activities**

In addition to the tasks previously outlined in this UPWP for Corpus Christi MPO staff, other transportation transportation-related activities will be conducted by various transportation planning and implementation agencies. The *FAST Act* requires that the UPWP include a description of all metropolitan transportation planning activities anticipated within the next two year period, regardless of funding source or agencies conducting the activities. The following information summarizes the efforts that were submitted to Corpus Christi MPO for inclusion in this document. *Note: Project descriptions are provided by the respective government entity staff.*

#### **TxDOT Planning Efforts**

#### **City of Corpus Christi Planning Efforts**

#### **Nueces County Planning Efforts**

#### **City of Portland Planning Efforts**

#### **San Patricio County Planning Efforts**

#### **Corpus Christi Regional Transportation Authority Planning Efforts**

#### **Port of Corpus Christi Authority Planning Efforts**

#### **Corpus Christi Airport Authority Planning Efforts**

#### **Coastal Bend Council of Governments Planning Effort**

#### **Military Installation Coordination**

**SECTION X**  
**APPENDICES**

**APPENDIX A  
COMMITTEE MEMBERS**

**CORPUS CHRISTI METROPOLITAN PLANNING ORGANIZATION  
TRANSPORTATION POLICY COMMITTEE MEMBERSHIP**

<b>VOTING MEMBERS</b>		
<b>Hon. David Krebs</b>	County Judge	San Patricio County
<b>Charles W. Zahn, Jr.</b>	Board Chairman	Port Corpus Christi
<b>Hon. Barbara Canales</b>	County Judge	Nueces County
<b>Hon. Cathy Skurow</b>	Mayor	City of Portland
<b>Hon. Joe McComb</b>	Mayor	City of Corpus Christi
<b>Edward Martinez</b>	Board Chairman	Corpus Christi Regional Transportation Authority
<b>Valente Olivarez, Jr., P.E.</b>	District Engineer	Texas Department of Transportation Corpus Christi District

<b>EX-OFFICIO NON-VOTING MEMBERS</b>		
<b>Anthony M. Jones</b>	Transportation Planner	Federal Highway Administration – Texas Division
<b>Tony Ogboli</b>	Community Planner	Federal Highway Administration – Region VI
<b>Sara Garza</b>	Transportation Planner	Texas Department of Transportation – Transportation Planning & Programming (TPP)
<b>Lynn Hayes</b>	Community Planner	Federal Highway Administration – Region VI
<b>John Buckner</b>	Representative	Coastal Bend Council of Governments
<b>State Legislators or Member of U.S. Congress</b>		Texas Legislators / United States Congress (District included in the MPO Study Area)

## CORPUS CHRISTI METROPOLITAN PLANNING ORGANIZATION TECHNICAL ADVISORY COMMITTEE MEMBERSHIP

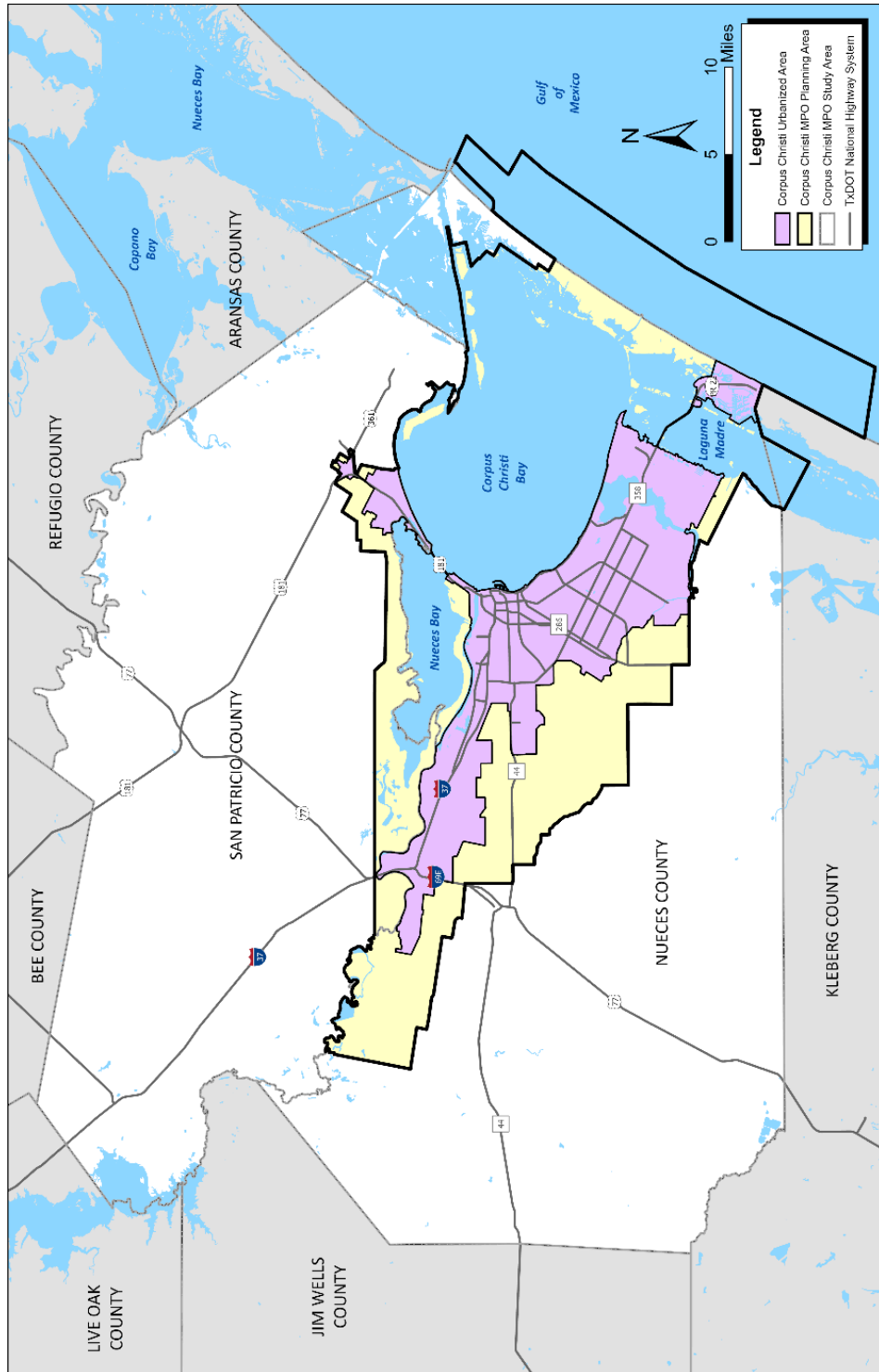
VOTING MEMBERS		
<b>Brian DeLatte, P.E. *</b>	Deputy City Manager	City of Portland
<b>Gordon Robinson, AICP, PMP*</b>	Director of Planning	Corpus Christi Regional Transportation Authority
<b>Howard Gillespie</b>	County Commissioner Pct. 4	San Patricio County
<b>Sarah Munoz, P.E.</b>	Executive Director of Public Works	City of Corpus Christi
<b>Jeff Pollack, AICP, ENV SP</b>	Director of Planning	Port of Corpus Christi
<b>Juan Pimentel, P.E.</b>	Director of Public Works	Nueces County
<b>Paula Sales-Evans, P.E.</b>	Director Transportation Planning & Development	Texas Department of Transportation - Corpus Christi District

EX-OFFICIO NON-VOTING MEMBERS		
<b>Anthony M. Jones</b>	Transportation Planner	Federal Highway Administration – TX Division
<b>Tony Ogboli</b>	Community Planner	Federal Transit Administration Region VI
<b>Lynn Hayes</b>	Community Planner	Federal Transit Administration Region VI
<b>Richard Bullock</b>	Director of Planning & Development	Coastal Bend Council of Governments (CBCOG)
<b>Sara Garza</b>	Transportation Planner	Texas Department of Transportation – Transportation Planning & Programming (TPP)
<b>State Legislators or Member of U.S. Congress</b>		Texas Legislators / U.S. Congress (District included in the MPO Study Area)

\* Designated Alternate



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



## APPENDIX C

### DEBARMENT CERTIFICATION (Negotiated Contracts)

- (1) The \_\_\_\_\_ **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*

\_\_\_\_\_  
Signature – Chairman, MPO Policy Committee

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

## APPENDIX D

### LOBBYING CERTIFICATION

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

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

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

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

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Signature – Chairman, MPO Policy Committee

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Title

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Agency

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Date

**APPENDIX E**  
**CERTIFICATION OF COMPLIANCE**

I, \_\_\_\_\_,  
(Name and Position, Typed or Printed)

a duly authorized officer/representative of \_\_\_\_\_

\_\_\_\_\_,  
(MPO)

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

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature - Chairman, MPO Policy Committee

Attest:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

**APPENDIX F**

**CERTIFICATION OF INTERNAL ETHICS AND COMPLIANCE PROGRAM**

I, \_\_\_\_\_,  
(Name and Position, Typed or Printed)

a duly authorized officer/representative of \_\_\_\_\_  
\_\_\_\_\_  
(MPO)

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

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature - Chairman, MPO Policy Committee

Attest:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

## **APPENDIX G**

### **PUBLIC COMMENTS**

(Comment period: June 4, 2020 to July 2, 2020)

## **APPENDIX H**

### **TRANSPORTATION TERMS AND ABBREVIATIONS**

3-C - Continuing, Cooperative, and Comprehensive: planning process.

AADT - Average Annual Daily Traffic: The number of vehicles passing a fixed point in a year, averaged over 365 days.

Accessibility: a measure of how easy it is to reach (and interact with) destinations or activities around a city or county.

ADA - Americans with Disabilities Act of 1990: Federal law that requires public facilities (including transportation services) to be accessible to persons with disabilities including those with mental disabilities, temporary disabilities, and the conditions related to substance abuse.

ADT - Average Daily Traffic: The number of vehicles passing a fixed point in a day, averaged over a number of days. The number of count days included in the average varies with the intended use of data.

AMPO - Association of Metropolitan Planning Organizations: Nonprofit membership organization serving the interests of metropolitan planning organizations nationwide.

AVO - Average Vehicle Occupancy: The ratio of person trips to vehicle trips; often used as a criteria in judging the success of trip reduction programs.

AVR - Average Vehicle Ridership: The number of employees scheduled to start work during specified period divided by the number of vehicles arriving at the site during that same period.

CCRTA - Corpus Christi Regional Transportation Authority: "The B" as it is locally known, is the urban public transportation service provider. Operations began in January 1986 with services to the citizens of the Coastal Bend, including the cities of Agua Dulce, Banquete, Bishop, Corpus Christi, Driscoll, Gregory, Port Aransas, Robstown, and San Patricio City.

CMP - Congestion Management Process: A systematic process that addresses congestion in the metropolitan area. It emphasizes effective management and operations, and shall include methods to monitor and evaluate the performance of the multi-modal transportation systems, identify causes of congestion, identify and evaluate alternative actions, provide information supporting the implementation of actions, and evaluate the efficiency and effectiveness of implementation actions.

CSJ - Control Section Job Number - TxDOT assigned number for projects entered into the Project Development Program (PDP). This number is unique to each individual project.

DOT - Department of Transportation: Agency responsible for transportation at the local, state, or federal level. For title 23 U.S.C. federal-aid highway actions, this would mean the Federal Highway Administration and for federal-aid transit actions under title 49 U.S.C, this would mean the Federal Transit Administration.

EIS - Environmental Impact Statement: A National Environmental Policy Act (NEPA) document that explains the purpose and need for a project, presents project alternatives, analyzes the likely impact of each, explains the choice of a preferred alternative, and finally details measures to be taken in order to mitigate the impacts of the preferred alternative.

Environmental Justice: Describes the impact of transportation plans or projects, either positive or negative, on a particular community or population. Derived from Title VI of the Civil Rights Act of 1964. Environmental Justice strives to ensure public involvement of low income and minority groups in decision making, to prevent disproportionately high and adverse impacts on low income and minority groups, and to assure that these groups receive equal benefits from transportation improvements.

ETJ: Extraterritorial Jurisdiction: Geographic area subject to urban municipality ordinance and platting requirements.

FAST ACT – Fixing America’s Surface Transportation: The federal law passed in 2015 to provide long-term funding for surface transportation infrastructure, planning and investment. It expires on September 30, 2020. It is likely that continuing resolutions will be necessary to extend past this expiration date.

Federal Aid Highway: Those highways eligible for assistance under Title 23 of the United States Code, which does not include those functionally classified as local streets or rural minor collectors.

FHPP - Federal High Priority Projects: Discretionary projects earmarked by the U.S. Congress as high priorities at the federal level during the Congressional appropriations and reauthorization process. This amounts to roughly 5% of the total transportation budget.

FHWA - Federal Highway Administration: U.S. Department of Transportation - Division responsible for administering federal highway transportation programs under title 23 U.S.C.

Fiscal Constraint: A requirement, that all plans be financially – constrained, balanced programmed expenditures are not more than the reasonably expected sources of funding over the period of the TIP or Long-Range Transportation Plan.

FTA - Federal Transit Administration: Federal entity responsible for transit planning and programs under title 49 U.S.C.

Funding Category - The Texas Transportation Commission (Commission) and TxDOT use the UTP as TxDOT’s ten-year plan to guide transportation project development and construction. The UTP has two major components: Preservation & Safety and Mobility.

F. CLASS – Functional Class - Categorizes streets and highways according to their ability to 1) move traffic, and 2) provide access to adjacent properties. It also determines eligibility for federal funds. There are three main functional classes as defined by the United States Federal Highway Administration: arterial, collector, and local. In addition to mobility and access, other factors can help determine the proper category to which a particular roadway belongs - such as trip length, speed limit, volume, and vehicle mix.

FY - Fiscal Year: A federal fiscal or budget year; runs from October 1 through September 30 for the MPO and the federal government.

Goals: The description of a desired outcomes. The purpose toward which funding is directed. (e.g., provide safe and secure transportation across modes.)

HOV - High Occupancy Vehicle: In Texas, vehicles carrying two (2) or more people receive this designation and may travel on freeways, expressways and other large volume roads in lanes designated for high occupancy vehicles.



IMS - Incident Management System: A systematic process first required under SAFETEA-LU, and continued under the FAST Act to provide information on accidents and identify causes and improvements to the Transportation system to increase safety of all users.

Intergovernmental Agreement: Legal instrument describing tasks to be accomplished and/or funds to be paid between government agencies.

Indicator: A performance measure that is used to identify relevant background conditions and trends.

ITE - Institute of Transportation Engineers: An international society of professionals in transportation and traffic engineering; publishes Trip Generation (a manual of trip generation rates by land use type).

ITS - Intelligent Transportation Systems: A range of advanced computer and communications technologies that improve mobility, enhance safety, maximize the use of existing transportation facilities, conserve energy resources and reduce adverse environmental effects.

LCA – Lifecycle Cost Analysis: a methodology for assessing the sum of project costs for all stages of the lifespan of a transportation project. This includes planning, design, construction, environmental impact mitigation, operations, preventive maintenance, and reconstruction.

LEP - Limited English Proficiency: Clarifies the responsibilities of recipients of federal financial assistance and assist them in fulfilling their responsibilities to LEP persons, pursuant to Title VI of the Civil Rights Act of 1964 and its implementing regulations.

LOS - Level of Service: A qualitative assessment of a road's operating condition, generally described using a scale of A (little congestion) to E/F (severe congestion).

MAP-21 - Moving Ahead for Progress in the 21st Century Act: Enacted July 6, 2012, the federal law creates a streamlined and performance-based surface transportation program and builds on highway, transit, bike, and pedestrian programs and policies established in 1991.

MPA - Metropolitan Planning Area: Encompass the entire existing urbanized area and the contiguous area expected to become urbanized within a 20-year forecast period for the metropolitan transportation plan.

Maintenance: Activities undertaken to keep transportation infrastructure and equipment operating as intended, to eliminate deficiencies, and to extend or achieve the expected life of facilities before reconstruction is needed. These include routine or day-to-day activities (e.g., pothole patching, mowing, litter removal, guardrail repair and striping, routine bus inspection and maintenance, and periodic dredging of channels) and periodic major projects (e.g., resurfacing roadways and runways and rehabilitating bridges).

Measures: Indicators of how well the transportation system or specific transportation projects will improve transportation conditions. Used in assessing relevant background conditions and trends to aid identifying projects for funding and trajectory toward desired future conditions.

MG - Minimum Guarantee: A funding category created in TEA-21 that guarantees a 90% return of contributions on formula funds to every state.

Mobility: The ability to move or be moved freely and easily. It is typically used in conjunction with accessibility. This term is also used by TxDOT for one of the major groups of transportation funds. CAT 7: Metropolitan Mobility and Rehabilitation; CAT 9: Transportation Enhancements; CAT 10: Supplemental Transportation Projects; CAT 11: District Discretionary; CAT 12: Strategic Priority.

MPO - Metropolitan Planning Organization: The forum of local elected officials responsible for cooperative transportation decision-making; required for urbanized areas with populations over 50,000.

MTP - Metropolitan Transportation Plan: 25- year forecast required of MPOs and state planning agencies; considers a range of social, environmental, energy, and economic factors in determining overall regional goals and how transportation can best meet these goals.

NHS - The National Highway System (NHS) consists of roadways important to the nation's economy, defense, and mobility. The NHS includes the following subsystems of roadways:

- Interstate: The Eisenhower Interstate System of highways retains its separate identity within the NHS.
- Other Principal Arterials: These are highways in rural and urban areas which provide access between an arterial and a major port, airport, public transportation facility, or other intermodal transportation facility.
- Strategic Highway Network (STRAHNET): This is a network of highways which are important to the United States' strategic defense policy and which provide defense access, continuity and emergency capabilities for defense purposes.
- Major Strategic Highway Network Connectors: These are highways which provide access between major military installations and highways which are part of the Strategic Highway Network.
- Intermodal Connectors: These highways provide access between major intermodal facilities and the other four subsystems making up the National Highway System. A listing of all official NHS Intermodal Connectors is available.

Operations: The implementation of policies, projects, and technologies to improve road performance. The overriding objectives of operations programs include minimizing congestion (and its side effects), improving safety, and enhancing overall mobility.

Performance Based Planning and Programming: The process developed to evaluate and select transportation projects. This includes monitoring progress toward achieving goals and objectives at the agency strategic, decision-making and project delivery levels.

Officials: Are people who have governmental decision-making, planning or administrative responsibilities that relate to MPO activities.

PHASE: Project phase for federal funding - PE: Preliminary Engineering; ROW: Right of Way Acquisition; CON: Construction; T: Transfer.

PMS - Pavement Management System: A systematic process utilized by state agencies and MPOs to analyze and summarize pavement information for use in selecting and implementing cost-effective pavement construction, rehabilitation, and maintenance programs; required for roads in the National Highway System as a part of ISTEA; the extent to which the remaining public roads are included in the process is left to the discretion of state and local officials; criteria found in 23 CFR 500.021-209.

Preservation & Safety: funding category of the UTP includes maintenance and rehabilitation projects to maintain the existing transportation system and to improve certain safety aspects. Categories are: CAT 1: Preventive Maintenance and Rehabilitation; CAT 6: Structures Replacement and Rehabilitation (Bridges); CAT 8: Safety.

PROJ ID - Project Identification: Identification number assigned by the MPO for local tracking and identification. Used to relate projects to the MTP.

**PTMS - Public Transportation Facilities and Equipment Management System:** A systematic process utilized by state agencies and MPOs to collect and analyze information on the condition and cost of transit assets on a continual basis; data is to be used to help people choose cost effective strategies for providing and keeping transit facilities and equipment in good condition; process must be developed in Transportation Management Areas (TMAs); the use of CMS in non-TMAs is left to the discretion of state and local officials.

**PPP - Public Participation Plan:** Is an integral part of a planning or major decision-making process. It provides opportunities for the public to be involved with the MPO in an exchange of data and ideas. Citizen participation offers an open process in which the rights of the community, to be informed to provide comments to the Government and to receive a response from the Government, are met through a full opportunity to be involved and to express needs and goals.

**Public:** Includes citizens, public agencies, advocacy groups and the private sectors that have an interest in or may be affected by MPO activities.

**RCAT - RTA Committee on Accessible Transportation:** Members act as ambassadors on transportation ridership issues related to transportation disadvantaged riders and services.

**Resurfacing:** Projects that are intended to preserve the structural integrity of highway pavements by rehabilitation, minor reconstruction, and pavement milling and recycling.

**ROW - Right-of-Way:** Real property that is used for transportation purposes; defines the extent of the corridor that can be used for the road and associated drainage.

**Routine Maintenance:** Operations that may be predicted and planned in advance. These operations (e.g.: cleaning and debris removals, regular inspections, mowing, preventive maintenance, etc.), which may be preventive or corrective in nature, should be conducted on a regularly scheduled basis using standard procedures.

**RTDM - Regional Travel Demand Model:** This is a tool for forecasting impacts of urban developments on travel patterns as well as testing various transportation alternative solutions to traffic patterns. The travel patterns are determined from US census results and in simple terms tell where residents live and where they go to work or school on a regional wide basis.

**Safety Analysis:** A comprehensive assessment of safety outcomes with and without a specific project under consideration, including a general analysis of historical crash data on the facility under consideration, a detailed review of fatal crashes and their causes.

**SHSP – Strategic Highway Safety Plan:** A Federally required plan to reduce crashes on all public roads adopted by TxDOT in 2019. The current plan includes 7 emphasis areas.

**SIB - State Infrastructure Bank:** Method of financing large capital projects by taking advantage of borrowing against future state revenues.

**SMP - Statewide Mobility Plan:** TxDOT's 10-year plan for adding capacity to the system by using the Mobility Category Funds of Federal and State Transportation funding.

**Sponsoring Agencies:** Organizations or governmental units, which enter into agreements with the MPO to undertake transportation related activities.

**Sponsoring Agencies:** Organizations or governmental units, which enter into agreements with the MPO to undertake transportation related activities. They are responsible for actually constructing the projects or enforcing the policies.

**SPP - Statewide Preservation Plan:** TxDOT's 10-year plan for maintaining the system using the preservation categories of Federal and State Transportation funding. It is one half of the overall 10-year Unified Transportation Plan.

**Stakeholders:** Individuals and groups with an interest in the outcomes of policy decisions and actions.

**STIP - State Transportation Improvement Program:** The TxDOT Five Year Work Program as prescribed by federal law. It incorporates the TIPs from all MPO in the state without modification. Projects included in the STIP must be consistent with the regional and state long-range transportation plan.

**TAC - Technical Advisory Committee:** A standing committee of most metropolitan planning organizations (MPOs); function is to provide advice on plans or actions of the MPO from planners, engineers and other staff members (not general citizens).

**TCEQ:** Texas Commission on Environmental Quality

**TCI - Texas Congestion Index:** An index to measure the magnitude of congestion in a single performance measure across the state. The index measures the mobility of people and goods in each Texas metropolitan area, with attention to the delay time experienced by drivers.

**TIP - Transportation Improvement Program:** A priority list of transportation projects developed by a metropolitan planning organization that is to be carried out within the four (4) year period following its adoption; must include documentation of federal and state funding sources for each project and be consistent with adopted MPO long range transportation plans and local government comprehensive plans.

**Title VI - Civil Rights Act:** As a recipient of federal funds, the MPO ensures that no person shall, on the grounds of race, religion, color, national origin, sex, age, or disability be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any agency programs or activities.

**TMA - Transportation Management Area:** An area designated by the U.S. Department of Transportation given to all urbanized areas with a population over 200,000 (or other area when requested by the Governor and MPO); these areas must comply with special transportation planning requirements regarding congestion management systems, project selection and certification; requirements identified in 23 CFR - 450.300-33.6.

**TMMP - Texas Metropolitan Mobility Plan:** This is a state-based requirement intended to serve as a framework for identifying unmet transportation needs in the state's larger metropolitan areas. The TMMP is a needs-based plan which quantifies transportation needs beyond the fiscal constraint barrier.

**TPC - Transportation Policy Committee:** The decision-making body for the MPO. This committee was created to serve as spokespersons for the citizens of the metropolitan area and to prioritize and direct federal transportation funds to local projects. The TPC is comprised of elected officials from the cities and two counties in the urbanized area, along with TxDOT, RTA, and Port Authority. TPC meetings are open to the public on the first Thursday of each month at 1:30 P.M. at the Corpus Christi City Hall, City Council Chambers.

**Transportation Disadvantaged:** People who are unable to transport themselves or to purchase transportation due to disability, income status or age.

**Transportation Alternatives Program:** A funding program that includes the federal Transportation Alternatives (TA) Set-Aside Program. These funds may be awarded for the following activities: Construction of sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic-calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act Construction of infrastructure-related projects that provide safe routes for non-drivers. Conversion and use of abandoned railroad corridors for trails for pedestrian, bicyclists, or other non-motorized transportation users. Construction of infrastructure-related projects to improve the ability of students to walk and bicycle to school.

**TSMO - Transportation Systems Management and Operations:** Strategies to improve the efficiency of the transportation system through operational improvements such as the use of bus priority or reserved lanes, signalization, access management, turn restrictions, etc.

**TTI - Texas Transportation Institute:** A legislatively created research center, located at Texas A & M University, whose purpose is to conduct and facilitate research and serve as an information exchange on issues related to urban transportation problems in Texas.

**TxDOT - Texas Department of Transportation:** State agency responsible for transportation issues in Texas.

**UZA - Urbanized Area:** A Census-designated area consisting of a central core and adjacent densely settled territory with populations of 50,000 residents or more.

**UPWP - Unified Planning Work Program:** Developed by MPOs to identify transportation and planning activities anticipated within the next one to two years, including a schedule for the completion of the identified tasks and activities.

**UTP - Unified Transportation Plan:** This is the state's 10-year Transportation Plan with the first 10 years programmed and the second 15 years of projects under design. This document has two parts. The two parts are: The SMP and SPP respectively.

**V/C Ratio Volume over Capacity Ratio:** This is a roadway performance measure to show how a highway volume compares with a highway's capacity.