VI. TASK 5.0 SPECIAL STUDIES

A. OBJECTIVE - Special studies needed to support the development and maintenance of the planning process. The MPO Congestion Management Process (CMP) working group utilizes updated travel time and delay data which is the special purpose studies in this task. The study is the periodic update of the CMP utilized traffic data collection activity. Two studies to integrate land use and transit choice into the planning process.

B. EXPECTED PRODUCTS - The staff is continually updating traffic count data and will also respond to directives from the Transportation Policy Committee for any special studies related to continuation of the transportation planning process. The traffic count data will be collected at over 200 critical locations as a part of congestion management system plan. A special project to develop an enhanced visualization method to make traffic count data accessible to the public will require additional professional services. Two additional studies will provide: 1) information and process necessary to integrate land use into the planning process and 2) development of a transit alternative into the travel demand modeling process.

C. PREVIOUS WORK:

1. Traffic Congestion Management Study

D. SUBTASKS - The following subtasks will be performed to achieve the objectives of this task. The objectives of each subtask are listed in detail within each subtask description on the following page.

Subtask 5.1 Congestion Management process (CMP)
Subtask 5.2 Travel Time and Delay Study
Subtask 5.3 Financial Plan
Subtask 5.4 Corridor Feasibility Study

E. FUNDING SUMMARY - TASK 5.0 FY 2010 - 2011

Subtask	Responsible Agency	TPF*	FTA Sect. 5307	Local*	Total*
5.1	MPO	$ 37,099	$0	$0	**$ 37,099**
5.2	MPO	$ 97,099	$0	$0	**$ 97,099**
5.3	MPO	$ 91,423	$0	$0	**$ 91,423**
5.4	MPO	$211,422	$0	$0	**$211,422**
Total		**$437,043**	**$0**	**$0**	**$437,043**

*** (TFP) Transportation Planning Funds - This includes both FHWA PL-112 and FTA Section 5303 funds.**

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SUBTASK 5.1 CONGESTION MANAGEMENT PROCESS (CMP)

OBJECTIVE - This subtask provides for the use and development of the Congestion Management Process (CMP). The CMP establishes a systematic process that provides information on transportation system performance and alternative strategies to alleviate congestion and enhance the mobility of persons and goods in the Corpus Christi Metropolitan Area. As part of the process the MPO has used the travel time and delay studies and the traffic count data to gauge the degree of congestion on various segments of the streets within the urbanized area. The MPO receives traffic count data from the Cities of Corpus Christi and Portland and the Texas Department of Transportation. The MPO has budgeted $30,000 for contracted traffic counts in the urbanized area and will contract for a new regional Travel Speed Study as Subtask 5.2.

EXPECTED PRODUCTS - The MPO collects traffic count data on 200 locations on a two-year cycle basis. The data is analyzed to produce maps showing the degree of congestion on various segments of streets. This data is used to select projects for MTP and TIP and to evaluate project performance.

PREVIOUS WORK - The GIS Maps showing the mobility ratios for the streets in the MPO area and a interactive map on the website showing recent traffic counts.

SUBTASK FUNDING SUMMARY:

Subtask	Responsible Agency	TPF	FTA Sect. 5307	Local	Total
5.1	MPO	$37,099	$0	$0	$37,099

SUBTASK 5.2 TRAVEL TIME AND DELAY STUDY

OBJECTIVE - It is necessary for metropolitan planning organizations (MPO) to maintain an accurate, up to date regional transportation model in order to conform with State and Federal regulations for transportation projects. The MPO has updated and calibrated the model using current information on the roadway network, area development, and other relevant characteristics such as travel time and speed data.

The primary purpose of the 2010 Travel Speed Study will be to evaluate the transportation system and prepare a report as part of the Congestion Management Process in compliance with the current requirements. The secondary purpose of the study was to identify trends in congestion.

EXPECTED PRODUCTS - An updated Travel Speed Study developed through professional services estimated at $90,000 will provide roadways mapped to establish centerlines and record relevant roadway features. Features in the mapping process will include: speed limits, school zone limits, and intersection control information. The primary purpose of the 2009 Travel Speed Study will be to expand on the 2003 and 2006 effort to cover more of the network and to develop a trend for those segments previously included.

Travel speed data will be collected during the months school is in session on Tuesdays, Wednesdays, and Thursdays, during the morning and during the afternoon peak period.

PREVIOUS WORK - For the 2006 study, the MPO contracted to collect roadway characteristics and field-measured travel time and speed data for use in calibrating and validating the regional transportation model. The contractor expanded the scope of the study without increasing the cost to include a larger sample of roadways, a major GIS enhancement, digital video, percent stops at intersections, and congestion index (% of posted speed).

Through the methodology developed and the additional data assembled, the data collected in this study has a variety of additional uses. Because the information is all housed in the GIS system, queries can group data by area for use in individual planning processes. The database can be used for background information for signal timing projects, signing and pavement marking This provided a new element in the planning process.

SUBTASK FUNDING SUMMARY:

Subtask	Responsible Agency	TPF	FTA Sect. 5307	Local	Total
5.2	MPO	$97,099	$0	$0	$97,099

SUBTASK 5.3 FINANCIAL PLAN

OBJECTIVE - The Corpus Christi MPO needs to develop as part of its long-range MTP update a financial plan that includes estimates of costs and revenues association with its systems-level operations and maintenance (O&M) activities over the period of the 25-year long-range transportation plan.

The Corpus Christi MPO must also address financial shortfalls within its next long-range Metropolitan Transportation Plan (MTP) update by exploring alternative methods of funding projects.

EXPECTED PRODUCTS - The plan will require professional services not to exceed $80,000 and will provide estimated costs of O&M and contain estimates at the systems-level for costs and revenue sources that are reasonably expected to be available in order to adequately operate and maintain Federal-aid highways and public transportation.

The plan will explore innovative finance techniques (including pass-thru funds, managed lanes, TIFIA and SIB loans, bonding opportunities, and public-private partnerships). The MTP projects will be evaluated for alternative methods of financing in order to fund financial shortfalls over the 25-year period of the MTP. The discussion of alternative financing mechanisms will be documented as part of the next MTP update and will include the associated long-range financial plan.

The plan will include input from locally elected officials and may result in public dialogue on potential funding alternatives provided by state and federal legislative changes.

PREVIOUS WORK - The long-range financial plan of the current MTP has included the eleven years of financial revenue data developed as part of the next Unified Transportation Program (UTP) to ensure fiscal constraint and consistency with State revenue projections.

SUBTASK FUNDING SUMMARY:

Subtask	Responsible Agency	TPF	FTA Sect. 5307	Local	Total
5.3	MPO	$91,423	$0	$0	$91,423

SUBTASK 5.4 CORRIDOR FEASIBILITY STUDY

OBJECTIVE - This subtask would provide for a feasibility study that would consider a wide range of alternatives to adding capacity to SH 358 and SH 286, providing improved mobility for the northwest and south side of the region and improved connectivity to SH 286, US 77 and IH 37.

Such alternatives, would be selected from those advocated by interested groups or recommended by local or State government such as: modes of transportation (e.g., bus, highway, rail) and management strategies (e.g. improvement of traffic control devices, implementation of congestion pricing, preferential facility treatment of HOVs), design levels (e.g., controlled access freeway, partially controlled access multilane highway, 2-lane uncontrolled access highway), and locations that may serve an important purpose and fill a need for transportation of people and goods.

EXPECTED PRODUCTS - The study utilizing professional services at an estimated cost of $200,000 would provide a compilation of existing conditions, history of previous studies, determinations and commitments by elected officials, relevant legislation, and documentation of prior input from the public, business officials and public officials. The study would also document procedures to be used in analysis.

The study would evaluate alternative modes, management strategies, design levels (including various levels of technology) and potential locations. The study may utilize travel forecasts, modal, management design and environmental considerations, and cost estimates of reasonably practical alternative improvements.

The study will also explore economic benefits of alternative improvements, preliminary determination of economic justification and financial feasibility.

PREVIOUS WORK - The MPO staff and TxDOT have conducted a number of public listening sessions for the proposed I-69, improving US 77, and improving mobility in the northwest and on the island. The development of a comprehensive regional mobility plan is the logical next step.

SUBTASK FUNDING SUMMARY:

Subtask	Responsible Agency	TPF	FTA Sect. 5307	Local	Total
5.4	MPO	$211,422	$0	$0	$211,422