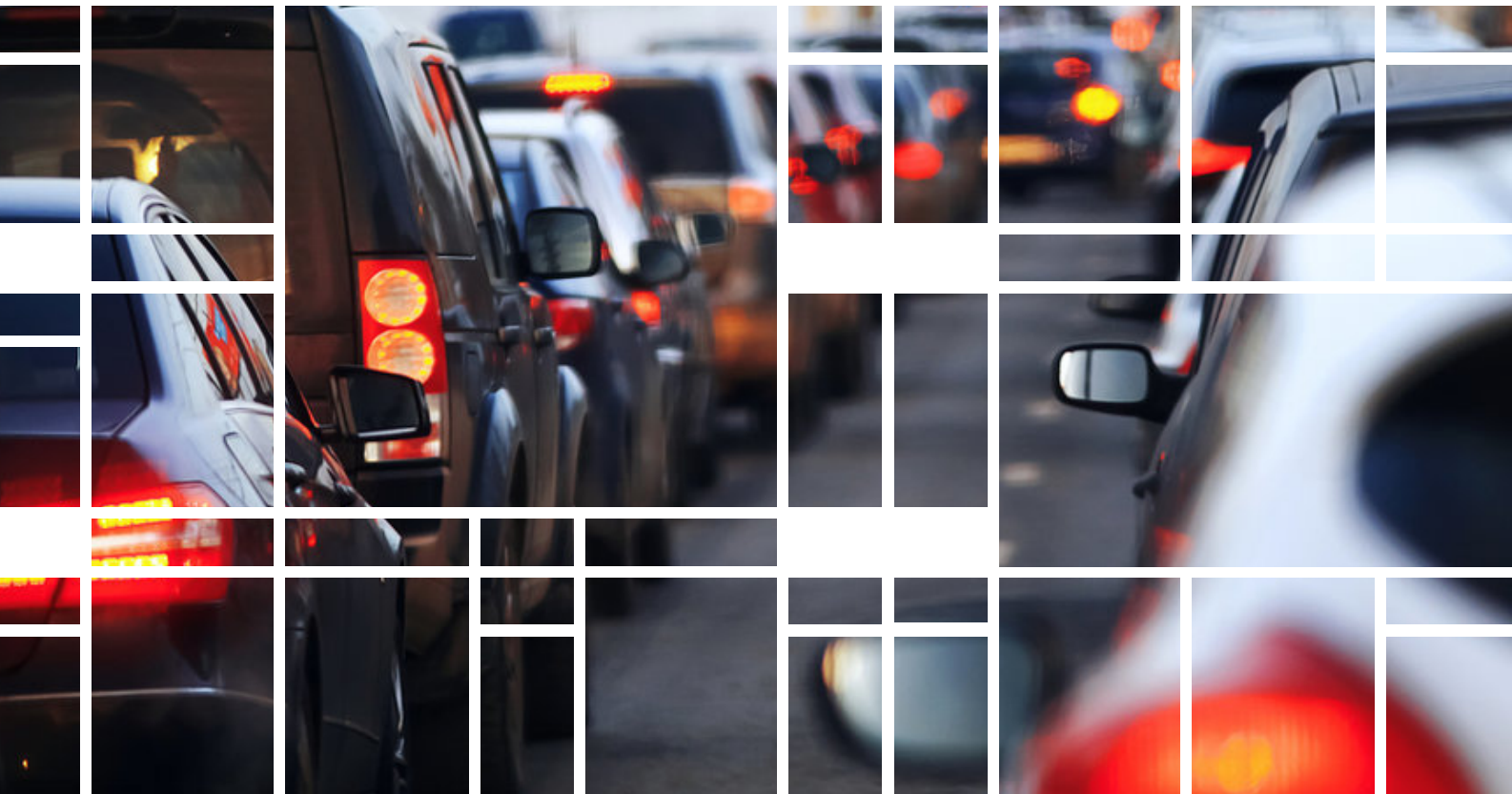
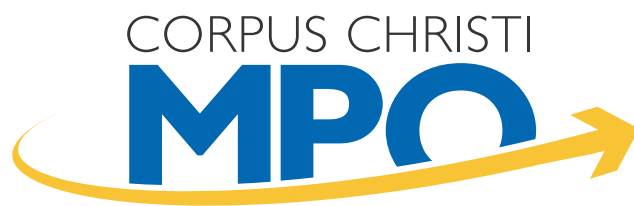


CMP



CONGESTION MANAGEMENT PROCESS

APPROVED BY THE TRANSPORTATION POLICY COMMITTEE - FEBRUARY 6, 2020
PENDING FEDERAL APPROVAL



METROPOLITAN PLANNING ORGANIZATION

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APPROVED BY THE CORPUS CHRISTI MPO TRANSPORTATION POLICY COMMITTEE – FEBRUARY 6, 2020

PENDING FEDERAL APPROVAL



Preparation of this report has been financed in part through grants from the Federal Transit Administration and the Federal Highway Administration of the U. S. Department of Transportation.

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Transportation Lexicon and Glossary

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.

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 required for all TMAs that addresses congestion management through the metropolitan planning process that provides for effective management and operation, based on a cooperatively developed and applied metropolitan-wide strategy of new and existing transportation facilities eligible for funding under Title 23 and Chapter 53 of Title 49 through the use of travel demand reduction and operational management strategies. The CMP is required under 23 CFR 500.109 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.

CSI – Commuter Stress Index: Accounts for the fact that most of the transportation network operate with much more volume or ridership (and more congestion) in one direction during each peak period. According to the TTI, the CS Index is calculated by dividing the time it takes to travel in the most congested direction during a peak period by the time it takes to take the same trip under free flow conditions.

EPA – U.S. Environmental Protection Agency: Agency of the United States federal government whose mission is to protect human and environmental health.

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

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

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.

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).

MPA – Metropolitan Planning Area: Encompasses the entire existing urbanized area and the contiguous area expected to become urbanized within a 20-year forecast period for the metropolitan transportation plan.

MPO – Metropolitan Planning Organization: The forum for cooperative transportation decision-making; required for urbanized areas with populations over 50,000.

MTP – Metropolitan Transportation Plan: 25-year long-range plan 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.

PBPP – Performance-based Planning and Programming: As defined the Federal Highway Administration, refers to the application of performance management within the planning and programming processes of transportation agencies to achieve desired performance outcomes for the multimodal transportation system.

PCI – Pavement Index Condition: A numerical index between 0 and 100 which is used to indicate the general condition of a pavement.

PTI – Planning Time Index: According to the Texas A&M Transportation Institute, PT Index represents the total travel time that should be planned when sufficient buffer time is included to account for anticipated congestion.

SOV – Single-Occupant Vehicle: A privately operated vehicle whose only occupant is the driver.

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).

TDM – Travel Demand Model

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.

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.

TPC – Transportation Policy Committee: Committee created for the purpose of serving as spokespersons for the citizens of the metropolitan area and is the designated MPO to prioritize and direct federal transportation funds to local projects. TPC is comprised of elected officials from the cities and two counties in the urbanized area. TPC representatives include TXDOT, CCRTA, and Port Authority. TPC is responsible for creating policies regarding transportation planning issues. TPC meetings, open to the public, is where members of the public can address the MPO on transportation issues. TPC meets on the first Thursday of each month at 2:00 P.M. at the Corpus Christi City Hall, City Council Chambers.

TTI – Travel Time Index: The TT Index is calculated by dividing the time it takes to travel during a peak period by the time it takes to take the same trip under free flow conditions. However, while averaging the conditions for both directions in both peaks provides an accurate measure of congestion, it does not always match the perception of the majority of commuters.

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

UA – Urbanized Area: A Census-designated urban area defined by a population range of 50,000 residents or more.

VMT – Vehicle Miles Traveled: This is an output of the travel demand model and is a measure of traffic flow over a highway segment. While 1000 vehicles traveling over a mile road and 1 vehicle traveling over 1000 miles are mathematically equal only the former 1000 vehicle mile means anything to the transportation planner.

Executive Summary

This Congestion Management Process will aid the region in managing traffic in the Corpus Christi region that is projected to grow by 146% by 2045. The CMP should be updated no less frequently than the same cycle as the metropolitan transportation plan updates – about every five years. Although collecting and re-evaluating the data to produce the annual and biennial reports is not a simple task, it is necessary to complete the monitoring requirement of the CMP.

In addition to the specific projects identified in this report, other policy recommendations are included as part of the overall recommendations. The increasing interplay among technology and transportation is especially noteworthy, and has accelerated tremendously since the previous CMP was issued; micro-transit initiatives are playing a large role in first-mile/last-mile solutions; private sector partnerships with peer-to-peer sharing companies (e.g., Uber and Lyft); and even motorized scooters are now filling several short-distance travel niches.

These broad policy actions are listed below; see the final section of this report for a more detailed description of each of these recommendations. The performance areas addressed by each project or policy requires resources to implement them, and timing considerations.

1. Implement Ramp Metering on I-37, Tx 358
2. Support Private and Public Sector Technology Solutions
3. Implement Smart Corridors Policy and Infrastructure
4. Emphasize Non-Recurring Congestion (traffic safety) in Planning and Design

These more policy-focused recommendations merit consideration region-wide, while the 6 tiers of strategies listed below are targeted primarily for the corridors of concern and the corridors of note. The annual reporting process is a guide that can help effectively target available funding resources to those areas with the most severe congestion.

- Tier 1 – Reducing and Shortening Trips
- Tier 2 – Encouraging a Shift to Alternative Modes
- Tier 3 – Increasing Vehicle Occupancy and Shifting Travel Times
- Tier 4 – Improving Roadway Operations Without Expansion
- Tier 5 – Traffic Incidence Management
- Tier 6 – Increasing Physical Capacity of the System

Section 1: Introduction

WHAT IS THE CONGESTION MANAGEMENT PROCESS (CMP)?

A Congestion Management Process (CMP) is a federally required effort for metropolitan areas that are designated as Transportation Management Areas (TMAs). A TMA is a Census Bureau designated urban area with more than 200,000 residents. The Federal Highway Administration (FHWA) defines a CMP as:

“a systematic and regionally accepted approach for managing congestion that provides accurate, up-to-date information on transportation system performance and assesses alternative strategies for congestion management that meets state and local needs.”

A sound, effective CMP integrates with the entire metropolitan planning process, working to achieve the goals and objectives outlined in the long-range transportation plan and influencing the prioritization and programming of projects for the short- and medium-term. CMPs provide transparent structure and information to decision-makers by analyzing system performance and assessing alternative strategies to improve performance. Strategies are attainable policies or projects that are tailored to local, state, and regional needs. The Corpus Christi Metropolitan Planning Organization (MPO) CMP:

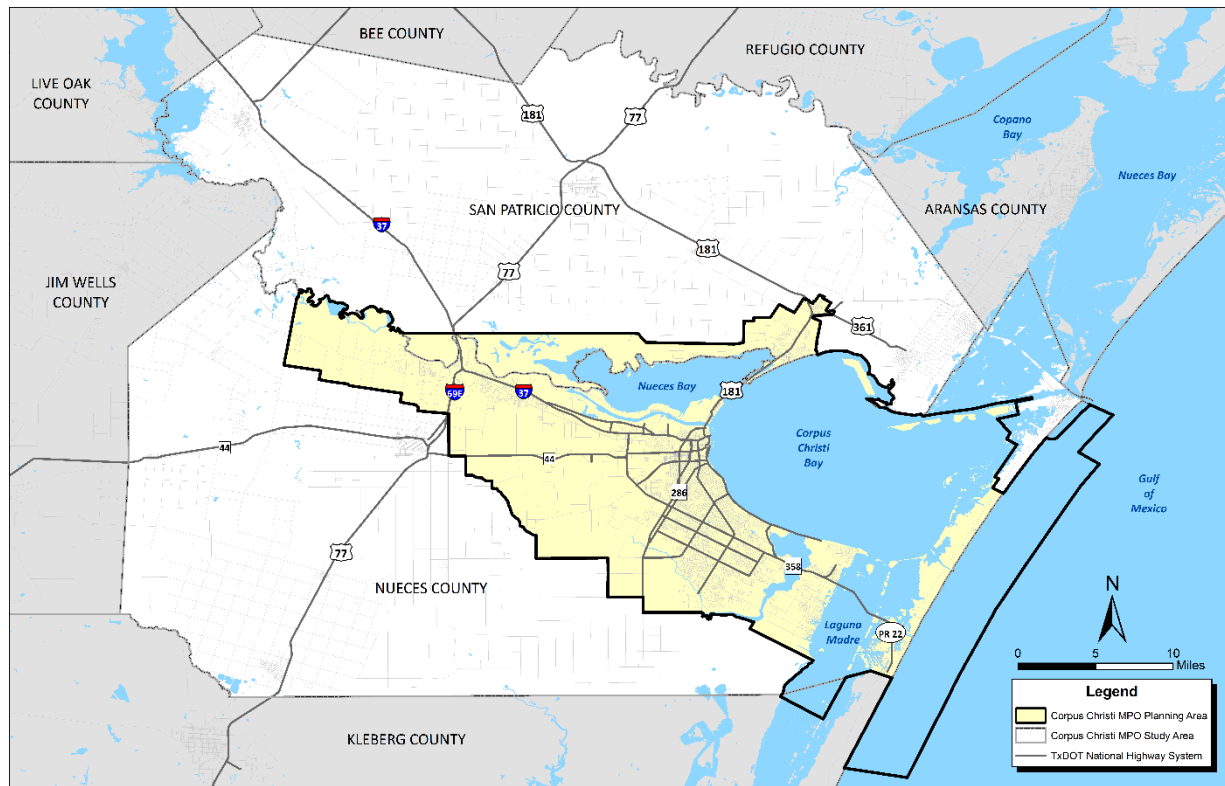
- Identifies Regionally Significant Corridors (RSC);
- Defines congestion;
- Identifies congested locations;
- Determines the causes of recurring and nonrecurring congestion;
- Provides a toolbox of policies and projects to manage the congestion;
- Evaluates the potential of these policies and projects for each identified corridor;
- Lists performance measures and adopts specific targets to assess the effectiveness of policies and projects against;
- Establishes a program for data collection to measure system performance; and
- Sets priorities among projects for incorporation into both the 25-year Metropolitan Transportation Plan (MTP) and the 4-year Transportation Improvement Program (TIP).

A periodic CMP performance report is published describing the change in performance measures. The performance report will identify effective strategies for congestion management, enabling the region to methodically improve system performance.

WHAT IS THE CORPUS CHRISTI METROPOLITAN PLANNING ORGANIZATION?

Every urban area with a population of more than 50,000 people has a designated Metropolitan Planning Organization (MPO) to ensure that highway and transit projects that use federal funds come from a credible planning process and meet local priorities. Unites States Department of Transportation will not approve federal funding for urban highway and transit projects unless they are on the MPO's MTP or TIP list. The MPO's role is developing and maintaining the necessary documents to assure that federal funds support regional needs. The Corpus Christi Metropolitan Planning Organization covers the urban portions of Nueces and San Patricio counties shown in Exhibit 1-1.

Exhibit 1-1. Map of Corpus Christi Metropolitan Planning Organization Planning Area



HOW DOES THE CONGESTION MANAGEMENT PROCESS WORK?

The CMP identifies key routes, determines what is acceptable and unacceptable congestion, and then uses goals and performance measures to identify congestion hotspots along the corridors of concern, and a toolbox of possible policies or projects to improve travel within each corridor. This toolbox of policies and projects is not prescriptive and should be customized to each individual corridor and the surrounding community. The CMP also identifies emerging / regionally significant issues that may impact regional travel during the next 25 years that merit proactive consideration, such as autonomous vehicles or developments that will significantly increase freight or personal travel. This CMP will aid the region in managing traffic in the Corpus Christi region that is projected to grow by 146% by 2045.

FEDERAL AND STATE REQUIREMENTS

The CMP requires that policies or projects that reduce congestion without building new or wider roads are used **before** the decision is made to build a new or wider road. This promotes efficient use of existing transportation infrastructure and allows limited funding to benefit a wider area. Federal regulations specify an effective CMP should include:

- Methods to monitor and evaluate the performance of the multimodal transportation system, identify the underlying causes of recurring and non-recurring congestion, identify and evaluate alternative strategies, provide information supporting the implementation of actions, and evaluate the effectiveness of implemented actions;
- The regional definition of congestion management with objectives and appropriate performance measures to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of people and goods;

- A description of the coordinated program for data collection and system performance monitoring to define the extent and duration of congestion, to contribute in determining the causes of congestion, and evaluate the efficiency and effectiveness of implemented strategies;
- Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies that will contribute to the more effective use and improved safety of existing and future transportation systems based on the established performance measures;
- Identification of an implementation schedule, responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed; and
- Implementation of a process for periodic assessment of the effectiveness of implemented strategies, in terms of the area's established performance measures. The results of this evaluation shall be provided to decision-makers and the public to provide guidance on selection of effective strategies for future implementation.

The CMP is intended to maximize benefits from capital investments in transportation. The alternative strategies may include transportation demand management strategies, traffic operational improvements, public transportation improvements and ITS technologies. Projects that do physically add lanes to increase Single Occupant Vehicle (SOV) capacity must result from the CMP unless it is identified as a necessary safety improvement. Per 23 CFR §450.322 of the federal regulations governing metropolitan transportation planning, a CMP is required to include the following:

- Regional goals to reduce vehicle miles traveled during peak commuting hours and improve transportation connections between areas with high job concentration and areas with high concentrations of low-income households;
- A list of existing public transportation services, employer-based commuter programs, and other existing transportation services that support access to jobs in the region; and
- A list of proposed projects and programs to reduce congestion and increase job access opportunities.

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. If a roadway expansion projects is deemed necessary, the CMP must identify all the other regional demand and operational management strategies to maintain the functional integrity and safety of the project into the future.

MPOs are the regional repository of data that illustrate the relationship between land use, transportation and quality of life. CMP results are best displayed in graphical format that is easy for non-transportation audiences to understand. The information in the CMP should help MPO member agencies, partner agencies, and the public understand effective solutions to congestion at each location.

THE CORPUS CHRISTI MPO CONGESTION MANAGEMENT PROCESS (CMP)

The Corpus Christi MPO is required to update the CMP every 5 years. The last compliant Congestion Management Process was adopted by the Transportation Policy Committee (TPC) in 2009. The 2017 CMP that was approved by the TPC did not meet federal standards for the 8 steps of the process. The 2018 resubmittal also did not rise to the level of compliance. This 2019 submittal used the following 8 steps in order to refine the regional congestion management process.

Step 1: Develop Regional Objectives

This step in the process answers the question: "What outcome is desired from investing transportation resources?" It may not be feasible or desirable to try to eliminate all congestion, and so in this step it is important to define the regional objectives for congestion management that are designed to achieve the desired outcome. Some MPOs also define congestion management principles, which shape how congestion is addressed from a policy perspective.

Step 2: Define the Congestion Network

This step answers the question, "What components (roads, transit routes, freight routes, etc) of the transportation system are the focus?" and involves defining the corridors and elements within the corridors that are analyzed.

Step 3: Develop Multimodal Performance Measures

In this step, the CMP addresses the questions, "At what level of delay does the Corpus Christi MPO TPC believe using federal funds is required for intersections and roads? What are the best ways of determining when unacceptable conditions exist?" This step involves developing performance measures to measure congestion on both a regional and local scale. These performance measures should support the regional objectives.

Step 4: Collect Data/Monitor System Performance

After performance measures are defined, the next step in the process is to collect and analyze data to determine, "How does the transportation system perform?" Data collection may be on-going and involve a wide range of data sources from various planning partners.

Step 5: Analyze Congestion Problems and Needs

Using available data and analysis techniques, in the next step in the process the CMP answers the questions, "What congestion problems are present in the region? Where are future congestion problems forecast?" and "What are the causes of unacceptable congestion?"

Step 6: Identify and Assess Strategies

Working together with the MPO's planning partners, in the next step in the process the CMP addresses the question, "What strategies are appropriate to mitigate congestion?" This step involves both identifying and assessing potential strategies and may include efforts conducted as part of the development of the Metropolitan Transportation Plan (MTP), corridor studies, or project studies.

Step 7: Program and Implement Strategies

This action answers the question, "How and when will solutions be implemented?" The strategies listed here are included in the MTP, along with determining funding sources, matching and prioritizing strategies to corridors, allocating funding in the TIP, and ultimately, implementing these strategies.

Step 8: Evaluate Strategy Effectiveness

Finally, efforts should be undertaken to assess, "What have we learned about implemented strategies?" This action may be tied closely to monitoring system performance under Step 4 (above) and is designed to inform future decision making about the effectiveness of transportation strategies.

Section 2: Metropolitan Plan Goals and Performance Measures

Performance-based planning is legislatively required by 2015's Fixing America's Surface Transportation Act, the "FAST Act". Although MPOs are largely enabled to establish their own goals and objectives, the FAST Act's predecessor, 2012's Moving Ahead for Progress in the 21st Century (MAP-21), introduced a standard set of National Goals to harmonize planning among regions and between States. Under this unified framework, States and MPOs invest resources in projects that collectively make progress toward the achieving the following National Goals:

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

REGIONAL GOALS

Using these National Goals as a foundation, the Corpus Christi MPO developed regional Goals as part of the 25-year Metropolitan Transportation Plan framework. This helps to guide the planning and programming of projects within the planning boundary. Performance Measure Topics provide a categorical framework for selected performance measures and provide linkage to broader regional goals and objectives. The CMP work within the performance-based planning and programming framework toward the achievement of Goals and Objectives related to congestion and safety.

The Corpus Christi MPO Goals for the 2045 MTP are:

- 1) Significantly reduce traffic fatalities and serious injuries on all public roads.
- 2) Manage regional transportation assets into a state of good repair.
- 3) Reduce congestion on Regionally Significant Corridors (RSC).
- 4) Efficiently invest in and operate the surface transportation system.
- 5) Improve regional freight transportation facility performance.
- 6) Use transportation investments to improve the regional economy.
- 7) Protect and enhance communities, the natural environment, and historic and cultural resources.
- 8) Provide an equitable transportation system for all, regardless of age, ability, race, ethnicity, or income.

The Corpus Christi MPO's member entities and general public within the Corpus Christi MPO have indicated through the Corpus Christi MPO's routine planning processes that congestion is not the highest priority issue when prioritizing transportation infrastructure investments. Capturing the full spectrum of regional priorities in

the transportation planning process, the CMP includes all MTP goals and performance targets and not just the congestion goal. The sections below synthesize performance measure data to evaluate progress toward other regional goals and objectives that may only *indirectly* relate to congestion.

REGIONAL PERFORMANCE MEASURES AND TARGETS

At the core of the CMP are its performance measures; measurable metrics used to evaluate the effectiveness of specific functions of the regional transportation system. 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.

Performance measures are used at two levels of analysis:

- **Regional scale** performance measures are used to evaluate the functionality of the regional metropolitan transportation system and to assess progress towards regional goals and objectives. Data for individual regional measures (or for multiple measures in a composite index) can be compared to state or national benchmarks and to region-specific performance targets to track progress over time.
- **Corridor scale** performance measures are used to evaluate effectiveness and rank the projected return on investment (toward regional goals) among individual projects for the Corpus Christi MPO's 25-year MTP and 4-year TIP.

The Corpus Christi MPO performance measures were distilled from required state and federal measures, as listed in the Decision Lens tool provided by TxDOT. Targets are statewide targets that the Corpus Christi MPO supported. If there were no applicable state performance measures, then other national information was used. The following goals have a direct impact on managing congestion.

1) Significantly Reduce Traffic Fatalities and Serious Injuries:

Safety is the highest priority in the 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).

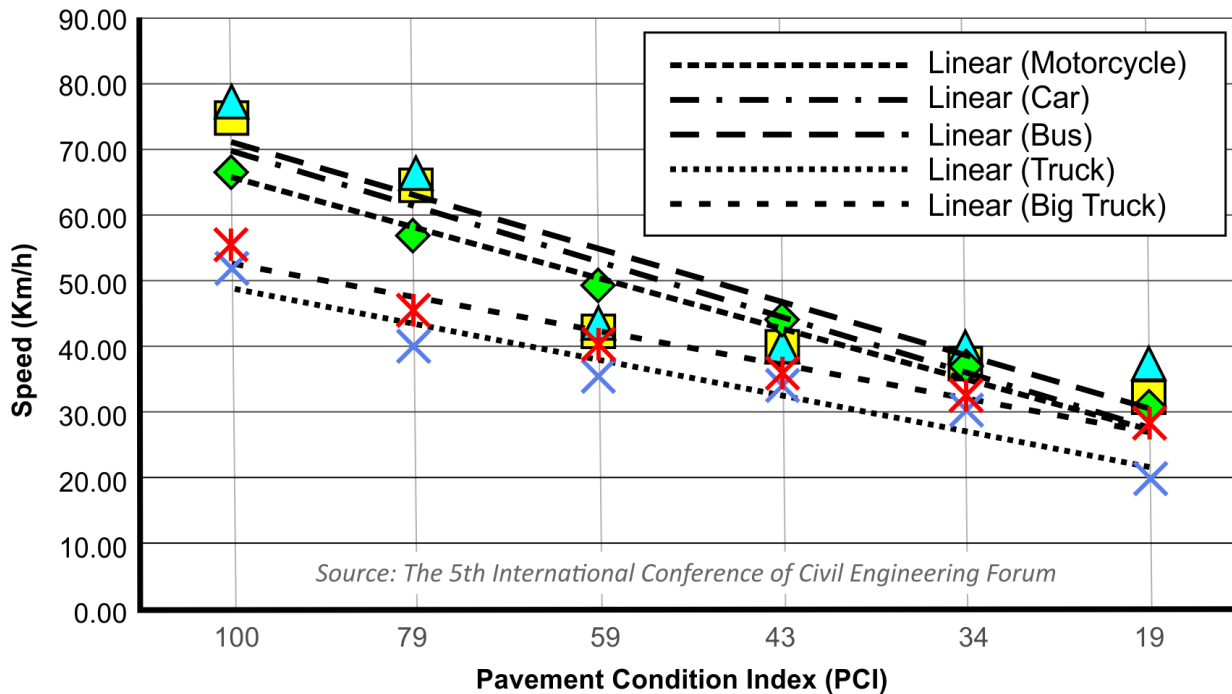
Detailed analyses of all crashes within Regionally Significant Corridors (RSC), at the spot level, are recommended using rigorous software such as Vision Zero Suite®. This tool will identify cost-effective safety projects that could be implemented in high crash locations or where there are already maintenance or construction activities scheduled, thereby reducing mobilization costs.

2) Manage regional transportation assets into a state of good repair:

Transportation assets impact congestion in two distinct ways. The first, roads in poor condition generally lead to slower traffic as drivers seek to avoid potholes and other roadway impediments. A corollary to this is that the capacity of road decreases when road roughness increases. *“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.”

Exhibit 2-1. Chart of The Effects of Pavement Condition on Vehicle Speeds and Motor Vehicle Emissions



Source: The 5th International Conference of Civil Engineering Forum

Secondly, 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. It is also a possible reason that travel on arterials in the Corpus Christi MPO area is 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 lower than those other MPOs.

Some type of bridge and pavement management system, potentially FHWA’s free tool the Highway Economic Requirements System – State (HERS-ST), is recommended to identify the approximate cost-schedule for roadway and bridge maintenance needs throughout the region so that projects may be coordinated with other transportation construction activities and utility infrastructure work. HERS-ST can determine the most economically desirable combination of maintenance projects for specified funding levels and it can also determine the minimum maintenance funding levels needed in order to reach specified performance targets.

3) Reduce congestion on Regionally Significant Corridors.

In the Corpus Christi MPO traffic congestion and travel time reliability metrics are, at a system-wide level, trending in a negative direction. Section 3 of this report, Defining the CMP Network, defines the Regionally Significant Corridors (RSCs) and Section 4, Defining Congestion, defines congestion for both road segments and intersections. Two key metrics that are monitored are delay per capita and the duration of the congested period. Section 5, System Performance Monitoring and Data Collection describes the data monitoring that occurs.

Performance for the Performance Measure Final Rule 3 (PM3) measures is assessed and reported over a four-year performance period. For the PM3 measures, the first performance period began on January 1, 2018 and will end on December 31, 2021. TxDOT reported baseline PM3 performance and targets to FHWA and will report updated performance information at the midpoint and end of the performance period. The second four-year performance period will cover January 1, 2022, to December 31, 2025, with additional performance periods following every four years. 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

Exhibit 2-2. Table of Targets for PM 3 Measures

Measure	Region	2014	2015	2016	2017	2020*	2022*	2045
Level of Travel Time Reliability on Interstates (LOTTR-I)**	Corpus Christi MPO	100%	100%	98%	100%	92%	84%	95%
	Texas	79%	78%	79%	80%	67%	62%	N/A
Level of Travel Time Reliability on Non-Interstate National Highway System (LOTTR-NI)**	Corpus Christi MPO	96%	95%	94%	97%	95%	93%	85%
	Texas	60%	60%	59%	80%	71%	62%	N/A
Level of Truck Travel Time Reliability on the National Highway System (LOTTTR)***	Corpus Christi MPO	1.16	1.22	1.22	1.15	1.19	1.21	1.35
	Texas	2.1	2.01	2.24	1.39	1.45	1.5	N/A

*2020 and 2022 values are forecast by TxDOT

**Higher is better

***Lower is better

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.

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

4) Efficiently operate, and invest in, the surface transportation system.

The transportation system underlies all economic activity, allowing consumers, workers, and firms to coordinate to mutual advantage. Getting infrastructure decisions right is a core part of economic policy. Efficient transportation systems are those that enable people to access destinations while reducing vehicle miles traveled, overall transportation costs, reducing traffic congestion, enabling the use of more efficient vehicles, decreasing vehicle emissions, reducing vehicle wear and tear, and saving time for drivers. The Corpus Christi MPO will examine the RSCs and obtain the percent of person-miles traveled on the Interstates that are reliable and the percent of person-miles traveled on the non-Interstate National Highway System (NHS) that are reliable. Also important in evaluating changes in efficiency are the vehicle miles of travel per capita and the miles of roads per capita.

The lifespan of infrastructure projects, and the benefits they provide can extend across generations, making the costs to operate and maintain the infrastructure at least as important as the initial cost to build the

project. The consideration of all three; the costs to build, operate and maintain a project is known as life-cycle cost. Efficient selection of infrastructure projects is crucial in a resource constrained world and the use of life-cycle benefit analyses can provide critical information on efficiency of investments. Investment in technology and other non-infrastructure improvements may improve regional travel more efficiently than infrastructure improvements.

In order to verify efficient and effective investments are made, a life-cycle benefit-cost analysis should be reported individually on all major infrastructure investments and upon several scenarios of portfolios of projects prior to final selection for inclusion into the TIP and MTP. These analyses will report both the Benefit/Cost Ratio (BCR), Internal Rate of Return (IRR) and the Net Present Value (NPV) of investments. The NPV indicates the quantity by which a project's total measurable benefits exceed its total measurable costs.

5) Improve regional freight transportation facility performance.

The efficient movement of goods greatly influences the economic competitiveness of a region. This is especially true in the Corpus Christi MPO region where the regional economy is centered on transportation, distribution, and logistics. Growing international trade markets, expanding trade through the Panama Canal and diversifying and growing employment are directly impacting travel within the region. The Texas Priority Freight Network (TPFN) identifies key freight movement corridors and gateways. Establishing this integrated and multimodal freight transportation system is a critical to facilitating efficient freight mobility in Texas. The TPFN is a statewide network of high priority highway, rail, and waterway transportation corridors connecting the Port of Corpus Christi (POCCA) to inland ports such as Laredo and San Antonio. Texas' ability to maintain its position as a leader in the global economy depends on the strength of its multimodal freight transportation system. The Corpus Christi MPO will evaluate the RSCs to determine the percent of lane miles on the interstate and non-interstate NHS for the Truck Travel Time Reliability index, with critical freight corridors highlighted. The team will also compile the annual congestion costs for trucks, and delay on the critical freight corridors.

To help coordinate regional investments, the Corpus Christi MPO should collaborate with the POCCA using a rigorous tool, such as TREDPLAN-Ports to evaluate vulnerability risks and opportunities impacting the region and the port, especially as industries and markets change over time. The tool can compare the POCCA to competitors and peers to identify the market position in contested markets, assess how the region's freight markets may change in the future relative to those of competitors and peers, and finally assess the region's relative reliance on various domestic and international trading partners.

6) Use transportation investments to improve the regional economy.

Infrastructure investment is closely linked to economic output. In the short term it stimulates demand, creating employment in construction and related industries, and in the long term it boosts supply, enhancing an economy's productive capacity. For example, a new road may facilitate more trade, and it would likely support even more jobs long after the project's completion. This is known as the "multiplier effect," whereby each dollar spent on infrastructure may translate into greater than \$1 worth of gains for the region. A similar example is the widening and deepening of the shipping channel to the POCC. This \$100 million investment will provide economic benefits for decades.

Econometric analyses, using a rigorous tool such as the Transportation Economic Development Impact System (TREDIS®), should be done individually on all major infrastructure investments and upon scenarios of portfolios of projects prior to final selection for inclusion into the TIP and MTP. This tool will assess the economic benefits and impacts to the region on jobs, household income, business output and gross regional product associated with the different investments. It will also show the public return on investment (ROI) for transportation dollars from all sources, local, state, and federal spent on transportation in the region and quantify the Corpus Christi MPO's economic dependence on different passenger and freight modes of transportation.

7) Protect and enhance communities, the natural environment, and historic and cultural resources.

Transportation decision-making is primarily a process of making trade-offs between different policies and projects that change the regional community's ability to travel to jobs, schools, hospitals, shopping, and entertainment. These changes may reduce congestion by making some trips by motor vehicle unnecessary. Some projects make access faster, some projects make access more difficult, depending on how people travel. This concept, called accessibility, is central to all purposeful travel. Connectivity within a street or transit network as well as between networks, such as walking or cycling to public transit stations, is a critical component of accessibility. For example, wider roads designed to maximize automobile traffic speeds tend to create barriers to walking and bicycling, reducing non-auto access. Similarly, more dense land uses can reduce automobile travel speeds or parking supply, but improve walking, bicycling and public transit accessibility. The Corpus Christi MPO will evaluate each RSC to quantify existing accessibility conditions and identify how transportation and land-use changes may improve or degrade accessibility. The Corpus Christi MPO recommends use of a multi-modal level-of-service indicator and models to measure the travel distances, travel time and travel costs required by various types of transport system users to access various types of services and activities along the corridors. Good measures of increased accessibility, and therefore travel efficiency, are decreased miles traveled per capita and decreased lane miles of roads per capita.

8) Provide an equitable transportation system for all, regardless of age, ability, race, ethnicity, or income.

The Corpus Christi MPO staff will evaluate the project portfolios for both the MTP and the TIP for conformity to the USDOT Title VI and Environmental Justice requirements. An analysis of the distributive effects of investments and policies, possibly aided by the Environmental Protection Agency's free tool EJSCREEN, will assist with determining who receives transportation user benefits, who pays the costs of projects, and who bears the brunt of negative impacts. A Distributive Equity analysis measures the fairness of the allocation of costs, benefits, and other consequences. The purposes of these analytics are determining if there is a "mismatch" between who benefits, who pays, and who must tolerate the worst effects, making sure that protected populations receive benefits that are as timely and of the same magnitude the general population. Exhibits 2-3 through 2-6 show Minority populations and Low income in the Corpus Christi MPO region, along with proximity to traffic noise and exposure to ground level ozone.

Exhibit 2-3. Map of Minority Population

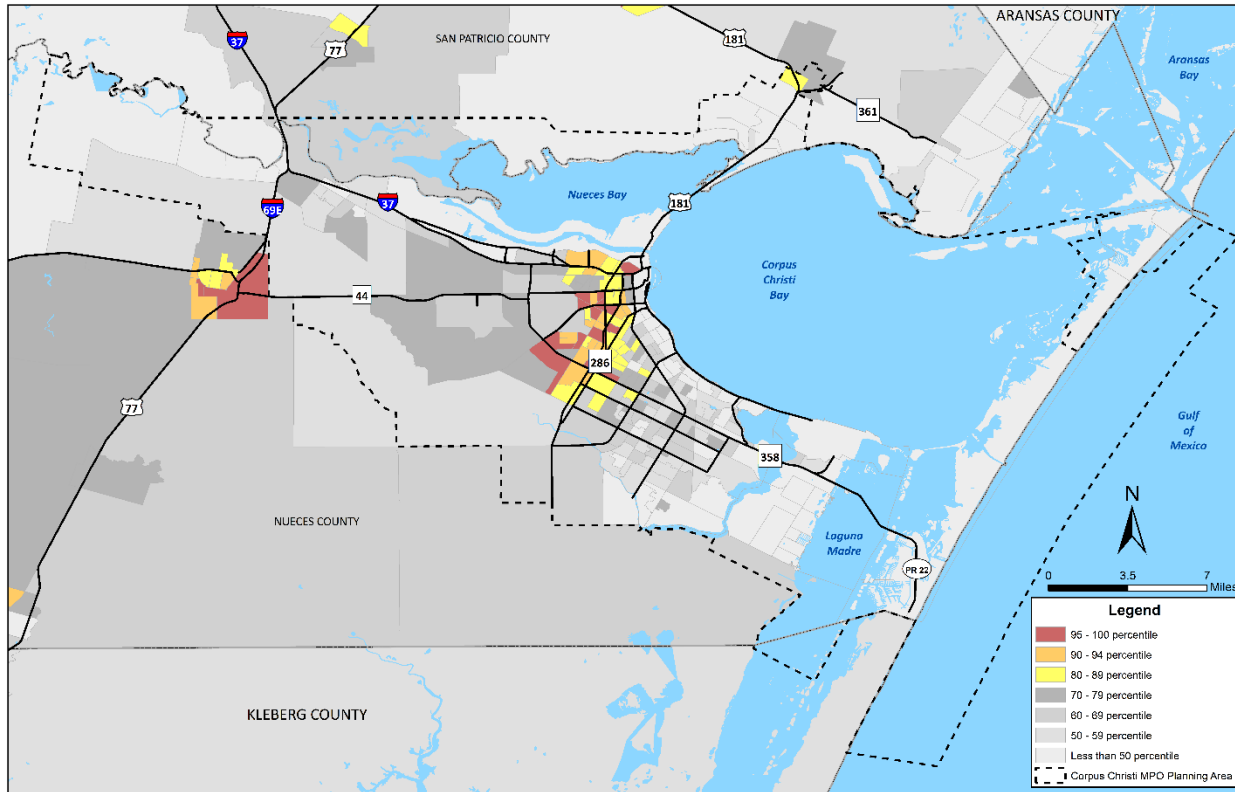
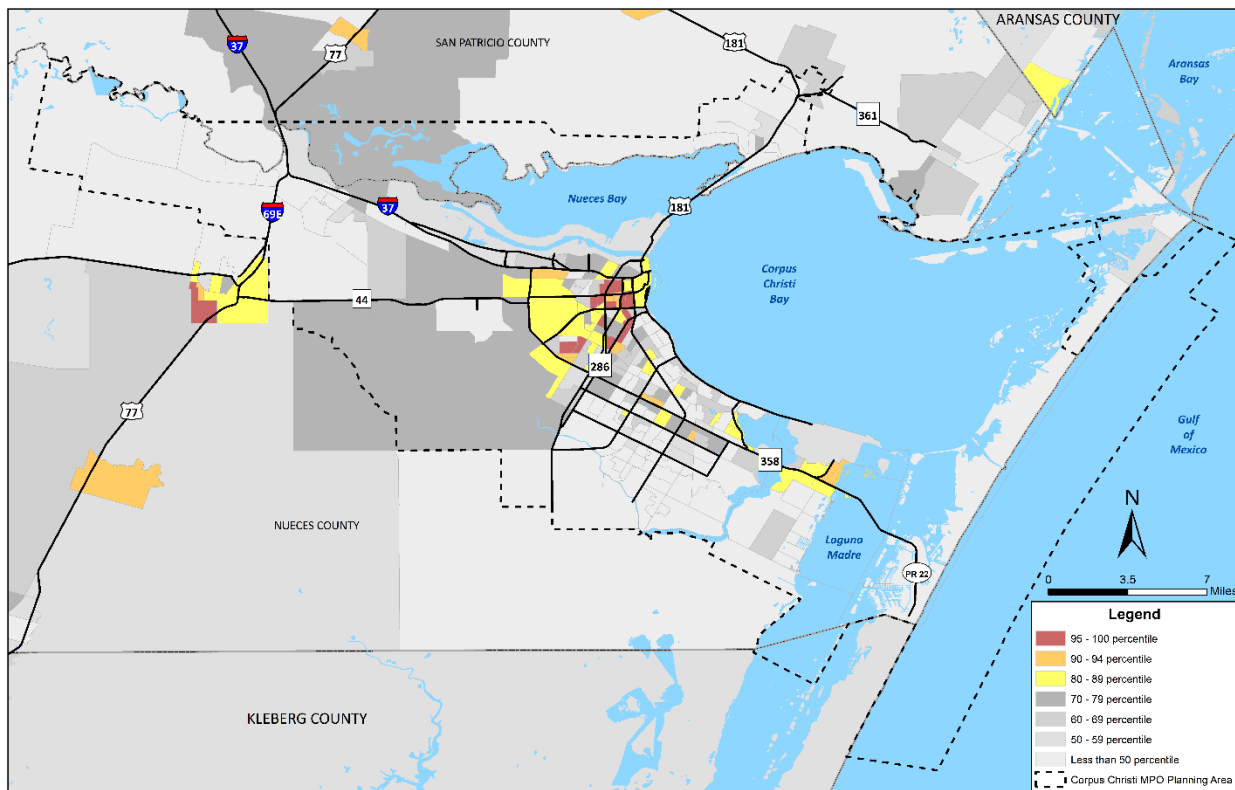
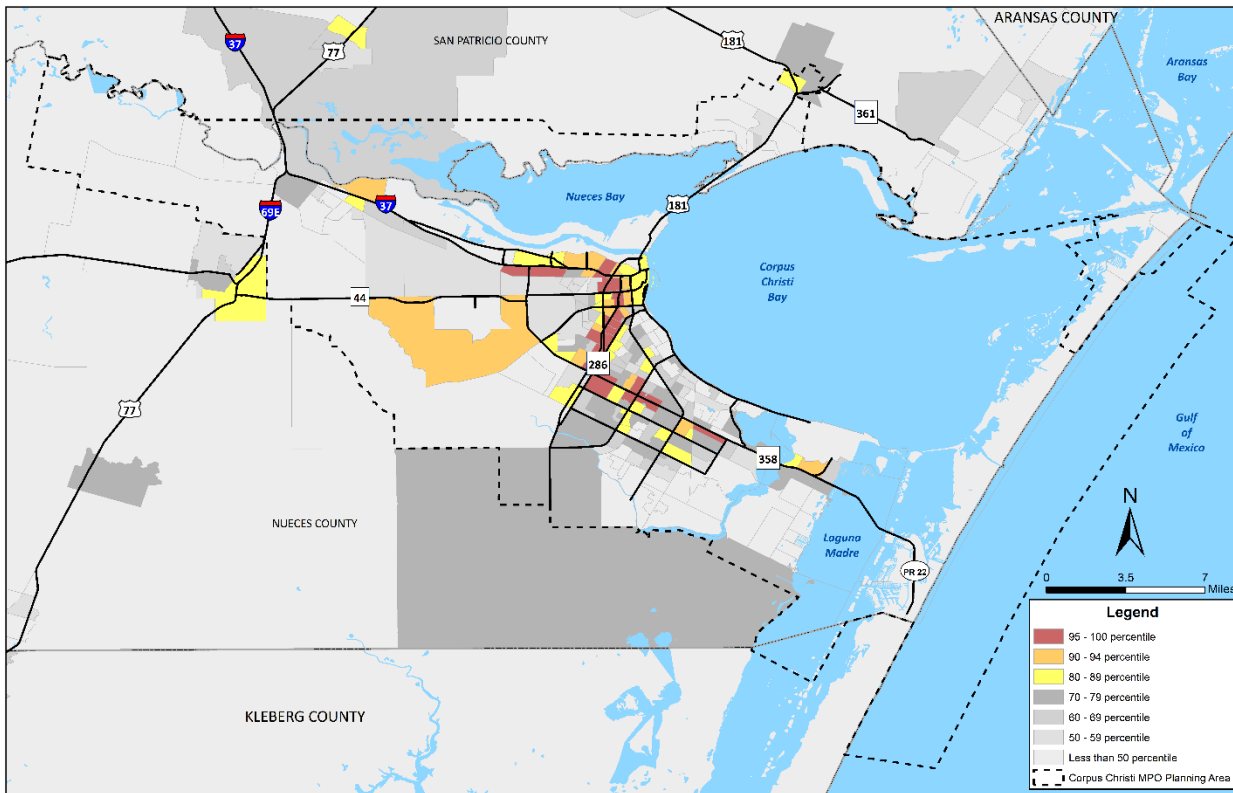
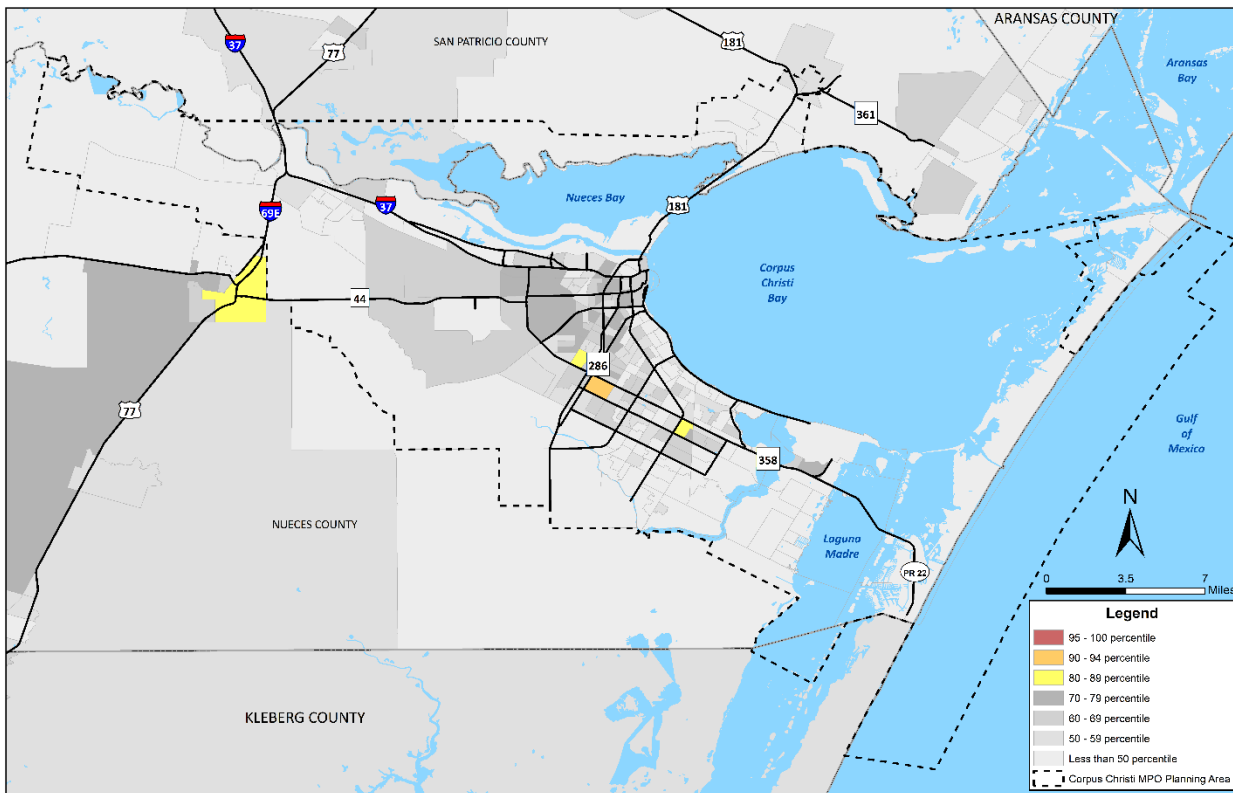


Exhibit 2-4. Map of Low-Income Population







Section 3: Defining the Congestion Management Process Network

The CMP network includes the physical infrastructure which supports multiple modes of mobility, including personal and freight vehicles, transit, and other active modes. Holistic and integrated consideration of all modes is critical to identifying and employing strategies to reduce demand for single occupancy vehicle (SOV) travel.

GEOGRAPHIC BOUNDARY AND NATIONAL HIGHWAY SYSTEM

The CMP focuses on all Regionally Significant Corridors (RSC) identified for the 2020-2045 MTP. The RSC designation allows the Corpus Christi MPO to focus the very limited transportation funding on projects that improve regional travel. In general, congestion in the region occurs on the RSCs. A RSC is an important link in the regional multi-modal network comprised of existing or new transportation corridors that connect communities and/or activity centers by facilitating the timely and safe movement of people, goods, information, and services. The following criteria were used to identify the Corpus Christi MPO RSCs.

- The Geographic Boundary of the RSCs is the MPO's Metropolitan Planning Area (MPA), defined as the area that is currently urban in nature according to the US Census, plus the areas that is projected to urbanize over the next 25 years. The Corpus Christi Urbanized Area (UA), the MPA, and the broader MPO Study Area are shown in Exhibit 3-1.
- The National Highway System (Interstates, US highways, and principal arterials) (Exhibit 3-1)
- Texas Highway Freight Network (Exhibit 3-2)
- The roadways which serve as Hurricane Evacuation Routes (Exhibit 3-3)
- Regionally significant non-motorized routes both on street and off street (Exhibit 3-4)
- CCRTA Transit Routes (Exhibit 3-5)

Exhibit 3-1. Map of Corpus Christi MPO Planning Area

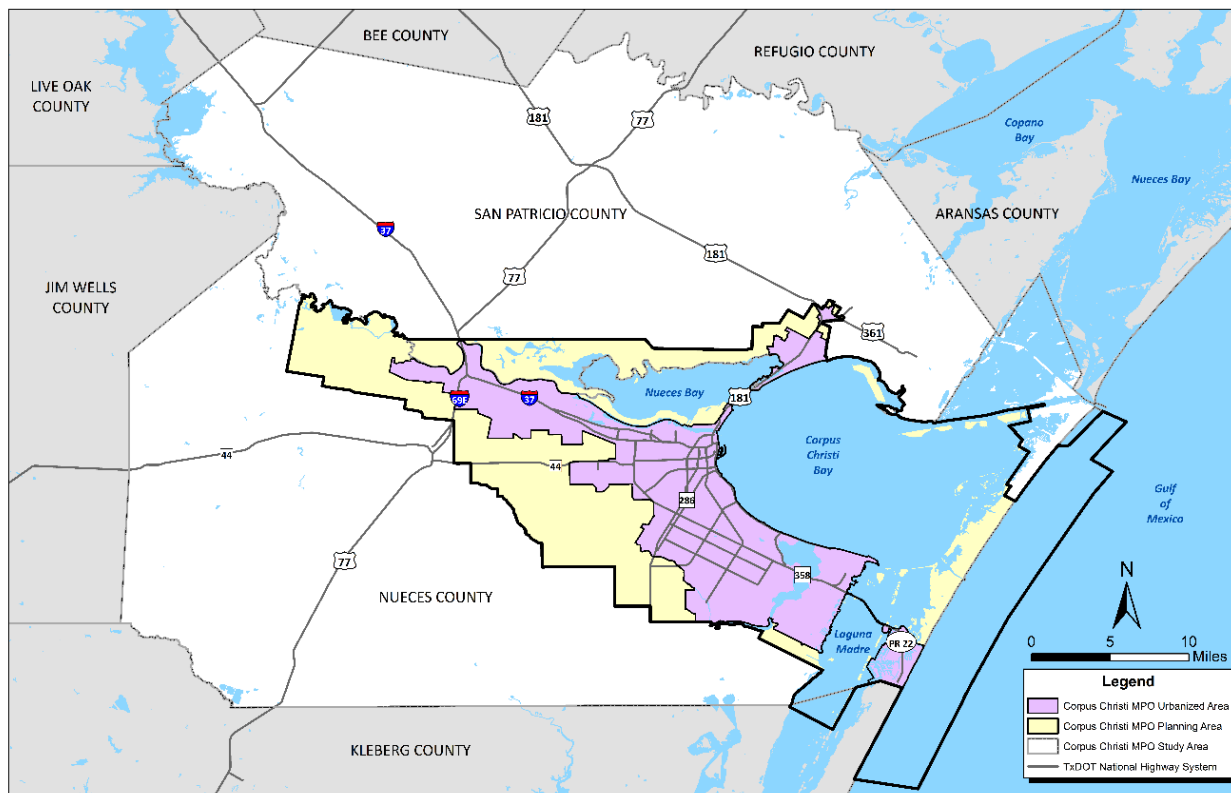


Exhibit 3-2. Map of Texas Highway Freight Network

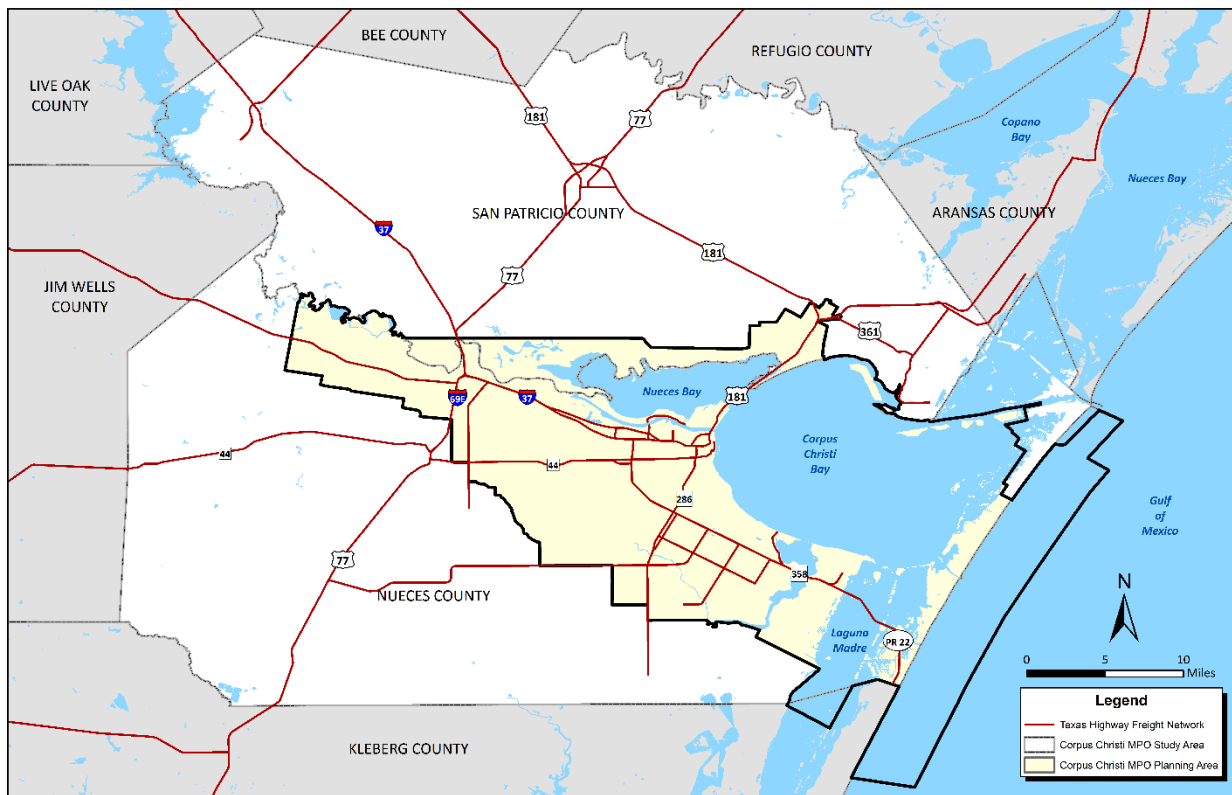


Exhibit 3-3. Map of Hurricane Evacuation Routes

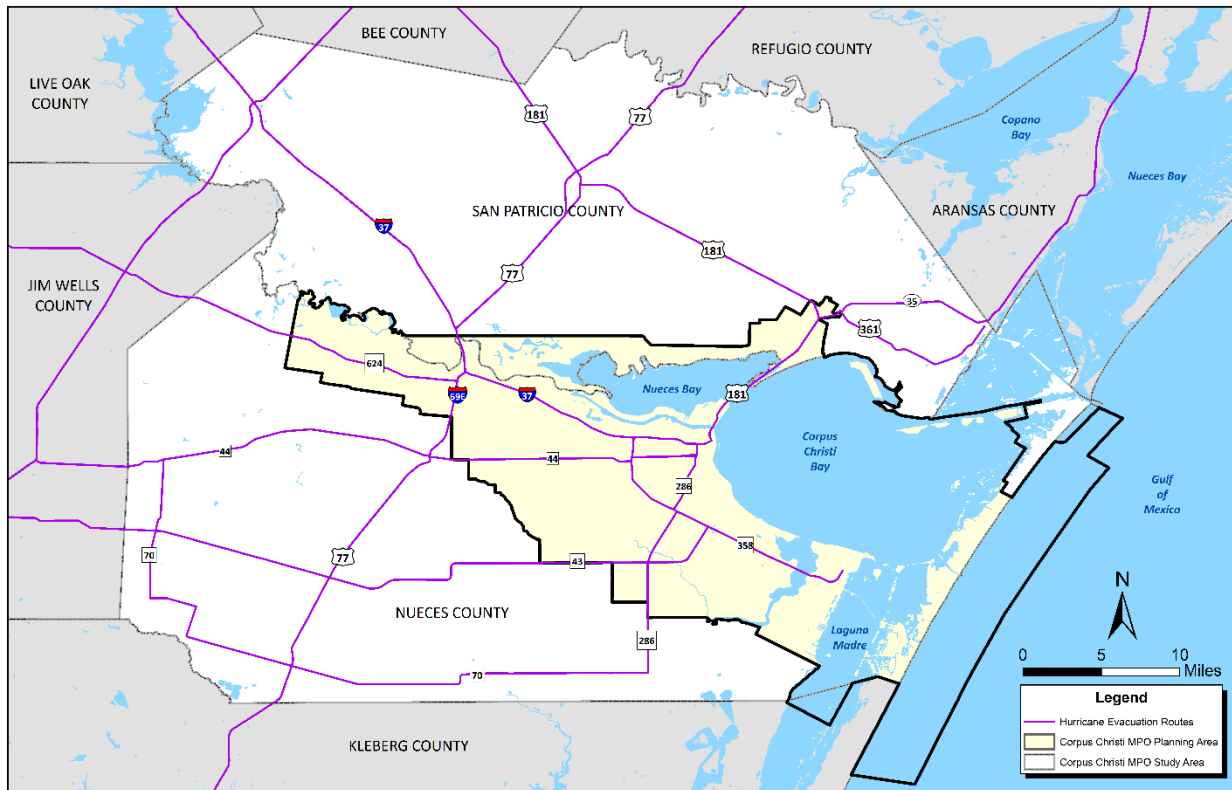


Exhibit 3-4. Map of CCRTA Transit Routes

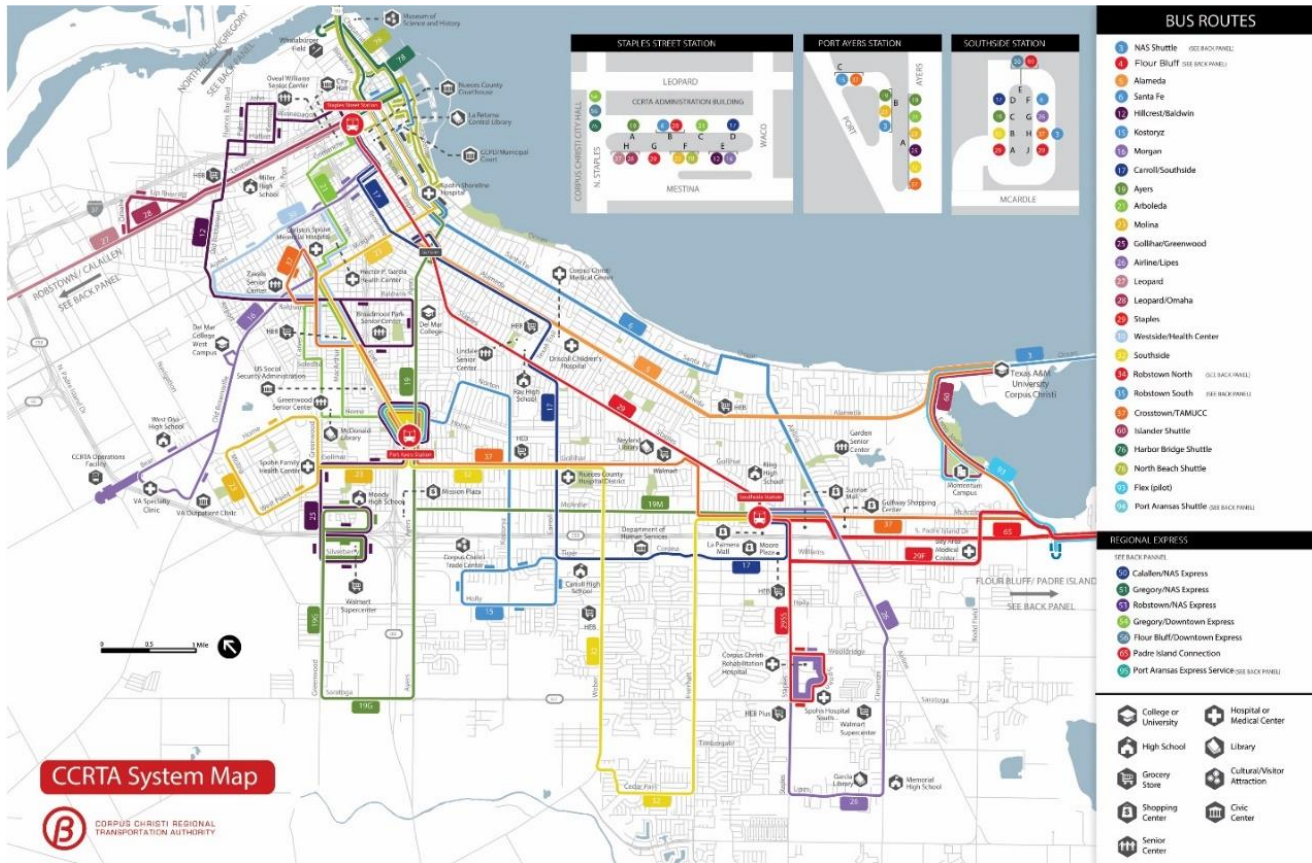
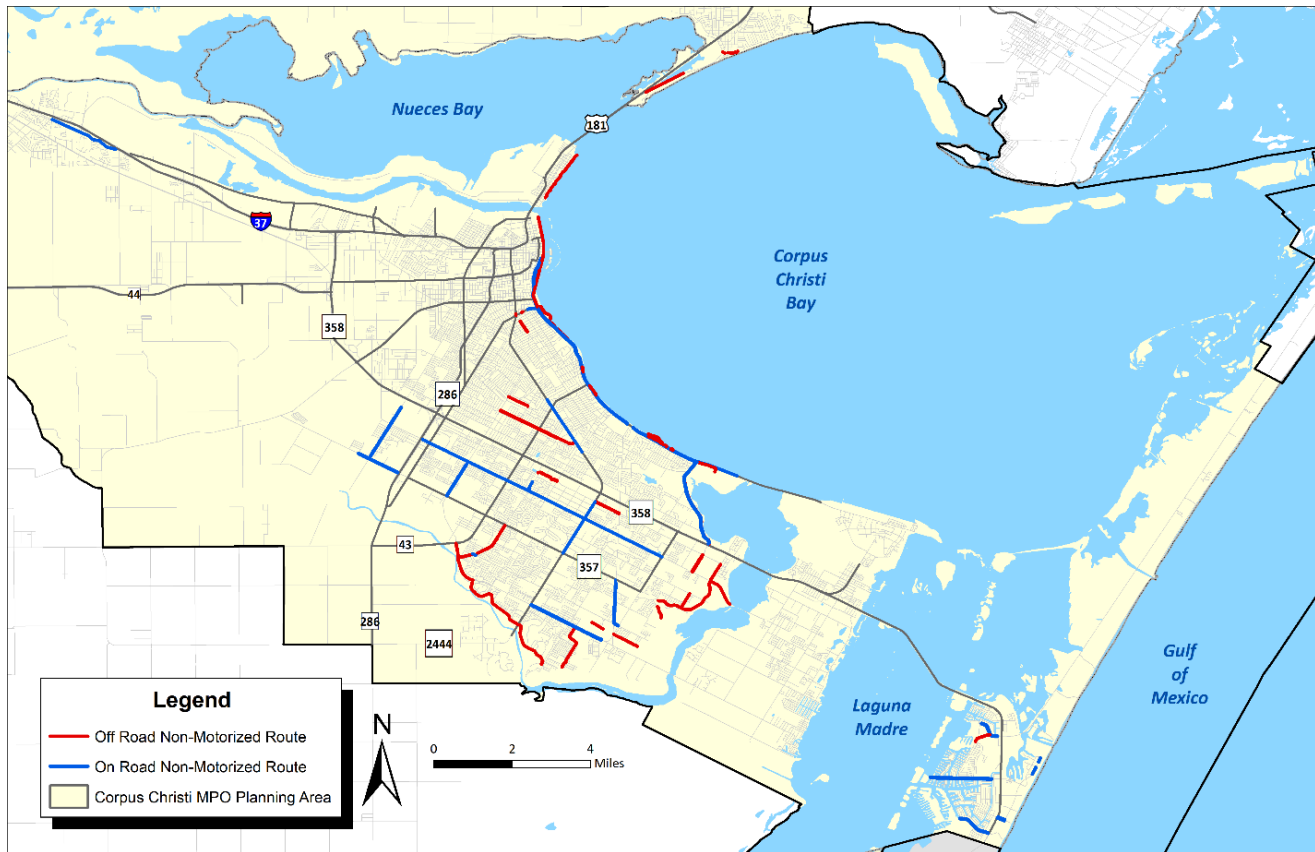


Exhibit 3-5. Map of Regionally Significant Non-Motorized Routes

The principal arterials selected for inclusion in the RSCs are listed below and will become the network for the CMP. The routes are grouped into two categories: corridors of concern and corridors of note. The Corridors of Concern will become more congested during the next 25 years without intervention. Corridors of Note are important corridors that currently function and need monitoring to avoid unacceptable congestion.

Data sources are described in Section 5, System Performance Monitoring and Data Collection.

Exhibit 3-6. Map of Regionally Significant Corridors

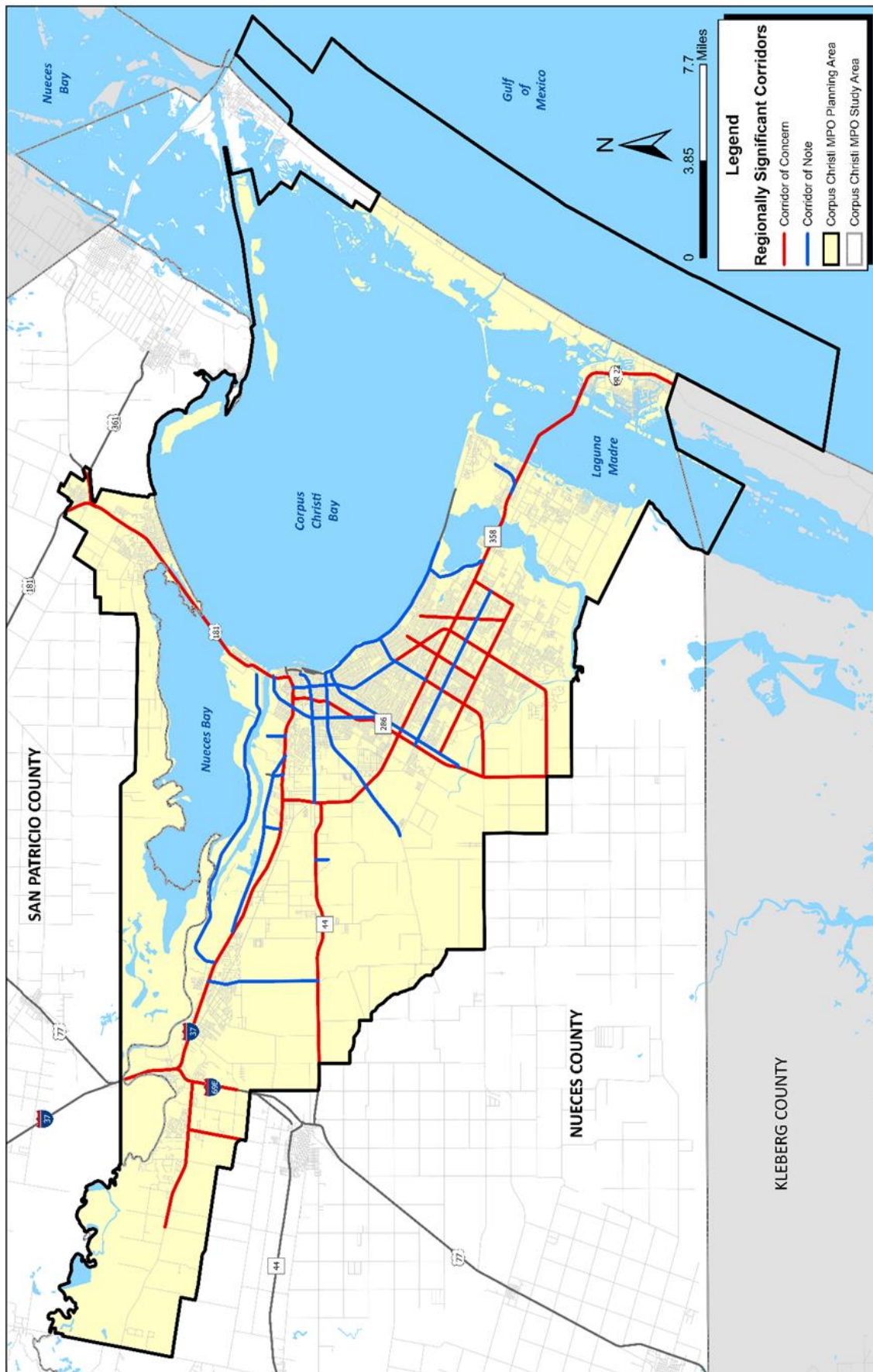


Exhibit 3-7: Table of Corridors of Concern

Corridors of Concern			
ID	Road	From Limit	To Limit
COC-01	FM 624 (Northwest Blvd)	CR 79	I-69
COC-02	FM 1889	CR 46	FM 624 (Northwest Blvd)
COC-03	SH 358 (S.P.I.D.)	SH 286 (Crosstown Expressway)	Central Dr
COC-04	PR 22	Central Dr	Sea Pines Dr
COC-05	SH 357 (Saratoga Blvd)	Ayers St	SH 357 (Rodd Field Rd)
COC-06	FM 43 (Weber Rd)	SH 286 (Crosstown Expressway)	SH 358 (S.P.I.D.)
COC-07	Everhart Rd	SH 357 (Saratoga Blvd)	S Alameda St
COC-08	FM 2444 (S Staples St)	SH 286 (Crosstown Expressway)	SH 357 (Saratoga Blvd)
COC-09	S Staples St	SH 357 (Saratoga Blvd)	Weber Rd
COC-10	Airline Rd	SH 357 (Saratoga Blvd)	S Alameda St
COC-11	SH 357 (Rodd Field Rd)	SH 357 (Saratoga Blvd)	SH 358 (S.P.I.D.)
COC-12	SH 286 (Crosstown Expressway)	FM 2444 (S Staples St)	I-37
COC-13	I-69	CR 48	I-37
COC-14	I-37	Nueces River	Rand Morgan Rd (FM 2292)
COC-15	I-37	FM 2292 (Rand Morgan Rd)	SH 358 (N.P.I.D.)
COC-16	I-37	SH 358 (N.P.I.D.)	Carrizo St
COC-17	US 181	Carrizo St	Moore Ave
COC-18	US 181	Moore Ave	FM 2986 (Wildcat Dr)
COC-19	SH 35	US 181	US 361
COC-20	SH 44 (Agnes St)	CR 67	SH 358 (N.P.I.D.)
COC-21	SH 358 (N.P.I.D.)	I-37	SH 286 (Crosstown Expressway)

Exhibit 3-8: Table of Corridors of Note

Corridors of Note			
ID	Road	From Limit	To Limit
CON-01	FM 3386 (McKinzie Rd)	I-37	SH 44
CON-02	SH 44 (Agnes St)	SH 358 (N.P.I.D.)	John Sartain St
CON-03	FM 665 (Old Brownsville Rd)	SH 357 (Saratoga Blvd)	Airport Rd
CON-04	FM 665 (Morgan Ave)	Airport Rd	Ocean Dr
CON-05	Ayers St	SH 286 (Crosstown Expressway)	SH 358 (S.P.I.D.)
CON-06	Ayers St	SH 358 (S.P.I.D.)	Ocean Dr
CON-07	S Port Ave	Ayers St	SH 44 (Agnes St)
CON-08	N Port Ave	SH 44 (Agnes St)	I-37
CON-09	Weber Rd	SH 358 (S.P.I.D.)	S Staples St
CON-10	Doddridge Rd	S Staples St	Ocean Dr
CON-11	S Staples St	SH 44 (Agnes St)	Weber Rd
CON-12	S Staples St	I-37	SH 44 (Agnes St)
CON-13	Holly Rd	SH 286 (Crosstown Expressway)	SH 357 (Rodd Field Rd)
CON-14	Spur 3 (Ennis Joslin Rd)	SH 358 (S.P.I.D.)	Sand Dollar Ave
CON-15	Ocean Dr	FM 665 (Morgan Ave)	Spur 3 (Ennis Joslin Rd)
CON-16	International Dr	Corpus Christi International Airport	SH 44 (Agnes St)
CON-17	Up River Rd	I-37 Access Rd (WB)	I-37 Access Rd (EB)
CON-18	Corn Products Rd	I-37 Access Rd (WB)	Up River Rd
CON-19	N Navigation Blvd	I-37	Up River Rd
CON-20	Buddy Lawrence Dr	I-37	Poth Ln

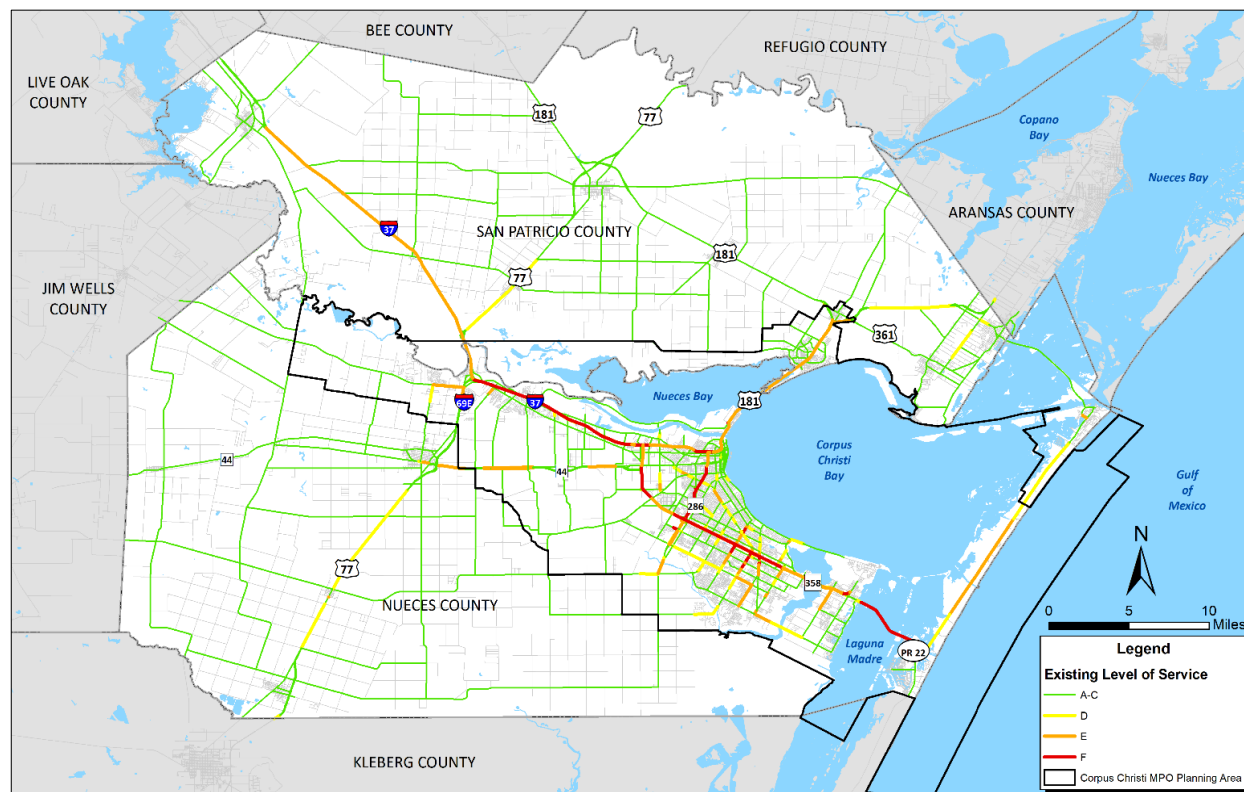
Corridors of Note (continued)			
ID	Road	From Limit	To Limit
CON-21	N Port Ave / E Port Ave	I-37	N Broadway St
CON-22	SH 358	SH 358	Lexington Blvd
CON-23	Joe Fulton International Trade Corridor	I-37	Avenue F

Section 4: Definition of Congestion

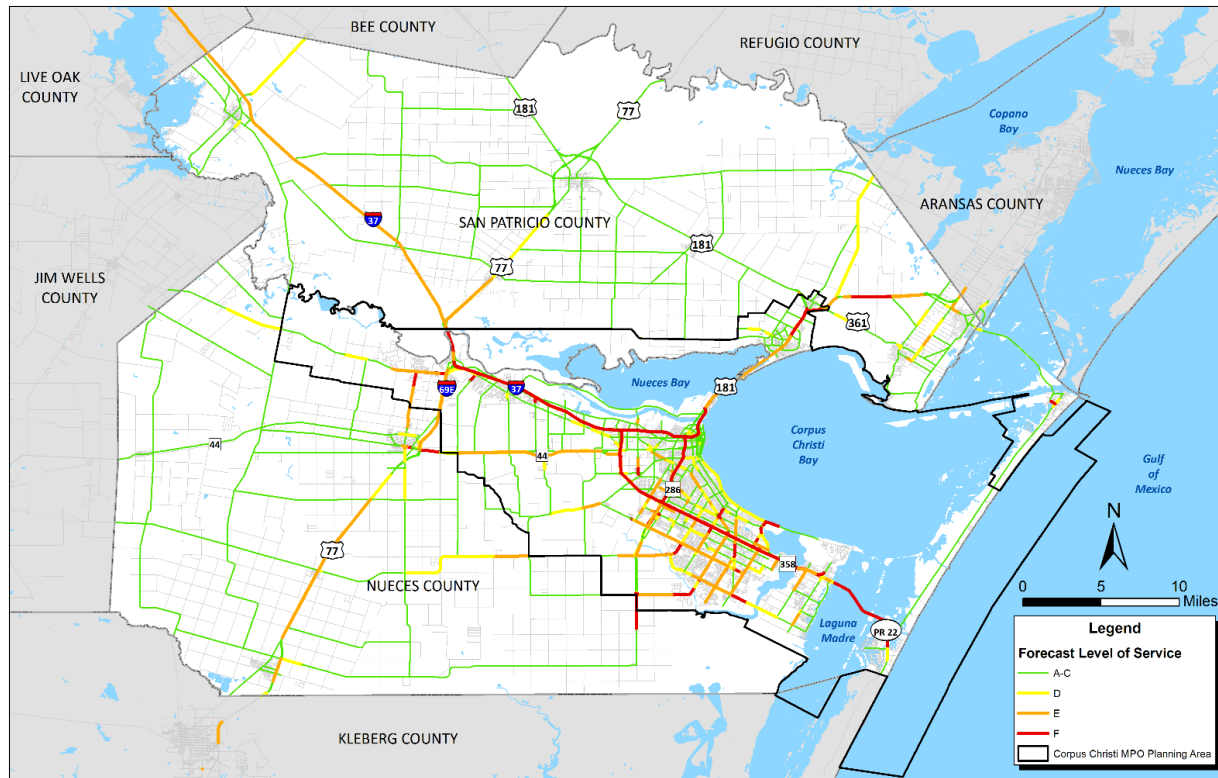
One of the critical and complex tasks of the CMP is to define congestion. Studies have shown that congestion is a relative rather than an absolute condition. People “feel” roads are congested at different levels of operations. Technically, congestion occurs when the number of vehicles on a facility exceeds the maximum number of vehicles that a roadway or intersection can accommodate at that point in time, whether because of the physical limitations of the facility or because an event (such as rain) has temporarily hindered vehicular movement. Traffic congestion is characterized by slower speeds, longer trip times, vehicular queueing, travel time uncertainty, and increased traffic collisions.

The Corpus Christi MPO defines roadway congestion using the concept of Level-of-Service. Level-of-Service (LOS) examines the relationship between traffic speed / delay at intersections / volume of traffic / space between cars and assigns a “grade” for the flow of traffic. What that means is that there are six Levels-of-Service possible for each facility. They are given letter designations from A to F, with LOS A representing the best possible operating conditions and LOS F the worst. See Exhibits 4-1 and Exhibit 4-2 below.

Exhibit 4-1. Map of Existing Level of Service



*Existing Level of Service is derived from the Corpus Christi MPO 2016 Travel Demand Model and TxDOT’s 2016 Congestion Map.

Exhibit 4-2. Map of Future Level of Service Without Plan Implementation

*Future Level of Service is derived from the Corpus Christi MPO 2045 Travel Demand Model and TxDOT's 2036 Congestion Map.

RECURRING VS NON-RECURRING (i.e. RELIABLE) CONGESTION

Research into travelers' views of congestion has shown that predictable travel times are a primary concern. Having reliable travel time is a crucial factor affecting traveler behaviors, including choices of route, departure time, and mode. One commonly accepted definition of travel time reliability, given by the Federal Highway Administration, states that "Drivers are used to congestion and they expect and plan for some delay, but most travelers are less tolerant of unexpected delays. Travel time reliability measures the extent of this unexpected delay." Travelers and firms may account for the variability in their trips and transport of goods by building in time-buffers as insurance against late arrival. This implies that the consequences of late arrivals are costly. Not only are these buffers inefficient, the productivity lost represent a cost that travelers and firms absorb due to unreliability, but also stress, late arrivals, missed connections, missed appointments and early arrivals are costly. Thus, congestion is broadly categorized as either recurring (predictable) or non-recurring (unpredictable) congestion. Congestion, both recurring and non-recurring, vary significantly depending on the season, day of the week, and even time of day. Furthermore, both recurring and nonrecurring congestion may occur at the same time, exacerbating any event.

Recurring congestion is congestion that occurs repeatedly at predictable times and locations, e.g. at bottlenecks or on corridors with poorly coordinated traffic signals, usually during the peak hour periods. Simply put, recurring congestion occurs because travel demand exceeds system capacity. There are many strategies available to mitigate this type of congestion through demand management, operational improvements, and multimodal strategies. Integration of land-use and transportation decisions enables agencies to coordinate efforts to address this demand side of congestion. Elimination of all recurring congestion may not be either feasible (due to physical and financial constraints) or desirable (in terms of the

implications to community of unfettered vehicular travel). Recurring congestion is generally considered the least frustrating because its effects are known and can be planned for.

In contrast, non-recurring congestion incidents can occur at any time, including during non-peak travel times, and is often associated with traffic crashes, weather events, special events, work zones, and emergencies. This is the congestion that most often frustrates people. It is especially bad when a non-recurring incident magnifies the magnitude and extent of congestion during “normal” recurring congestion. Non-recurring congestion is difficult to address without proper prior planning. Exhibit 4-3 illustrates the distribution of the various types of congestion on U.S. transportation networks.

Exhibit 4-3: Charts of Recurring vs Non-Recurring Congestion Breakdown

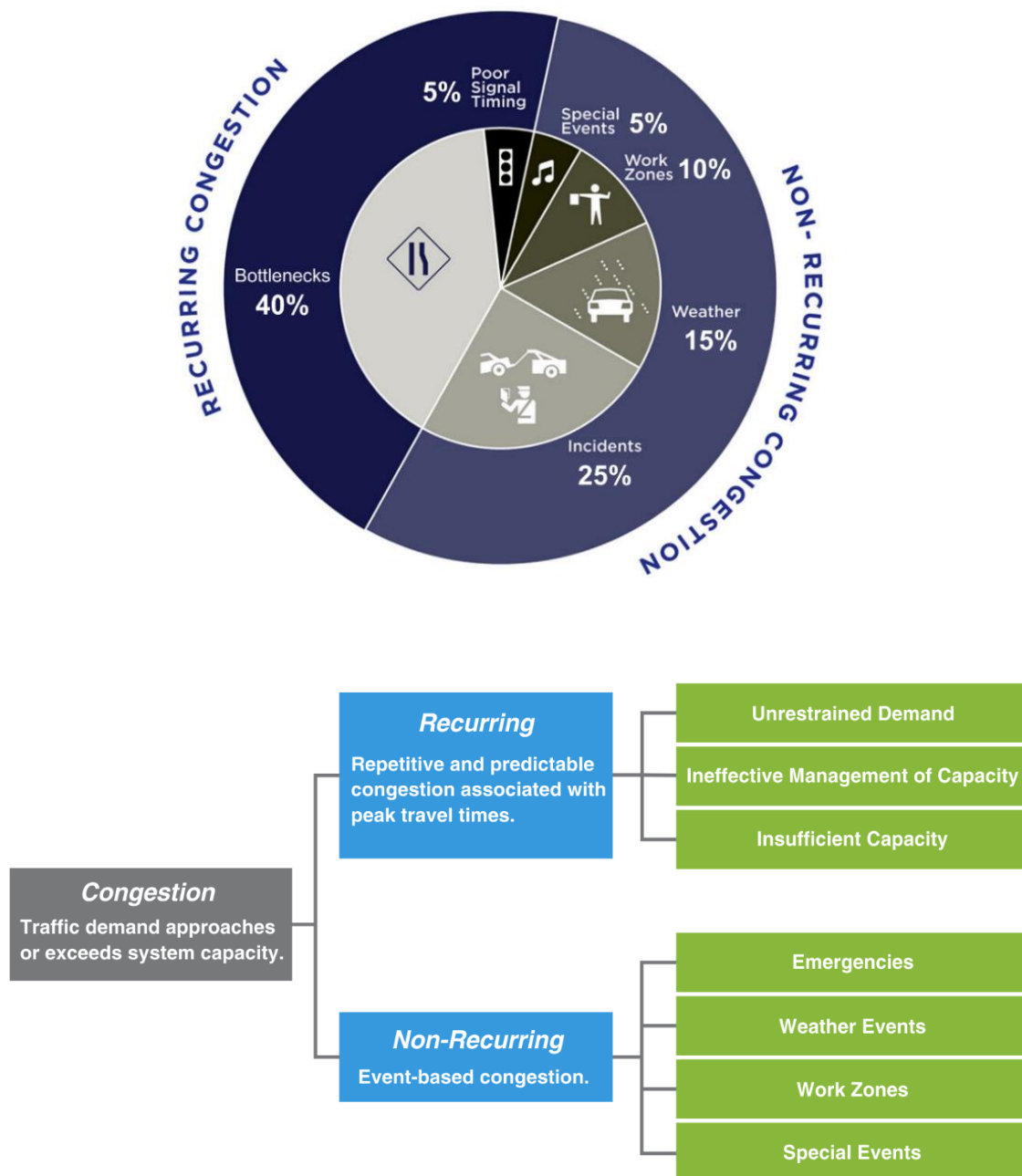
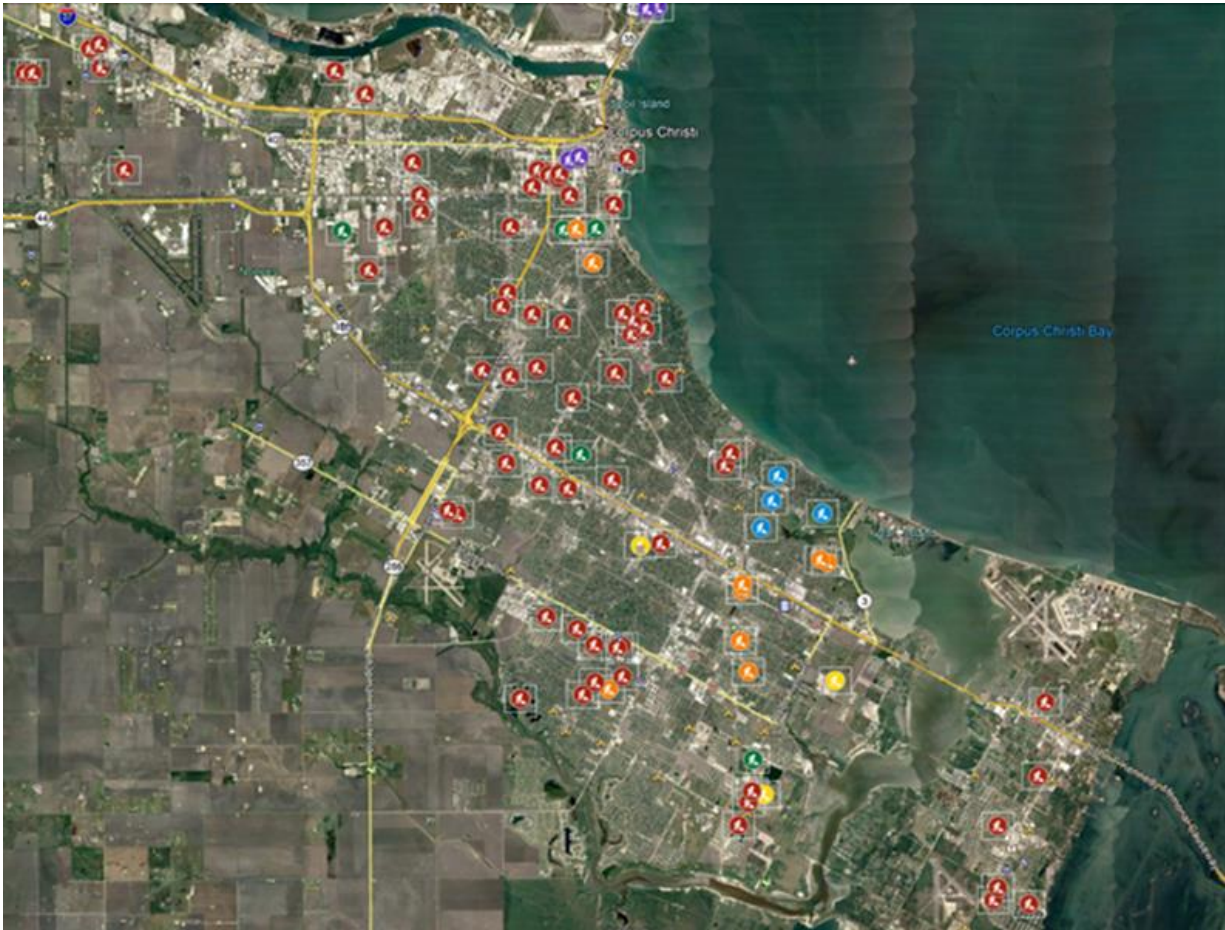


Exhibit 4-4. Map of Work Zones on November 13, 2019 that contribute to Non-Recurring Congestion



COMPONENTS OF CONGESTION

While it is difficult to use a single value to describe all individuals' concerns about congestion, there are four components that interact in a congested roadway or system. These components are duration, extent, intensity and reliability. These components vary among and within urban areas – smaller urban areas, for example, have shorter durations of congestion than larger areas.

- **Duration** – this is how much time congestion affects the travel system.
- **Extent** – this is an estimate of the number of people or vehicles affected by congestion, and by the geographic distribution of congestion.
- **Intensity** – this is the severity of the congestion that affects travel. It is typically used to differentiate between levels of congestion on transportation systems and to define the total amount of congestion.
- **Reliability** – this is the variation in the other three elements. Reliability is a measure of the extent to which the traveler's experience matches their expectation. The variable is the impact of non-recurrent congestion on the transportation system.

ROADWAY CONGESTION

The actual capacity of a given road cannot be expressed in an absolute number such as 2,400 vehicles per lane per hour. This is because the traffic stream is not uniform. Many things, like weather conditions or even driver skill or behavior can change the capacity of roads. For example, some drivers are familiar with the route;

others, like tourists, are not. This alters how purposefully and predictably they drive, decreasing spacing between vehicles and increasing operating speeds. The presence of friction from traffic entering or leaving a highway can also impact the through-put of traffic, as do operating speed, number of lanes, width of lanes, shoulder width, sight distance, horizontal (left or right) curvature, and vertical curvature (up and down, or grade) of the road. The TxDOT definitions of congestion are shown below in Exhibit 4-5.

Exhibit 4-5. TxDOT Definitions of Congested Roadway



LOS A



LOS B



LOS C



LOS D



LOS E



LOS F

Exhibit 4-6. Table of LOS Ranges by ADT Service Volumes

Road Type		Good Flow	Tolerable Flow	Undesirable Flow	Exceeds L.O.S. E
		L.O.S. A - B	L.O.S. C - D	L.O.S. E	L.O.S. F
		PURPLE	GREEN	YELLOW	RED
Urban Freeways	4 Lane	0 - 44000	44,001 – 52,800	52,801 – 64,400	64,401 +
	6 Lane	0 - 66000	66,001 – 79,200	79,201 – 96,600	96,601 +
	8 Lane	0 - 88000	88,001 – 105,600	105,601 – 128,800	128,801 +
	Each Additional Lane	0 - 11000	11,001 – 13,200	13,201 – 16,100	16,101 +
Urban Divided Streets (1 & 2)	2 Lane CLT	0-9,600	9,600 – 11,400	11,400 – 13,800	13,800 +
	4 Lane	0 - 16100	16,101 – 19,100	19,101 – 23,000	23,001 +
	4 Lane CLT	0-18,100	18,100 – 21,500	21,500 – 25,900	25,900 +
	6 Lane	0 - 23500	23,501 – 27,900	27,901 – 33,000	33,001 +
	8 Lane	0 - 29400	29,401 – 34,900	34,901 – 42,000	42,001 +
Urban Undivided Streets (1 & 2)	2 Lane	0 – 7,700	7,701 – 9,100	9,101 – 11,000	11,001 +
	4 Lane	0 – 12,600	12,601 – 14,900	14,901 – 18,000	18,001 +
	6 Lane	0 – 19,800	19,801 – 23,500	23,501 – 28,300	28,301 +

The Corpus Christi MPO defines congestion as roadways that operate with a Level of Service (LOS) E or F. The operating Level of Service (LOS) E or F for a roadway is considered unacceptable system performance and facilities at LOS D, are concerning. The Regional Travel Demand Model estimates LOS by using roadway characteristics such as number of lanes, median type, lane width, and functional class as well as time of day, roadway capacity, and traffic volume to perform an assessment of a road's operating condition, generally described using a scale of A (Free Flow) to D (approaching congestion) and E/F (congested and severe congestion). Exhibit 4-7 below shows examples of each LOS. It is important to note that traffic speed and flow on urban arterials and collectors are primarily determined by intersection capacity, which is especially affected by traffic volumes on cross streets and left turn signal phases. These are described in Section 5.

Exhibit 4-7. Table of Typical Roadway Speed, Flow and Density Relationships

LOS	Speeds Range (mph)	Flow Range (vehicle/hour/lane)	Density Range (vehicle/mile)
A	Over 60	Under 700	Under 12
B	57-60	700-1,100	12-20
C	54-57	1,100-1,550	20-30
D	46-54	1,550-1,850	30-42
E	30-46	1,850-2,000	42-67
F	Under 30	Unstable	67-Maximum

This Table shows the speed, flow and density of traffic under Level of Service (LOS) rating, a standard measure of traffic congestion.

INTERSECTION CONGESTION

Intersections are the most common location of congestion in a road system. Intersection Levels of Service can measure congestion for signalized intersections in terms of both control delay, which is a measure of driver discomfort or frustration, and increased travel time. The delay experienced by the motorist is made up of a number of factors that relate to control, geometrics, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions in the absence of traffic control, geometric delay, any incidents and any other vehicles. Specifically, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle, typically for a 15-min. analysis period, see Exhibit 4-8 for LOS description. Delay is a complex measure and depends on a number of variables, including the quality of the progression, the cycle length, the green ratio and the ratio of actual traffic passing through the intersection divided by the estimated capacity of the number of lanes in the intersection.

Signals in modern cities are timed using optimization models that analyze factors including traffic volume and speed to safely get as many vehicles as possible through intersections. Researchers have collected data and run computer simulations to determine that adjusting the signals at intersections in bad weather could reduce delays by up to 20 percent.

Exhibit 4-8. Table of Level of Service (LOS) Description

LOS A	Describes operations with low delay, which is described as 10 sec/vehicle or less. This LOS occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Many vehicles do not stop at all.
LOS B	Describes operations with delay greater than 10 and up to 20 sec/vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
LOS C	Describes operations with average delay of vehicles entering the intersection greater than 20 and up to 35 sec/ vehicle. These higher delays may result from only fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersections without stopping.
LOS D	Describes operations with delay greater than 35 sec/vehicle and up to 55 sec/vehicle. Congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths and high v/c ratios. Many vehicles stop and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
LOS E	Describes conditions with delay greater than 55 sec/ vehicle and up to 80 sec/vehicle. These higher delays indicate poor progression, long cycle lengths and high V/C ratios. Individual cycle failures are frequent.
LOS F	Describes operations with a control delay in excess of 80 sec/vehicle. This level, considered unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the lane groups. It may also occur at high V/C ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.

Exhibit 4-9. Table of Typical Daily Intersection Capacity Values

Uninterrupted Flow Capacity Green/Cycle	40%	50%	60%
20,000/lane/day LOS = E	8,000	10,000	12,000
16,000/lane/day LOS = C -D	6,400	8,000	9,600

Section 5: System and Corridor Performance Monitoring and Data Collection

Collecting data on traffic conditions, roadway conditions, and system users is a vital component of an efficient and effective transportation planning process. Data helps leaders make informed decisions regarding roadway maintenance and investment priorities and can even feed into other technologies to provide real-time feedback to help maximize 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.

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.

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.

DATA SOURCES

Identifying and exploiting existing data collection efforts is necessary to efficiently monitor the adopted performance measures. Collecting data on system performance is generally a responsibility of the jurisdiction responsible for operating and maintaining the infrastructure, with the Corpus Christi MPO supplementing efforts when needed.

National Performance Management Research Data Set (NPMRDS)

FHWA provides the National Performance Management Research Data Set (NPMRDS) to MPOs to assist with the required performance measurement efforts. NPMRDS is a data set acquired by FHWA specifically to support the agency's Freight Performance Measures (FPM) and Urban Congestion Report (UCR) programs. The data includes average travel times by calendar day in 5-minute increments covering the National Highway System (NHS). The data includes travel times for passenger and freight vehicles and are reported by road direction. Corpus Christi MPO uses the travel time data to evaluate strategies for specific corridor segments and before and after analysis.

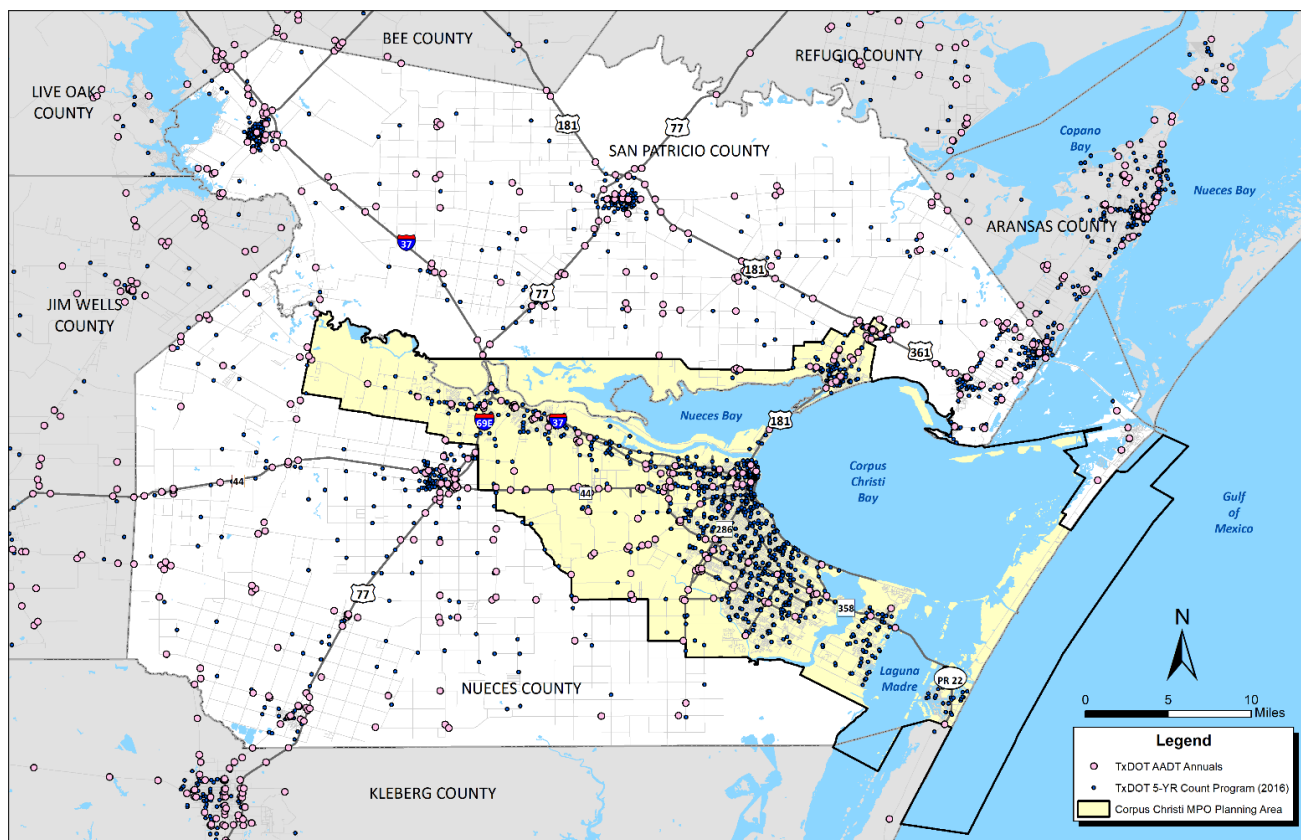
Congestion Management Process Assessment Tool (COMPAT)

The Texas A&M Transportation Institute maintains the Congestion Management Process Assessment Tool (COMPAT) for use by MPOs and stakeholders during both CMP development and monitoring, also for corridor study planning. The assembled volume and speed data are from an INRIX speed data set procured by TxDOT to compute the Texas 100 Most Congested Road Section report, and the TxDOT-maintained Roadway-Highway Inventory Network (RHINO) data sets. The Corpus Christi MPO uses the data to identify needs along all CMP corridor segments and it is also very useful for before and after analyses.

Texas Department of Transportation (TXDOT)

The Corpus Christi MPO is also reliant on TXDOT for the Statewide Traffic Analysis Reporting System (STARS II). STARS II is an annually updated data analysis and reporting database with on average 82,000 short term traffic counts, 1,000 manual traffic counts and more than 300 long-term counts. It contains the traffic data submitted for Highway Performance Monitoring System (HPMS) reporting and is collected and reported according to Federal requirements for Traffic Monitoring System and HPMS data collection. These federal requirements mean that it may be calculated differently from other Exhibits from TxDOT which are also used to evaluate transportation system use. In addition to the annual counts, TxDOT's five-year count program (previously called urban saturation count program) provides traffic count information on TxDOT maintained roads and select county roads and city streets. The count sites in the Corpus Christi MPO are shown below in Exhibit 5-1.

Exhibit 5-1. Map of TxDOT STARS II Count Sites



Crash Records Information System (C.R.I.S)

TxDOT's Crash Records Information System is an automated database maintained by the state and available to the public via their query tool or annual summary reports. The database goes back to 2009 and provides information about the location of reported crashes, as well as different attributes that provide more detail about who was involved and the outcome of each crash (e.g. injury or fatality).

Regional Travel Demand Model System (TxDOT approved validation)

The Corpus Christi MPO has a regional modeling system based on a 3-step Travel Demand Model (TDM) originally created by the Texas Transportation Institute to forecast traffic volumes on arterials out through year 2045. All TDM models use roadway attributes and socioeconomic data such as population and employment to predict travel behavior. The Corpus Christi regional modeling system uses a 2016 base year and forecasted 2045 demographic inputs to forecast travel demand along the TDM roadway network for different time periods. The TDM forecasts vehicle travel times, speed, and traffic volumes along the federally eligible roadway system of the region. There are currently two calibrated models at Corpus Christi MPO.

Unfortunately, neither was available in time to use for this CMP Update. The first is a TxDOT approved model that updates the 2040 model. The second is also an update to the 2040 model that was paid for by the City of Corpus Christi to refine some technical issues and improve resolution in growth areas. The Corpus Christi MPO will integrate these disparate models into one coherent model, along with making other necessary improvements including higher resolution, improved time of day, etc.

Corpus Christi Regional Transportation Regional Authority (CCRTA)

CCRTA is the designated recipient of Federal Transit Authority funds for the Corpus Christi metropolitan area. CCRTA must annually report system-wide performance measures to the National Transit Database (NTD). The measures reported are general indicators such as service area population, passenger trips and miles, vehicle miles and revenue miles. In addition, CCRTA develops internal reports of measures that are available to the Corpus Christi MPO on a regular basis. Currently the MPO has acquired the following performance statistics from CCRTA:

- Total ridership by year and monthly totals (by route information is pending)
- Passengers per hour.
- On-Time Performance, (by route information is pending).
- Routes in GIS format with demographic information.
- Shelter/Bus Stop information in GIS format.

Local Government Data Collection

Local governments in the region receive traffic counts and other traffic data that are valuable to the regional system. The Corpus Christi MPO is working with these agencies to maximize use of data.

Direct Data Acquisition

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.airsage.com/>
- <http://inrix.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/
- <http://www.ihsglobalinsight.com/ProductsServices/ProductDetail838.htm>

** 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.*

STATE AND NATIONAL PERFORMANCE MEASURES

The data source(s) for each CMP performance measure are identified below:

Travel Time Index (TTI) - This is the ratio of average peak travel time to an off-peak (free-flow) standard. A value of 1.5 indicates that the average peak travel time is 50% longer than off-peak travel times. However, while averaging the conditions for both directions in both peaks provides an accurate measure of congestion, it generally does not match the perception of the majority of commuters.

Vehicle Miles of Travel (VMT) per capita - Miles traveled by vehicles in a specified region over a specified time period. Calculated per person for all trips or for specific destinations including home, work, commercial, etc.

Travel Time Reliability (TTR) - Measures non-recurring delay for all vehicles by comparing the 80th percentile travel time to the average (50th percentile) travel time. A value of 1.5 or higher indicates that the segment is not reliable. A corridor or location may be congested, but reliable, if the congestion recurs on a daily basis. The most recent available TTI from the Texas Transportation Institutes Urban Mobility Scorecard indicates a TTR of 1.13 for Corpus Christi Urbanized Area.

Truck Travel Time Reliability (TTTR) - Measures non-recurring delay for trucks by comparing the 95th percentile travel time to the average (50th percentile) travel time. A value of 1.5 or higher is considered unreliable.

Planning Time Index (PTI) - According to the Texas Transportation Institute, PTI represents the total travel time that should be planned for including sufficient buffer time to account for anticipated congestion. In this way, the PTI compares near-worst case travel time to a travel time in light or free-flow traffic. A PTI of 1.50 means that, for a 20-minute trip in light traffic, the total time that should be planned for the trip under congested conditions is approximately 30 minutes (20 minutes x 1.50 = 30 minutes). The PTI can be directly compared to the TTI (a measure of average congestion) on a similar numeric scale, as the PTI is computed as the 95th percentile travel time divided by the free-flow time. The most recent available information from the Urban Mobility Scorecard indicates a PTI of 1.47 for the Corpus Christi Urbanized Area. The PTI is a particularly useful metric in that it reflects the impact of congestion on drivers' real-world experience.

Commuter Stress Index (CSI) - The most recent available CSI from the Urban Mobility Scorecard indicates a CSI of 1.16 for Corpus Christi Urbanized Area. Unlike the TTI, the CSI accounts for the fact that most of the transportation network operates with much more volume or ridership (and more congestion) in one direction during each peak period. According to the Texas Transportation Institute, the CSI is calculated by dividing the time it takes to travel in the most congested direction during a peak period by the time it takes to take the same trip under free flow conditions. This performance measure illustrates the conditions experienced by the commuters traveling in the predominant directions (for example, inbound from suburbs in the morning and outbound to the suburbs in the evening).

INRIX Traffic Scorecard Report - According to the INRIX 2016 Traffic Scorecard Report, Corpus Christi's level of congestion ranked 208th out of the 240 cities included in 9th national assessment. The average resident spent only 3% (roughly 6.4 hours) of total driving time in congestion in 2016, as derived by applying the average peak period congestion rate to travel times. This metric for the impact of congestion on the typical car commuter is calculated for seven main periods and travel patterns in an urban area to balance various aspects of travel to and within an urban area:

- Peak periods on highways in and out of the city
- Peak periods within a city
- Day time travel on highways in and out of a city
- Day time travel within a city

DATA COLLECTION AND MONITORING PLAN

In 2009, the Corpus Christi MPO initiated a data collection and monitoring plan for key performance indicators to help determine congestion levels and locations in the Corpus Christi MPO Area. The Corpus Christi MPO does not currently have an ongoing systematic data collection and monitoring process as required by federal regulations. Given the number of travel time data sources now available to the Corpus Christi MPO through its planning partners, the MPO is anticipating a successful ongoing data collection and analysis to support the CMP or implementation of CMP strategies. In 2019, the Corpus Christi MPO began developing a set of data that will comprise the required ***Performance Indicators Report*** which will present the status of congestion including a top thirteen list of congested roadways and intersections.

The Congestion Management Process is a tool for tracking progress towards the region's congestion management goals, which requires the following actions:

- The CMP will have a formal reevaluation and updated at a minimum on a five-year cycle in conjunction with the MTP update. Additionally, updates to the CMP will occur when there are significant changes to the CMP network.
- An evaluation of system performance and strategy effectiveness should be done annually or biennially. The Corpus Christi MPO, in cooperation with member agencies, will evaluate the effect of completed projects or effectiveness of adopted policies toward maintaining flow of traffic in conjunction with updates to the TIP.
- The Corpus Christi MPO will review and revise, as necessary, the adopted performance measures as part of each update to the Transportation Improvement Program.

The Corpus Christi MPO will collect data primarily using a collaborative partnership 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 Other Areas of Concern. The list below identifies the data for each Corpus Christi MPO performance measure.

- a) **Travel Time and Travel Speed** - Previous CMPs identified travel time and speed as priority efforts. In 2006, 2010, and 2013 the Texas Department of Transportation Travel Survey Program and the Corpus Christi MPO hired consultants to drive primary routes throughout the region at different times of day to obtain travel speeds and times. New technologies and data sources now allow much more data to be acquired for the same cost. While TxDOT has acquired many useful data types, they will need some supplementing to provide the corridor-level details of conditions that are necessary to evaluate projects.
- b) **Traffic Volume Counts** - Prior CMPs identified traffic counts as a priority effort. In the past, Corpus Christi MPO hired consultants to acquire traffic counts by vehicle class throughout the region at different times of day. In order to meet new requirements and provide more useful data, traffic data including the vehicle classification are collected for 48 consecutive hours with 15-minute time periods using the tube counters. Other traffic counts from various resources such as TxDOT, local municipalities or developers are also acquired. The Corpus Christi MPO will work with local municipalities to establish standards that will make sure traffic counting by developers is useful.
- c) **Turning Movement Counts** - The 2009 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 2020 or 2021, and continuing at regular intervals as needed, the Corpus Christi MPO will identify up to 100 intersections to get 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 analyzed results will be released bi-annually.
- d) **Pedestrian and Bicyclist Count and Traveler Satisfaction Survey** - Pedestrian and bicyclist counts will be taken using various resources. One idea is to utilize volunteers to collect this data in as much as possible. Another potential source of pedestrian crossing activity in the downtown area is the surveillance cameras already in place to support the traffic operation centers. Later the digital image can be analyzed manually or automatically. In lieu of these resources, temporary data collectors or consultant resources will be utilized for this effort. The results will be released bi-annually. A region-wide survey of individuals to aid understanding of views of traffic and commuting from around the region should also be conducted, ideally taking into consideration the 2020 Census to improve usefulness of the effort.
- e) **Transit ridership and satisfaction survey** - CCRTA provides annual operating performance statistics to the Federal Transit Administration that the Corpus Christi MPO receives. The transit agency also conducts a bi-annual customer satisfaction surveys and quadrennial rider surveys. These data sources are used to monitor transit performance and will be included in the Corpus Christi MPO performance reports.
- f) **Crash rate, count, and severity** - The Traffic Engineering Accident Analysis System (TEAAS) is a tool to analyze accidents that occur on the state's roads, and is maintained by TxDOT- Traffic Engineering and Safety Systems Branch. This tool is used to monitor safety. The most dangerous 20 locations will be ranked by crash rate and another 20 locations will be ranked by total crashes. The result is reported annually.
- g) **Pavement and Bridge Condition** - The TxDOT collects pavement and bridge condition. Pavement condition score is a combined index of ride quality and pavement surface distress, adjusted for traffic and speed. Ride quality is calculated from pavement roughness. Pavement distress is calculated from measuring rut data and surface deterioration such as cracking, patching and failures. Data is collected once a year to

determine the surface distresses and ride quality of the pavement on Texas roadways. The data from surface defects and ride quality is then combined to provide an overall score from low 1 (worst condition) to high 100 (best condition) per lane mile. TxDOT's goal is to deliver preventive maintenance for the National Highway System and capital assets to protect investments.

Bridge condition score is based on the most severe primary component condition rating. The primary bridge components are deck, superstructure and substructure. The component rating is assigned a value between 0 (failed) and 9 (excellent) based on the overall condition of the component. A combined score for all bridges on Texas roadways is calculated as the average of each individual bridge's numeric score, weighted by deck area, categorized into four highway classifications: Statewide (All Highway Types), National Highway System (NHS), Interstate Highway (IH), NHS non-IH, Non-NHS.

- h) **Land-use and Development conditions** - Small adjustments in land development in the region can lead to a more efficient transportation system. This requires community leaders to routinely evaluate the co-dependencies between land development and transportation. By evaluating these factors, local communities in the region can determine how to shorten the commuting distance between complementary land-uses, provide more travel choices, and create a more efficient transportation systems.

The Corpus Christi MPO staff will coordinate a regional data collection effort by meeting with all local municipalities to ensure that the Corpus Christi MPO received the most up to date land-use and environmental data in a GIS format. This information is necessary to develop and calibrate a new land-use forecasting tool, such as UrbanSim, in order to examine how local land-use conditions change travel behavior. This model is also extremely useful in developing long-range scenarios of development distribution for future MTP updates. It was important that this data accurately represented the base conditions in the region. By creating a reliable and accurate regional geodatabase based on existing conditions, the Corpus Christi MPO can develop a base land-use scenario for the region.

- i) **Public surveys and focus group results** - Experts' comments for CMP are primarily collected during the advisory committee meetings. For public comments the Corpus Christi MPO maintains the web-page comment window and also a brief survey will be conducted biannually. The Corpus Christi MPO will conduct a coordinated set of surveys, possibly including some sort of commercial tool, such as Metroquest[®], to better understand regional customer satisfaction, desires, and priorities.
- j) **Freight Flows** - The previous CMPs identified freight flows as a priority effort. In the past, the TxDOT Travel Survey Program and Corpus Christi MPO hired consultants to acquire conduct a commercial vehicle survey. This survey provided data to enable TxDOT and the Corpus Christi MPO to forecast total commercial vehicle traffic to, through and from the Corpus Christi urban area. The Corpus Christi MPO will work with TxDOT to update this information.

DATA ANALYSES AND SYSTEMATIC REPORTING

A key effort to upgrading the Corpus Christi MPO's regional and corridor modelling capabilities is to efficiently and effectively take advantage of new technologies and data sources. This will also facilitate data visualization and improve the resolution of analyses. To describe congestion conditions and trends systemwide, the collected data are analyzed, and the outputs are summarized using informative graphics, including pictograms, maps, tables, and other charts.

Recurring congestion performance measures:

- Travel time index and comparison result against baseline conditions on all corridors
- Truck Travel Time Index on designated freight routes
- Planning Time Index on all CMP Corridors
- V/C ratio and comparison against baseline conditions
- Level-of-Service (LOS) analyses for both intersections and corridors
- Transit route/frequency, ridership, and peak-hour passenger/seat ratio
- LOS Scores for pedestrian, bicycle, and transit modes

Nonrecurring congestion performance measures:

- High crash intersections by crash rate, the number of crashes, and incident severity
- High crash corridors by crash rate, the number of crashes, and incident severity
- Future planned utility and roadway maintenance locations that are coordinated among jurisdictions.

As part of the TIP update process and performance-based planning and programming reporting process, the regional data are examined, and locations identified as problematic are examined in more detail. For the motorized traffic congestion analysis, a weighted ranking system is applied to the existing and projected congestion measures. The TTI, Estimated Time of Completion severity of existing congestion is 80% of weight and the severity of projected congestion with financially committed improvements is 20% of weight in the rank system.

Once the congested corridors and locations are ranked, the top 13 ranked areas are reported for problem identification, strategy review and project prioritization. The high crash intersections and corridors for nonrecurring congestion are also ranked and reported for identifying the cause of problems. The performance measurement in the area of pedestrian & bicycle, transit, freight, and security will be analyzed independently. It is preferable that a single report for all measures is developed.

The use of a Multimodal Level of Service (MMLOS) analysis method will be discussed after adoption of the CMP. The MMLOS method can address the perceived quality of service within the right of way of the urban street for passenger car driver, bus passengers, bicyclists, and pedestrians. It is noted that (a) the MMLOS method is not simple, (b) it cannot be applicable for the analysis of dynamic conditions such as the determination of the beginning and end times of congestion, and (c) the MMLOS analysis for the four modes requires various additional data, which are not defined in the previous sections, including the number of times a vehicle decelerates to a full stop, number of the exclusive left turn lanes, proportion of heavy vehicles, pavement surface condition rate, percentage of segment with occupied on-street parking, lane configuration and the width on segments, number of right-turn-on-red vehicles, etc.

Section 6: Existing Congestion: Regional Snapshot

The CMP was developed to be integrated into the region's transportation planning process, to fully meet federal requirements, and to be iterative, flexible, and infinitely customizable. Performance measures are the foundation for the Corpus Christi MPO's Performance-Based Planning and Programming. Despite data collection barriers, the selected suite of performance measures provides a reasonable snapshot of system performance, and of the region's progress towards its goals and objectives.

Analysis occurs at two scales; Regional and Corridor:

- Regional scale performance measures are used to evaluate the functionality of the regional metropolitan transportation system and to assess progress towards regional goals and objectives. Data for individual regional measures (or for multiple measures in a composite index) can be compared to state or national benchmarks and to region-specific performance targets to track progress over time.
- Corridor scale performance measures are used to evaluate and compare the projected return on investment (in terms of helping to meet regional transportation objectives) for individual projects in the Corpus Christi MPO's 25-year MTP and 4-year TIP.

REGIONAL PERFORMANCE MEASURES

According to the 2019 Urban Mobility Report from the Texas A&M Transportation Institute, the average auto commuter in the Corpus Christi MPO area spent an extra 36 hours per year commuting to and from work due to congestion. This ranks 98th in the United States for average levels of congestion and costs the average Corpus Christi MPO area commuter an extra \$648 per year. The average for metropolitan areas similar to Corpus Christi (between 200,000 and 500,000 in population) was 36.4 hours of delay per auto commuter.

A closer examination of congestion reveals that during the peak hour 53% of the commuting delay in the Corpus Christi MPO occurs on local streets, while similarly sized metropolitan areas experience 43% of the congestion on streets during peak hour. During off-peak congestion Corpus Christi MPO area shows 35% on local streets, compared with 28% in similarly sized MPO areas. Correspondingly, 8% of congestion in the Corpus Christi MPO area occurs on freeways during peak hour, compared with 18% on freeways in other similarly sized metropolitan areas. In the Corpus Christi MPO, 4% of off-peak congestion occurs on freeways versus 11% in similarly sized metropolitan areas. This shows that TxDOT is doing a very good job with freeway operations and also points to a need for more and better traffic signal coordination and operational improvements by local agencies off of the freeway network to increase efficiency and effectiveness of these roads.

Exhibit 6-1. Chart of Travel Time to Work in 2017

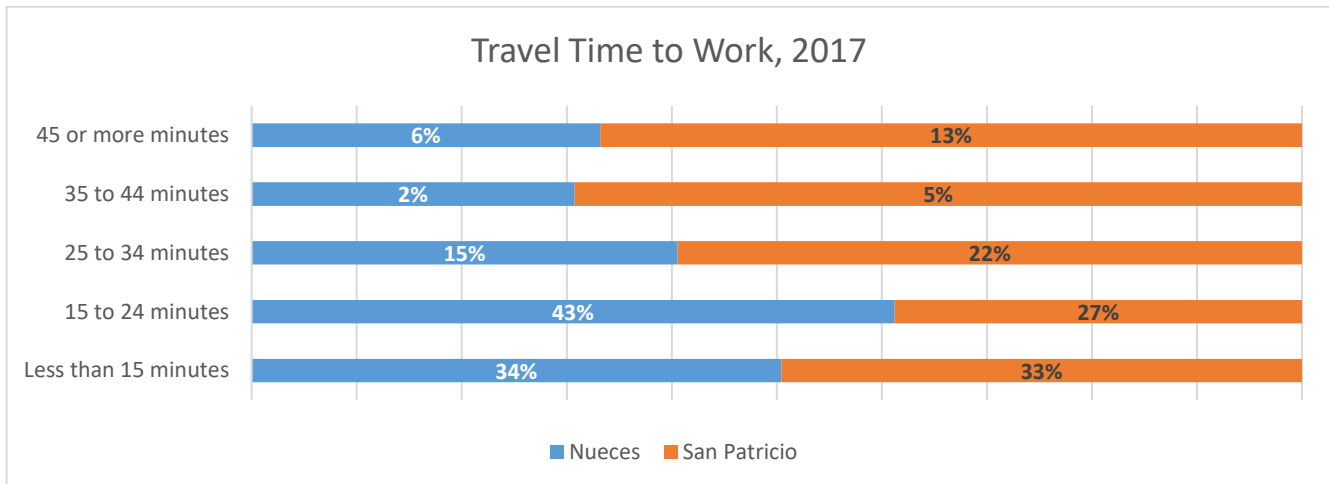


Exhibit 6-2. Chart of Mode of Transportation to Work in 2017

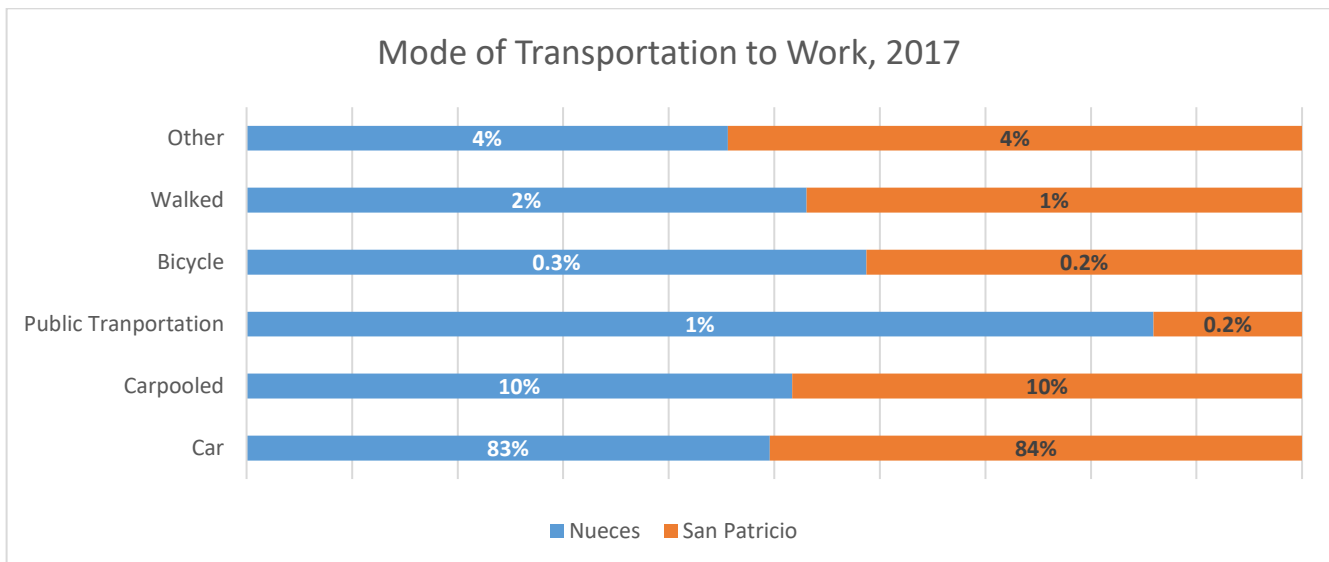


Exhibit 6-3. Infographic of When Congestion Occurs

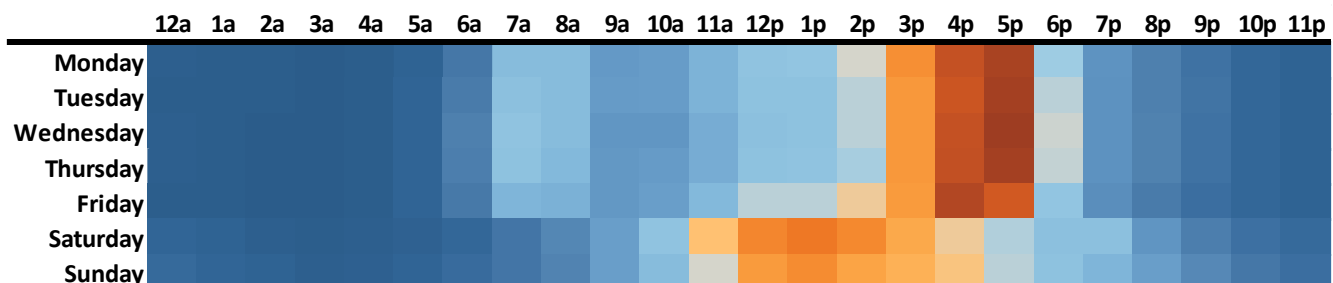


Exhibit 6-4 shows that most places can reach downtown Corpus Christi within 30 minutes and Exhibit 6-5 shows that the entirety of the MPO, from downtown Portland can be driven within 45 minutes.

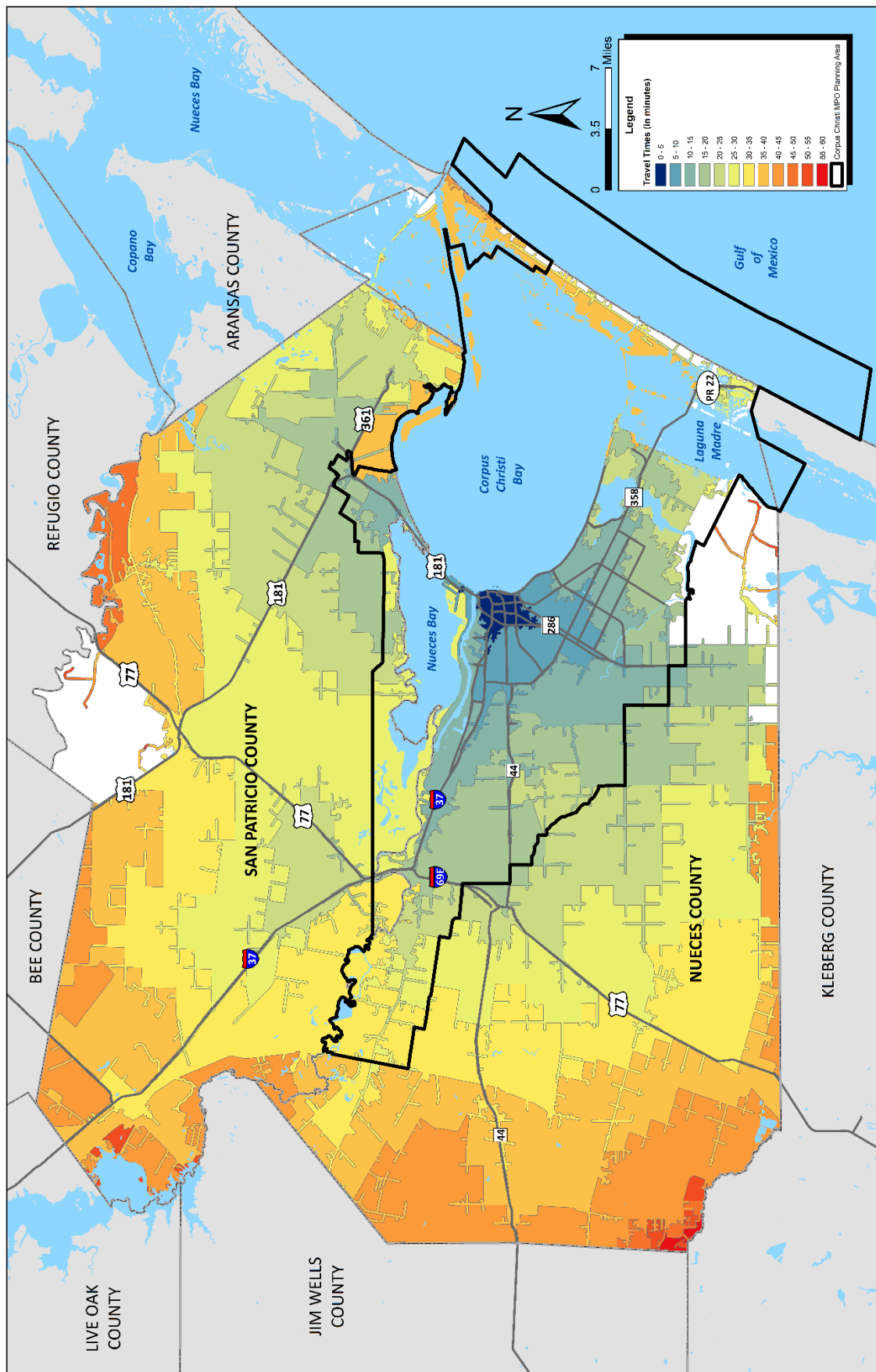
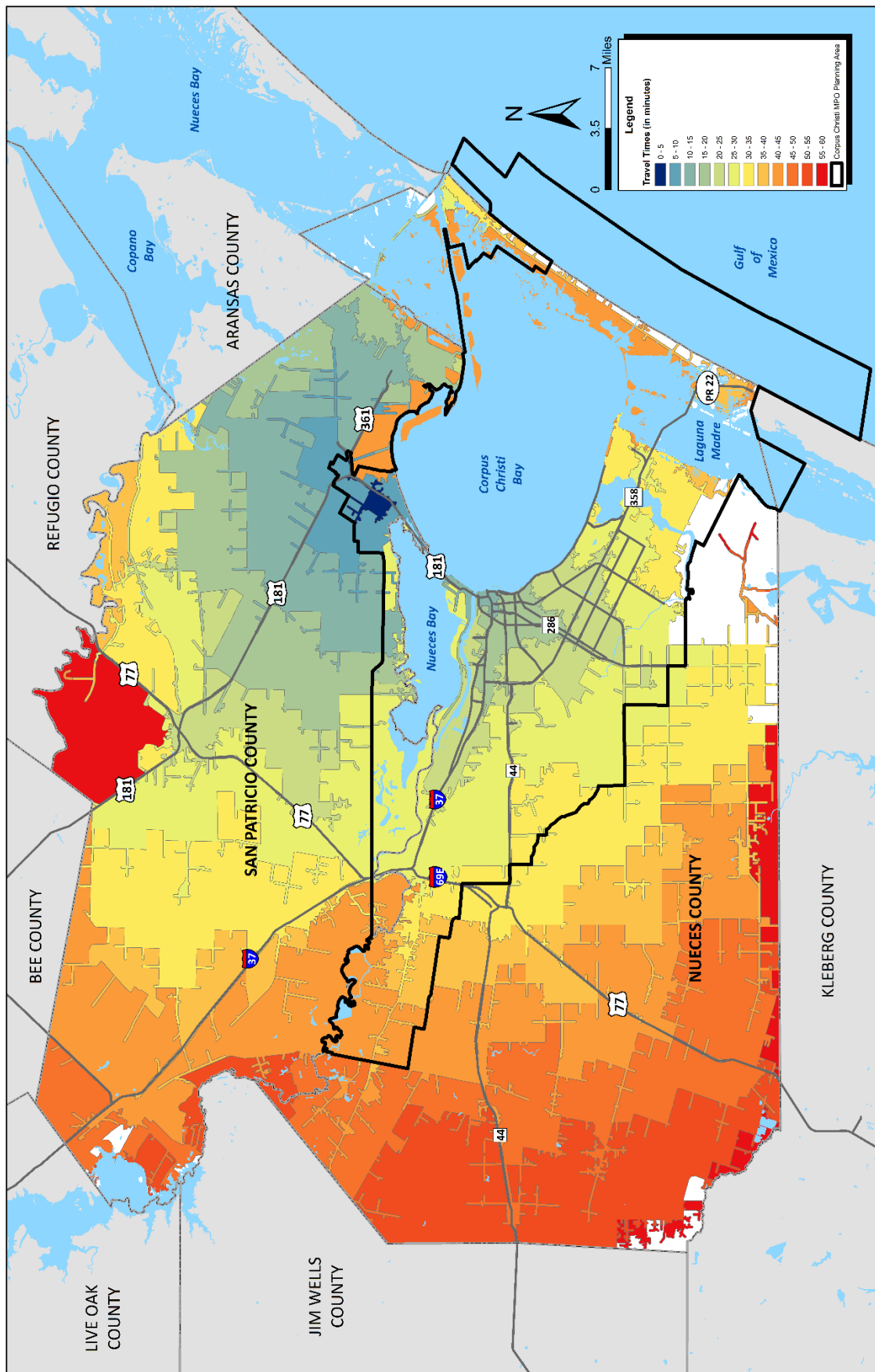


Exhibit 6-5. Map of Estimated Travel Times to Downtown Portland in 2016



THE MOST CONGESTED ROADWAYS IN TEXAS – CORPUS CHRISTI

The Texas A&M Transportation Institute conducted detailed examinations of nearly 1,800 roadways across Texas using the 2017 traffic data, the most recent available at the time. Only one of Texas' 100 Most Congested Roadways is within the Corpus Christi MPO Area: Staples Street from South Padre Island Drive to Yorktown Boulevard, ranked 86th. The other Congested Roads in the Corpus Christi MPO area are shown below in the Exhibit 6-6. All of the roadways listed in Exhibit 6-6, were examined and incorporated into the development of the Corpus Christi MPO's CMP network of Regionally Significant Corridors (RSC) as either a Corridor of Concern (COC) or Corridor of Note (CON), with the exception of Baldwin Boulevard.

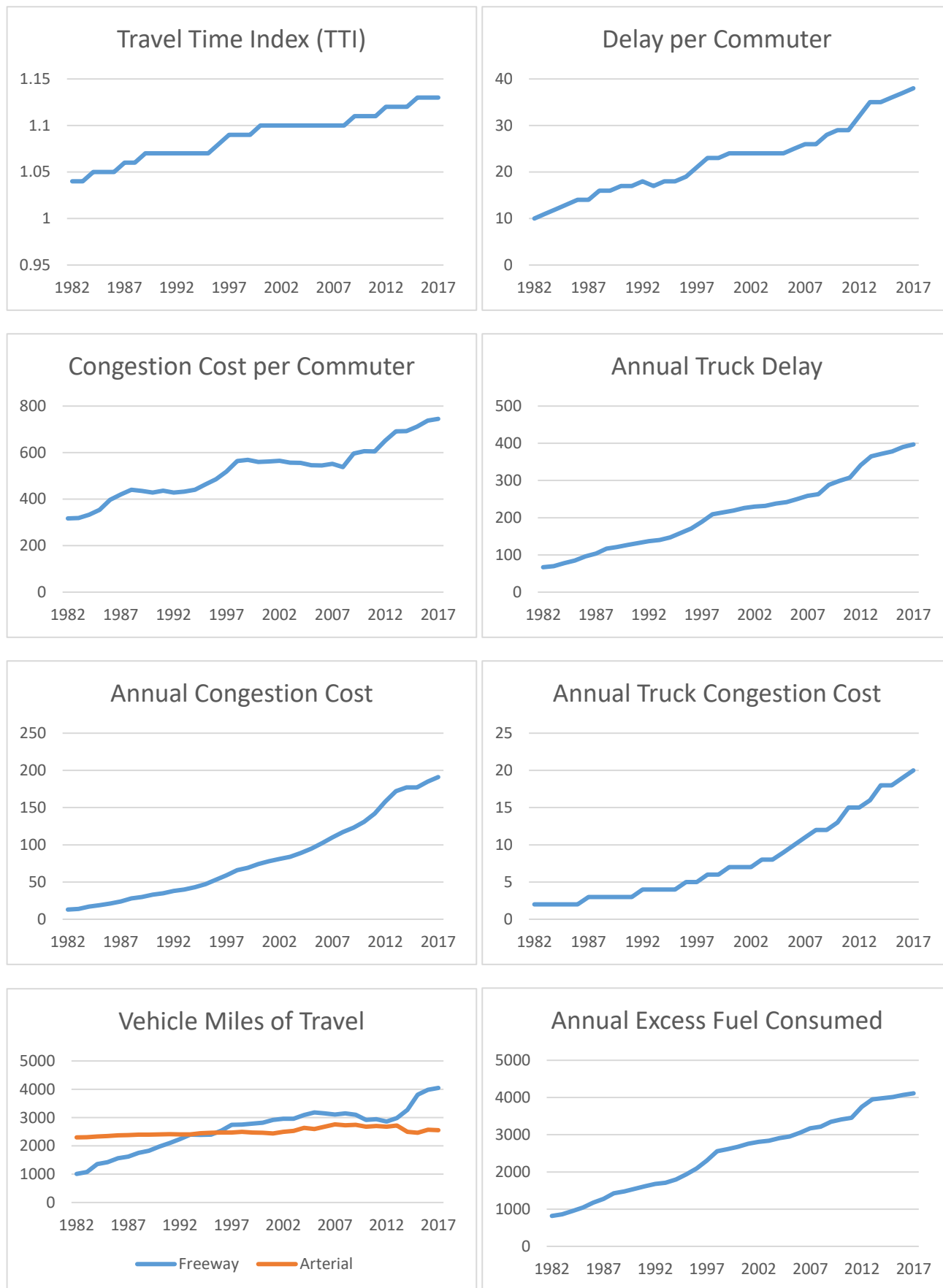
Exhibit 6-6. Table of Most Congested Roadways in Texas in the Corpus Christi MPO

RSC	Rank	Road Name	From	To	Truck Rank	Delay/ Mile	Truck Delay/ Mile	CSI	PTI (95th %)	Annual Congestion Cost	Annual Truck Congestion Cost
COC	86	S Staple St	S Padre Island Dr / SH 358	Yorktown Blvd	304	186,218	2,932	1.44	1.47	\$11,576,204	\$478,940
COC	152	Everhart Rd	S Alameda St	Yorktown Blvd	330	132,901	2,767	1.48	1.58	\$11,858,826	\$639,070
COC & CON	231	N Staples St / S Staples St	IH 37	S Padre Island Dr / SH 358	839	101,150	1,137	1.39	1.67	\$13,133,679	\$386,735
COC & CON	241	Weber Rd / FM 43	Ocean Dr	Aaron Dr	545	98,057	1,792	1.49	1.71	\$9,241,858	\$439,868
COC	340	Airline Rd	Ocean Dr	Rodd Field Rd	590	79,782	1,682	1.34	1.52	\$8,274,810	\$451,743
COC	660	S Padre Island Dr / SH 358	Crosstown Expy / SH 286	Waldron Rd	358	47,264	2,584	1.17	1.25	\$9,511,875	\$1,299,465
CON	1,143	Ocean Dr	Morgan Ave	Ennis Joslin Rd	1,311	19,682	533	1.09	1.15	\$2,174,904	\$156,701
COC	1,153	Crosstown Expy / SH 286	IH 37	Greenwood Dr	738	19,212	1,313	1.07	1.12	\$2,695,897	\$452,732
CON	1,221	McKinzie Rd / FM 3386	IH 37	SH 44	1,174	15,550	668	1.2	1.3	\$1,343,174	\$145,485
COC	1,223	Padre Island Dr / SH 358	IH 37	Crosstown Expy / SH 286	926	15,457	988	1.07	1.14	\$1,767,208	\$275,467
COC	1,236	US 181 / SH 35	E 4th St / SH 202	Moore Ave	662	14,501	1,467	1.04	1.06	\$1,710,688	\$405,726
CON	1,264	Agent St / SS 544	N Padre Island Dr / SH 358	Kinney St	777	13,193	1,241	1.11	1.16	\$1,313,490	\$290,206
CON	1,304	Old Brownsville Rd / Morgan Ave	Saratoga Blvd / SH 357	Ocean Dr	1,371	11,101	470	1.09	1.15	\$1,502,444	\$163,625
CON	1,331	US 181 / SH 35 / Harbor Bridge	Carrizo St	Moore Ave	1,008	10,222	856	1.02	1.03	\$1,551,872	\$311,684
COC	1,390	IH 37	N Padre Island Dr / SH 358	Carrizo St	1,014	7,583	853	1.03	1.04	\$686,069	\$175,205
COC	1,539	IH 37	US 77	Rand Morgan Rd / FM 2292	1,515	3,232	302	1.06	1.02	\$518,899	\$114,531
COC	1,617	IH 37	Rand Morgan Rd / FM 2292	N Padre Island Dr / SH 358	1,610	1,675	180	1.01	1.01	\$190,105	\$46,123
COC	1,619	Agnes St / SH 44	FM 3386	Padre Island Dr / SH 358	1,521	1,646	292	1.01	1.01	\$241,919	\$88,412
COC	1,636	IH 69 E / US 77	IH 37	SH 44	1,421	1,441	421	1.02	1.02	\$291,619	\$152,819
N/A	1,774	Baldwin Blvd	Leopard St / TX 407	S Staples St	1,784	18	1	1.04		\$1,269	\$109

Source: <https://mobility.tamu.edu/texas-most-congested-roadways/>

Exhibit 6-7 shows travel trends over time for the Corpus Christi MPO region as well as reveal that despite investing hundreds of millions of dollars into the road system, there is a consistent upward trend in congestion in the Corpus Christi MPO area. Ameliorating this growth in congestion will require some combination of; accepting roads will be congested, finding additional funds to invest into the transportation system, and adopting changes in land development and roadway access patterns.

Exhibit 6-7. Charts of Travel Trends in the Corpus Christi MPO Region



Section 7: Strategies to Reduce Congestion

Effectively managing congestion over time requires a multi-faceted approach. Though roadway expansion increases capacity in the short term, this strategy induces Single Occupant Vehicle (SOV) travel demand for the treated corridor in the long-term and therefore should not be considered as a stand-alone solution. Longer-term congestion-management strategies include reducing transportation demand, often referred to as transportation demand management (TDM) and improving the overall efficacy of the existing system through improvements to operational management and implementation of Intelligent Transportation Systems (ITS). The following subsections highlight several potential strategies for reducing congestion in the region.

Strategies are categorized into six Tiers, ranked generally by efficacy of mitigating congestion:

Tier 1: Directly impacting congestion by reducing or removing the need for trips.

Tier 2: Increasing the availability and access to non-motorized modes and transit.

Tier 3: Auto-oriented TDM strategies that limit SOV trips during peak travel times.

Tier 4: Strategies that improve roadway operations without expansion, including managing access and ITS.

Tier 5: Reducing crashes and the impact of work zones.

Tier 6: Capacity expansion strategies that increase capacity by adding lanes to the roadway.

While this section does not include an exhaustive list of strategies available to manage congestion, it is a starting point for identifying potential projects oriented at reducing congestion, where appropriate, within the region's transportation system. Section 8 uses the strategies identified in this section to provide recommendations for managing congestion along some of the region's most congested corridors.

IDENTIFYING STRATEGIES

After the causes of congestion are identified and evaluated, specific improvement strategies are examined. During the identification of appropriate improvement strategies, the following contributing factors that affect the feasibility of the strategies are assessed: estimated cost, right-of-way availability, technology infrastructure, and environmental and social constraints. Environmental Justice Analysis will be conducted in the assessment of environmental and social constraints. This analysis will ensure that the candidate improvement strategies do not disproportionately impact minority and low-income populations. For recurring congestion problems, improvement strategies are focused on decreasing the travel time index, V/C, and control delay. Strategies for nonrecurring congestion problems are evaluated in terms of their ability to decrease crash rates or decrease the incident severity. To quantify estimated crash rate, number of crashes, or incident severity, the development of a regional safety model is required.

Each congested area has specific characteristics that benefit from certain improvements. While every category of strategies is not applicable for every situation, it is important to consider the alternatives when they are applicable. The goal of these strategies is to get the most performance out of the transportation facilities we already have. This requires knowledge, skills, and techniques to administer comprehensive solutions that can be quickly implemented at relatively low cost. This may enable transportation agencies to "stretch" their funding to benefit more areas and customers. Transportation System Management and Operations (TSMO) strategies also help agencies balance supply and demand and provide flexible solutions to match changing conditions.

This CMP looks at performance from a systems perspective, not just one strategy, project or corridor. This means that these strategies are coordinated with others across multiple jurisdictions, agencies, and modes. The Corpus Christi MPO views the surface transportation network as a unified whole, making the various

transportation modes and facilities work together and ultimately perform better. Some of these strategies involve coordination and collaboration among multiple stakeholders, such as federal, state, and local agencies, the first responder community, and the private sector to achieve seamless interoperability. Reconvening the Corpus Christi MPO committee, Congestion Management System Committee, will help achieve greater performance on the entire system.

Corpus Christi Regional Congestion Management Process Toolbox

TIER 1: REDUCING TRIP GENERATION AND SHORTENING TRIPS

Of the factors resulting in congestion, reducing travel demand has the greatest potential for producing long-lasting, high impact on congestion for the least cost. Travel demand is typically measured in Vehicle Miles Traveled (VMT), which is described in more detail in Section 5. Reducing trip generation and shortening trip length are considered Tier 1 strategies because they remove the need to use a vehicle either directly or indirectly. For example, being able to work from home eliminates the need to commute to an office during peak travel hours. Shortening trips can also eliminate VMT by making trips by bicycling and walking more feasible.

Tier 1 Strategies include:

- Efficient Land-Use and Development Practices
- Telecommuting

Efficient Land-Use and Development Practices

Efficient development practices include infill development, which directs new construction to underutilized or vacant parcels in urban areas already served by transportation, utilities, etc.; mixed use development, which encourages multiple uses in a single structure or the construction of multiple uses adjacent to one-another to encourage walkability; and transit-oriented development, which encourages dense, mixed-use development centered around high-performing transit nodes. These practices encourage development that shortens trips, while accommodating all modes of transportation.

Pros

- Can leverage private dollars
- May increase density to a level that supports transit
- Reduces need for investing in new general-purpose transportation infrastructure

Cons

- May require accelerated reinvestment in maintenance, rehabilitation, or expansion of existing infrastructure and utilities

Other Factors or Considerations

- This is outside of the jurisdiction of the Corpus Christi MPO. It is planned and implemented by local planning agencies.
- Often driven by external-market forces.
- Implementation may be limited by political or social factors.

Telecommuting

Working from home and completing interpersonal tasks via email, telephone, video-chats, or other forms of communication technology. Many employers within and outside of the Corpus Christi MPO region offer telecommuting options to their employees.

Pros

- Very inexpensive to implement
- Directly reduces or changes the time of commute trips, the biggest contributor to recurring congestion
- May result in significant reduction of Ozone precursors and better air quality

Cons

- May be challenging to implement where in-person meetings are frequent and electronic attendance reduces efficacy of meetings
- Technical difficulties may prevent efficient communication

Other Factors or Considerations

- Some workplaces offer flexible telecommuting, encouraging employees to telecommute when interpersonal communications are not required.
- Optional telecommuting during extreme weather events may increase the safety of employees and reduce the risk of crashes.

TIER 2: ENCOURAGING A SHIFT TO ALTERNATIVE MODES OF TRANSPORTATION

Once trips have been either eliminated or shortened, the next best strategy for reducing travel demand are those that encourage alternative modes of transportation, including transit, bicycling, and walking. Bicycle and pedestrian modes may also include e-bikes, scooters, skateboards, mobility-assistance devices, etc. Though buses do count as a vehicle on the road, they retain the capability to significantly reduce the total number of vehicle miles traveled. Like Tier 1 strategies, bicycling, walking, and other modes of alternative transportation can eliminate vehicle miles traveled. However, these modes may not be feasible if trip lengths are too long. Typical trip length for a bicycle commute is under four miles and under one mile for a pedestrian. These trips may need to be even shorter for travelers with a disability. Therefore, though still high impact strategies, strategies encouraging alternative modes of non-car transportation are included in Tier 2.

Tier 2 Strategies include:

- Complete Streets Policies
- Pedestrian Infrastructure
- Micromobility (Bicycle) Infrastructure
- Micromobility (Bike and scooter) Share system
- Bus Rapid Transit (BRT)
- Car Sharing
- Mobility Hubs
- Parking Pricing or Parking Restrictions
- Transit Incentives
- Transit Service Quantity and Quality Factors

Complete Streets Policies

Complete Streets are streets designed to enable safe access for users of all ages and abilities, including pedestrians, bicyclists, motorists, and transit riders. The adoption of a Complete Streets policy by communities encourages the routine design and operation of the entire right-of-way to enable safe access for all users.

Pros

- Institutionalizes design considerations and standards into road projects
- Improves health conditions in the area

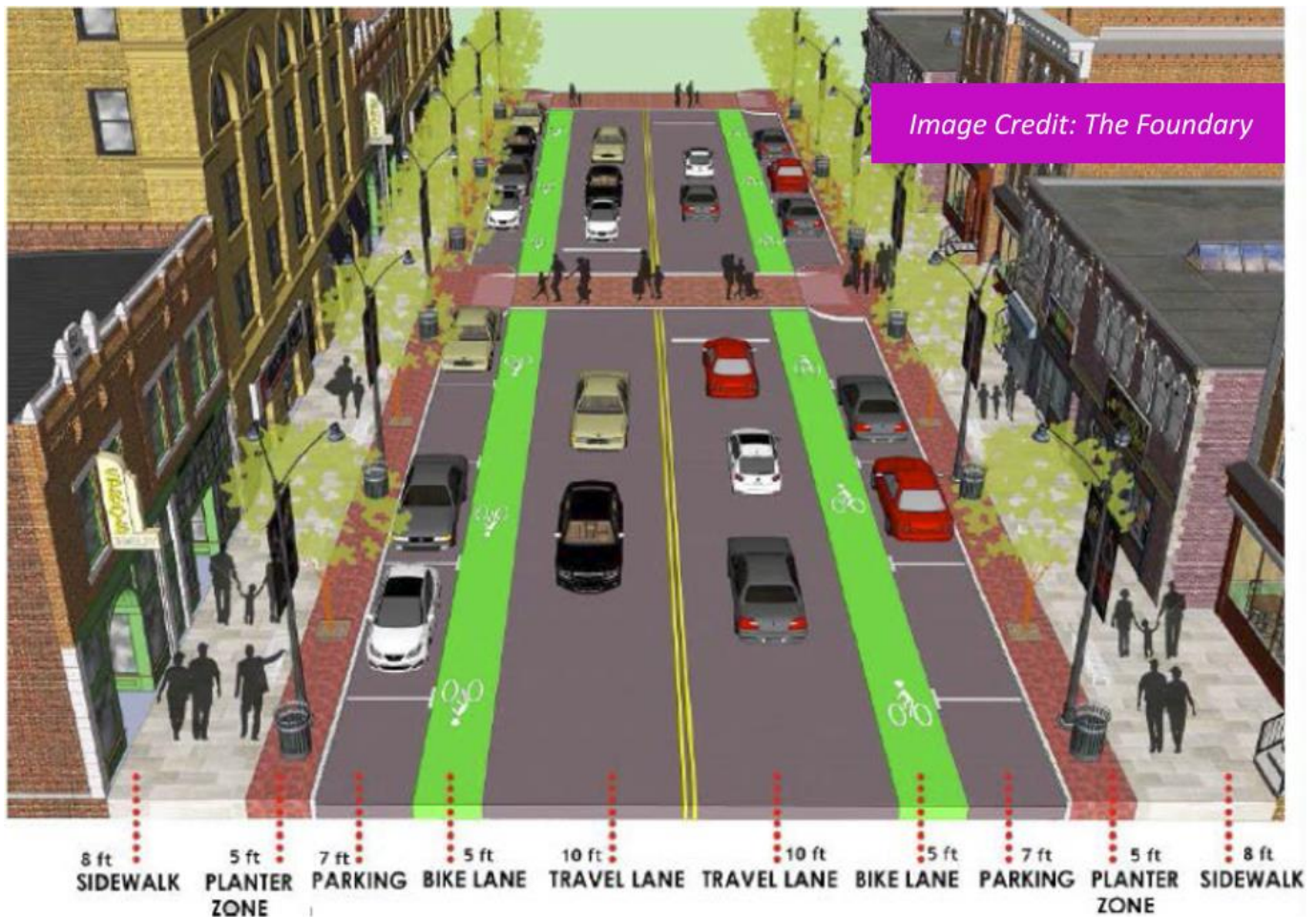
Cons

- Legacy views of roads as for cars often interferes

Other Factors or Considerations

- ChangeLab Solutions offers Complete Streets model comprehensive plan language, local ordinance and resolution language, and state legislation and resolution language.

Exhibit 7-1. Illustration of NACTO Guidelines on Micromobility



Pedestrian Infrastructure

Improving pedestrian infrastructure can enhance safety, ensure American with Disabilities Act (ADA) compliance, and boost the overall pedestrian experience, encouraging more people to choose active transportation for short trips and improving access to transit or other alternative modes.

Pros

- Improves safety and comfort of the pedestrian environment for both transportation and recreation
- Provides better access to various destination and other transportation modes, encouraging alternative transportation choices

Cons

- Construction and maintenance can be costly depending on the project
- Site constraints may limit design possibilities

Other Factors or Considerations

- ADA compliance should be a top consideration for pedestrian improvements.

- Improvement type depends on a combination of traffic volumes, speed differential, available space, destinations along the corridor, and more. See the National Association of City Transportation Officials' (NACTO) Urban Street Design Guide for information on design considerations.
- Including improvements as part of other road construction or maintenance projects may yield cost savings.
- Promotional and educational events can encourage use of facilities and improve understanding of their positive impacts.

Micromobility and Bicycles

INRIX® analyzed more than 50 million car trips in cities across the U.S. and determined 48% are less than 3 miles. While scooters are the newest topic in micromobility, with extreme growth, they are by no means the only form. Shared bicycle usage still the most common way to get around, and e-bikes growing extremely quickly. These systems are an increasingly important part of city transit and mobility systems, as they help people move around cities more seamlessly and efficiently.

Pros

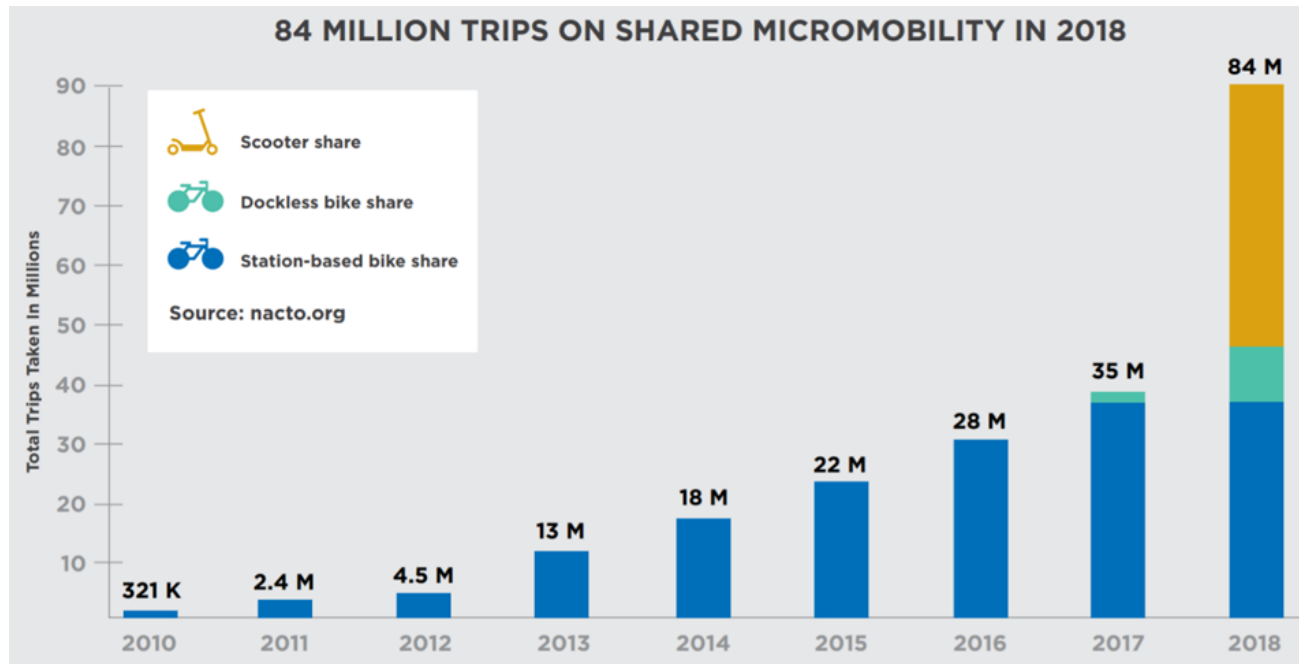
- flexibility in routes and access
- Allow users to go exactly where they need to go when they need to go there
- offer cities another tool in fighting mobility deserts, by closing "first and last mile" gaps for transit systems,
- might have a compounding effect, as expanded infrastructure lowers the barriers for more commuters to choose other alternative modes
- Offers a comfortable and accessible entry for people unfamiliar with biking
- Allows users to access bicycles without buying their own
- Fleets are maintained and repaired professionally

Cons

- Systems have geographic limitations
- Requires a certain level of population and employment density to make the system sustainable
- If the system is not managed well, bicycles and scooters may be neglected and can obstruct public rights-of-way

Other Factors or Considerations

- The appropriate system model depends on the user base (students, tourists, residents, etc.).
- Public and private partnerships and advertisement opportunities can help kickstart and maintain the system.

Exhibit 7-2. Chart of Trips on Shared Micromobility in 2018

Micromobility Infrastructure

Improvements to on-road or separated facilities that encourage travel by increasing safety through a variety of corridor-specific considerations. Improvements often include “sharrows” or wayfinding / route signage, reminding cars to share the road with users; lane striping and physical barriers to provide a dedicated space for users within the road rights of way; or completely separated facilities such as trails/shared-use paths.

Pros

- Increased safety for scooters or bicyclists by reducing automobile conflicts on roads and pedestrian conflicts on sidewalks
- Increase frequency of use for beginner and intermediate users
- Pavement striping and markings and signage help maintain safe automobile speeds by providing visual cues to drivers

Cons

- Site constraints may limit design possibilities
- Construction and maintenance can be costly depending on the project
- Redistributing space among road users can be unpopular

Other Factors or Considerations

- Improvement type depends on a combination of traffic volumes, speed differential, available space, destinations along the corridor, and more. See the National Association of City Transportation Officials’ (NACTO) Urban Bicycleway Design Guide for information on design considerations.
- Including improvements as part of other road construction or maintenance projects may yield cost savings.
- Promotional and educational events can encourage use of facilities and improve understanding of their positive impacts.
- Conflict points at intersections and other locations with weaving motor vehicle traffic may require special attention.

Bus Rapid Transit (BRT)

BRT can be thought of as an above-ground subway or a rubber-tired light rail system with the added benefit of having greater operating flexibility and lower costs. BRT is “an integrated system of facilities, equipment, services, and amenities that improves the speed, reliability, and identity of bus transit.”⁷ BRT systems often have dedicated right-of-way lanes, signal priority, and station platforms level with the bus floor to accelerate passenger boarding time and to allow wheelchairs and strollers to easily roll on or off the bus.

Pros

- BRT can have different features depending on the corridor, which can be phased in over time
- Marketing can effectively portray BRT as an upscale or specialized service
- Dedicated lanes mean transit does not need to wait when traffic is heavy
- Focused on speed and reliability

Cons

- Very costly to implement
- BRT can be watered down (“BRT creep”), losing its luster and become an expensive, but simple limited bus service
- Relies heavily on marketing more than substance in many cases
- Potentially reduces service on local routes
- Potentially reduces funding for local routes as the focus is on the specialized services

Other Factors or Consideration

- BRT features are not one-size-fits-all and can be adjusted to fit the community and land-use in the surrounding area.
- The Institute for Transportation & Development Policy (ITDP) advises on BRT and what constitutes a BRT route or system: <https://www.itdp.org/library/standards-and-guides/thebus-rapid-transit-standard/what-is-brt/>
- BRT can be seen as a step toward light rail or higher capacity transit. The Los Angeles Metro has considered upgrading the Orange Line from a BRT line to a light rail line.
- <https://la.curbed.com/2018/7/26/17617240/orange-line-improvements-travel-times-approved>

Transit Incentives

Incentives may be offered to students, employees, or residents to help reduce the cost of transit to the user. Examples of incentives include free or discounted public transportation passes, employer provided subsidies, or pre-tax payroll reductions.

Pros

- Additional transit ridership can incentivize investment in more routes, increased infrastructure, and other tangential benefits
- Riding transit can increase physical activity, which improves health
- Riding transit reduces automobile usage, which frees up limited parking
- Riding transit can be tied to a multimodal commute, meaning the use of bicycles or walking to commute

Cons

- Incentives must be paid by fees or businesses
- Transit can be a divisive issue for individuals who do not like federally funded programs
- Transit is inexpensive in the Corpus Christi MPO region (\$ 0.75 per ride)

Other Factors or Considerations

- Transit access is limited in much of the Corpus Christi MPO region, especially outside the city of Corpus Christi.
- Transit ridership is known to fluctuate with the price of gas, availability of parking, and other factors which may not be addressed by incentives.

Transit Service Quantity and Quality Factors

Improving transit convenience and experience by adding transit stop amenities, off-board fare collection, on-board cleanliness and comfort, providing efficient route structures, clear bus scheduling information and schedule reliability, station and in-route safety, and customer service. Adding key local and regional routes, increasing service hours, reducing the time between transit vehicles, reducing transfer time, prioritizing transit vehicles at traffic signals, and focusing routes on high density corridors or locations.

Pros

- Service quality can be improved gradually and in phases, meaning limited funding can be used over time
- Reduces travel time for transit users
- Reduce congestion and VMT by encouraging a mode shift to transit
- Can increase physical activity as people walk to the bus and rely less on their cars
- Improved frequencies attract more choice riders
- Additional service hours can reduce the need for SOVs because errands can be run at more times of day with less wait time between buses
- Could benefit non-commuters and those relying solely on transit with additional service

Cons

- Many improvements require long-term funding
- Many improvements require meeting a certain ridership threshold
- Improvements can take time to catch on with riders

Other Factors or Considerations

- Other quality factors, like sidewalk connectivity or shaded sidewalks, may be outside of the transit agency's purview but should be considered
- Increasing service hours requires additional funding or cuts in service elsewhere
- Improvements to transit service can take time to reap the benefits
- Changes to transit service face an issue of frequency versus coverage – should you focus on where ridership is or make less frequent routes go to more places?

Car Sharing

Through a membership, participants pay to rent vehicles for personal trips from a third party. Ownership costs such as car payments, insurance, maintenance, are spread among the user base.

Pros

- By avoiding the costs of auto ownership, users have more flexibility to determine the mode choice that most effectively meets their needs
- A diverse fleet reduces the need for people to own larger, less fuel efficient vehicles for specific occasions
- Dedicated parking reduces the time spent by car owners looking for parking in urban areas

Cons

- Availability of the fleet is uncertain
- Requires planning and time to book a rental and travel to and from the car's location
- Certain age groups and people with a poor driving record may not qualify for membership

Other Factors or Considerations

- Dedicated on-street or off-street parking is required
- Discounts through schools or employers can encourage alternative transportation choices

Mobility Hubs

In conjunction with parking pricing, designated parking for carpooling, vanpooling, transit riders, etc. can further incentivize ridesharing by ensuring convenient parking where parking spaces are otherwise limited.

Pros

- May incentivize ridesharing
- Reduces congestion associated with circulating for parking

Cons

- None

Other Factors or Considerations

- May only be necessary where parking spaces are limited.
- To further incentivize ridesharing, designated parking should be made as convenient as possible to the final destination.

Parking Pricing or Parking Restrictions

Parking restrictions limit the amount of time a vehicle is allowed to remain in a space. Parking restriction may also mean limiting the number of available parking spaces. Parking pricing refers to the price associated with the use of a parking space. Pricing can be fixed or variable depending on time of day/week or demand.

Pros

- Encourages the use of other modes
- Opens curbside space for rideshare modes

Cons

- May have limited political viability

Other Factors or Considerations

- Pricing may fluctuate to ensure a certain percentage of parking spaces are vacant.
- To maximize the efficacy of parking restrictions and pricing, other modes of travel, such as transit or bicycling, must be made accessible, convenient, and intuitive.

TIER 3: INCREASING VEHICLE OCCUPANCY AND SHIFTING TRAVEL TIMES

Increasing vehicle occupancy and shifting travel times continue to contribute to a reduction in travel demand, especially during key peak periods. As vehicle-centric strategies, they do not address congestion as directly as Tier 1 and Tier 2 strategies. However, increasing vehicle occupancy and shifting travel times may serve a broader audience, reducing vehicle miles traveled during peak periods, while affording more flexibility in both trip length and destination than Tier 1 and Tier 2 strategies.

Tier 3 Strategies include:

- Alternative/Flexible Work Schedules
- Guaranteed Ride Home
- High Occupancy Vehicle (HOV) Lanes
- Ridesharing

Alternative/Flexible Work Schedules

Flexible work schedules allow employees to set work schedules outside of the typical workday structure, which enables commuting during off-peak hours.

Pros

- Reduces demand during peak-travel periods
- Could result in significant improvements to air quality
- Inexpensive to implement
- Saves commuter time and money

Cons

- May be difficult to implement for some industries that require employees present during core hours

Other Factors or Considerations

- Work schedules are under the control of each individual organization
- Education may help employers unsure about flexible work schedules to understand the significant benefits

Guaranteed Ride Home

Used to encourage ridesharing, the Guaranteed Ride Home service provides a free or inexpensive taxi (or Uber/Lyft) for emergencies for employees who rideshare.

Pros

- Provides more flexibility within vanpooling programs
- Peace-of-mind for vanpoolers in case of emergency or special circumstances

Cons

- May be costly to implement

Other Factors or Considerations

- Guaranteed Ride Home programs vary widely, from the number of available rides per person, to the mechanism for transporting the person, to the cap on reimbursement per ride.
- More robust programs provide greater assurance to vanpoolers but are more costly to implement.

High Occupancy Vehicle (HOV) Lanes

HOV lanes incentivize ridesharing by offering travelers who rideshare a less congested travel lane at reduced or no cost. Though HOV may be paired with an Express/Toll Lane, they may also be implemented as a stand-alone strategy.

Pros

- Provide improved travel time reliability

Cons

- HOV users often travel for free, which diminishes the ability for the lane to help pay for itself

Other Factors or Considerations

- HOV lane policies may be for 2+, 3+, 4+, or even 5+.
- HOV users can be difficult to monitor and the lanes challenging to enforce.
- May be coupled with an Express Lane through the use of a switchable HOV transponder.

Ridesharing

Ridesharing is two or more people traveling in a vehicle to their destination.

Pros

- Reduces single-occupant vehicle (SOV) trips
- May significantly shorten travel times if High Occupancy Vehicle (HOV) lanes are available

Cons

- Still encourages vehicle travel

Other Factors or Considerations

- Should be implemented in conjunction with a guaranteed ride home program.
- Designated parking for carpooling or vanpooling proximate to destination may encourage users.
- Park-n-Rides may need to be made available to provide convenient starting locations.

TIER 4: IMPROVING ROADWAY OPERATIONS WITHOUT EXPANSION, INCLUDING ITS AND SMART MOBILITY

Today, roadway operations are driven primarily through advancements in technology, though proper planning and physical projects may play a role as well. Intelligent Transportation System (ITS) strategies use technology to improve mobility, increase safety, and reduce delays. ITS improves the existing roadway system's operations in a cost-effective manner. The Corpus Christi MPO will update the previous guiding documents: TxDOT ITS Architecture Plan and TxDOT ITS Strategic Implementation Plan, to include connected and autonomous vehicle systems. Exhibit X shows an existing Corpus Christi MPO corridor that could benefit from Access Management efforts.

Tier 4 Strategies include:

- Access Management
- Advanced Traveler Information System
- Automatic Road Enforcement
- Fiber-Optic Communications
- Maintenance Decisions and Support System (MDSS)
- Ramp Metering
- Signage Improvements
- Traffic Operations Center
- Traffic Signal Timing Adjustments
- Transit Signal Priority
- Variable Speed Limits

Access Management

Planning and design practices that identify existing and future land-use and arterial access points to maximize traffic safety and mobility. Strategies include medians, turn lanes, side/rear access points between businesses, shared access, and local land-use ordinances to control access.

Pros

- Improves safety along managed roadway.
- Increases roadway capacity by enabling greater vehicle throughput.
- Reduces corridor delay, thus improving travel times.

Cons

- Local businesses, residents, and commuters may oppose limiting access to or from developments.
- May increase vehicle delay on local streets.

Other Factors or Considerations

- Proper access management may enhance the safety and comfort of bicyclists and pedestrians by limiting ingress and egress points that cross bicycle and pedestrian infrastructure.

- Drawbacks of access management may be limited by appropriate site design of adjacent development, including side or rear access and access via transit or biking and walking.

Fiber-Optic Communications

Use pulses of light through an optical fiber to carry information for still and live feed cameras, transfer data to and from Traffic Operations Centers and between traffic signals where adaptive technologies have been installed and connect to the permanent Variable Message Signs (VMS). In the future, fiber will enable Vehicle-to-Everything (V2X) connected vehicle technology, allowing communication between connected vehicles and surrounding environment. V2X encompasses V2V (Vehicle-to-Vehicle), V2I (Vehicle-to-Infrastructure), V2N (Vehicle-to-Network), V2D (Vehicle-to-Device) and V2G (Vehicle-to- Grid).

Pros

- Fiber is more resilient than other communication technologies and is not as susceptible to interference or failure as its wireless counterparts
- Is necessary preparation for connected and autonomous vehicles and infrastructure systems

Cons

- Can be expensive to install
- With rapidly changing technology, some investments may become outdated

Other Factors or Considerations

- Roadway and utility projects that require digging up existing infrastructure should consider implementing fiber at time of construction to lower the cost of implementing fiber.

Advanced Traveler Information System

The Advanced Traveler Information Systems applications provide for the collection, aggregation, and dissemination of a wide range of transportation information. The collection of information includes traffic, transit, road weather, and work zone data. Mobile devices, web portals, 511 systems, and variable message signs. A key element in this transformation is the integration of technology between cars and connected roads that deploy high-tech features such as roadside sensor technology and other equipment to monitor traffic flow and speed, and report inclement weather conditions and other hazards. Sophisticated systems that connect roads with vehicles will soon communicate with vehicles, letting them know ahead of time about accidents and problem areas such as construction zones. Sharing such real-time information will allow vehicles to change their route and avoid congestion.

Pros

- Helps to optimize the transportation system by allowing drivers to select the best routes
- May prevent secondary crashes caused by unexpectedly stopped traffic

Cons

- Using apps while driving may result in distracted driving
- Difficult to show conditions on all segments of a planned trip passing through multiple jurisdictions

Other Factors or Considerations

- Different apps or websites may be required to display information about roads within different jurisdictions.

Automatic Road Enforcement

A mounted camera used to record and ticket travelers who disobey a speed limit or other legal road requirement and subsequently mail a ticket to their address of record.

Pros

- Cost effective
- Encourages safe driving practices
- Reduces intersection crashes
- May reduce accident severity

Cons

- Could have political limitations
- Residents and commuters may distrust data collection by camera

Other Factors or Considerations

- Based on current State law, points are not assessed to a person's driver license unless they were moving in excess of 25 miles over the speed limit.

Maintenance Decisions Support System (MDSS)

A computer-based tool employed by road operating agencies to provide recommendations on road maintenance courses of action based on corridor-specific historical, current, and forecasted road and weather data. Recommendations can include treatment type and amount of material, optimal application times, short-term incident management strategies for quick response, and closures or advisories. MDSS also provide training opportunities for maintenance personnel using historical event playbacks.

Pros

- Reduces cost of labor, materials, and equipment
- Improves safety
- Reduces response time
- Provides training opportunity for new and experienced maintenance staff
- Improves collaboration within and between agencies

Cons

- Can be costly to implement the system and maintain data, operating, and hosting agreements
- System implementation may require shifts in organizational and management structures
- System may rely on data not currently collected by an agency

Other Factors or Considerations

- One system may be able to serve multiple agencies and/or MDSS outputs may help inform strategies for agencies not actively using the system.
- Analyzing effectiveness of MDSS recommendations and learning system biases and tendencies are key to calibrating the system.

Ramp Metering

Traffic signals installed on freeway on-ramps to manage the rate of vehicles entering the freeway. Vehicles wait at a designated stop line for a green light that releases individual vehicles into mainline traffic. The signal releases vehicles based on the freeway traffic volume and current speed to minimize stoppages and slowdowns caused by merging and weaving. Volume and speed information are collected by detectors in the mainline freeway pavement.

Pros

- Increased mainline speeds and decreased travel times
- Decreased rear-end and side crashes
- Emission reductions

Cons

- Installation can be very expensive

Other Factors or Considerations

- A ramp meter feasibility study can determine where this would be most beneficial.

Signage Improvement

Additional signage, signage upgrades, or removal of non-essential signs can facilitate the route-finding and decision-making ability of roadway users.

Pros

- Signage installation is relatively low cost
- Signage allows users to make more informed decisions with ample time to react and provides reminders of ways to keep traffic moving safely and efficiently

Cons

- Too much or poorly placed additional signage can create a chaotic environment and/or go unnoticed

Other Factors or Considerations

- Refer to the Manual on Uniform Traffic Control Devices (MUTCD) for minimum standards and guidance on uniformity of messages, locations, sizes, shape, colors, and more.

Traffic Operations Center (TOC)

A central command center which allows traffic engineers to monitor traffic signals, closed-circuit television (CCTV), and remote data sensors to analyze and manage traffic in real-time.

Pros

- Traffic engineers can monitor the transportation system, update driver information via variable message signs (VMS), modify signal timings, and troubleshoot many signal malfunctions remotely in real time
- Changes to signal timing can reduce delays, travel times, and emissions
- Fastest adapting to unexpected closures

Cons

- TOCs are costly to implement and Maintain

Other Factors or Considerations

- Remote traffic signal control requires installation of communication infrastructure across the system.

Traffic Signal Timing Adjustments

Adjustments to signal timing patterns are necessary over time as conditions and traffic patterns change. Inadequate timing may result in unnecessary idling, delays, and cues, especially at peak times when patterns shift dramatically at certain locations.

Pros

- Reduces idling, delays, cues, crashes, travel times, and emissions
- Can enhance the pedestrian and bicyclist experience if clearance intervals are extended at dedicated signals

Cons

- Signal timing adjustments can be costly and require new equipment that may be incompatible with existing infrastructure

Other Factors or Considerations:

- Determining need for signal timing adjustments may require a traffic study.
- Reasons to retime signals include land-use changes, population growth, traffic growth changes in vehicle classification profiles, incident management, special events, construction work zone or temporary traffic signal, traffic signal equipment change, scheduled or periodic traffic signal retiming, and high crash rates.

Transit Signal Priority (TSP)

Transit Signal Priority (TSP) tools modify traffic signal timing or phasing when transit vehicles are present either conditionally for late runs or unconditionally for all arriving transit. Queue jump lanes allow transit priority at red traffic signals, meaning the bus will receive a green light prior to general traffic.

Pros

- Allows transit services to remain on schedule or to make up time
- Fewer stops can make a more comfortable ride for transit riders
- Can be installed at major intersections, does not need to be installed at each intersection to be useful

Cons

- Requires additional technology for buses and traffic signals
- Can be abused by non-transit vehicles
- Does not help if bus is stuck behind a line of non-transit vehicles
- Could impact traffic on side or cross streets

Other Factors or Considerations

- TSP is predominantly used for BRT but can benefit local buses fitted with the proper technology.
- Need for TSP depends on traffic and transit volumes.
- TSP requires the coordination of traffic engineers, transit staff, and TxDOT.

Variable Speed Limits (VSL)

Typically used on interstate highways or high-speed arterials, VSLs leverage data on volume, operating speeds, weather information, sight distance, and roadway surface conditions to digitally post appropriate speed limits.

Pros

- Eliminate or delay bottlenecks
- Reduce crashes associated with slowed traffic on high-speed roadways
- Increase road capacity by decreasing vehicle spacing distances
- Reduced emissions due to less stop and go driving

Cons

- Increased maintenance costs
- Driver compliance varies
- Developing VSL algorithms is complicated
- If poorly managed, VSLs can increase variance in speeds

Other Factors or Considerations

- Variable message signs (VMS) are often used to achieve similar objectives by displaying messages such as “Slow Traffic Ahead”.

TIER 5: TRAFFIC INCIDENT MANAGEMENT

A traffic incident is any occurrence that impedes the normal flow of traffic on a highway, including crashes, vehicle breakdowns, and spilled loads. According to FHWA: Traffic Incident Management (TIM) consists of a planned and coordinated multi-disciplinary process to detect, respond to, and clear traffic incidents so that

traffic flow may be restored as safely and quickly as possible. Effective TIM reduces the duration and impacts of traffic incidents and improves the safety of motorists, crash victims and emergency responders. TIM activities are typically categorized into five overlapping functional areas:

1. **Detection and Verification:** the determination that an incident of some type has occurred, and the determination of the precise location and nature of the incident.
2. **Traveler Information:** The communication of incident related information to motorists who are at the scene of the incident, approaching the scene of the incident, or not yet departed from work, home, or other location.
3. **Response:** The activation of a “planned” strategy for the safe and rapid deployment of the most appropriate personnel and resources to the incident scene.
4. **Scene Management and Traffic Control:** the coordination and management of resources and activities at or near the incident scene, including personnel, equipment, and communication links and the process of managing vehicular traffic around the scene of the incident.
5. **Quick Clearance and Recovery:** the safe and timely removal of a vehicle, wreckage, debris, or spilled material from the roadway and the restoration of the roadway to its full capacity. These functional areas incorporate a number of operational agencies to assist in traffic incident recovery.

Typically, the agencies responsible for incident recovery include: TxDOT, State and local law enforcement, Fire/EMS, local jurisdictions, coroners, courtesy patrols, and towing/recovery agencies.

Tier 5 Strategies include:

- Courtesy Patrol
- Advanced Traveler Information System
- Traffic Incident Management Plan

Courtesy Patrol

Service provided to stranded freeway (or tollway) travelers to assist with vehicle breakdowns, stalls and crashes.

Pros

- May help reduce secondary crashes
- Reduce the time vehicles are disabled within the right-of-way

Cons

- May be costly to implement

Other Factors or Considerations

- Courtesy patrol programs do not replace emergency responders but can serve as a stop gap.
- May only be applicable for high-travel corridors with high incident rates.

Advanced Traveler Information System

(ATIS) is any system that acquires, analyzes, and presents information to assist travelers in moving to their desired destination. Relevant information may include locations of crashes, weather and road conditions, faster routes, recommended speeds, and lane restrictions.

Pros

- Most required technology already exists.
- Very cost efficient and effective.

Cons

- Can push traffic into local neighborhoods.
- Can be “gamed” by private users with false reporting.

Other Factors or Considerations

- Best when done using public-private partnerships.

Traffic Incident Management Plan (TIMP)

TIMPs are plans and programs developed to improve the procedural and coordination components of unplanned events on the roadways that impact traffic flow. These events can include stalled vehicles, crashes, hazardous materials incidents, and more. TIMP allows first responders, maintenance and operations crews, and other partners to better communicate and coordinate before, during, and after an incident by standardizing roles and expectations.

Pros

- Increased safety at incident sites for motorists and responders
- Reduced traffic flow recovery time after incidents
- Development of a TIMP provides training, networking, and best practice sharing opportunities for agency staff

Cons

- Requires intensive involvement from many agencies along the corridor

Other Factors or Considerations

- Decisions made during the TIMP development process must consider existing protocols and agreements.

TIER 6: ROADWAY CAPACITY

Though increasing roadway capacity can produce significant reductions in congestion in the short term, these projects are typically extremely costly, can cause congestion during construction, and tend to have a shorter lifetime of proposed benefits.

Tier 6 Strategies include:

- Auxiliary Lanes
- Grade-Separated Crossings/
- New Lanes/Roads
- Roundabouts and Modern Intersection Design

Auxiliary Lanes

Auxiliary Lanes include turning lanes and deceleration and acceleration lanes. Turn lanes are additional lanes that separate left or right turning vehicles from through-traffic. Deceleration lanes are extensions placed just prior to a freeway exit or intersection turn lane to allow vehicles to reduce speed outside the through-lanes. Acceleration lanes are extensions provided following entrance to the freeway or turn lane onto an arterial street for vehicles to increase speed and merge more smoothly into the through lane.

Pros

- Allows vehicles safe merging onto high speed highways or slower speed arterials

Cons

- May require property acquisition
- Auxiliary lanes are costly
- Widens intersections, creating a longer distance for pedestrians to cross

Other Factors or Considerations

- Acceleration and deceleration lanes should be made long enough to allow drivers to cover the speed differential from the on or off-ramp.

Grade-Separated Crossings/Intersections

A grade-separated intersection is a crossing at which converging facilities are separated vertically, removing the need for a signalized crossing and allowing each facility to flow without interruption.

Grade separation for congestion management purposes is commonly used to remove conflicts between automobiles, automobiles and trains, automobiles and bicyclists, automobiles and pedestrians, or some other combination. Grade separation can bring both congestion relief and safety benefits to travelers. There are several designs that can reduce impacts and improve flow compared to a conventional interchange, such as: Single Point Urban Interchange and the Diverging Diamond Interchange.

Pros

- Reduces congestion caused by the presence of signalized intersections
- Reduces crashes by eliminating conflicts between vehicles or vehicles and other travel modes

Cons

- Grade-separated intersections are extremely costly

Other Factors or Considerations

- Where space allows, grade separation for a specific mode of travel may present opportunity to include other modes. For instance, including bicycle lanes and a shared-use path where a road passes under a highway removes a barrier for all users by building just one grade-separated intersection.

New Lanes/Roads

Additional travel lanes on existing roadways or new roadways along separate corridors.

Pros

- Adds significant short-term capacity
- Can connect new areas to activity Centers
- Accommodates new growth outside of urban core

Cons

- Extremely costly to implement
- Induces demand on the treated corridor
- Growth of population and jobs in the region, leading to an increase in VMT, will further reduce the benefit of project
- Long construction times may cause delays
- Imposes environmental impacts and requires mitigation

Other Factors or Considerations

- Requires consideration and proof of insufficiency of TDM and/or operational efficiency improvements prior to being incorporated in TIP.

Roundabouts or other Modern Intersection Designs

There are several innovative intersection designs that eliminate, relocate, or modify conflict points by improving the way traffic makes certain movements. TxDOT recently published a description of these designs are coming into more frequent use: Modern Roundabouts, Diverging Diamond Interchange, Displaced Left Turn Intersection, Median U-Turn Intersection, Through–About Intersection, Continuous Green T-Intersection,

Jughandle Intersection, Offset T-Intersection, Parallel Flow Intersection, Quadrant Roadway Parallel Flow Intersections, Continuous Flow Intersections, Upstream Signalized Crossovers. When designed properly, these design types safely and efficiently accommodate all travel modes.



Displaced Left-turn Intersection



Through-about Intersection



Median U-Turn Intersection



Continuous Green-T Intersection



Parallel Flow Intersection

Pros

- Reduces conflict points and crashes at intersections (traditional intersections have 32 conflict points; roundabouts have eight conflict points)
- Increase capacity

- Increase safety
- More adaptable to the land uses around it
- Reduce left turn conflicts
- Reduce cost
- Reduces delay and improves traffic flow
- Higher capacity than traditional intersections
- Less expensive than traditional signalized intersections
- Potentially less space is required at the approaches of a roundabout due to removal of turn lanes

Cons

- The roundabout itself may require more space than a traditional intersection
- Requires educational outreach on benefits and proper use
- Can be costly to construct

Other Factors or Considerations

- Local agencies often develop informational materials for the public when implementing roundabouts.
- If the roundabout is on a route frequented by truck traffic, it is important to incorporate elements such as a truck apron along the center island.

Section 8: Implementation and Programming of Strategies

Effectively managing and even mitigating congestion in Corpus Christi Metropolitan Planning area requires a multilevel, multi-jurisdictional approach. Though the recommendations highlighted in the Congested Corridor profiles fall generally to the parties identified as responsible for each Corridor, the Corpus Christi MPO must still play an active role in ensuring the 2019 CMP is fully incorporated into: the region's 25-year Metropolitan Transportation Plan, the TxDOT 10-year Unified Transportation Plan, and the Corpus Christi 4-year Transportation Investment Program. Additionally, some strategies fall outside of the purview of either the Corpus Christi MPO or the Corpus Christi MPO's planning partners. For instance, efficient land-use and development planning were not included as part of corridor recommendations. However, effective congestion mitigation must include these Tier 1 Strategies. Finally, many strategies fall to private organizations, including telecommuting policies and the provision of incentives for using alternative transportation modes. This CMP Implementation Plan enumerates recommended action steps for ensuring the 2019 CMP is implemented to the fullest extent practicable, providing the greatest possibility for an efficient and effective transportation network for the region now and into the future.

Given that the region's need for transportation investments is greater than available funding, it is important to prioritize investments that provide the most benefit to the region in terms of regional goals and objectives. This analysis provides a systematic methodology for evaluating and ranking individual projects in the development of a financially reasonable MTP and a fiscally constrained UTP and 4-year TIP. Identifying the recommended set of strategies to address congestion is federally mandated and is an integral part of the CMP. A well-rounded suite of strategies must include:

- Strategies to preserve the condition of the existing transportation system
- Strategies to improve system performance through operation and management
- Strategies to promote non-vehicular mode
- As a last resort, strategies to add roadway capacity
- Public transportation strategies that enhance access to and the effectiveness of transit.

Examples include: Transit operations strategies, capacity strategies such as reserved transit travel lanes and strategies to facilitate first and last mile access to transit by active modes (bicycling and walking).

PROJECT PRIORITIZATION: UPDATING THE MTP, UTP AND TIP

The existing congestion was assessed based on data from 2016, and the forecast corridors anticipated to be congested in 2045 according to the Corpus Christi MPO travel demand model. Forecasting congestion according to the TTR and TTTR measures is not possible, since the travel demand model represents travel patterns throughout a typical day and cannot forecast variability from day to day or hour to hour. To provide additional context, the population and number of jobs within ¼ mile of the corridor is provided for 2016 and 2045 using data from the travel demand model. Evaluating corridors for both current and future years allows the CMP to respond to today's congestion while anticipating future congestion. Since many strategies can take several months or even years to implement, projecting future congestion and proactively programming and implementing strategies may help alleviate future congestion.

The Corpus Christi MPO's 2020-2045 Metropolitan Transportation Plan (MTP) includes 11 funded projects (Exhibit 8-1) on the TTI list of congested streets in the (Exhibit 6-6) Corpus Christi MPO. All of these projects are also identified as being a Corridor of Concern (COC) or Corridor of Note (CON) on the Corpus Christi MPO's CMP network of Regionally Significant Corridors (RSC).

Exhibit 8-1. Table of 2045 Programmed Projects on the Region's Most Congested Roads

RSC	Plan Period	Rank	MTP ID	Project Name	Description	From Limit	To Limit	Sponsor	TxDOT System	Funding Category	Total Project Cost (\$, millions)
COC	TIP 2021 - 2024	1	MPO-001	SH 358 (SPID) Ramp Reversal	Ramp reversal Phase II-B	Nile Drive	Staples Street	TxDOT-CRP	On	2	\$45.43
COC	TIP 2021 - 2024	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	\$77.88
COC	TIP 2021 - 2024	1	MPO-003	US 181	Widen freeway by constructing 1 additional travel lane in each direction	North of FM 3239 (Buddy Ganem Drive)	FM 2986 (Wildcat Drive)	TxDOT-CRP	On	2 / 4U	\$18.17
COC	TIP 2021 - 2024	1	MPO-004	US 181 Ramp Reversals	Reverse entrance and exit ramps in Northbound direction	FM 3239 (Buddy Ganem Drive)	FM 2986 (Wildcat Drive)	TxDOT-CRP	On	2	\$5.19
COC	10-Year	1	MPO-017	SH 361	Upgrade/add direct connectors	At SH 35 interchange	0.6 miles Southeast on SH 361	TxDOT-CRP	Off	2	\$46.20
CON	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	On	4	\$6.60
COC	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	\$8.40
COC	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	\$42.00
COC	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	\$96.00
COC	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	\$120.00
COC	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	\$72.00

Section 9: Evaluating and Reporting Strategy Effectiveness

A critical step in maintaining the Congestion Management Process is the development of a biannual report that all of the participating agencies agree upon. The biannual report works with other monitoring programs such as finance and plan implementation to present a snapshot of transportation system performance and progress towards the region's policy goals and objectives identified in the Corpus Christi MPO MTP.

Performance monitoring is not a one-time event, but rather an ongoing activity that must be matched to the existing and future resources of each participating agency. This is how the Corpus Christi MPO will monitor not only the ongoing performance of the region's transportation system, but also the effectiveness of the strategies and projects that are put in place. By evaluating congestion in the area, the Corpus Christi MPO and its member agencies can determine which strategies worked the best in mitigating specific types of congestion, and which had the least impact. This will in turn identify the best actions in subsequent CMP, MTP, UTP, and TIP updates. Through the biannual reports, the Corpus Christi MPO will disseminate information about the congestion related issues in the region.

This CMP provides a framework for weighing congestion relief projects against one another in terms of effectiveness but does not establish priorities for the region. To effectively monitor the performance of the system, access to good, reliable and consistent data is pertinent. In some areas, there have been longstanding data collection efforts, such as pavement conditions and crashes, but there are issues related to standardization of data, as data collection methodology varies by different agencies and software used. The Corpus Christi MPO relies heavily on the data collection efforts of our partner agencies and project implementers. The MPO is committed to an effective regional transportation monitoring system. It is important for the Corpus Christi MPO and the participating agencies to engage in a cooperative process to ensure the data collection efforts are coordinated to facilitate meaningful and efficient analysis.

The Corpus Christi MPO's Performance Based Planning and Programming processes, which integrate the CMP, are inherently iterative and continuous. The performance measures are applied at multiple dimensions within the MPO transportation planning process and includes evaluation of strategies at every stage in the process (Exhibit 9-1):

- Regional Analysis of Performance Measures (Annual)
- Project-level Analysis of Performance Measures (PBPP process)
- Determination of progress towards regional goals and objectives

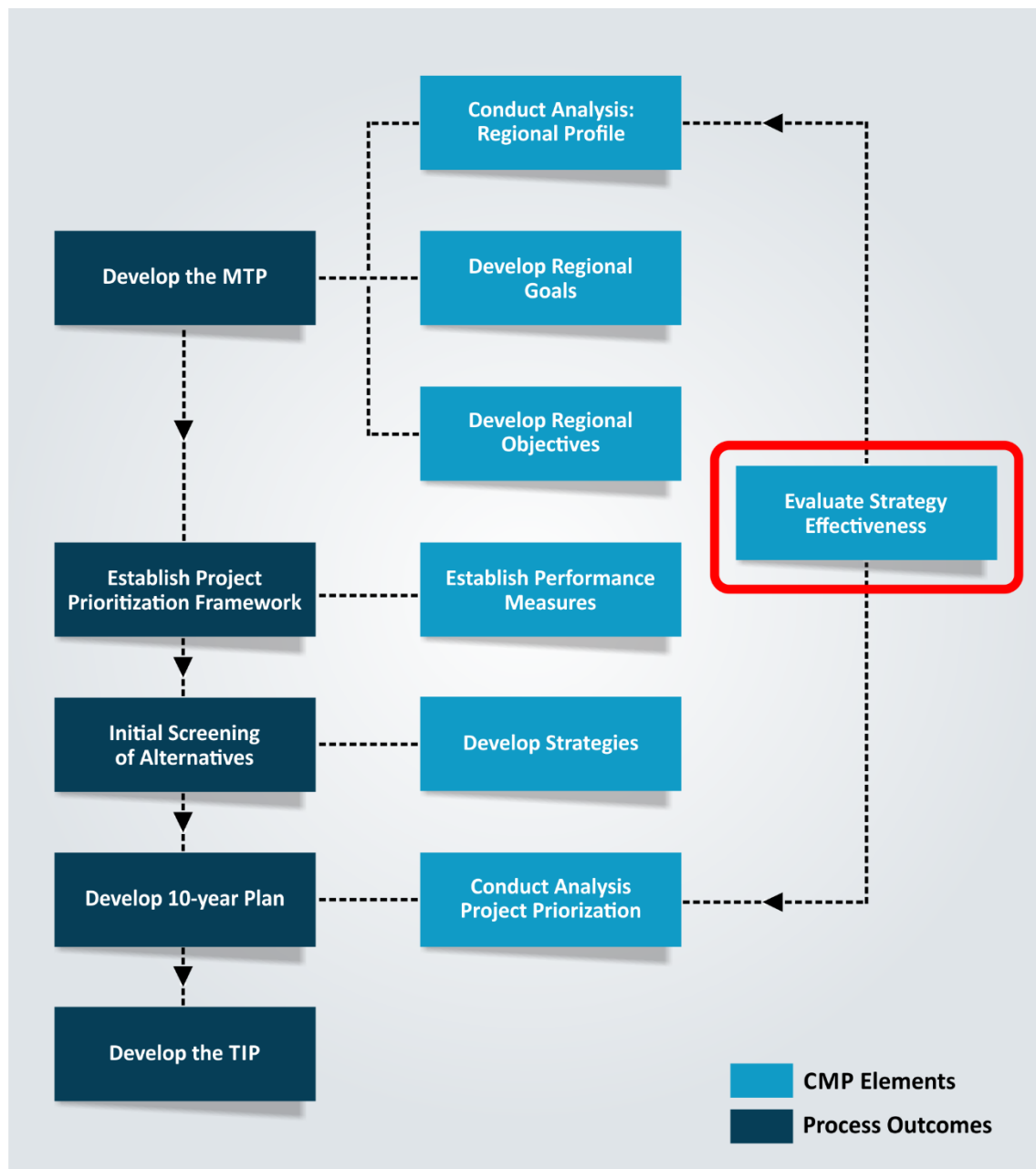
MONITORING STRATEGY EFFECTIVENESS

The implemented strategies will be monitored to assess their effectiveness. Monitoring techniques and schedules will be dependent on the type of improvement that is implemented, and the data availability. It may take years to assess the benefits of safety-type improvements that are intended to reduce crash rates, crash severity, or incidents. Conversely, the benefits of capacity improvements are relatively easy to measure and assess.

The benefits of the implemented strategies will be documented in the biannual report. For the improvements that may not be accurately measured in a two-year time frame, results will be presented with a description of the limitations of monitoring. Capacity projects and other improvements that are implemented through non-CMP methods will still be monitored to determine their benefits. Based upon the monitoring results, the learned facts will feedback for the CMP to verify and update the used performance measures, the applied data

analysis techniques, and the considered strategies. If necessary, the CMP objectives and the CMP itself will be adjusted.

Exhibit 9-1. Chart of CMP in Transportation Planning – Evaluating Strategy Effectiveness



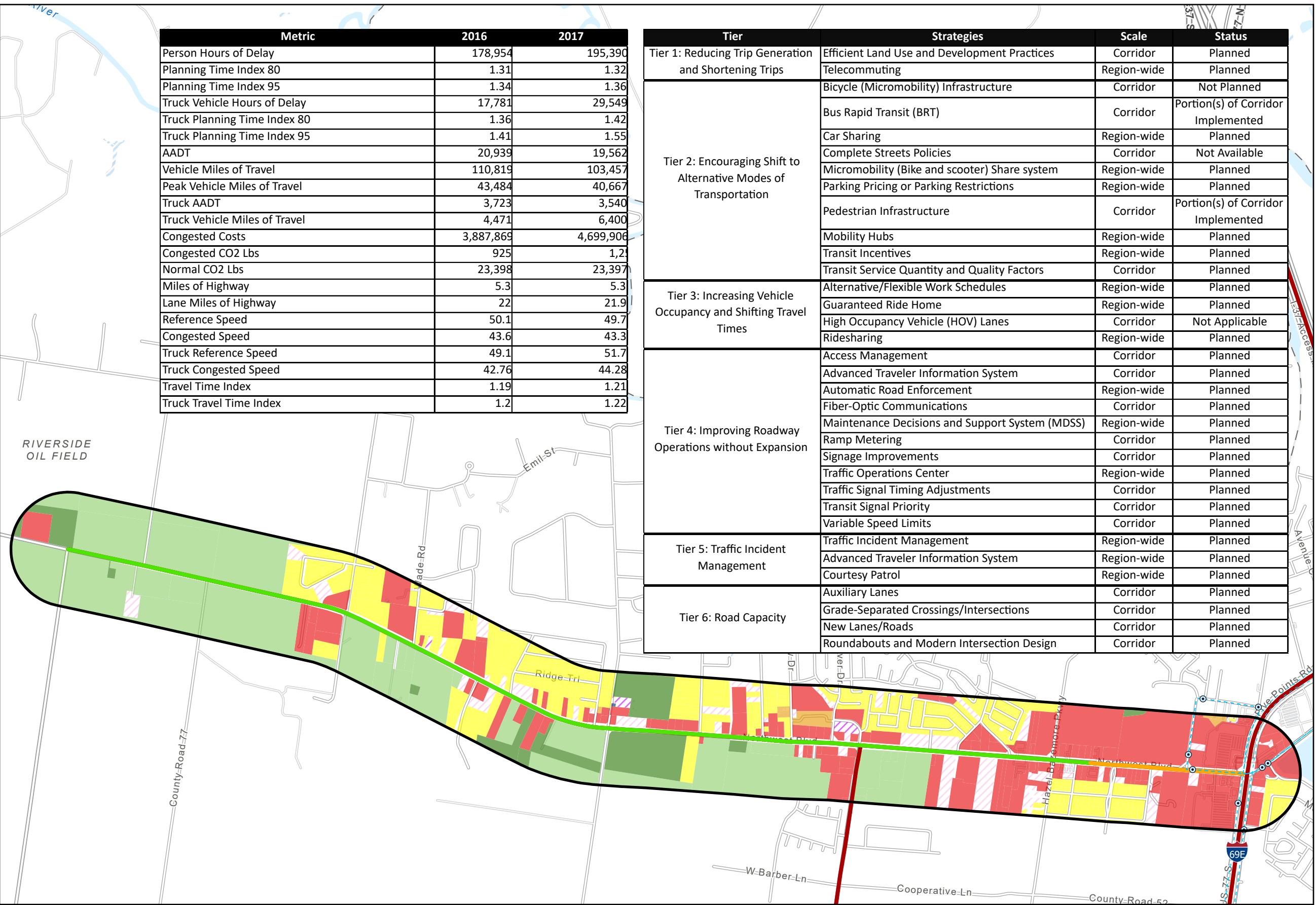
Section 10. Regionally Significant Corridor Profiles

Regionally Significant Routes are grouped into two categories: corridors of concern and corridors of note. The Corridors of Concern will become more congested during the next 25 years without intervention. Corridors of Note are important corridors that currently function and need monitoring to avoid unacceptable congestion. Corridor profiles show the travel corridor, surrounding land uses, and areas of need.

COC #01: FM 624 / Northwest Blvd (CR 79 to I-69)

Metric	2016	2017
Person Hours of Delay	178,954	195,390
Planning Time Index 80	1.31	1.32
Planning Time Index 95	1.34	1.36
Truck Vehicle Hours of Delay	17,781	29,549
Truck Planning Time Index 80	1.36	1.42
Truck Planning Time Index 95	1.41	1.55
AADT	20,939	19,562
Vehicle Miles of Travel	110,819	103,457
Peak Vehicle Miles of Travel	43,484	40,667
Truck AADT	3,723	3,540
Truck Vehicle Miles of Travel	4,471	6,400
Congested Costs	3,887,869	4,699,906
Congested CO2 Lbs	925	1,21
Normal CO2 Lbs	23,398	23,397
Miles of Highway	5.3	5.3
Lane Miles of Highway	22	21.9
Reference Speed	50.1	49.7
Congested Speed	43.6	43.3
Truck Reference Speed	49.1	51.7
Truck Congested Speed	42.76	44.28
Travel Time Index	1.19	1.21
Truck Travel Time Index	1.2	1.22

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Portion(s) of Corridor Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Portion(s) of Corridor Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned



Legend

Regionally Significant Corridors

- Corridor of Concern (COC)
- Corridor of Note (CON)

Travel Time Index

- Poor
- Fair
- Good

Property Classification

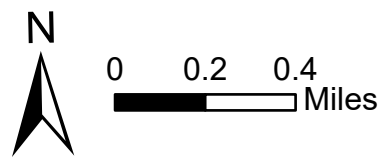
- Single-family Residential
- Multi-family Residential
- Commercial
- Industrial
- Open-Space Land
- Rural Land
- Utilities
- Residential Inventory
- Other
- Vacant Lots
- Colonia Lots
- Totally Exempt Property
- Property Not Classified

Corpus Christi RTA

- Stops
- Routes

Existing Bicycle Facilities

- Off Road Bicycle Facility
- On Road Bicycle Facility



- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)



COC #02: FM 1889 (CR 46 to FM 624)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Not Planned
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Not Available
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	3,119	8,513
Planning Time Index 80	1.05	1.1
Planning Time Index 95	1.06	1.14
Truck Vehicle Hours of Delay	319	340
Truck Planning Time Index 80	1.06	1.18
Truck Planning Time Index 95	1.07	1.28
AADT	5,769	5,521
Vehicle Miles of Travel	13,201	12,628
Peak Vehicle Miles of Travel	5,569	4,796
Truck AADT	1,710	1,673
Truck Vehicle Miles of Travel	686	172
Congested Costs	66,389	169,880
Congested CO2 Lbs	6	2
Normal CO2 Lbs	2,620	2,022
Miles of Highway	2.3	2.3
Lane Miles of Highway	4.6	4.6
Reference Speed	58.8	45
Congested Speed	57.7	42
Truck Reference Speed	58.6	45.5
Truck Congested Speed	57.44	41.64
Travel Time Index	1.02	1.07
Truck Travel Time Index	1.02	1.09



- Legend**
- Regionally Significant Corridors
 - Corridor of Concern (COC)
 - Corridor of Note (CON)
 - Travel Time Index
 - Poor
 - Fair
 - Good
 - Property Classification
 - Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
 - Corpus Christi RTA
 - Stops
 - Routes
 - Existing Bicycle Facilities
 - Off Road Bicycle Facility
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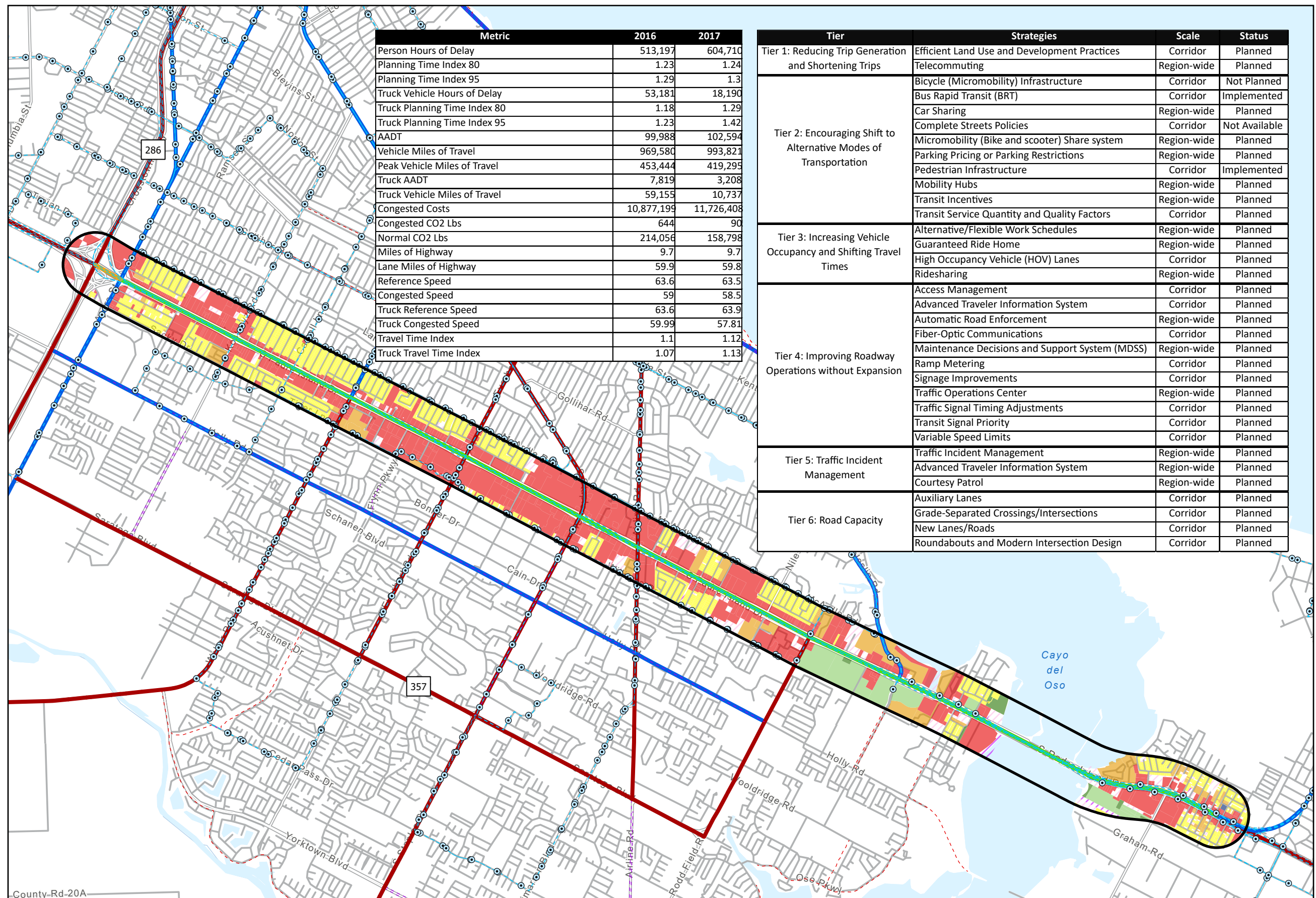
Parties Responsible:

- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

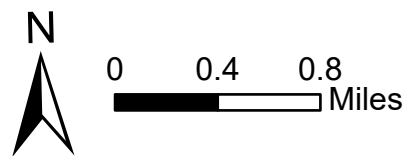
Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)

COC #03: SH 358 (SH 286 to Central Dr)



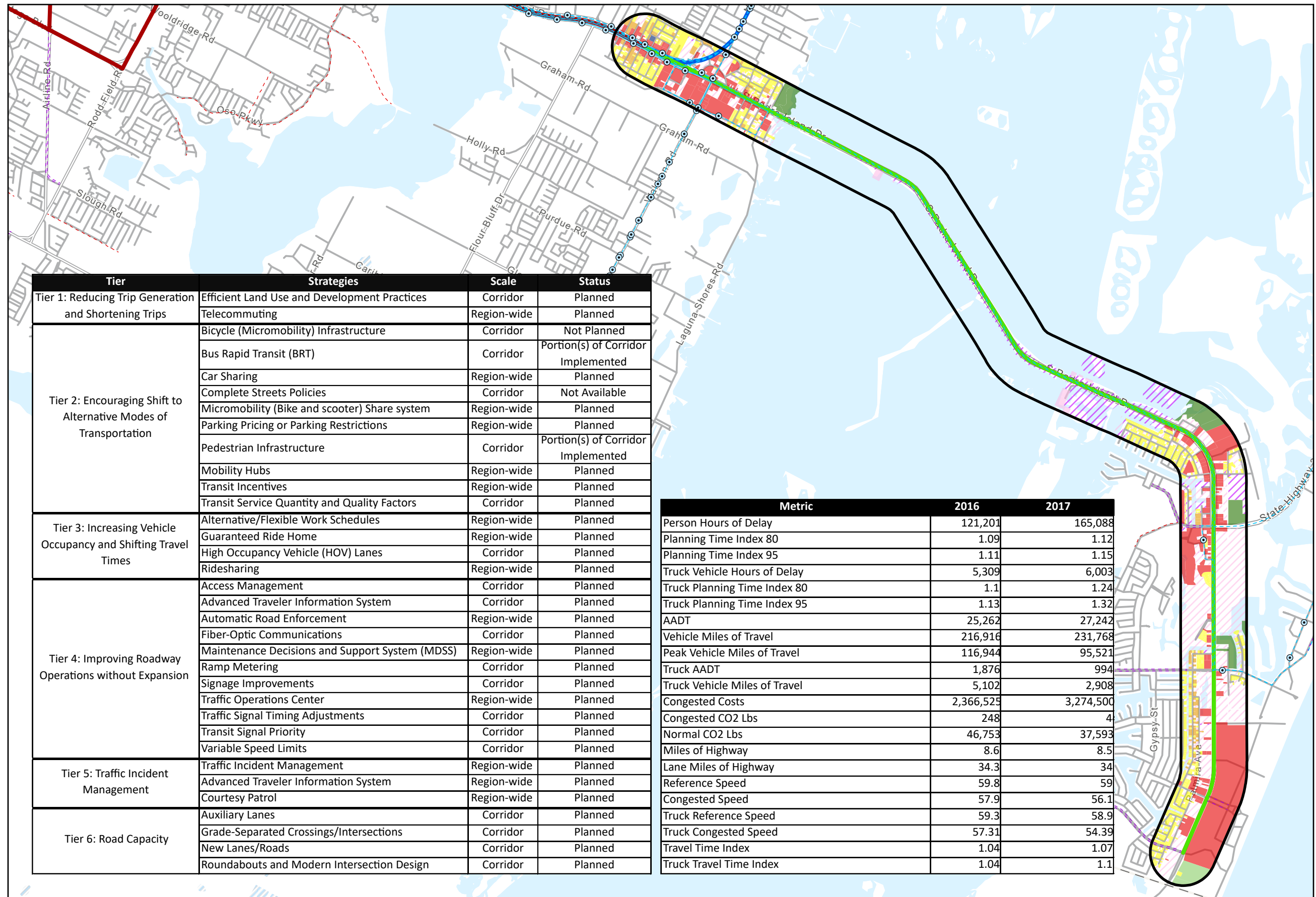
- Legend**
- Regionally Significant Corridors
- Corridor of Concern (COC)
 - Corridor of Note (CON)
- Travel Time Index
- Poor
 - Fair
 - Good
- Property Classification
- Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
- Corpus Christi RTA
- Stops
 - Routes
- Existing Bicycle Facilities
- Off Road Bicycle Facility
 - On Road Bicycle Facility



- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

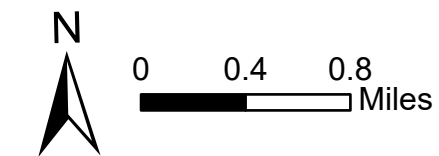
COC #04: PR 22 (Central Dr to Sea Pines Dr)



Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Portion(s) of Corridor Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Portion(s) of Corridor Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Planned
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	121,201	165,088
Planning Time Index 80	1.09	1.12
Planning Time Index 95	1.11	1.15
Truck Vehicle Hours of Delay	5,309	6,003
Truck Planning Time Index 80	1.1	1.24
Truck Planning Time Index 95	1.13	1.32
AADT	25,262	27,242
Vehicle Miles of Travel	216,916	231,768
Peak Vehicle Miles of Travel	116,944	95,521
Truck AADT	1,876	994
Truck Vehicle Miles of Travel	5,102	2,908
Congested Costs	2,366,525	3,274,500
Congested CO2 Lbs	248	4
Normal CO2 Lbs	46,753	37,593
Miles of Highway	8.6	8.5
Lane Miles of Highway	34.3	34
Reference Speed	59.8	59
Congested Speed	57.9	56.1
Truck Reference Speed	59.3	58.9
Truck Congested Speed	57.31	54.39
Travel Time Index	1.04	1.07
Truck Travel Time Index	1.04	1.1

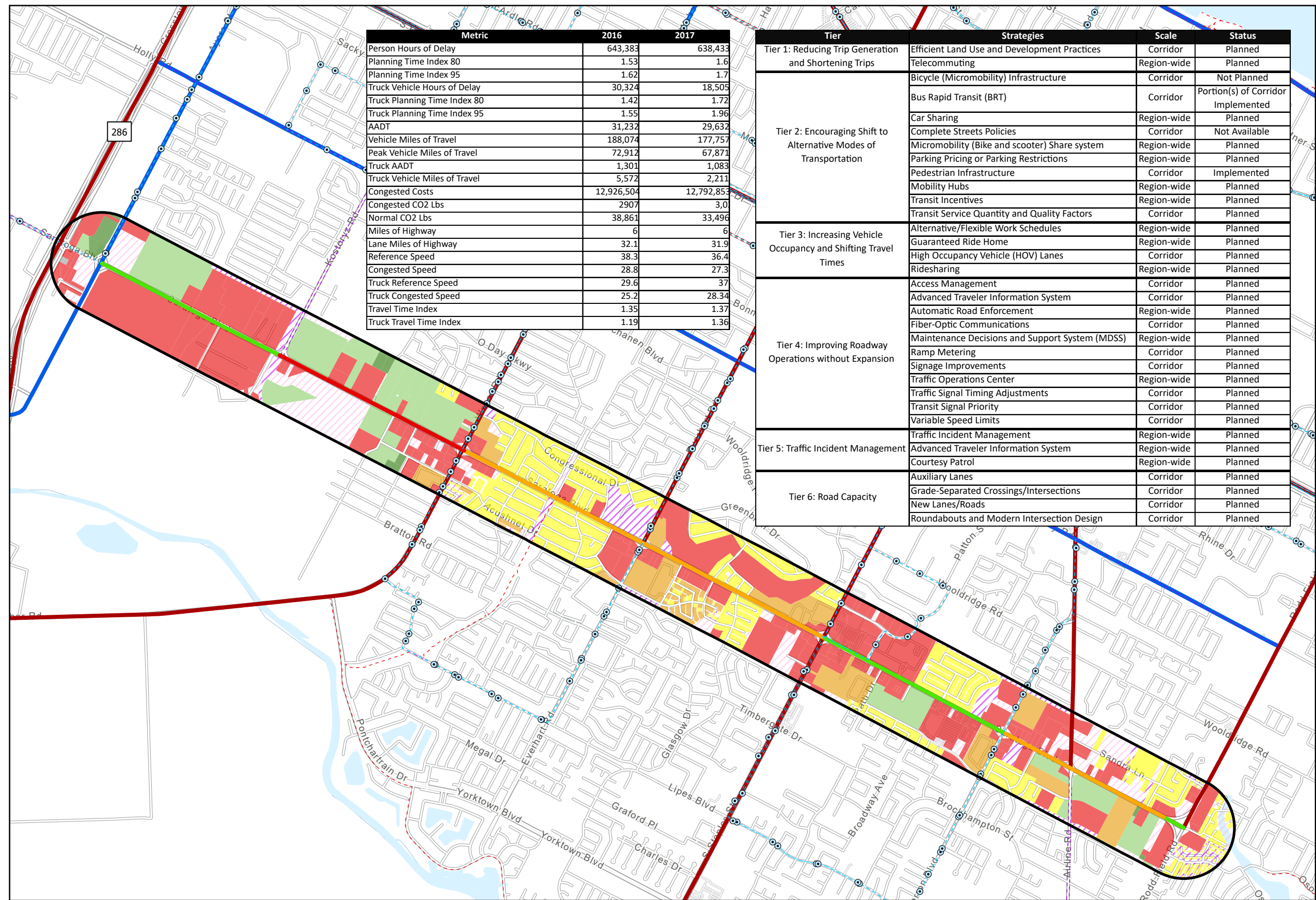
- Legend**
- Regionally Significant Corridors
 - Corridor of Concern (COC)
 - Corridor of Note (CON)
 - Travel Time Index
 - Poor
 - Fair
 - Good
 - Property Classification
 - Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
 - Corpus Christi RTA
 - Stops
 - Routes
 - Existing Bicycle Facilities
 - Off Road Bicycle Facility
 - On Road Bicycle Facility



- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

COC #05: SH 357 (Ayers St to SH 357)



Legend

Regionally Significant Corridors

- Corridor of Concern (COC)
- Corridor of Note (CON)

Travel Time Index

- Poor
- Fair
- Good

Property Classification

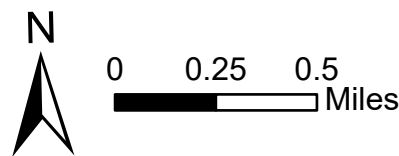
- Single-family Residential
- Multi-family Residential
- Commercial
- Industrial
- Open-Space Land
- Rural Land
- Utilities
- Residential Inventory
- Other
- Vacant Lots
- Colonia Lots
- Totally Exempt Property
- Property Not Classified

Corpus Christi RTA

- Stops
- Routes

Existing Bicycle Facilities

- Off Road Bicycle Facility
- On Road Bicycle Facility



- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

COC #06: FM 43 (SH 286 to SH 358)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Portion(s) of Corridor Implemented
	Bus Rapid Transit (BRT)	Corridor	Portion(s) of Corridor Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
Tier 5: Traffic Incident Management	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	338,433	408,985
Planning Time Index 80	1.57	1.59
Planning Time Index 95	1.68	1.66
Truck Vehicle Hours of Delay	5,680	10,465
Truck Planning Time Index 80	1.44	1.62
Truck Planning Time Index 95	1.57	1.78
AADT	17,944	19,380
Vehicle Miles of Travel	84,273	90,708
Peak Vehicle Miles of Travel	35,536	35,066
Truck AADT	864	786
Truck Vehicle Miles of Travel	1,124	1,254
Congested Costs	6,479,883	8,135,336
Congested CO2 Lbs	1424	1.8
Normal CO2 Lbs	17,186	18,197
Miles of Highway	4.7	4.7
Lane Miles of Highway	15	15.2
Reference Speed	37.5	36
Congested Speed	29.4	28
Truck Reference Speed	33.1	37
Truck Congested Speed	28.4	29.9
Travel Time Index	1.37	1.4
Truck Travel Time Index	1.22	1.33

Legend

Regionally Significant Corridors

Corridor of Concern (COC)

Corridor of Note (CON)

Travel Time Index

Poor

Fair

Good

Property Classification

Single-family Residential

Multi-family Residential

Commercial

Industrial

Open-Space Land

Rural Land

Utilities

Residential Inventory

Other

Vacant Lots

Colonia Lots

Totally Exempt Property

Property Not Classified

Corpus Christi RTA

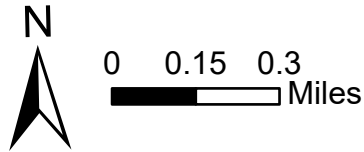
Stops

Routes

Existing Bicycle Facilities

Off Road Bicycle Facility

On Road Bicycle Facility



Parties Responsible:

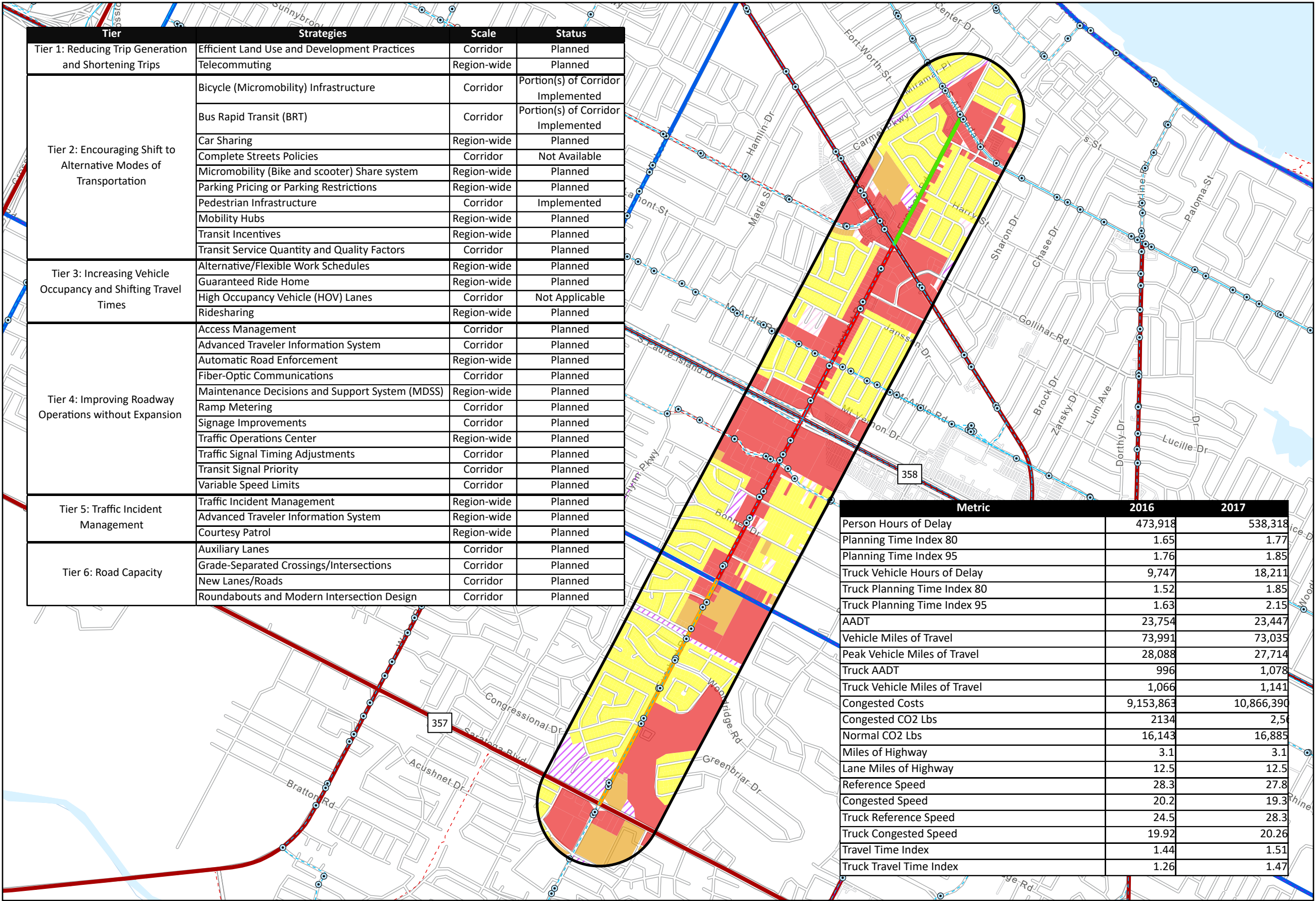
- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)



COC #07: Everhart Rd (SH 357 to S Alameda St)



Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Portion(s) of Corridor Implemented
	Bus Rapid Transit (BRT)	Corridor	Portion(s) of Corridor Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	473,918	538,318
Planning Time Index 80	1.65	1.77
Planning Time Index 95	1.76	1.85
Truck Vehicle Hours of Delay	9,747	18,211
Truck Planning Time Index 80	1.52	1.85
Truck Planning Time Index 95	1.63	2.15
AADT	23,754	23,447
Vehicle Miles of Travel	73,991	73,035
Peak Vehicle Miles of Travel	28,088	27,714
Truck AADT	996	1,078
Truck Vehicle Miles of Travel	1,066	1,141
Congested Costs	9,153,863	10,866,390
Congested CO2 Lbs	2134	2,5
Normal CO2 Lbs	16,143	16,885
Miles of Highway	3.1	3.1
Lane Miles of Highway	12.5	12.5
Reference Speed	28.3	27.8
Congested Speed	20.2	19.3
Truck Reference Speed	24.5	28.3
Truck Congested Speed	19.92	20.26
Travel Time Index	1.44	1.51
Truck Travel Time Index	1.26	1.47

Legend

Regionally Significant Corridors

- Corridor of Concern (COC)
- Corridor of Note (CON)

Travel Time Index

- Poor
- Fair
- Good

Property Classification

- Single-family Residential
- Multi-family Residential
- Commercial
- Industrial
- Open-Space Land
- Rural Land
- Utilities
- Residential Inventory
- Other
- Vacant Lots
- Colonia Lots
- Totally Exempt Property
- Property Not Classified

Corpus Christi RTA

- Stops
- Routes

Existing Bicycle Facilities

- Off Road Bicycle Facility
- On Road Bicycle Facility



- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

COC #08: FM 2444 (SH 286 to SH 357)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Portion(s) of Corridor Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Portion(s) of Corridor Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	211,239	244,862
Planning Time Index 80	1.27	1.37
Planning Time Index 95	1.34	1.43
Truck Vehicle Hours of Delay	7,752	15,379
Truck Planning Time Index 80	1.27	1.44
Truck Planning Time Index 95	1.37	1.54
AADT	15,493	14,533
Vehicle Miles of Travel	87,498	82,047
Peak Vehicle Miles of Travel	59,682	31,935
Truck AADT	1,265	1,195
Truck Vehicle Miles of Travel	2,924	2,302
Congested Costs	4,159,700	5,178,527
Congested CO2 Lbs	853	1.2
Normal CO2 Lbs	27,322	15,996
Miles of Highway	5.6	5.6
Lane Miles of Highway	15.7	15.9
Reference Speed	41.6	42.9
Congested Speed	38	36.6
Truck Reference Speed	36.5	42.9
Truck Congested Speed	34.01	36.96
Travel Time Index	1.12	1.25
Truck Travel Time Index	1.1	1.24

Legend

Regionally Significant Corridors

Corridor of Concern (COC)

Corridor of Note (CON)

Travel Time Index

Poor

Fair

Good

Property Classification

Single-family Residential

Multi-family Residential

Commercial

Industrial

Open-Space Land

Rural Land

Utilities

Residential Inventory

Other

Vacant Lots

Colonia Lots

Totally Exempt Property

Property Not Classified

Corpus Christi RTA

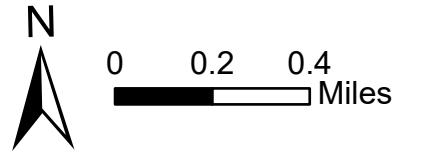
Stops

Routes

Existing Bicycle Facilities

Off Road Bicycle Facility

On Road Bicycle Facility



Parties Responsible:

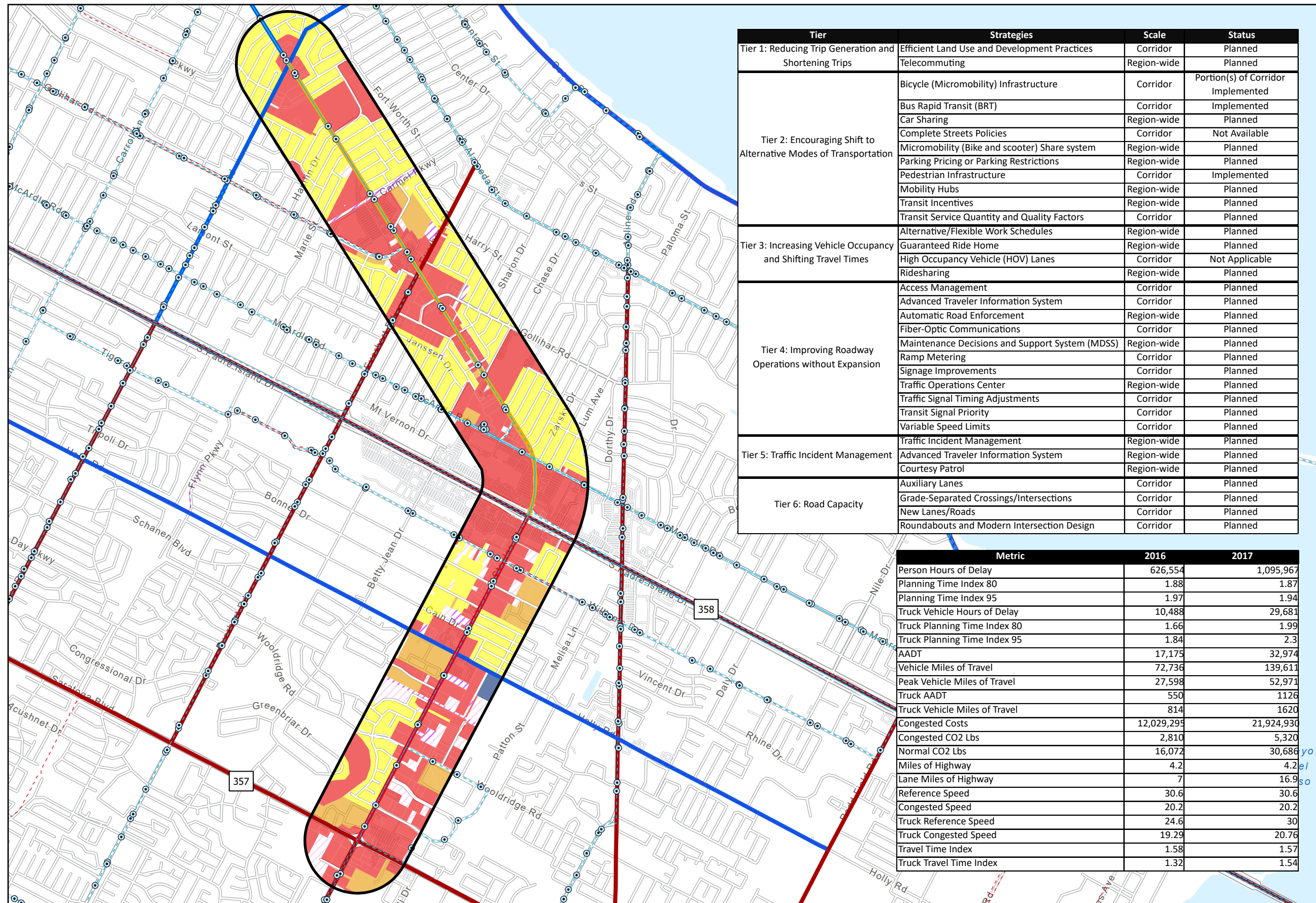
- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

Data Sources:

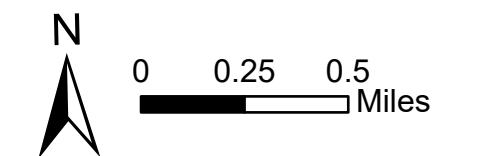
- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)



COC #09: S Staples St (SH 357 to Weber Rd)



- Legend**
- Regionally Significant Corridors
 - Corridor of Concern (COC)
 - Corridor of Note (CON)
 - Travel Time Index
 - Poor
 - Fair
 - Good
 - Property Classification
 - Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
 - Corpus Christi RTA
 - Stops
 - Routes
 - Existing Bicycle Facilities
 - Off Road Bicycle Facility
 - On Road Bicycle Facility



Parties Responsible:

- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)

COC #10: Airline Rd (SH 357 to S Alameda St)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Portion(s) of Corridor Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
Tier 5: Traffic Incident Management	Courtesy Patrol	Region-wide	Planned
	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
Tier 6: Road Capacity	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	407,754	555,619
Planning Time Index 80	1.6	1.83
Planning Time Index 95	1.64	1.91
Truck Vehicle Hours of Delay	12,455	19,591
Truck Planning Time Index 80	1.51	1.91
Truck Planning Time Index 95	1.66	2.17
AADT	23,932	24,926
Vehicle Miles of Travel	80,266	83,673
Peak Vehicle Miles of Travel	30,475	31,782
Truck AADT	1293	1215
Truck Vehicle Miles of Travel	1686	1387
Congested Costs	8,019,573	11,257,122
Congested CO2 Lbs	1,961	2,723
Normal CO2 Lbs	17,345	18,639
Miles of Highway	3.4	3.4
Lane Miles of Highway	12.3	12.3
Reference Speed	29.6	29.4
Congested Speed	22	20.5
Truck Reference Speed	26.4	29.8
Truck Congested Speed	22.16	21.75
Travel Time Index	1.39	1.52
Truck Travel Time Index	1.23	1.47

Legend

Regionally Significant Corridors

Corridor of Concern (COC)

Corridor of Note (CON)

Travel Time Index

Poor

Fair

Good

Property Classification

Single-family Residential

Multi-family Residential

Commercial

Industrial

Open-Space Land

Rural Land

Utilities

Residential Inventory

Other

Vacant Lots

Colonia Lots

Totally Exempt Property

Property Not Classified

Corpus Christi RTA

Stops

Routes

Existing Bicycle Facilities

Off Road Bicycle Facility

On Road Bicycle Facility



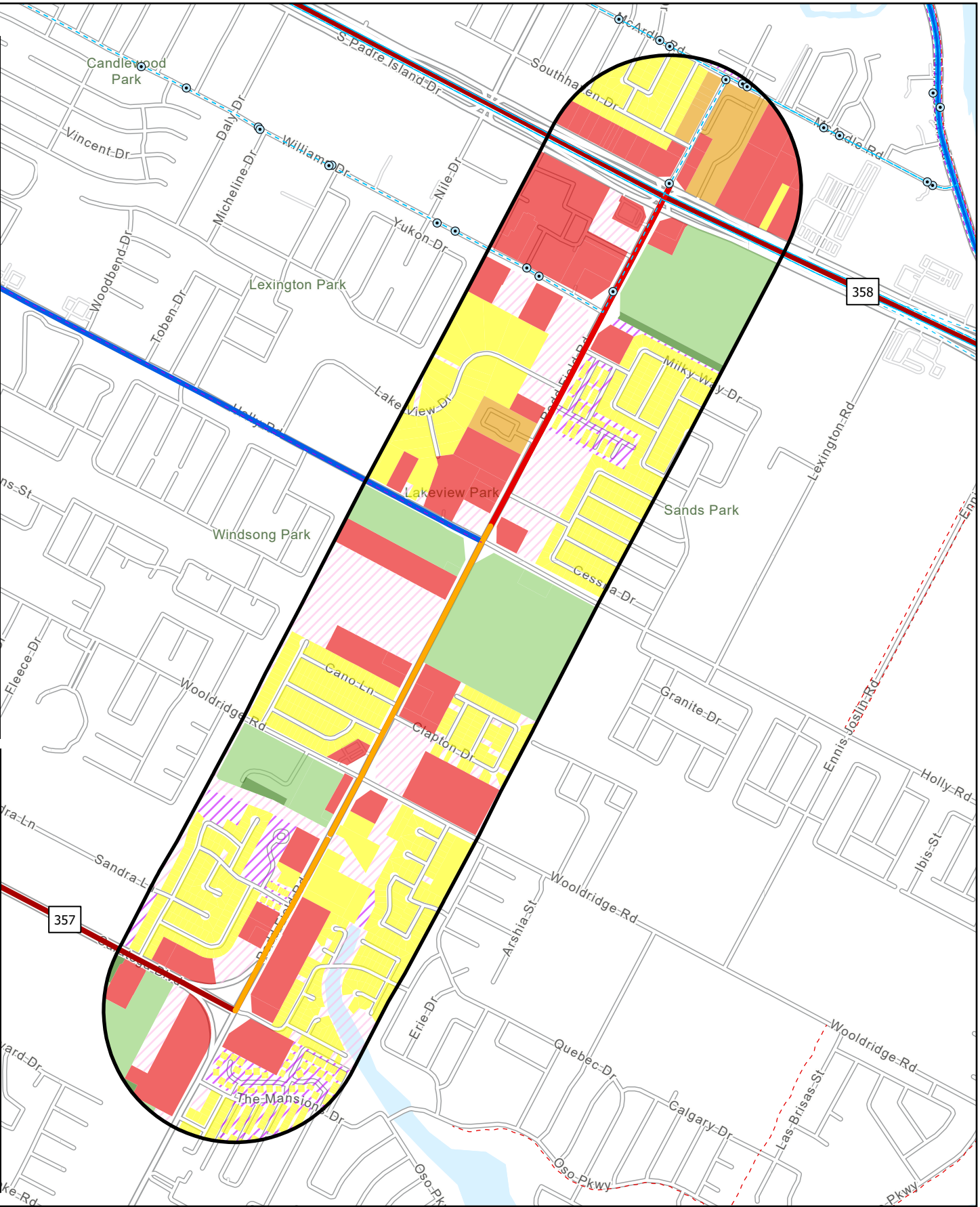
- Parties Responsible:
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

COC #11: SH 357 / Saratoga Blvd (SH 357 to SH 358)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Planned
	Bus Rapid Transit (BRT)	Corridor	Portion(s) of Corridor Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	262,624	313,439
Planning Time Index 80	1.66	1.83
Planning Time Index 95	1.85	2.13
Truck Vehicle Hours of Delay	3,767	7,682
Truck Planning Time Index 80	1.44	1.87
Truck Planning Time Index 95	1.57	2.13
AADT	36,734	33,684
Vehicle Miles of Travel	63,843	59,549
Peak Vehicle Miles of Travel	25,028	22,806
Truck AADT	1474	1184
Truck Vehicle Miles of Travel	862	712
Congested Costs	5,000,606	6,240,045
Congested CO2 Lbs	1,062	1,497
Normal CO2 Lbs	11,908	11,700
Miles of Highway	1.7	1.8
Lane Miles of Highway	7	7.1
Reference Speed	37.3	36.3
Congested Speed	26.8	24.1
Truck Reference Speed	30.9	36.4
Truck Congested Speed	26.4	25.34
Travel Time Index	1.44	1.56
Truck Travel Time Index	1.22	1.51



Legend

Regionally Significant Corridors

- Corridor of Concern (COC)
- Corridor of Note (CON)

Travel Time Index

- Poor
- Fair
- Good

Property Classification

- Single-family Residential
- Multi-family Residential
- Commercial
- Industrial
- Open-Space Land
- Rural Land
- Utilities
- Residential Inventory
- Other
- Vacant Lots
- Colonia Lots
- Totally Exempt Property
- Property Not Classified

Corpus Christi RTA

- Stops
- Routes

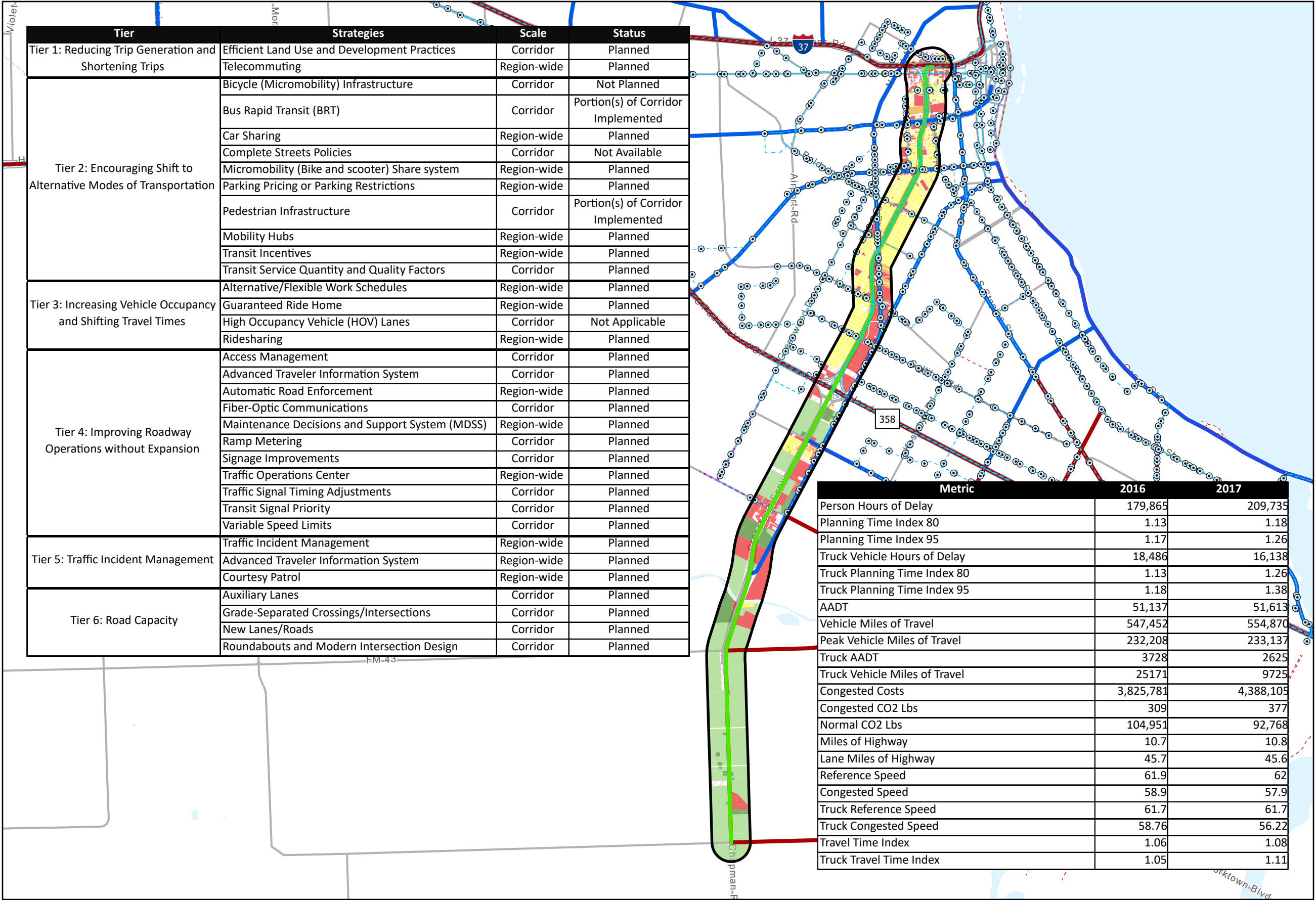
Existing Bicycle Facilities

- Off Road Bicycle Facility
- On Road Bicycle Facility

- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

COC #12: SH 286 (FM 2444 to I-37)



Legend

Regionally Significant Corridors

- Corridor of Concern (COC)
- Corridor of Note (CON)

Travel Time Index

- Poor
- Fair
- Good

Property Classification

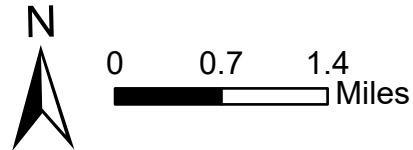
- Single-family Residential
- Multi-family Residential
- Commercial
- Industrial
- Open-Space Land
- Rural Land
- Utilities
- Residential Inventory
- Other
- Vacant Lots
- Colonia Lots
- Totally Exempt Property
- Property Not Classified

Corpus Christi RTA

- Stops
- Routes

Existing Bicycle Facilities

- Off Road Bicycle Facility
- On Road Bicycle Facility



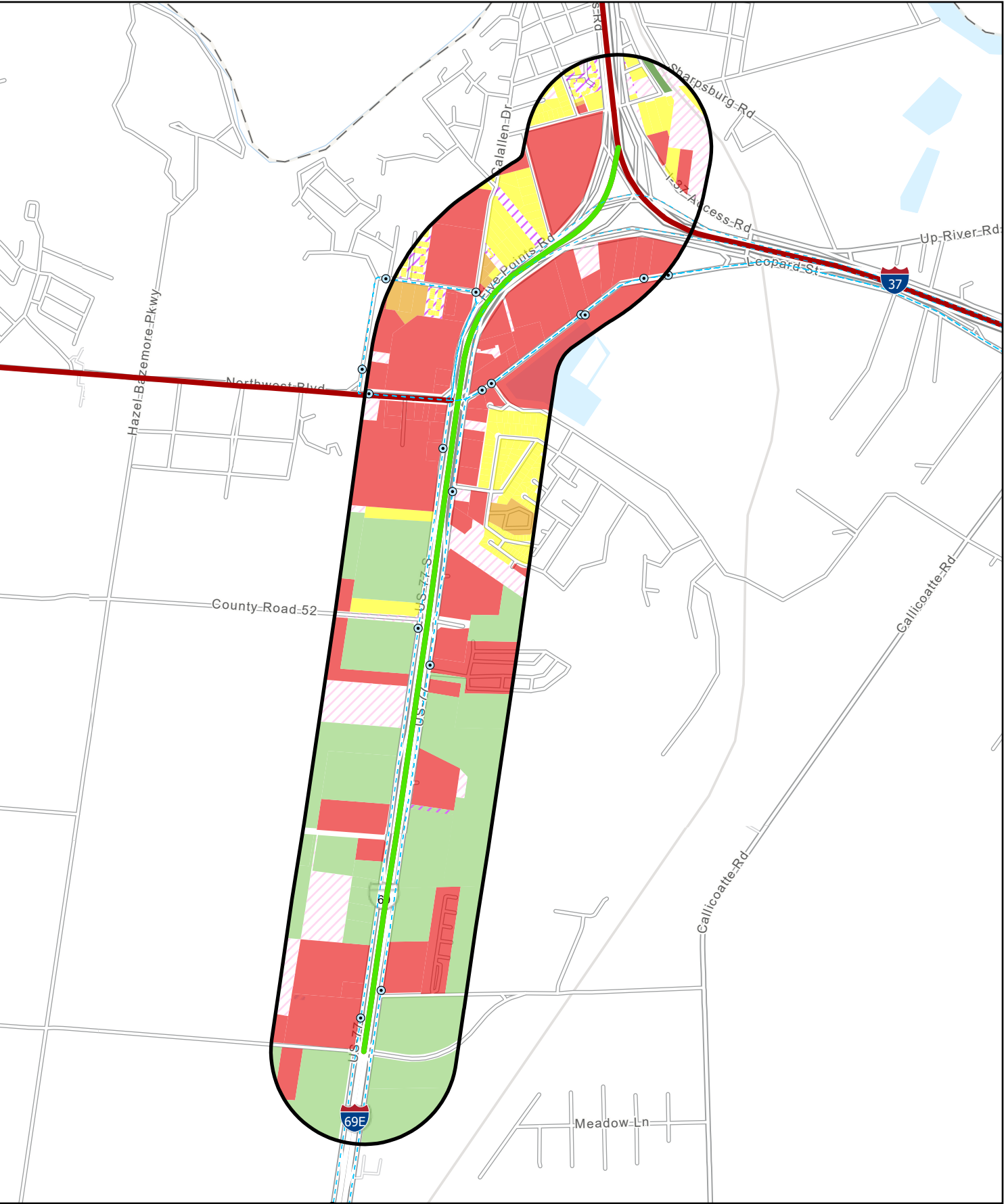
- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

COC #13: I-69 (CR 48 to I-37)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Planned
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Variable Lane Control	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	0	5,060
Planning Time Index 80	0	1.04
Planning Time Index 95	0	1.04
Truck Vehicle Hours of Delay	0	1,747
Truck Planning Time Index 80	0	1.06
Truck Planning Time Index 95	0	1.06
AADT	0	23,303
Vehicle Miles of Travel	0	60,912
Peak Vehicle Miles of Travel	0	26,264
Truck AADT	0	6530
Truck Vehicle Miles of Travel	0	5944
Congested Costs	0	145,099
Congested CO2 Lbs	0	0
Normal CO2 Lbs	0	17,863
Miles of Highway	3.1	2.6
Lane Miles of Highway	0	11.2
Reference Speed	0	63.8
Congested Speed	0	63.2
Truck Reference Speed	0	63.5
Truck Congested Speed	0	62.42
Travel Time Index	0	1.01
Truck Travel Time Index	0	1.02



- Legend**
- Regionally Significant Corridors
- Corridor of Concern (COC)
 - Corridor of Note (CON)
- Travel Time Index
- Poor
 - Fair
 - Good
- Property Classification
- Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
- Corpus Christi RTA
- Stops
 - Routes
- Existing Bicycle Facilities
- Off Road Bicycle Facility
 - On Road Bicycle Facility

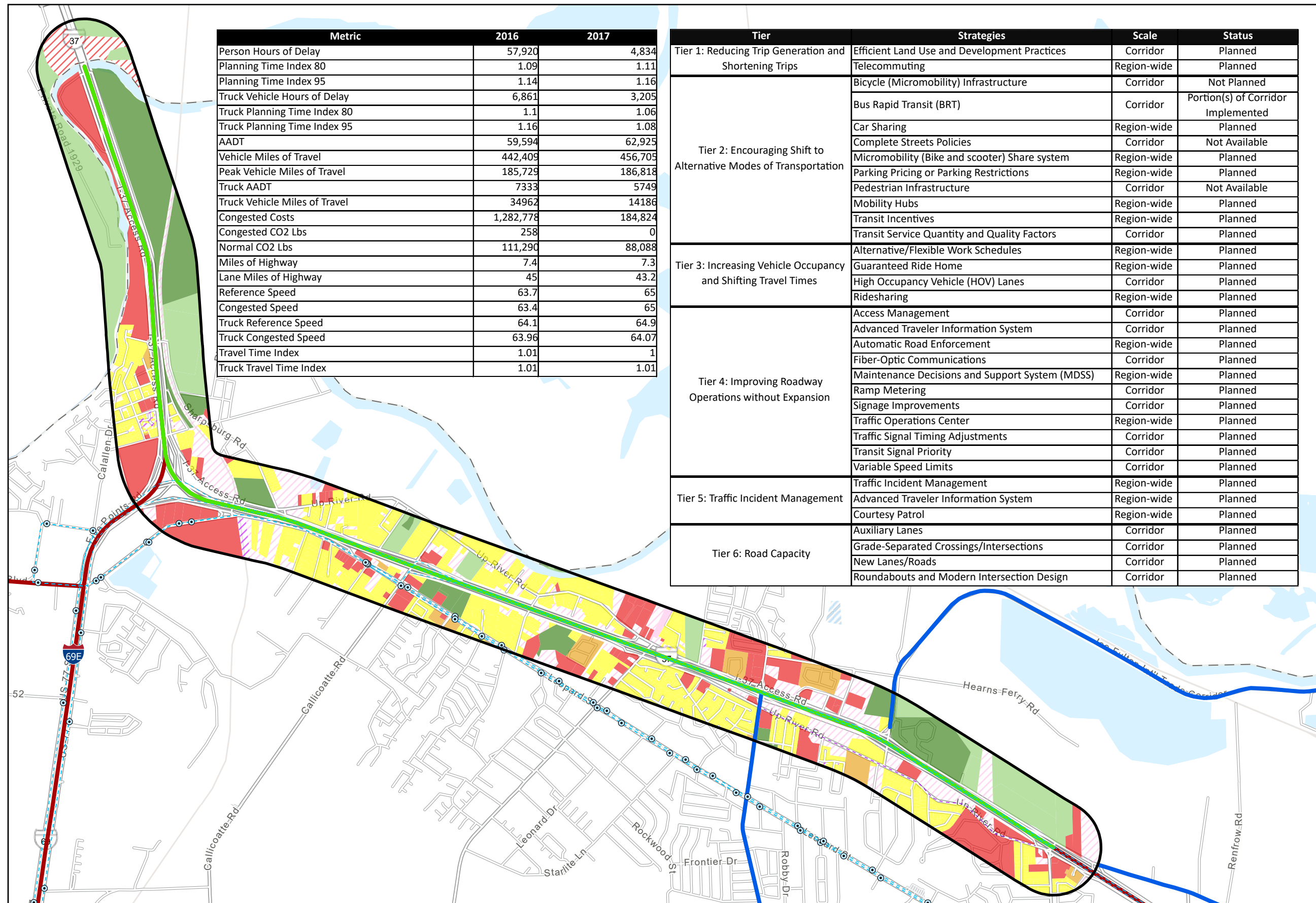
Parties Responsible:

- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)

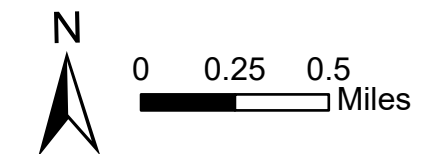
COC #14: I-37 (Nueces River to Rand Morgan Rd)



Metric	2016	2017
Person Hours of Delay	57,920	4,834
Planning Time Index 80	1.09	1.11
Planning Time Index 95	1.14	1.16
Truck Vehicle Hours of Delay	6,861	3,205
Truck Planning Time Index 80	1.1	1.06
Truck Planning Time Index 95	1.16	1.08
AADT	59,594	62,925
Vehicle Miles of Travel	442,409	456,705
Peak Vehicle Miles of Travel	185,729	186,818
Truck AADT	7333	5749
Truck Vehicle Miles of Travel	34962	14186
Congested Costs	1,282,778	184,824
Congested CO2 Lbs	258	0
Normal CO2 Lbs	111,290	88,088
Miles of Highway	7.4	7.3
Lane Miles of Highway	45	43.2
Reference Speed	63.7	65
Congested Speed	63.4	65
Truck Reference Speed	64.1	64.9
Truck Congested Speed	63.96	64.07
Travel Time Index	1.01	1
Truck Travel Time Index	1.01	1.01

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Portion(s) of Corridor Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Not Available
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Planned
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
Tier 5: Traffic Incident Management	Courtesy Patrol	Region-wide	Planned
	Auxiliary Lanes	Corridor	Planned
Tier 6: Road Capacity	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

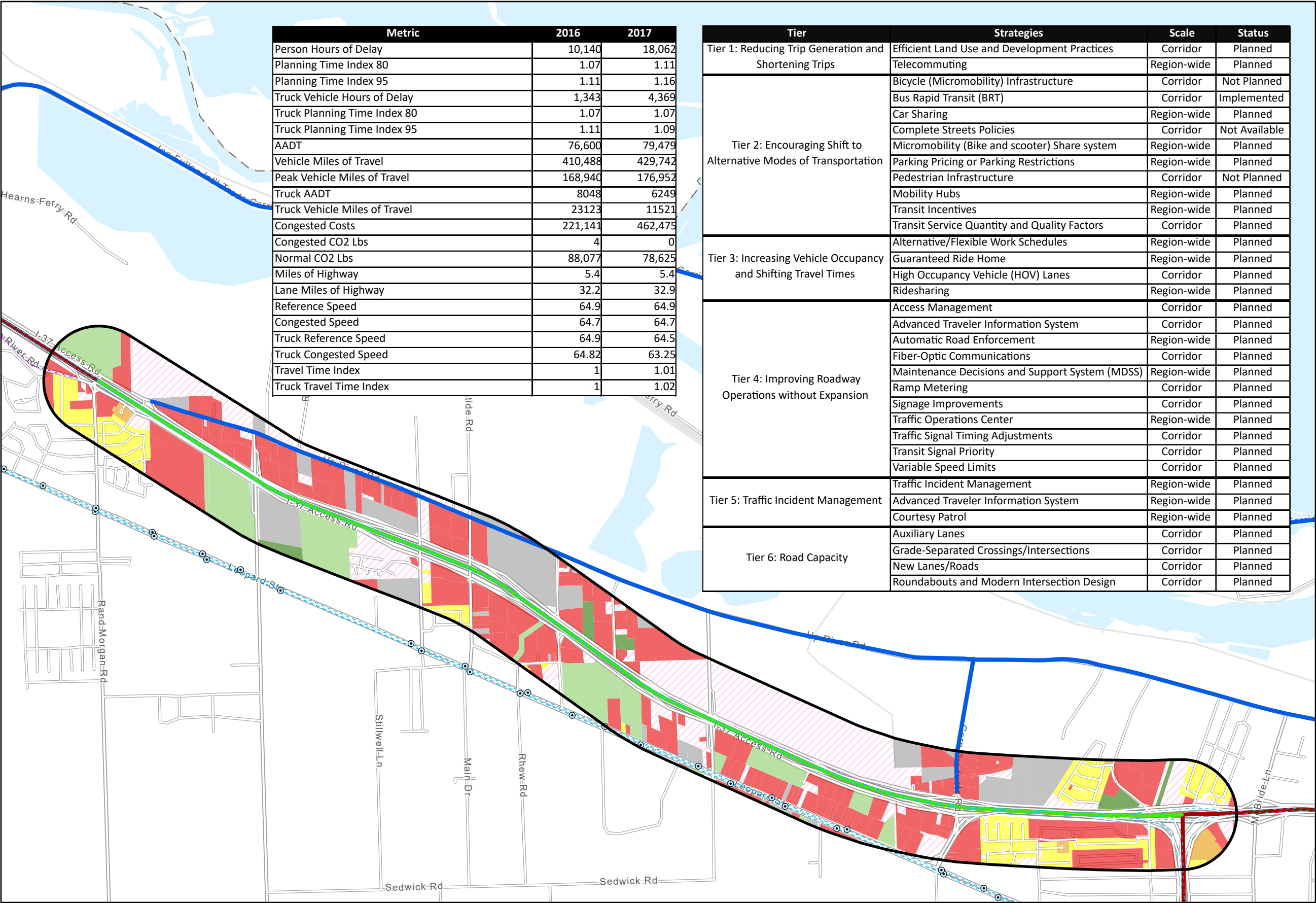
- Legend**
- Regionally Significant Corridors
 - Corridor of Concern (COC)
 - Corridor of Note (CON)
 - Travel Time Index
 - Poor
 - Fair
 - Good
 - Property Classification
 - Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
 - Corpus Christi RTA
 - Stops
 - Routes
 - Existing Bicycle Facilities
 - Off Road Bicycle Facility
 - On Road Bicycle Facility



- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

COC #15: I-37 (FM 2292 to SH 358)



Metric	2016	2017
Person Hours of Delay	10,140	18,062
Planning Time Index 80	1.07	1.11
Planning Time Index 95	1.11	1.16
Truck Vehicle Hours of Delay	1,343	4,369
Truck Planning Time Index 80	1.07	1.07
Truck Planning Time Index 95	1.11	1.09
AADT	76,600	79,479
Vehicle Miles of Travel	410,488	429,742
Peak Vehicle Miles of Travel	168,940	176,952
Truck AADT	8048	6249
Truck Vehicle Miles of Travel	23123	11521
Congested Costs	221,141	462,475
Congested CO2 Lbs	4	0
Normal CO2 Lbs	88,077	78,625
Miles of Highway	5.4	5.4
Lane Miles of Highway	32.2	32.9
Reference Speed	64.9	64.9
Congested Speed	64.7	64.7
Truck Reference Speed	64.9	64.5
Truck Congested Speed	64.82	63.25
Travel Time Index	1	1.01
Truck Travel Time Index	1	1.02

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Not Planned
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
	Alternative/Flexible Work Schedules	Region-wide	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Planned
	Ridesharing	Region-wide	Planned
	Access Management	Corridor	Planned
Tier 4: Improving Roadway Operations without Expansion	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 5: Traffic Incident Management			
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Legend

Regionally Significant Corridors

- Corridor of Concern (COC)
- Corridor of Note (CON)

Travel Time Index

- Poor
- Fair
- Good

Property Classification

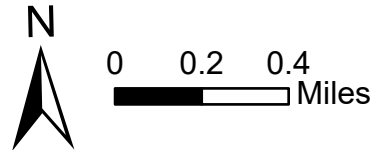
- Single-family Residential
- Multi-family Residential
- Commercial
- Industrial
- Open-Space Land
- Rural Land
- Utilities
- Residential Inventory
- Other
- Vacant Lots
- Colonia Lots
- Totally Exempt Property
- Property Not Classified

Corpus Christi RTA

- Stops
- Routes

Existing Bicycle Facilities

- Off Road Bicycle Facility
- On Road Bicycle Facility



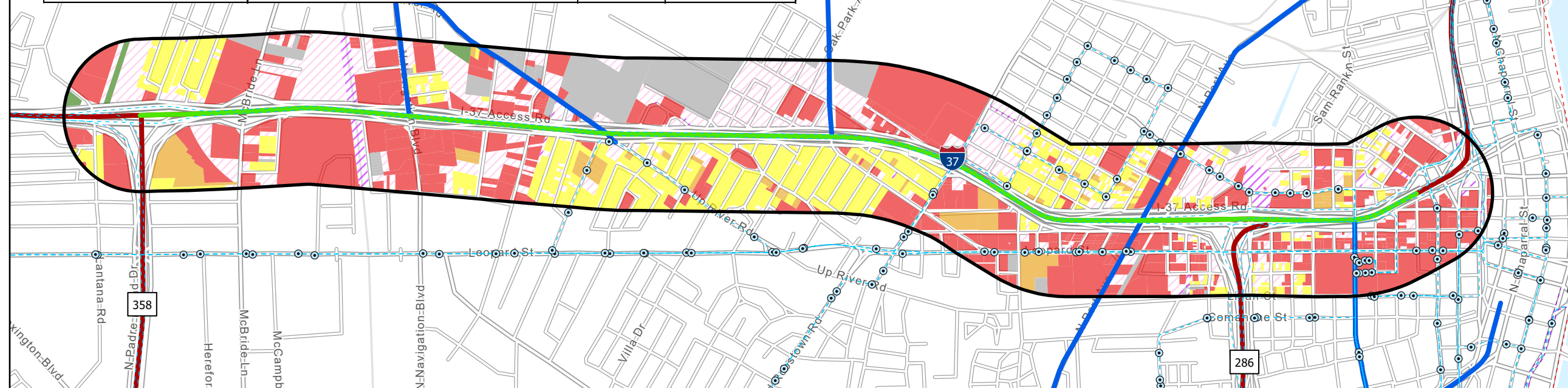
- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

COC #16: I-37 (SH 358 / N.P.I.D. to Carrizo St)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Not Available
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Planned
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	5,685	12,017
Planning Time Index 80	1.16	1.89
Planning Time Index 95	1.22	2
Truck Vehicle Hours of Delay	53	264
Truck Planning Time Index 80	1.19	1.88
Truck Planning Time Index 95	1.28	2.01
AADT	3,740	3,740
Vehicle Miles of Travel	1,765	1,855
Peak Vehicle Miles of Travel	2,011	731
Truck AADT	118	118
Truck Vehicle Miles of Travel	29	20
Congested Costs	107,103	237,304
Congested CO2 Lbs	21	53
Normal CO2 Lbs	871	422
Miles of Highway	0.5	0.5
Lane Miles of Highway	1.9	2
Reference Speed	35.6	26.6
Congested Speed	33.1	19.7
Truck Reference Speed	34.9	26.5
Truck Congested Speed	32.9	19.9
Travel Time Index	1.08	1.45
Truck Travel Time Index	1.06	1.41



- Legend**
- Regionally Significant Corridors
- Corridor of Concern (COC)
 - Corridor of Note (CON)
- Travel Time Index
- Poor
 - Fair
 - Good
- Property Classification
- Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
- Corpus Christi RTA
- Stops
 - Routes
- Existing Bicycle Facilities
- Off Road Bicycle Facility
 - On Road Bicycle Facility



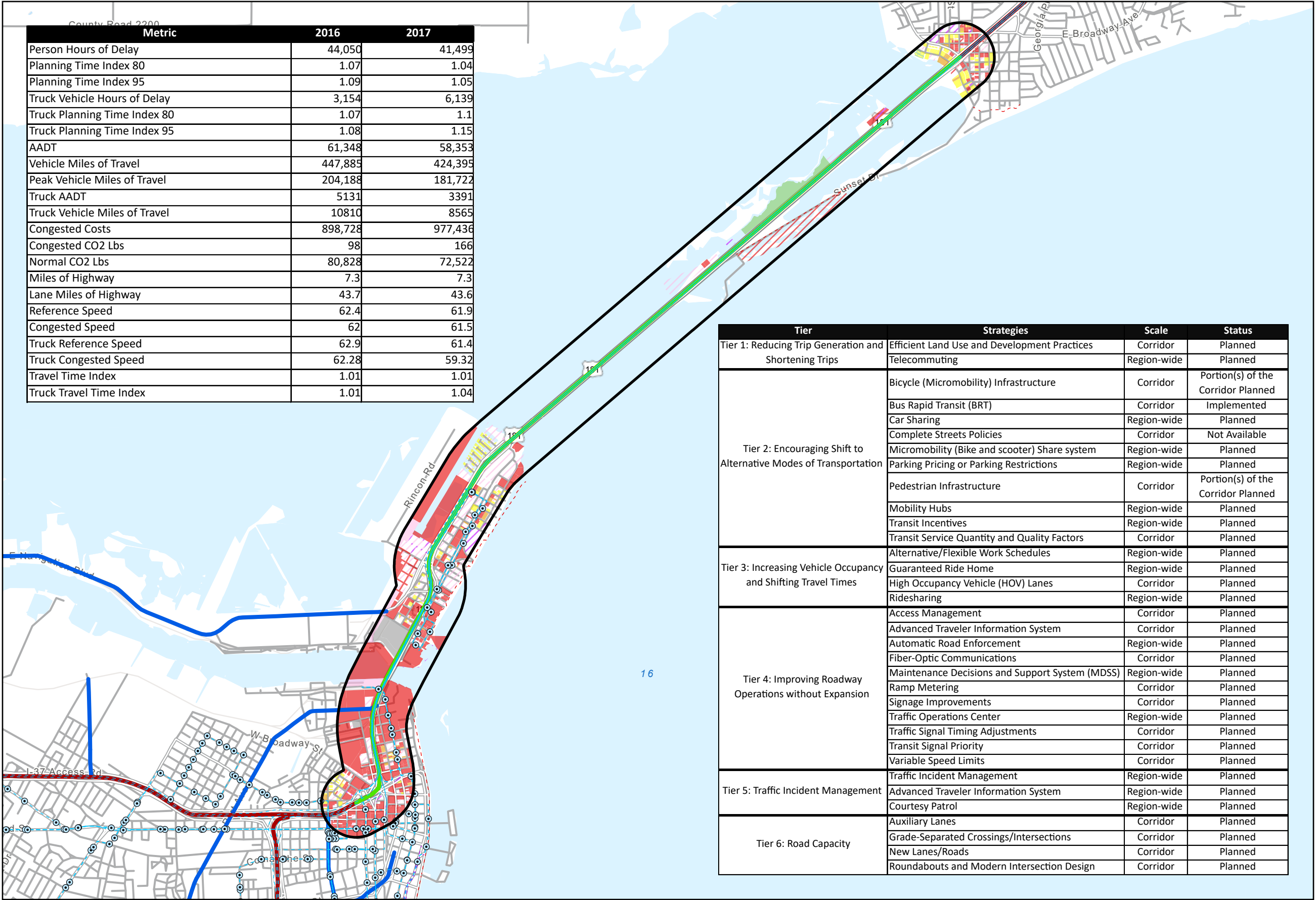
Parties Responsible:

- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)

COC #17: US 181 (Carrizo St to Moore Ave)



Metric	2016	2017
Person Hours of Delay	44,050	41,499
Planning Time Index 80	1.07	1.04
Planning Time Index 95	1.09	1.05
Truck Vehicle Hours of Delay	3,154	6,139
Truck Planning Time Index 80	1.07	1.1
Truck Planning Time Index 95	1.08	1.15
AADT	61,348	58,353
Vehicle Miles of Travel	447,885	424,395
Peak Vehicle Miles of Travel	204,188	181,722
Truck AADT	5131	3391
Truck Vehicle Miles of Travel	10810	8565
Congested Costs	898,728	977,436
Congested CO2 Lbs	98	166
Normal CO2 Lbs	80,828	72,522
Miles of Highway	7.3	7.3
Lane Miles of Highway	43.7	43.6
Reference Speed	62.4	61.9
Congested Speed	62	61.5
Truck Reference Speed	62.9	61.4
Truck Congested Speed	62.28	59.32
Travel Time Index	1.01	1.01
Truck Travel Time Index	1.01	1.04

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Portion(s) of the Corridor Planned
	Bus Rapid Transit (BRT)	Corridor	Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Portion(s) of the Corridor Planned
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Planned
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
Tier 5: Traffic Incident Management	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Legend

Regionally Significant Corridors

- Corridor of Concern (COC)
- Corridor of Note (CON)

Travel Time Index

- Poor
- Fair
- Good

Property Classification

- Single-family Residential
- Multi-family Residential
- Commercial
- Industrial
- Open-Space Land
- Rural Land
- Utilities
- Residential Inventory
- Other
- Vacant Lots
- Colonia Lots
- Totally Exempt Property
- Property Not Classified

Corpus Christi RTA

- Stops
- Routes

Existing Bicycle Facilities

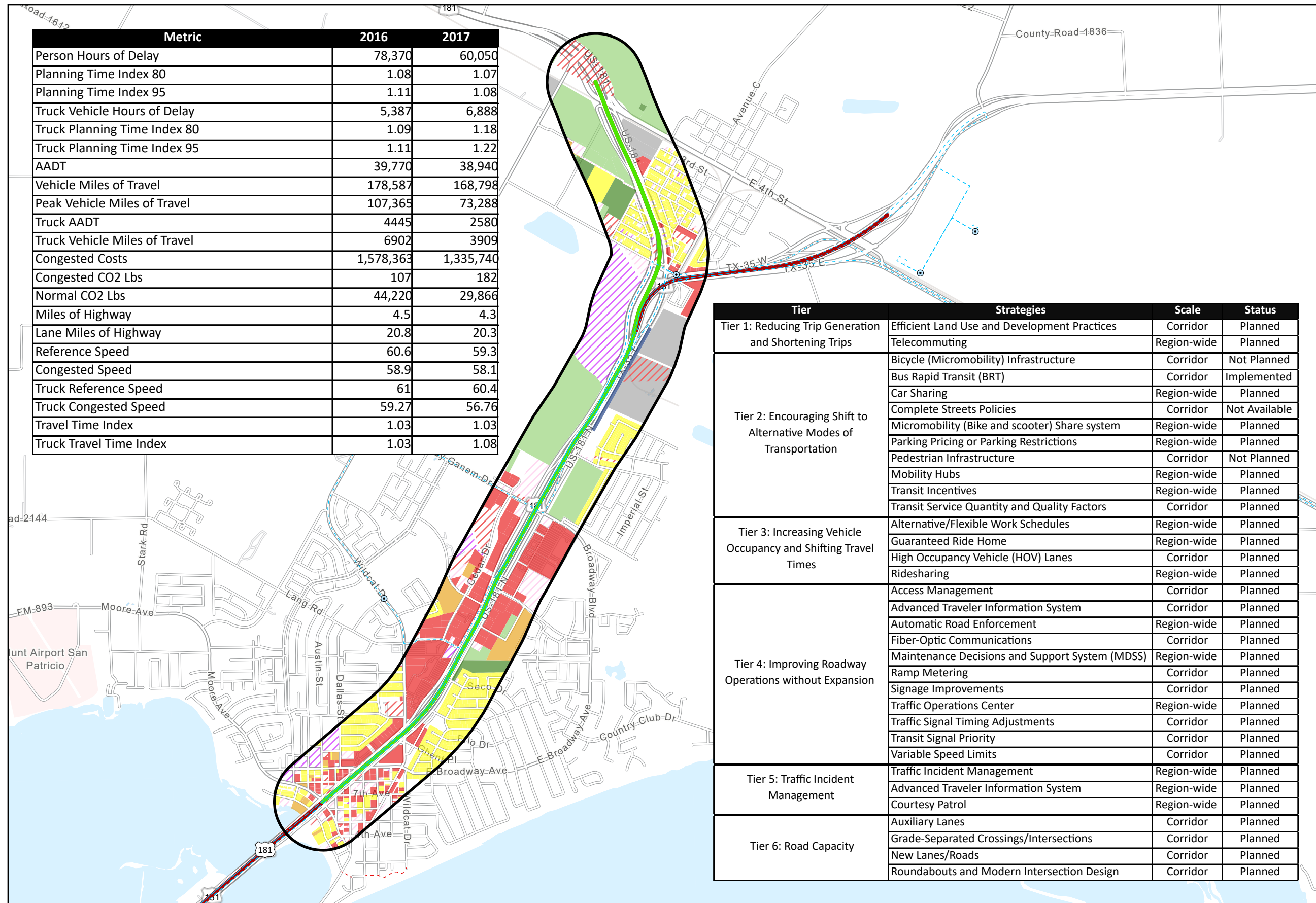
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- On Road Bicycle Facility



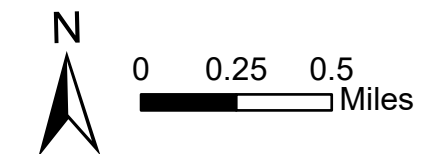
- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - City of Portland
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

COC #18: US 181 (Moore Ave to FM 2986)



- Legend**
- Regionally Significant Corridors
- Corridor of Concern (COC)
 - Corridor of Note (CON)
- Travel Time Index
- Poor
 - Fair
 - Good
- Property Classification
- Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
- Corpus Christi RTA
- Stops
 - Routes
- Existing Bicycle Facilities
- Off Road Bicycle Facility
 - On Road Bicycle Facility



Parties Responsible:

- TxDOT
- City of Portland
- Corpus Christi RTA

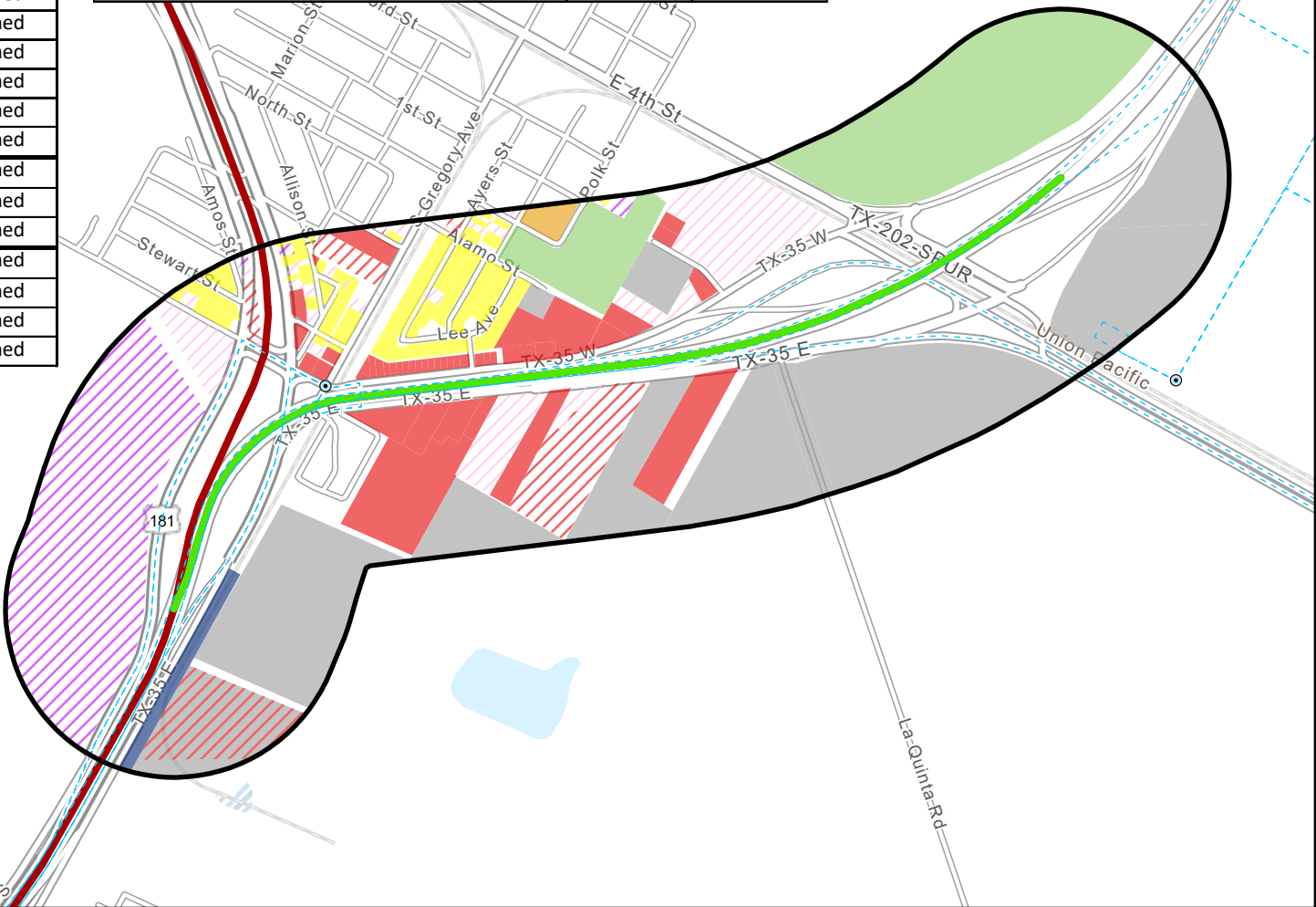
Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)

COC #19: SH 35 (US 181 to US 361)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Not Planned
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Planned
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 5: Traffic Incident Management			
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	13,747	9,191
Planning Time Index 80	1.07	1.07
Planning Time Index 95	1.07	1.07
Truck Vehicle Hours of Delay	523	862
Truck Planning Time Index 80	1.08	1.12
Truck Planning Time Index 95	1.08	1.19
AADT	39,492	38,082
Vehicle Miles of Travel	54,771	59,521
Peak Vehicle Miles of Travel	23,687	25,587
Truck AADT	1345	1995
Truck Vehicle Miles of Travel	794	1085
Congested Costs	261,439	193,869
Congested CO2 Lbs	3	0
Normal CO2 Lbs	8,719	9,933
Miles of Highway	1.4	1.6
Lane Miles of Highway	5.5	6.3
Reference Speed	63.8	64.2
Congested Speed	62	62.9
Truck Reference Speed	63.9	64.1
Truck Congested Speed	61.8	61.16
Travel Time Index	1.03	1.02
Truck Travel Time Index	1.04	1.05

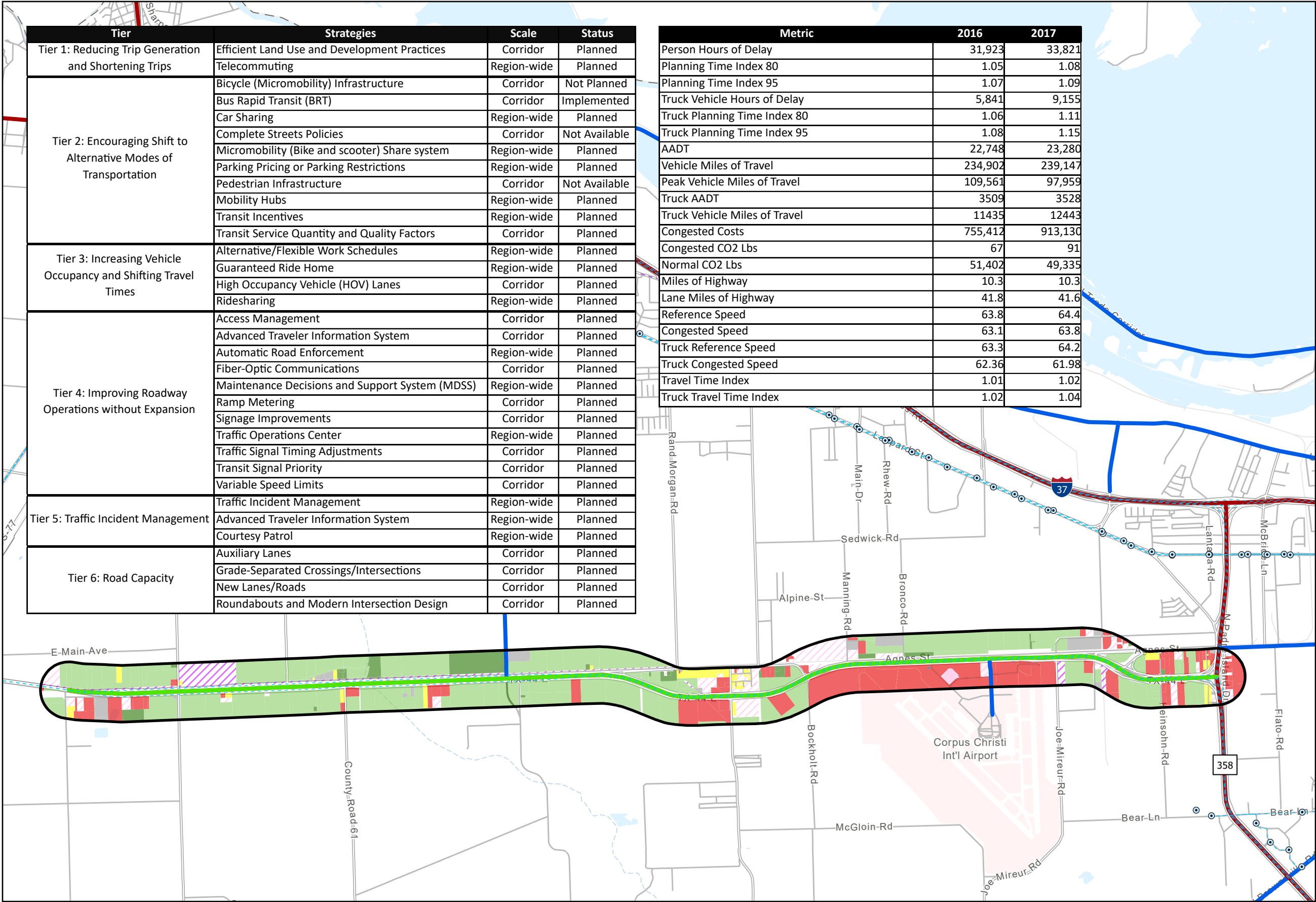


- Legend**
- Regionally Significant Corridors
- Corridor of Concern (COC)
 - Corridor of Note (CON)
- Travel Time Index
- Poor
 - Fair
 - Good
- Property Classification
- Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
- Corpus Christi RTA
- Stops
 - Routes
- Existing Bicycle Facilities
- Off Road Bicycle Facility
 - On Road Bicycle Facility

- Parties Responsible:**
- TxDOT
 - City of Portland
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

COC #20: SH 44 (CR 67 to SH 358)



Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Not Available
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Planned
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	31,923	33,821
Planning Time Index 80	1.05	1.08
Planning Time Index 95	1.07	1.09
Truck Vehicle Hours of Delay	5,841	9,155
Truck Planning Time Index 80	1.06	1.11
Truck Planning Time Index 95	1.08	1.15
AADT	22,748	23,280
Vehicle Miles of Travel	234,902	239,147
Peak Vehicle Miles of Travel	109,561	97,959
Truck AADT	3509	3528
Truck Vehicle Miles of Travel	11435	12443
Congested Costs	755,412	913,130
Congested CO2 Lbs	67	91
Normal CO2 Lbs	51,402	49,335
Miles of Highway	10.3	10.3
Lane Miles of Highway	41.8	41.6
Reference Speed	63.8	64.4
Congested Speed	63.1	63.8
Truck Reference Speed	63.3	64.2
Truck Congested Speed	62.36	61.98
Travel Time Index	1.01	1.02
Truck Travel Time Index	1.02	1.04

Legend

Regionally Significant Corridors

Corridor of Concern (COC)

Corridor of Note (CON)

Travel Time Index

Poor

Fair

Good

Property Classification

Single-family Residential

Multi-family Residential

Commercial

Industrial

Open-Space Land

Rural Land

Utilities

Residential Inventory

Other

Vacant Lots

Colonia Lots

Totally Exempt Property

Property Not Classified

Corpus Christi RTA

Stops

Routes

Existing Bicycle Facilities

Off Road Bicycle Facility

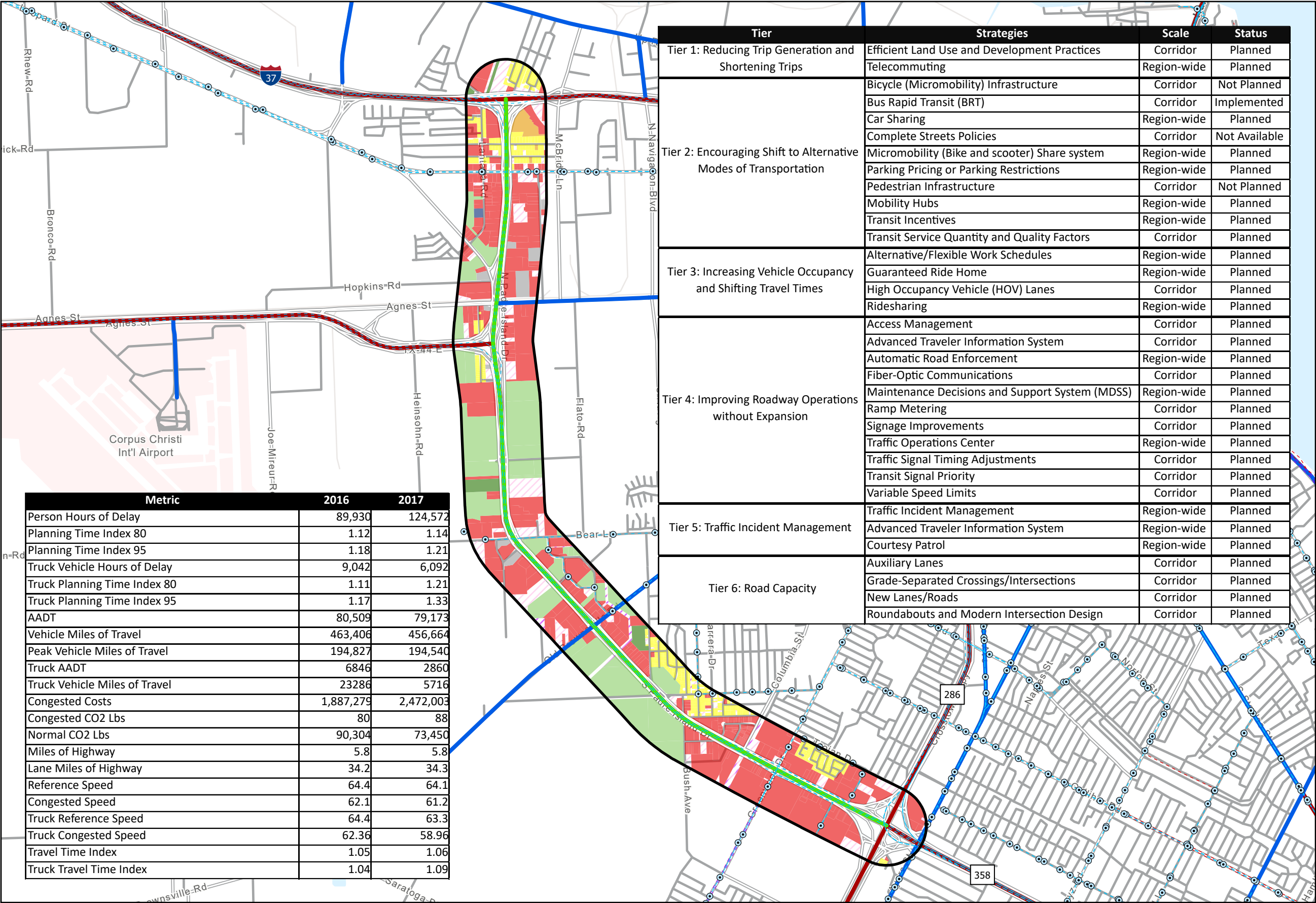
On Road Bicycle Facility



- Parties Responsible:
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

COC #21: SH 358 (I-37 to SH 286)



Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Not Planned
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Planned
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	89,930	124,572
Planning Time Index 80	1.12	1.14
Planning Time Index 95	1.18	1.21
Truck Vehicle Hours of Delay	9,042	6,092
Truck Planning Time Index 80	1.11	1.21
Truck Planning Time Index 95	1.17	1.33
AADT	80,509	79,173
Vehicle Miles of Travel	463,406	456,664
Peak Vehicle Miles of Travel	194,827	194,540
Truck AADT	6846	2860
Truck Vehicle Miles of Travel	23286	5716
Congested Costs	1,887,279	2,472,003
Congested CO2 Lbs	80	88
Normal CO2 Lbs	90,304	73,450
Miles of Highway	5.8	5.8
Lane Miles of Highway	34.2	34.3
Reference Speed	64.4	64.1
Congested Speed	62.1	61.2
Truck Reference Speed	64.4	63.3
Truck Congested Speed	62.36	58.96
Travel Time Index	1.05	1.06
Truck Travel Time Index	1.04	1.09

Legend

Regionally Significant Corridors

- Corridor of Concern (COC)
- Corridor of Note (CON)

Travel Time Index

- Poor
- Fair
- Good

Property Classification

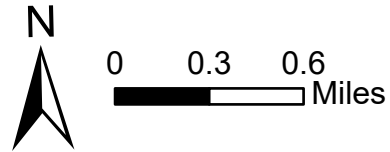
- Single-family Residential
- Multi-family Residential
- Commercial
- Industrial
- Open-Space Land
- Rural Land
- Utilities
- Residential Inventory
- Other
- Vacant Lots
- Colonia Lots
- Totally Exempt Property
- Property Not Classified

Corpus Christi RTA

- Stops
- Routes

Existing Bicycle Facilities

- Off Road Bicycle Facility
- On Road Bicycle Facility



Parties Responsible:

- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)



CON #01: FM 3386 / McKinzie Rd (I-37 to SH 44)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Not Planned
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Not Available
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	N/A	47,553
Planning Time Index 80	N/A	1.23
Planning Time Index 95	N/A	1.28
Truck Vehicle Hours of Delay	N/A	1,758
Truck Planning Time Index 80	N/A	1.32
Truck Planning Time Index 95	N/A	1.47
AADT	N/A	5,407
Vehicle Miles of Travel	N/A	23,546
Peak Vehicle Miles of Travel	N/A	8,940
Truck AADT	N/A	304
Truck Vehicle Miles of Travel	N/A	333
Congested Costs	N/A	958,989
Congested CO2 Lbs	N/A	201
Normal CO2 Lbs	N/A	4,444
Miles of Highway	N/A	4.4
Lane Miles of Highway	N/A	11.5
Reference Speed	N/A	37.7
Congested Speed	N/A	34.6
Truck Reference Speed	N/A	37.4
Truck Congested Speed	N/A	33.99
Travel Time Index	N/A	1.13
Truck Travel Time Index	N/A	1.14

Legend

Regionally Significant Corridors

Corridor of Concern (COC)

Corridor of Note (CON)

Travel Time Index

Poor

Fair

Good

Property Classification

Single-family Residential

Multi-family Residential

Commercial

Industrial

Open-Space Land

Rural Land

Utilities

Residential Inventory

Other

Vacant Lots

Colonia Lots

Totally Exempt Property

Property Not Classified

Corpus Christi RTA

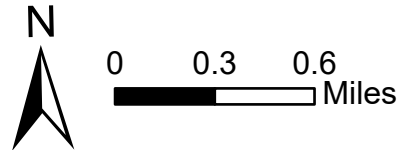
Stops

Routes

Existing Bicycle Facilities

Off Road Bicycle Facility

On Road Bicycle Facility



- Parties Responsible:
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

CON #02: SH 44 (SH 358 to John Sartain St)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Portion(s) of Corridor Planned
	Bus Rapid Transit (BRT)	Corridor	Portion(s) of Corridor Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Portion(s) of Corridor Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Planned
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
Tier 5: Traffic Incident Management	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
Tier 6: Road Capacity	Courtesy Patrol	Region-wide	Planned
	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	61,676	52,350
Planning Time Index 80	1.17	1.16
Planning Time Index 95	1.2	1.19
Truck Vehicle Hours of Delay	5,864	6,680
Truck Planning Time Index 80	1.19	1.35
Truck Planning Time Index 95	1.24	1.43
AADT	8,283	8,313
Vehicle Miles of Travel	39,644	39,290
Peak Vehicle Miles of Travel	17,045	15,565
Truck AADT	986	701
Truck Vehicle Miles of Travel	1648	1130
Congested Costs	1,344,491	1,230,035
Congested CO2 Lbs	379	373
Normal CO2 Lbs	9,901	8,995
Miles of Highway	4.8	4.7
Lane Miles of Highway	19.4	19.7
Reference Speed	30.9	29.7
Congested Speed	28.7	27.8
Truck Reference Speed	30.3	30.7
Truck Congested Speed	28	26.89
Travel Time Index	1.09	1.08
Truck Travel Time Index	1.09	1.16

Legend

Regionally Significant Corridors

Corridor of Concern (COC)

Corridor of Note (CON)

Travel Time Index

Poor

Fair

Good

Property Classification

Single-family Residential

Multi-family Residential

Commercial

Industrial

Open-Space Land

Rural Land

Utilities

Residential Inventory

Other

Vacant Lots

Colonia Lots

Totally Exempt Property

Property Not Classified

Corpus Christi RTA

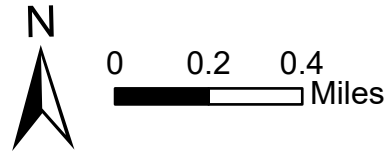
Stops

Routes

Existing Bicycle Facilities

Off Road Bicycle Facility

On Road Bicycle Facility

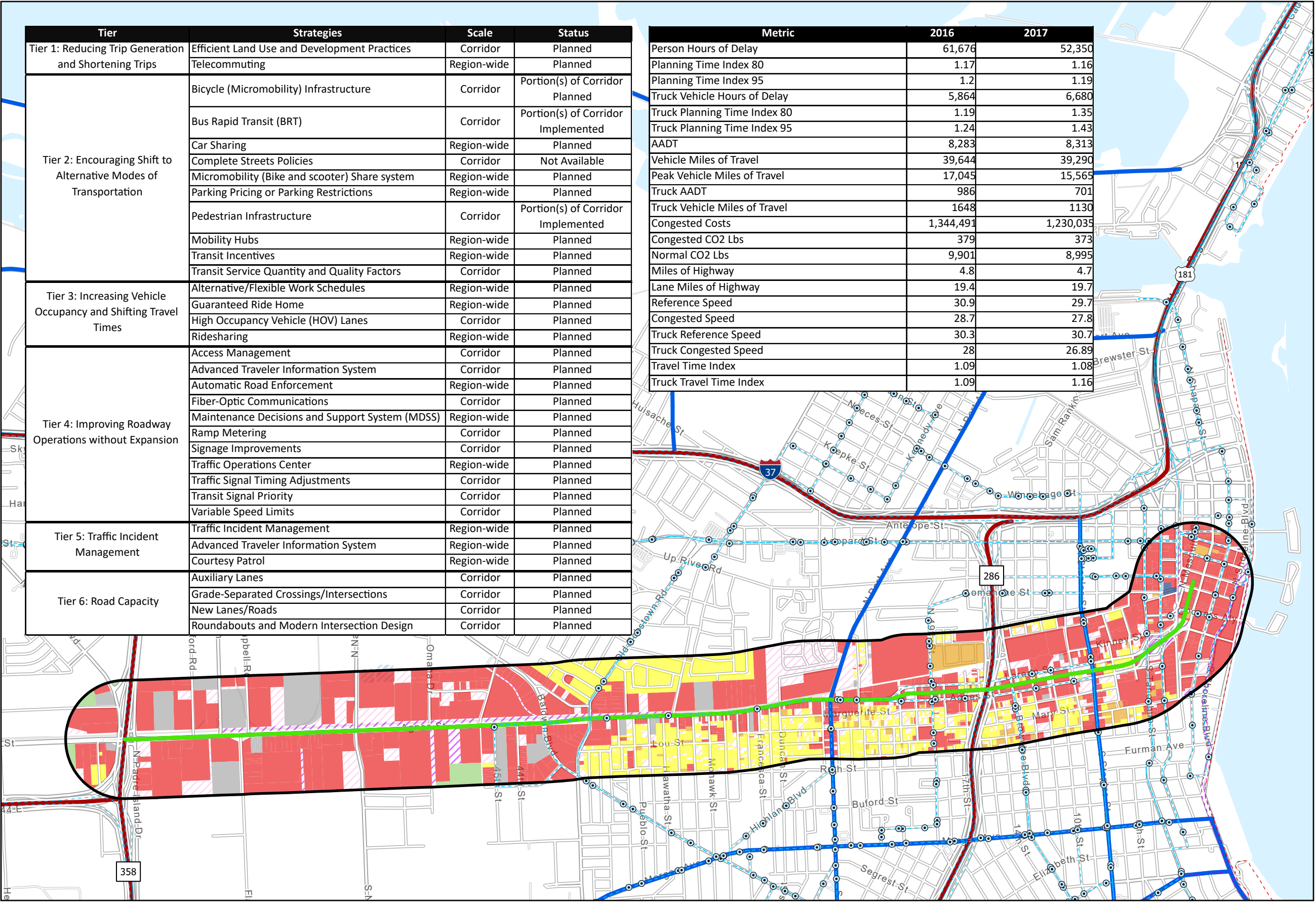


Parties Responsible:

- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

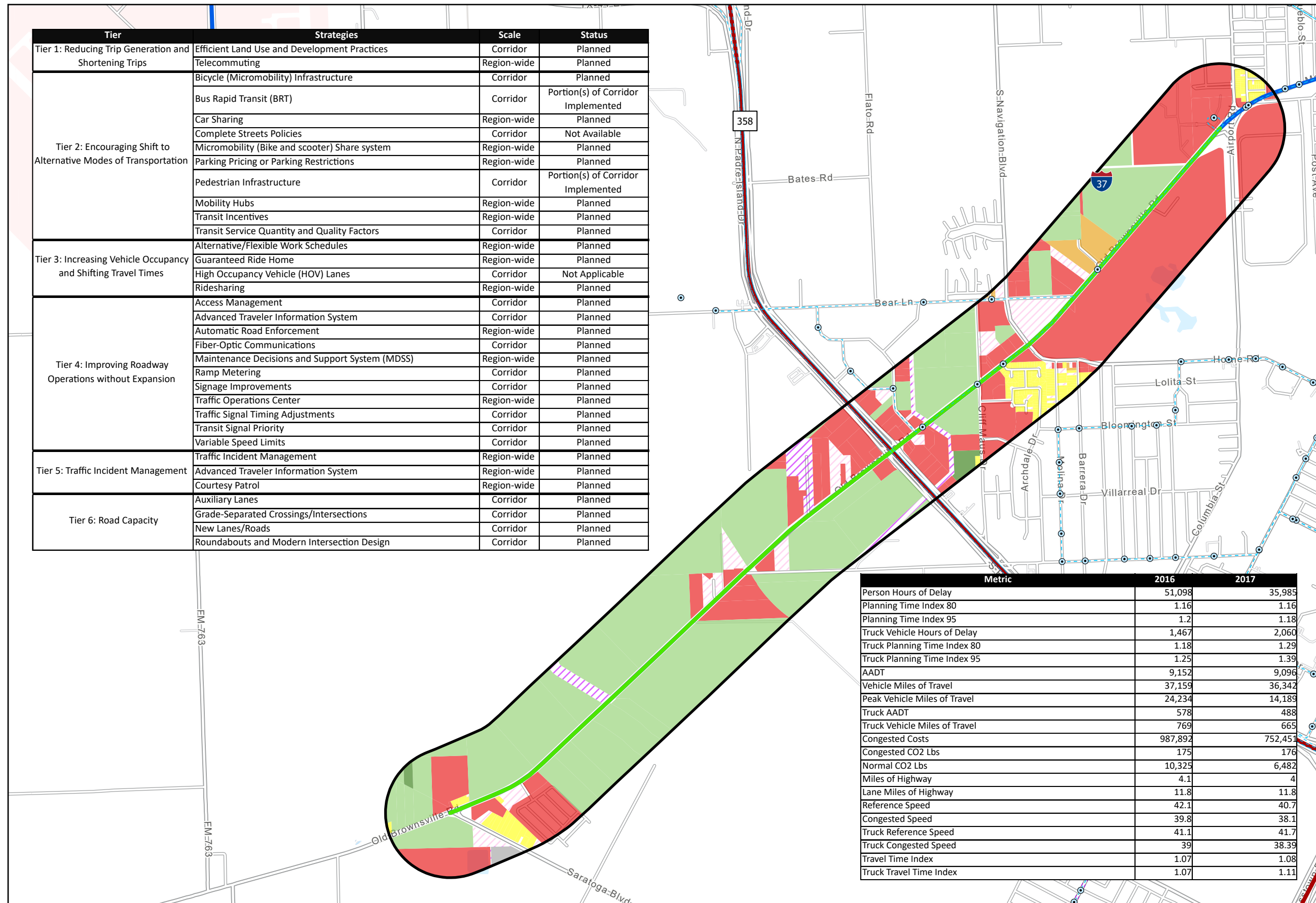
Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)



CON #03: FM 665 / Old Brownsville Rd (SH 357 to Airport Rd)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Planned
	Bus Rapid Transit (BRT)	Corridor	Portion(s) of Corridor Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Portion(s) of Corridor Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
Tier 5: Traffic Incident Management	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned



Metric	2016	2017
Person Hours of Delay	51,098	35,985
Planning Time Index 80	1.16	1.16
Planning Time Index 95	1.2	1.18
Truck Vehicle Hours of Delay	1,467	2,060
Truck Planning Time Index 80	1.18	1.29
Truck Planning Time Index 95	1.25	1.39
AADT	9,152	9,096
Vehicle Miles of Travel	37,159	36,342
Peak Vehicle Miles of Travel	24,234	14,189
Truck AADT	578	488
Truck Vehicle Miles of Travel	769	665
Congested Costs	987,892	752,451
Congested CO2 Lbs	175	176
Normal CO2 Lbs	10,325	6,482
Miles of Highway	4.1	4
Lane Miles of Highway	11.8	11.8
Reference Speed	42.1	40.7
Congested Speed	39.8	38.1
Truck Reference Speed	41.1	41.7
Truck Congested Speed	39	38.39
Travel Time Index	1.07	1.08
Truck Travel Time Index	1.07	1.11

- Legend**
- Regionally Significant Corridors
- Corridor of Concern (COC)
 - Corridor of Note (CON)
- Travel Time Index
- Poor
 - Fair
 - Good
- Property Classification
- Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
- Corpus Christi RTA
- Stops
 - Routes
- Existing Bicycle Facilities
- Off Road Bicycle Facility
 - On Road Bicycle Facility

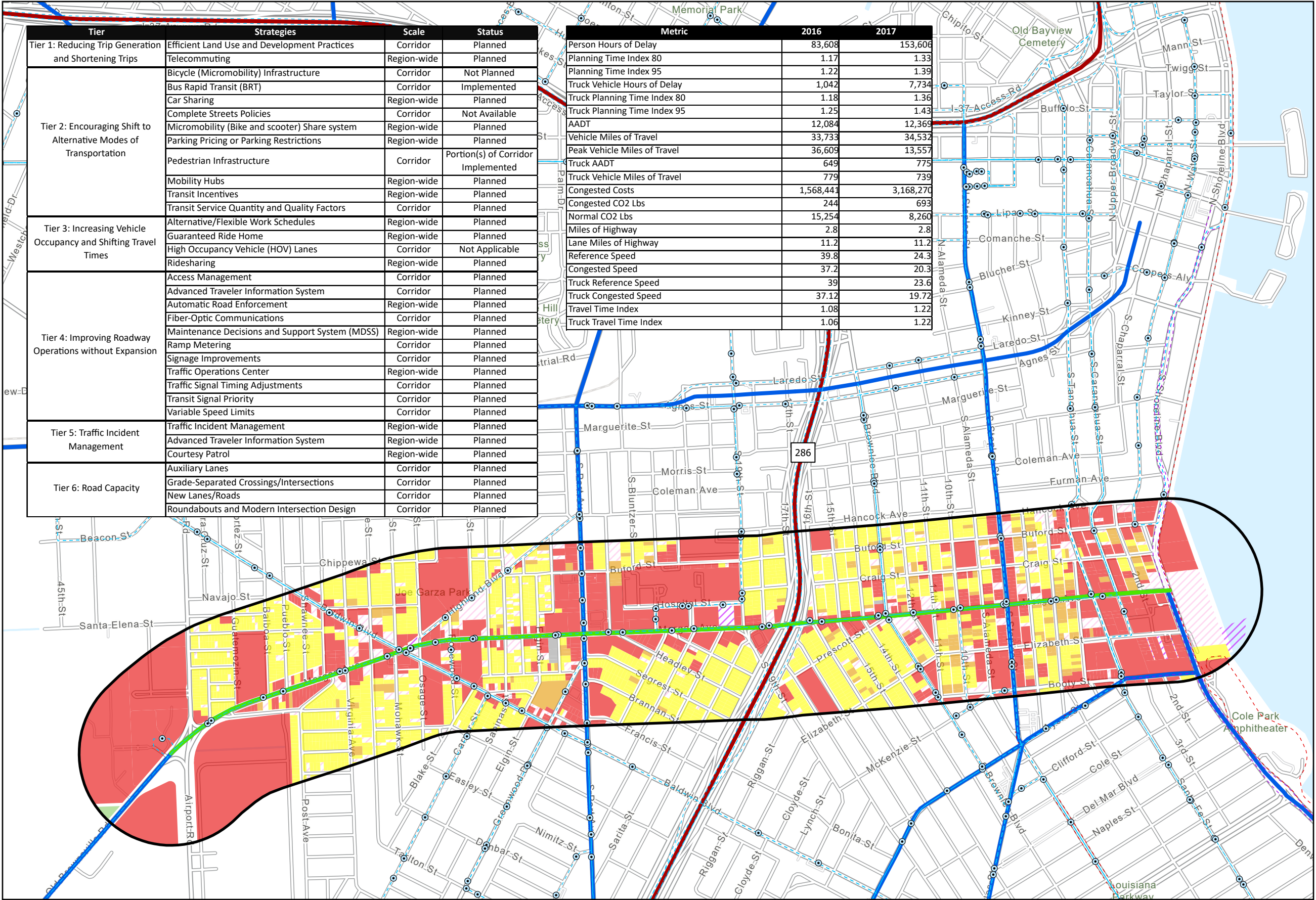
Parties Responsible:

- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)

CON #04: FM 665 / Old Brownsville Rd (Airport Rd to Ocean Dr)



Legend

Regionally Significant Corridors

- Corridor of Concern (COC)
- Corridor of Note (CON)

Travel Time Index

- Poor
- Fair
- Good

Property Classification

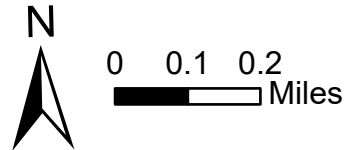
- Single-family Residential
- Multi-family Residential
- Commercial
- Industrial
- Open-Space Land
- Rural Land
- Utilities
- Residential Inventory
- Other
- Vacant Lots
- Colonia Lots
- Totally Exempt Property
- Property Not Classified

Corpus Christi RTA

- Stops
- Routes

Existing Bicycle Facilities

- Off Road Bicycle Facility
- On Road Bicycle Facility



- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

CON #05: Ayers St (SH 286 to SH 358)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Portion(s) of Corridor Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Portion(s) of Corridor Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	37,206	46,303
Planning Time Index 80	1.2	1.42
Planning Time Index 95	1.26	1.51
Truck Vehicle Hours of Delay	415	2,033
Truck Planning Time Index 80	1.18	1.53
Truck Planning Time Index 95	1.24	1.65
AADT	5,559	5,387
Vehicle Miles of Travel	14,889	14,423
Peak Vehicle Miles of Travel	12,719	5,495
Truck AADT	382	319
Truck Vehicle Miles of Travel	328	288
Congested Costs	698,209	954,673
Congested CO2 Lbs	117	248
Normal CO2 Lbs	5,465	2,916
Miles of Highway	2.7	2.7
Lane Miles of Highway	10.8	10.8
Reference Speed	39.7	33.3
Congested Speed	36.4	26.6
Truck Reference Speed	38.6	33.4
Truck Congested Speed	36.76	27.5
Travel Time Index	1.11	1.26
Truck Travel Time Index	1.06	1.24



Legend

Regionally Significant Corridors

— Corridor of Concern (COC)

Corridor of Note (CON)

Travel Time Index

 Poor

 Fair

Good

Property Classification

Single-family Residential

Multi-family Residential

Commercial

Industrial

Open-Space Land

 Rural Land

Utilities

Residential Inventory

Other

 Vacant Lots

Colonia Lots

 Totally Exempt Property

Property Not Classified

Corpus Christi RTA

- Stops

--- Routes

Existing Bic

- - - Off Road Bicycle Facility

- - - On Road Bicycle Facility



0 0.15 0.3 Miles

Parties Responsible:

- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)

CON #06: Ayers St (SH 358 to Ocean Dr)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Portion(s) of Corridor Implemented
	Bus Rapid Transit (BRT)	Corridor	Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Portion(s) of Corridor Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
Tier 5: Traffic Incident Management	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
	Auxiliary Lanes	Corridor	Planned
Tier 6: Road Capacity	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	135,520	255,623
Planning Time Index 80	1.19	1.48
Planning Time Index 95	1.25	1.55
Truck Vehicle Hours of Delay	1,137	6,419
Truck Planning Time Index 80	1.2	1.52
Truck Planning Time Index 95	1.28	1.65
AADT	13,406	13,649
Vehicle Miles of Travel	48,204	49,081
Peak Vehicle Miles of Travel	64,040	18,760
Truck AADT	509	476
Truck Vehicle Miles of Travel	954	582
Congested Costs	2,519,973	5,095,202
Congested CO2 Lbs	365	1226
Normal CO2 Lbs	26,544	10,870
Miles of Highway	3.6	3.6
Lane Miles of Highway	14.4	14.4
Reference Speed	39.7	26.1
Congested Speed	37.2	20.1
Truck Reference Speed	38.8	26.2
Truck Congested Speed	37.02	20.59
Travel Time Index	1.07	1.32
Truck Travel Time Index	1.05	1.29



Legend

Regionally Significant Corridors

Corridor of Concern (COC)

Corridor of Note (CON)

Travel Time Index

Poor

Fair

Good

Property Classification

Single-family Residential

Multi-family Residential

Commercial

Industrial

Open-Space Land

Rural Land

Utilities

Residential Inventory

Other

Vacant Lots

Colonia Lots

Totally Exempt Property

Property Not Classified

Corpus Christi RTA

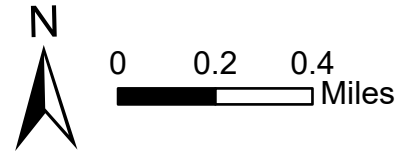
Stops

Routes

Existing Bicycle Facilities

Off Road Bicycle Facility

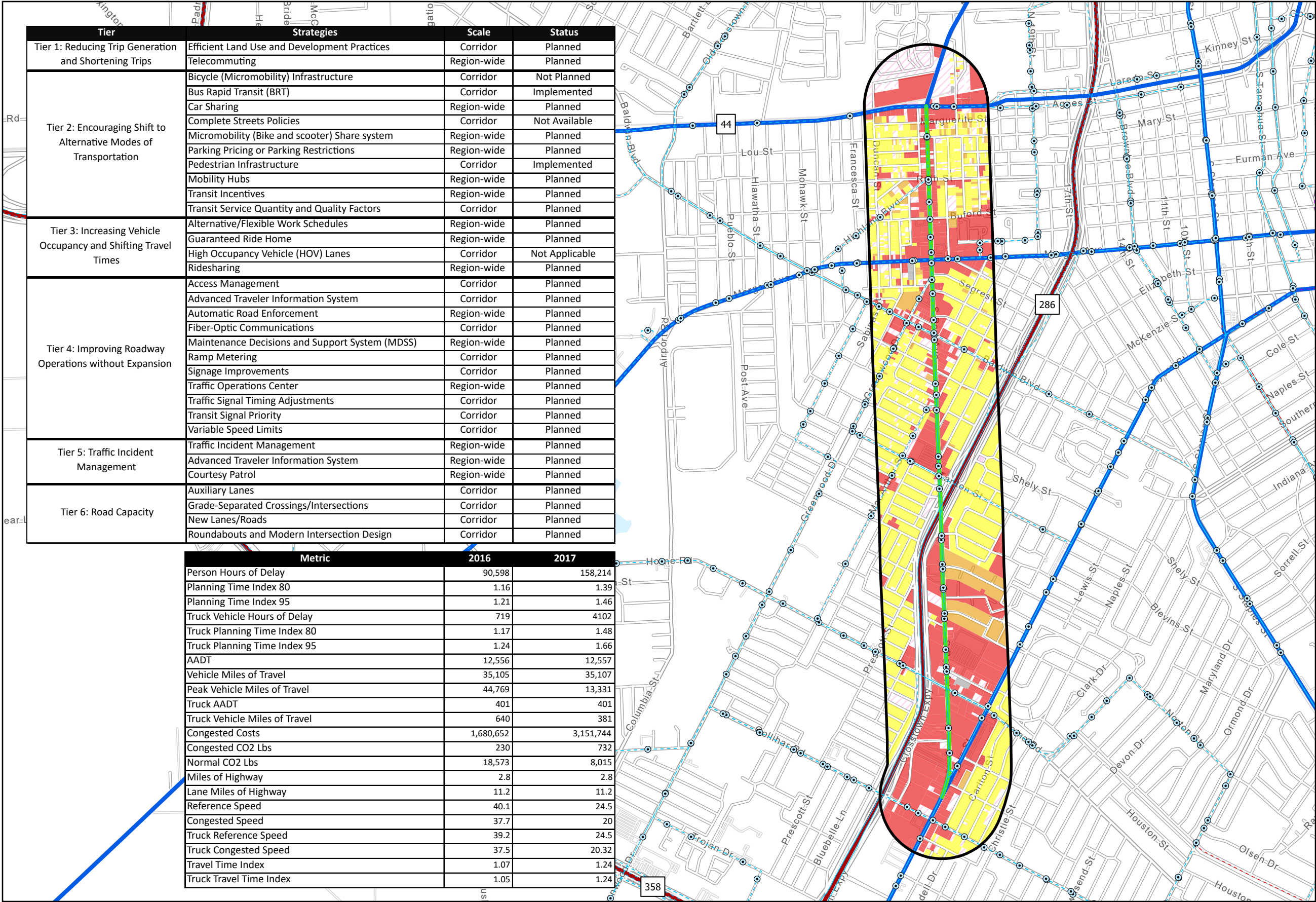
On Road Bicycle Facility



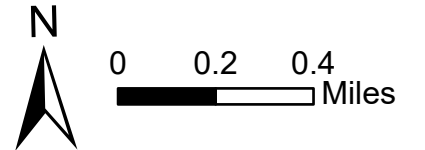
- Parties Responsible:
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

CON #07: S Port Ave (Ayers St to SH 44)



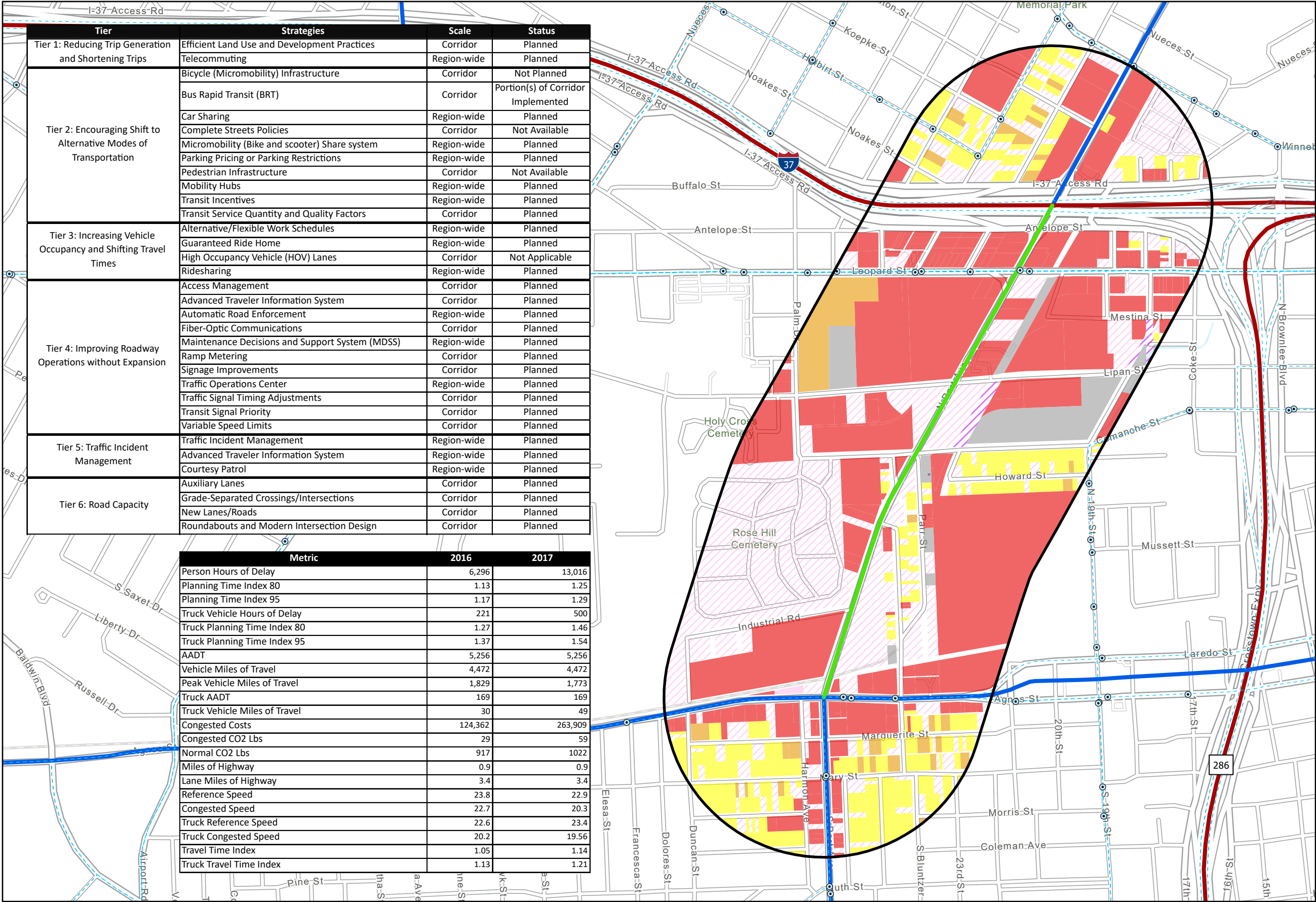
- Legend**
- Regionally Significant Corridors
 - Corridor of Concern (COC)
 - Corridor of Note (CON)
 - Travel Time Index
 - Poor
 - Fair
 - Good
 - Property Classification
 - Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
 - Corpus Christi RTA
 - Stops
 - Routes
 - Existing Bicycle Facilities
 - Off Road Bicycle Facility
 - On Road Bicycle Facility



- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

CON #08: N Port Ave (SH 44 to I-37)



Legend

Regionally Significant Corridors
Corridor of Concern (COC)
Corridor of Note (CON)

Travel Time Index
Poor
Fair
Good

Property Classification
Single-family Residential
Multi-family Residential
Commercial
Industrial
Open-Space Land
Rural Land
Utilities
Residential Inventory
Other
Vacant Lots
Colonia Lots
Totally Exempt Property
Property Not Classified

Corpus Christi RTA
Stops
Routes

Existing Bicycle Facilities
Off Road Bicycle Facility
On Road Bicycle Facility



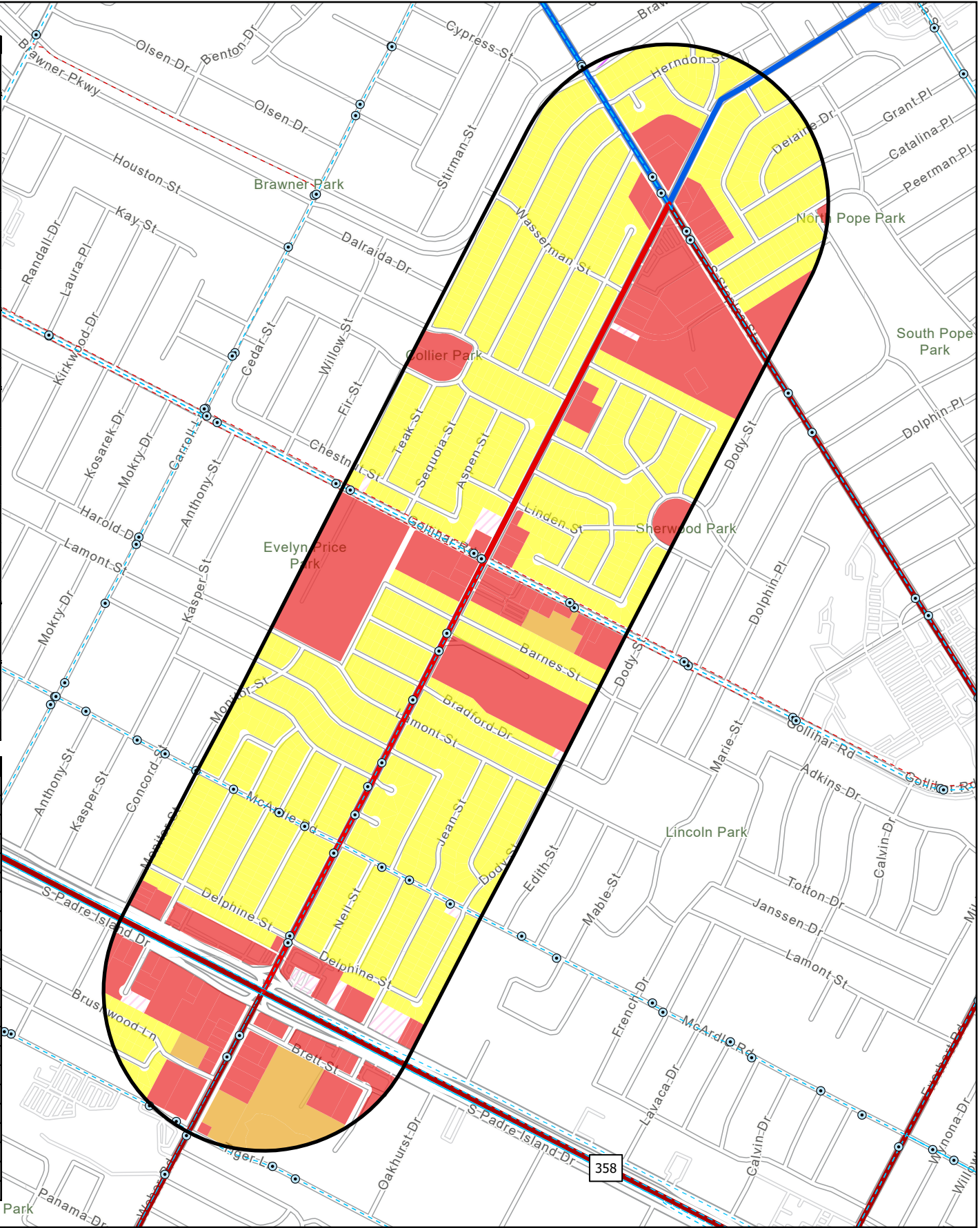
- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

CON #09: Weber Rd (SH 358 to S Staples St)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Portion(s) of Corridor Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
Tier 5: Traffic Incident Management	Courtesy Patrol	Region-wide	Planned
	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
Tier 6: Road Capacity	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	128,967	158,304
Planning Time Index 80	1.73	1.97
Planning Time Index 95	1.79	2.1
Truck Vehicle Hours of Delay	6,437	3,213
Truck Planning Time Index 80	1.64	1.93
Truck Planning Time Index 95	1.79	2.37
AADT	18,539	18,539
Vehicle Miles of Travel	25,695	25,695
Peak Vehicle Miles of Travel	9,753	9,753
Truck AADT	594	594
Truck Vehicle Miles of Travel	770	280
Congested Costs	2,620,430	3,137,380
Congested CO2 Lbs	677	781
Normal CO2 Lbs	6,105	5,452
Miles of Highway	1.4	1.4
Lane Miles of Highway	5.5	5.5
Reference Speed	30.8	31.2
Congested Speed	21.6	20.8
Truck Reference Speed	26.3	31.2
Truck Congested Speed	20.6	22.5
Travel Time Index	1.46	1.6
Truck Travel Time Index	1.32	1.48



Legend

Regionally Significant Corridors

Corridor of Concern (COC)

Corridor of Note (CON)

Travel Time Index

Poor

Fair

Good

Property Classification

Single-family Residential

Multi-family Residential

Commercial

Industrial

Open-Space Land

Rural Land

Utilities

Residential Inventory

Other

Vacant Lots

Colonia Lots

Totally Exempt Property

Property Not Classified

Corpus Christi RTA

Stops

Routes

Existing Bicycle Facilities

Off Road Bicycle Facility

On Road Bicycle Facility

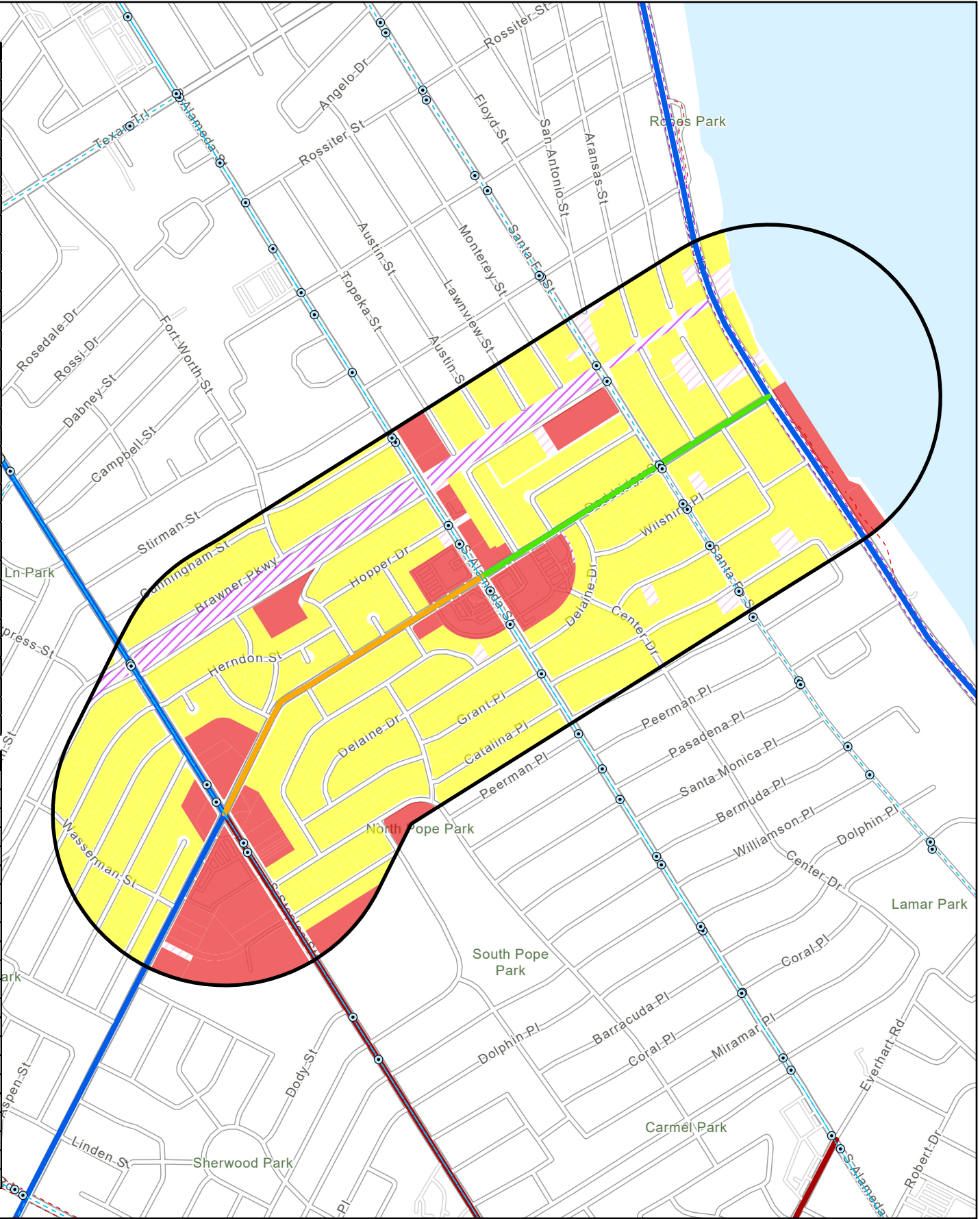
- Parties Responsible:
- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

- Data Sources:
- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)

CON #10: Doddridge Rd (S Staples St to Ocean Dr)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Portion(s) of Corridor Implemented
	Bus Rapid Transit (BRT)	Corridor	Not Available
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
	Access Management	Corridor	Planned
Tier 4: Improving Roadway Operations without Expansion	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	41,094	43,037
Planning Time Index 80	1.42	1.4
Planning Time Index 95	1.46	1.45
Truck Vehicle Hours of Delay	697	1012
Truck Planning Time Index 80	1.42	1.53
Truck Planning Time Index 95	1.56	1.67
AADT	10,073	10,073
Vehicle Miles of Travel	10,283	10,283
Peak Vehicle Miles of Travel	3,905	3,904
Truck AADT	322	322
Truck Vehicle Miles of Travel	91	112
Congested Costs	789,362	857,510
Congested CO2 Lbs	185	214
Normal CO2 Lbs	2,197	2,266
Miles of Highway	1	1
Lane Miles of Highway	4.1	4.1
Reference Speed	25.6	26.2
Congested Speed	20.4	20.6
Truck Reference Speed	23.6	26.2
Truck Congested Speed	20.07	21.08
Travel Time Index	1.26	1.28
Truck Travel Time Index	1.19	1.26



Legend

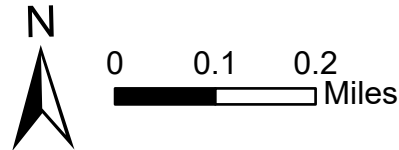
Regionally Significant Corridors
Corridor of Concern (COC)
Corridor of Note (CON)

Travel Time Index
Poor
Fair
Good

Property Classification
Single-family Residential
Multi-family Residential
Commercial
Industrial
Open-Space Land
Rural Land
Utilities
Residential Inventory
Other
Vacant Lots
Colonia Lots
Totally Exempt Property
Property Not Classified

Corpus Christi RTA
Stops
Routes

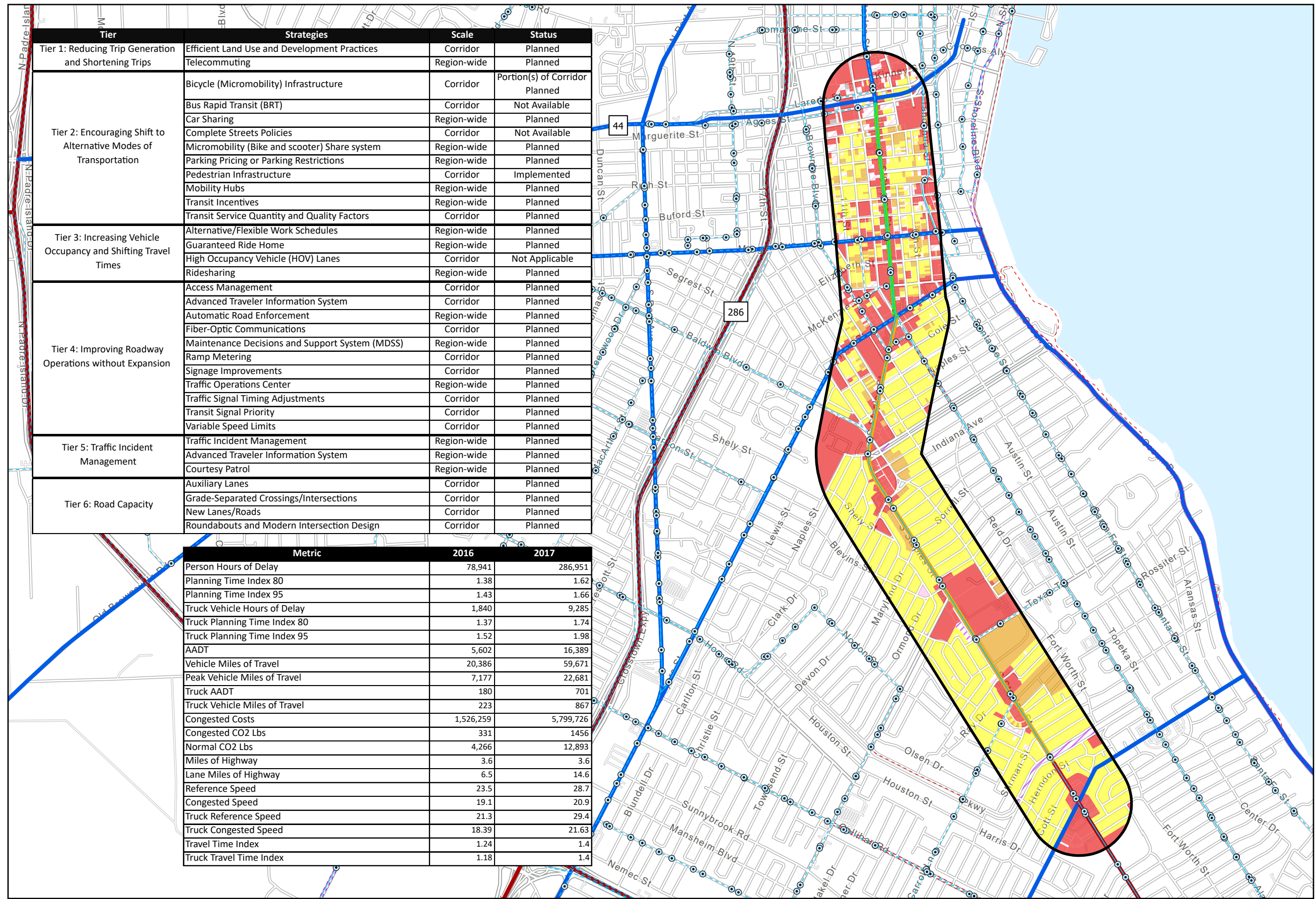
Existing Bicycle Facilities
Off Road Bicycle Facility
On Road Bicycle Facility



- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

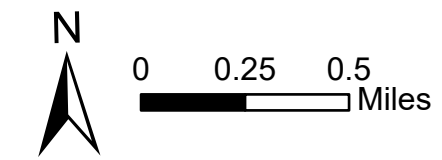
CON #11: S Staples St (SH 44 to Weber Rd)



Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Portion(s) of Corridor Planned
	Bus Rapid Transit (BRT)	Corridor	Not Available
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
Tier 5: Traffic Incident Management	Courtesy Patrol	Region-wide	Planned
	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
Tier 6: Road Capacity	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	78,941	286,951
Planning Time Index 80	1.38	1.62
Planning Time Index 95	1.43	1.66
Truck Vehicle Hours of Delay	1,840	9,285
Truck Planning Time Index 80	1.37	1.74
Truck Planning Time Index 95	1.52	1.98
AADT	5,602	16,389
Vehicle Miles of Travel	20,386	59,671
Peak Vehicle Miles of Travel	7,177	22,681
Truck AADT	180	701
Truck Vehicle Miles of Travel	223	867
Congested Costs	1,526,259	5,799,726
Congested CO2 Lbs	331	1456
Normal CO2 Lbs	4,266	12,893
Miles of Highway	3.6	3.6
Lane Miles of Highway	6.5	14.6
Reference Speed	23.5	28.7
Congested Speed	19.1	20.9
Truck Reference Speed	21.3	29.4
Truck Congested Speed	18.39	21.63
Travel Time Index	1.24	1.4
Truck Travel Time Index	1.18	1.4

- Legend
- Regionally Significant Corridors
- Corridor of Concern (COC)
- Corridor of Note (CON)
- Travel Time Index
- Poor
- Fair
- Good
- Property Classification
- Single-family Residential
- Multi-family Residential
- Commercial
- Industrial
- Open-Space Land
- Rural Land
- Utilities
- Residential Inventory
- Other
- Vacant Lots
- Colonia Lots
- Totally Exempt Property
- Property Not Classified
- Corpus Christi RTA
- Stops
- Routes
- Existing Bicycle Facilities
- Off Road Bicycle Facility
- On Road Bicycle Facility

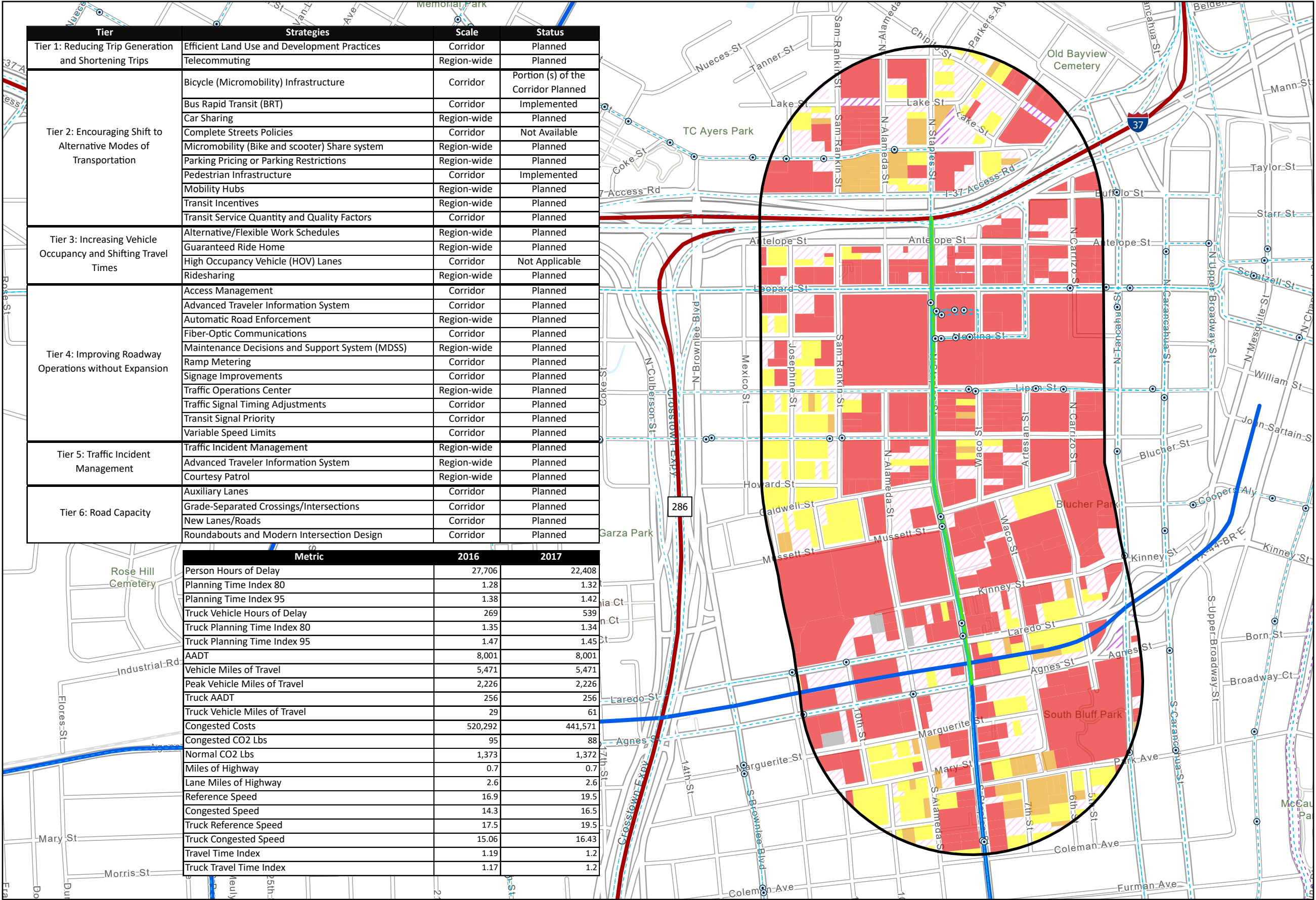


- Parties Responsible:
- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

- Data Sources:
- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)



CON #12: S Staples St (I-37 to SH 44)



Legend

Regionally Significant Corridors

- Corridor of Concern (COC)
- Corridor of Note (CON)

Travel Time Index

- Poor
- Fair
- Good

Property Classification

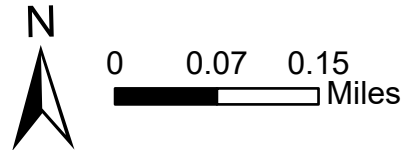
- Single-family Residential
- Multi-family Residential
- Commercial
- Industrial
- Open-Space Land
- Rural Land
- Utilities
- Residential Inventory
- Other
- Vacant Lots
- Colonia Lots
- Totally Exempt Property
- Property Not Classified

Corpus Christi RTA

- Stops
- Routes

Existing Bicycle Facilities

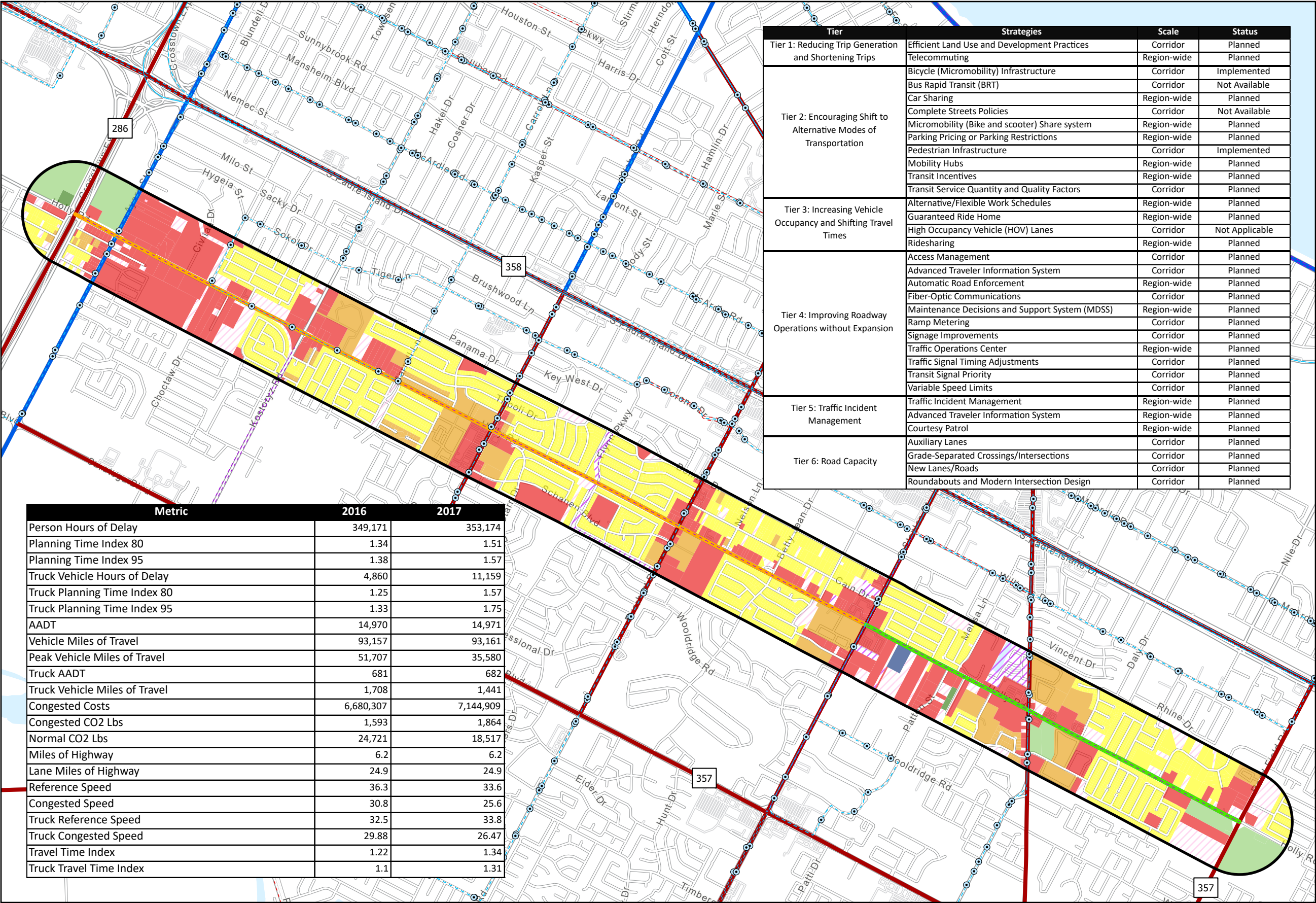
- Off Road Bicycle Facility
- On Road Bicycle Facility



- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

CON #13: Holly Rd (SH 286 to SH 357)



Legend

Regionally Significant Corridors

- Corridor of Concern (COC)
- Corridor of Note (CON)

Travel Time Index

- Poor
- Fair
- Good

Property Classification

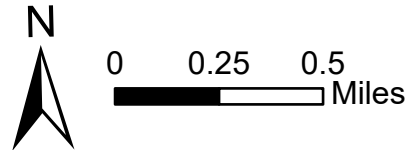
- Single-family Residential
- Multi-family Residential
- Commercial
- Industrial
- Open-Space Land
- Rural Land
- Utilities
- Residential Inventory
- Other
- Vacant Lots
- Colonia Lots
- Totally Exempt Property
- Property Not Classified

Corpus Christi RTA

- Stops
- Routes

Existing Bicycle Facilities

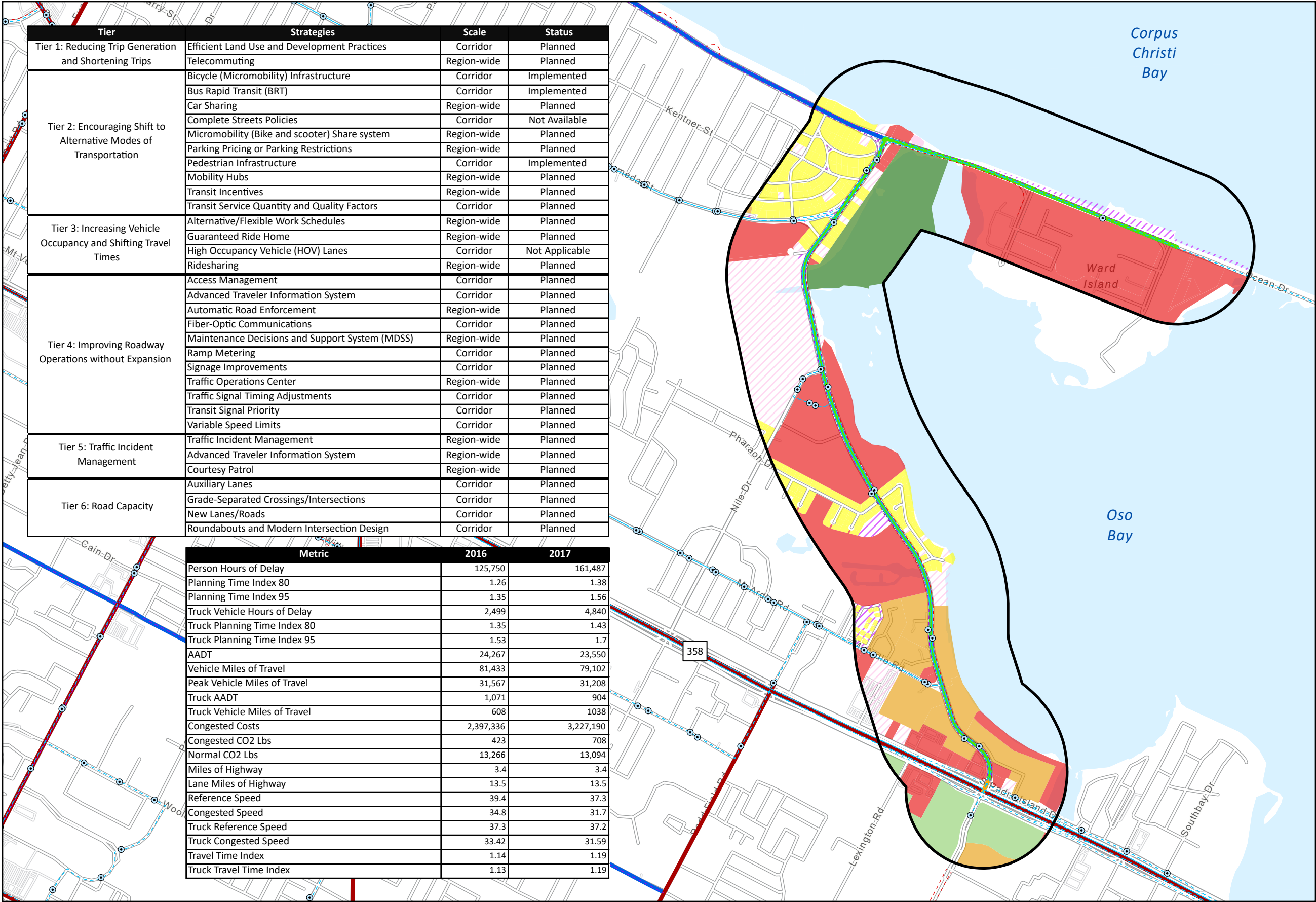
- Off Road Bicycle Facility
- On Road Bicycle Facility



- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

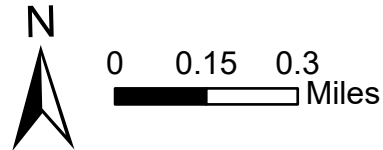
CON #14: Spur 3 / Ennis Joslin Rd (SH 358 to Sand Dollar Ave)



Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Implemented
	Bus Rapid Transit (BRT)	Corridor	Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
Tier 5: Traffic Incident Management	Courtesy Patrol	Region-wide	Planned
	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
Tier 6: Road Capacity	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	125,750	161,487
Planning Time Index 80	1.26	1.38
Planning Time Index 95	1.35	1.56
Truck Vehicle Hours of Delay	2,499	4,840
Truck Planning Time Index 80	1.35	1.43
Truck Planning Time Index 95	1.53	1.7
AADT	24,267	23,550
Vehicle Miles of Travel	81,433	79,102
Peak Vehicle Miles of Travel	31,567	31,208
Truck AADT	1,071	904
Truck Vehicle Miles of Travel	608	1038
Congested Costs	2,397,336	3,227,190
Congested CO2 Lbs	423	708
Normal CO2 Lbs	13,266	13,094
Miles of Highway	3.4	3.4
Lane Miles of Highway	13.5	13.5
Reference Speed	39.4	37.3
Congested Speed	34.8	31.7
Truck Reference Speed	37.3	37.2
Truck Congested Speed	33.42	31.59
Travel Time Index	1.14	1.19
Truck Travel Time Index	1.13	1.19

- Legend**
- Regionally Significant Corridors
- Corridor of Concern (COC)
 - Corridor of Note (CON)
- Travel Time Index
- Poor
 - Fair
 - Good
- Property Classification
- Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
- Corpus Christi RTA
- Stops
 - Routes
- Existing Bicycle Facilities
- Off Road Bicycle Facility
 - On Road Bicycle Facility



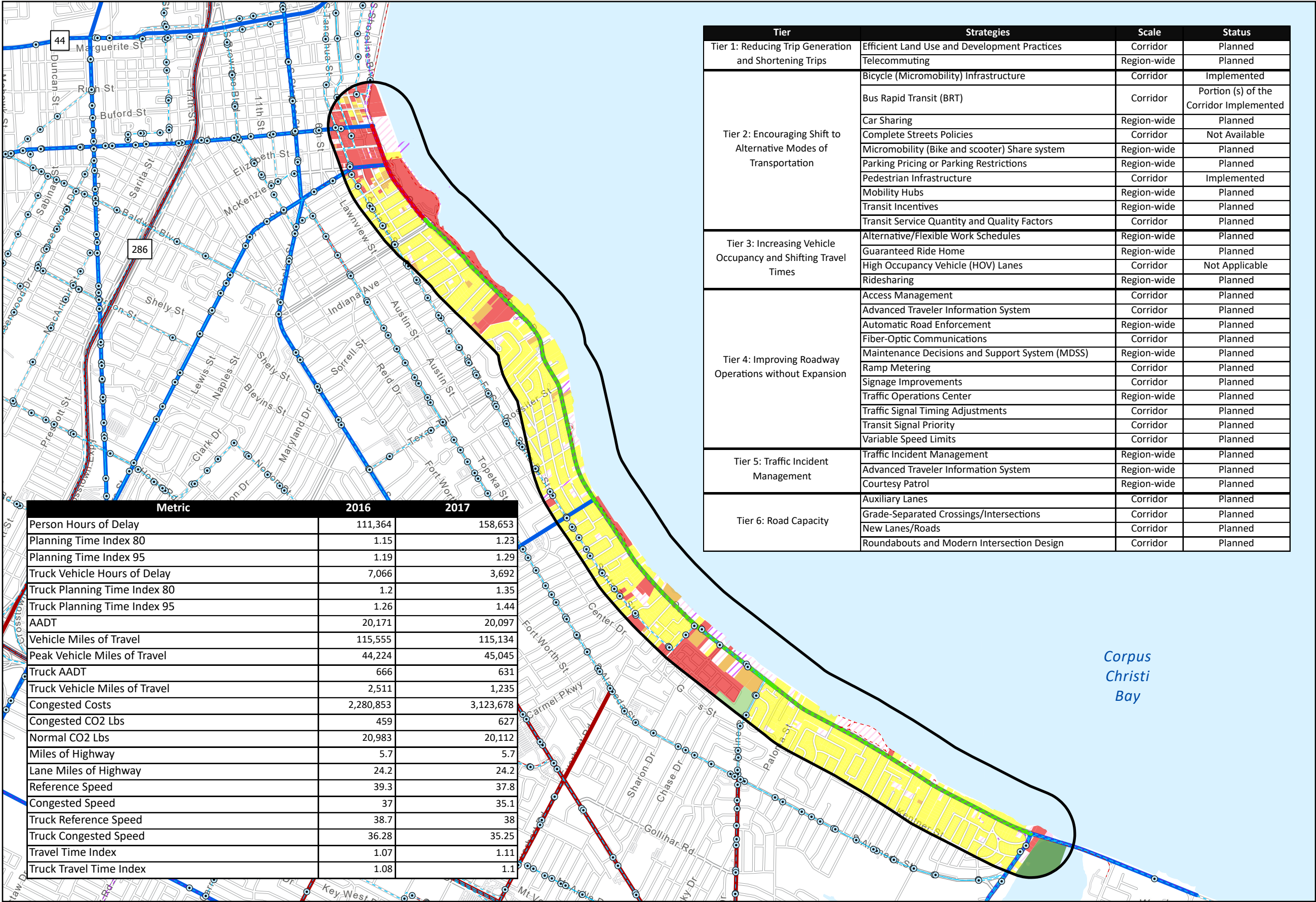
Parties Responsible:

- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)

CON #15: Ocean Dr (Morgan Ave to Ennis Joslin Rd)



Legend

Regionally Significant Corridors

- Corridor of Concern (COC)
- Corridor of Note (CON)

Travel Time Index

- Poor
- Fair
- Good

Property Classification

- Single-family Residential
- Multi-family Residential
- Commercial
- Industrial
- Open-Space Land
- Rural Land
- Utilities
- Residential Inventory
- Other
- Vacant Lots
- Colonia Lots
- Totally Exempt Property
- Property Not Classified

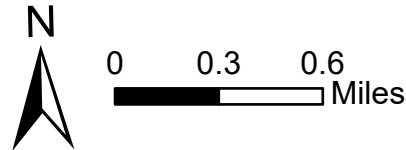
Corpus Christi RTA

- Stops
- Routes

Existing Bicycle Facilities

- Off Road Bicycle Facility
- On Road Bicycle Facility

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Implemented
	Bus Rapid Transit (BRT)	Corridor	Portion (s) of the Corridor Implemented
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
	Access Management	Corridor	Planned
Tier 4: Improving Roadway Operations without Expansion	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned



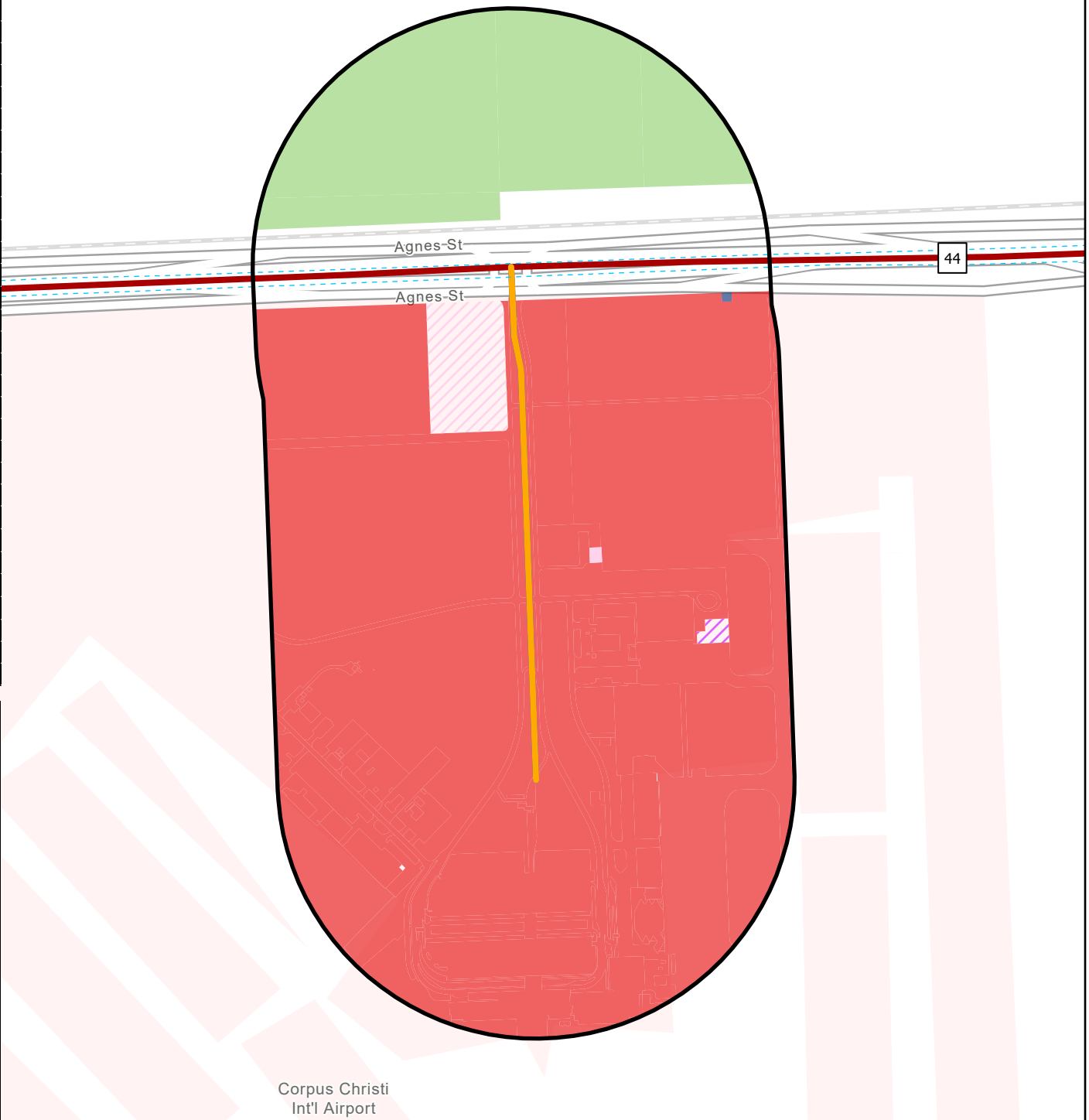
- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

CON #16: International Dr (Corpus Christi Int'l Airport to SH 44)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Not Available
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Planned
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
Tier 5: Traffic Incident Management	Courtesy Patrol	Region-wide	Planned
	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
Tier 6: Road Capacity	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	5,685	12,017
Planning Time Index 80	1.16	1.89
Planning Time Index 95	1.22	2
Truck Vehicle Hours of Delay	53	264
Truck Planning Time Index 80	1.19	1.88
Truck Planning Time Index 95	1.28	2.01
AADT	3,740	3,740
Vehicle Miles of Travel	1,765	1,855
Peak Vehicle Miles of Travel	2,011	731
Truck AADT	118	118
Truck Vehicle Miles of Travel	29	20
Congested Costs	107,103	237,304
Congested CO2 Lbs	21	53
Normal CO2 Lbs	871	422
Miles of Highway	0.5	0.5
Lane Miles of Highway	1.9	2
Reference Speed	35.6	26.6
Congested Speed	33.1	19.7
Truck Reference Speed	34.9	26.5
Truck Congested Speed	32.9	19.9
Travel Time Index	1.08	1.45
Truck Travel Time Index	1.06	1.41



Legend

Regionally Significant Corridors

Corridor of Concern (COC)

Corridor of Note (CON)

Travel Time Index

Poor

Fair

Good

Property Classification

Single-family Residential

Multi-family Residential

Commercial

Industrial

Open-Space Land

Rural Land

Utilities

Residential Inventory

Other

Vacant Lots

Colonia Lots

Totally Exempt Property

Property Not Classified

Corpus Christi RTA

Stops

Routes

Existing Bicycle Facilities

Off Road Bicycle Facility

On Road Bicycle Facility



- Parties Responsible:**
- TxDOT

●City of Corpus Christi

●Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap

●Texas Transportation Institute's COMPAT (2017)

●Corpus Christi RTA Stops and Routes (2019)

●County Appraisal District Land Use (2019)

CON #17: Up River Rd (I-37 Access Rd (WB) to I-37 Access Rd (EB))

Metric	2016	2017
Person Hours of Delay	N/A	N/A
Planning Time Index 80	N/A	N/A
Planning Time Index 95	N/A	N/A
Truck Vehicle Hours of Delay	N/A	N/A
Truck Planning Time Index 80	N/A	N/A
Truck Planning Time Index 95	N/A	N/A
AADT	N/A	N/A
Vehicle Miles of Travel	N/A	N/A
Peak Vehicle Miles of Travel	N/A	N/A
Truck AADT	N/A	N/A
Truck Vehicle Miles of Travel	N/A	N/A
Congested Costs	N/A	N/A
Congested CO2 Lbs	N/A	N/A
Normal CO2 Lbs	N/A	N/A
Miles of Highway	N/A	N/A
Lane Miles of Highway	N/A	N/A
Reference Speed	N/A	N/A
Congested Speed	N/A	N/A
Truck Reference Speed	N/A	N/A
Truck Congested Speed	N/A	N/A
Travel Time Index	N/A	N/A
Truck Travel Time Index	N/A	N/A

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Portion(s) of the Corridor Planned
	Bus Rapid Transit (BRT)	Corridor	Not Available
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Not Available
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
Tier 4: Improving Roadway Operations without Expansion	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 5: Traffic Incident Management	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
Tier 6: Road Capacity	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Legend

Regionally Significant Corridors

- Corridor of Concern (COC)
- Corridor of Note (CON)

Travel Time Index

Poor

Fair

Good

Property Classification

Single-family Residential

Multi-family Residential

Commercial

Industrial

Open-Space Land

Rural Land

Utilities

Residential Inventory

Other

Vacant Lots

Colonia Lots

Totally Exempt Property

Property Not Classified

Corpus Christi RTA

Stops

Routes

Existing Bicycle Facilities

Off Road Bicycle Facility

On Road Bicycle Facility



Parties Responsible:

- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

Data Sources:

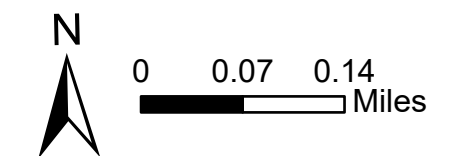
- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)

CON #18: Valero Way (I-37 Access Rd (WB) to Up River Rd)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Not Available
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
Tier 5: Traffic Incident Management	Courtesy Patrol	Region-wide	Planned
	Auxiliary Lanes	Corridor	Planned
Tier 6: Road Capacity	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	6,582	2,907
Planning Time Index 80	1.2	1.25
Planning Time Index 95	1.27	1.29
Truck Vehicle Hours of Delay	345	738
Truck Planning Time Index 80	1.22	1.25
Truck Planning Time Index 95	1.32	1.29
AADT	3,905	2,711
Vehicle Miles of Travel	2,374	1,648
Peak Vehicle Miles of Travel	2,704	650
Truck AADT	995	838
Truck Vehicle Miles of Travel	308	174
Congested Costs	133,971	80,729
Congested CO2 Lbs	33	27
Normal CO2 Lbs	1,540	574
Miles of Highway	0.6	0.6
Lane Miles of Highway	1.2	1.2
Reference Speed	34.5	28.1
Congested Speed	32.1	25.2
Truck Reference Speed	33.3	28
Truck Congested Speed	31.9	25
Travel Time Index	1.07	1.12
Truck Travel Time Index	1.05	1.13

- Legend**
- Regionally Significant Corridors
- Corridor of Concern (COC)
 - Corridor of Note (CON)
- Travel Time Index
- Poor
 - Fair
 - Good
- Property Classification
- Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
- Corpus Christi RTA
- Stops
 - Routes
- Existing Bicycle Facilities
- Off Road Bicycle Facility
 - On Road Bicycle Facility



Parties Responsible:

- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

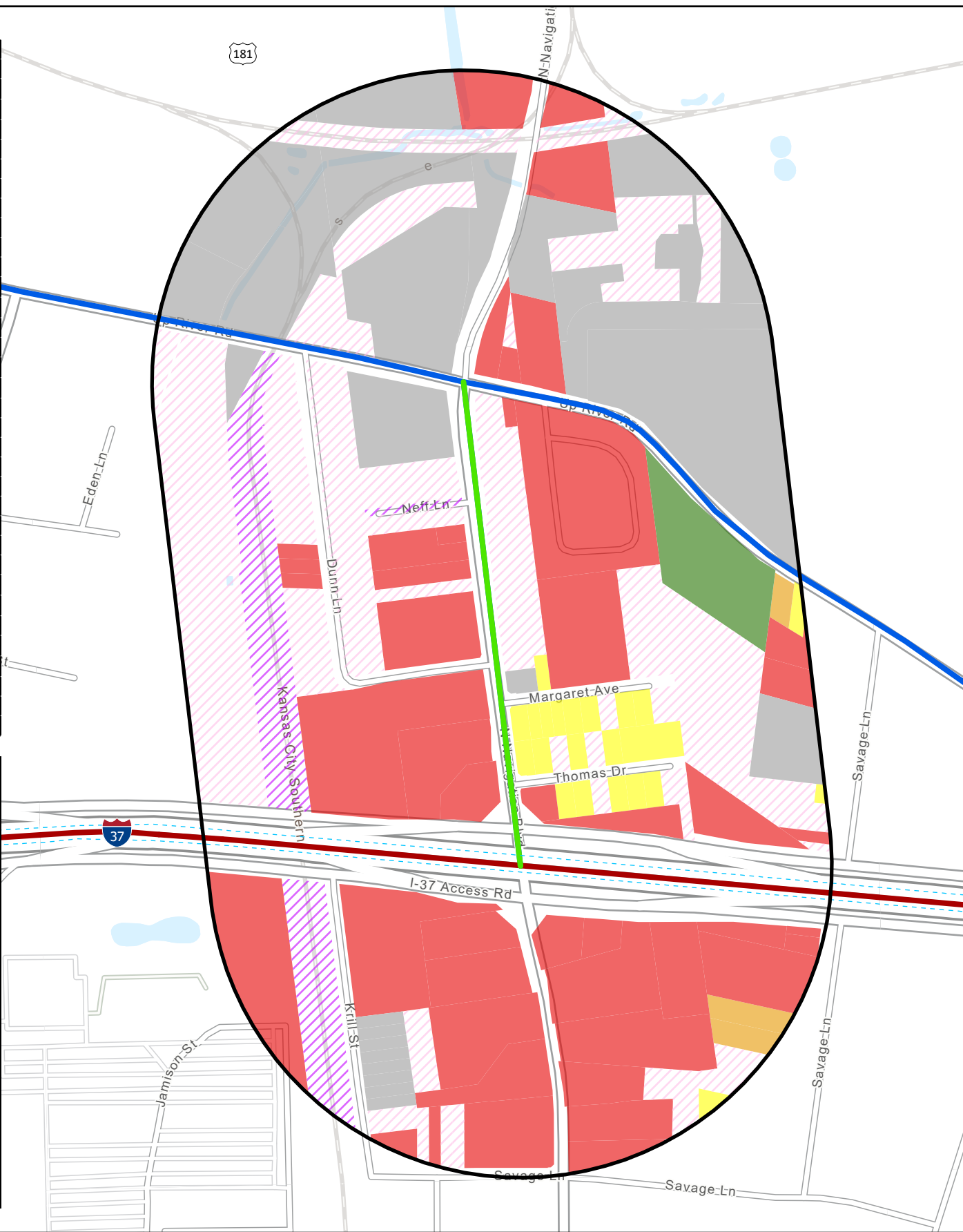
Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)

CON #19: N Navigation Blvd (I-37 to Up River Rd)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Not Available
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
Tier 5: Traffic Incident Management	Courtesy Patrol	Region-wide	Planned
	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
Tier 6: Road Capacity	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	4,558	3,976
Planning Time Index 80	1.31	1.31
Planning Time Index 95	1.36	1.34
Truck Vehicle Hours of Delay	378	1129
Truck Planning Time Index 80	1.23	1.41
Truck Planning Time Index 95	1.27	1.47
AADT	2,100	2,405
Vehicle Miles of Travel	821	939
Peak Vehicle Miles of Travel	324	384
Truck AADT	548	628
Truck Vehicle Miles of Travel	55	84
Congested Costs	95,898	110,769
Congested CO2 Lbs	18	22
Normal CO2 Lbs	299	368
Miles of Highway	0.4	0.4
Lane Miles of Highway	1.6	1.6
Reference Speed	16.2	17.3
Congested Speed	13.8	15
Truck Reference Speed	15.3	18.3
Truck Congested Speed	14	15.1
Travel Time Index	1.18	1.17
Truck Travel Time Index	1.1	1.23



- Legend**
- Regionally Significant Corridors
 - Corridor of Concern (COC)
 - Corridor of Note (CON)
 - Travel Time Index
 - Poor
 - Fair
 - Good
 - Property Classification
 - Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
 - Corpus Christi RTA
 - Stops
 - Routes
 - Existing Bicycle Facilities
 - Off Road Bicycle Facility
 - On Road Bicycle Facility

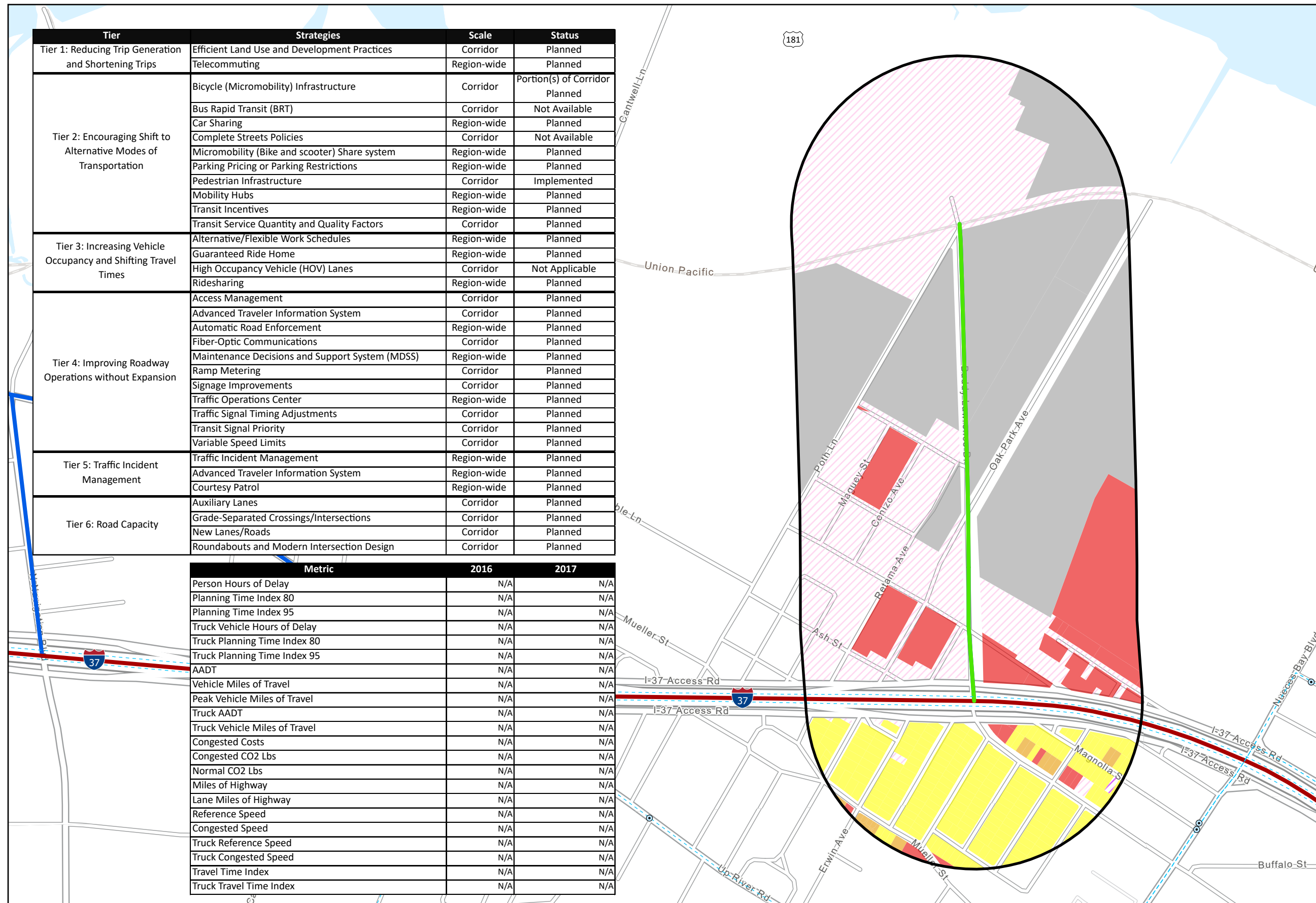
Parties Responsible:

- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)

CON #20: Buddy Lawrence Dr (I-37 to Poth Ln)



- Legend**
- Regionally Significant Corridors
- Corridor of Concern (COC)
 - Corridor of Note (CON)
- Travel Time Index
- Poor
 - Fair
 - Good
- Property Classification
- Single-family Residential
 - Multi-family Residential
 - Commercial
 - Industrial
 - Open-Space Land
 - Rural Land
 - Utilities
 - Residential Inventory
 - Other
 - Vacant Lots
 - Colonia Lots
 - Totally Exempt Property
 - Property Not Classified
- Corpus Christi RTA
- Stops
 - Routes
- Existing Bicycle Facilities
- Off Road Bicycle Facility
 - On Road Bicycle Facility

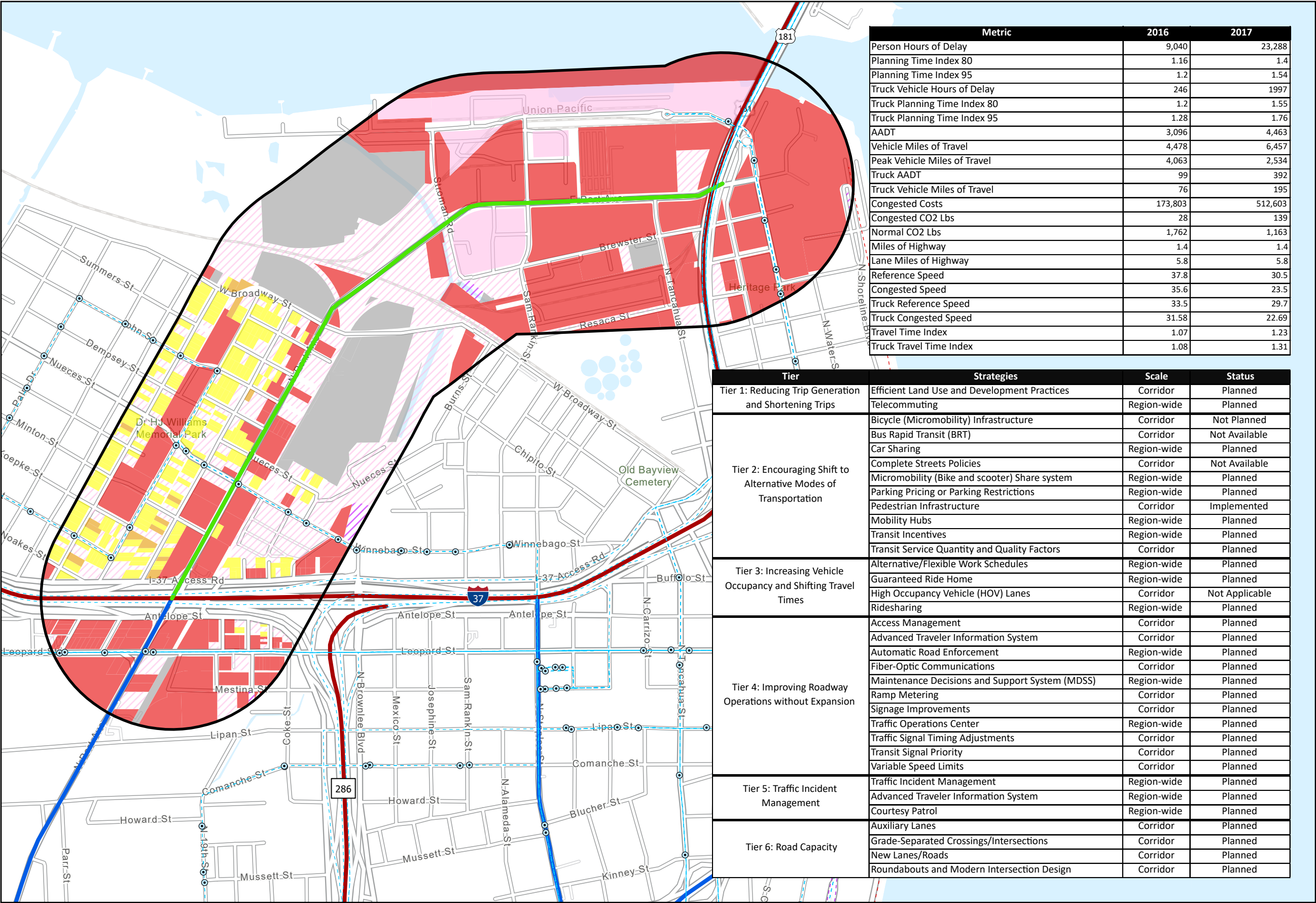
Parties Responsible:

- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)

CON #21: N Port Ave / E Port Ave (I-37 to N Broadway St)



Legend

Regionally Significant Corridors

- Corridor of Concern (COC)
- Corridor of Note (CON)

Travel Time Index

- Poor
- Fair
- Good

Property Classification

- Single-family Residential
- Multi-family Residential
- Commercial
- Industrial
- Open-Space Land
- Rural Land
- Utilities
- Residential Inventory
- Other
- Vacant Lots
- Colonia Lots
- Totally Exempt Property
- Property Not Classified

Corpus Christi RTA

- Stops
- Routes

Existing Bicycle Facilities

- Off Road Bicycle Facility
- On Road Bicycle Facility



- Parties Responsible:**
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

- Data Sources:**
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
 - County Appraisal District Land Use (2019)

CON #22: SH 358 / NAS Dr (SH 358 to Lexington Blvd)

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Portion(s) of Corridor Planned
	Bus Rapid Transit (BRT)	Corridor	Not Available
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Portion(s) of Corridor Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned

Metric	2016	2017
Person Hours of Delay	39,484	47,335
Planning Time Index 80	1.14	1.14
Planning Time Index 95	1.16	1.19
Truck Vehicle Hours of Delay	1678	1768
Truck Planning Time Index 80	1.17	1.21
Truck Planning Time Index 95	1.21	1.32
AADT	33566	34165
Vehicle Miles of Travel	47359	48237
Peak Vehicle Miles of Travel	19364	19214
Truck AADT	3598	1352
Truck Vehicle Miles of Travel	813	654
Congested Costs	783478	955666
Congested CO2 Lbs	155	204
Normal CO2 Lbs	7862	8182
Miles of Highway	1.4	1.4
Lane Miles of Highway	5	4.9
Reference Speed	52.1	48.7
Congested Speed	49.9	46.6
Truck Reference Speed	52.3	50.1
Truck Congested Speed	49.45	47.08
Travel Time Index	1.06	1.06
Truck Travel Time Index	1.07	1.08

Legend

Regionally Significant Corridors

Corridor of Concern (COC)

Corridor of Note (CON)

Travel Time Index

Poor

Fair

Good

Property Classification

Single-family Residential

Multi-family Residential

Commercial

Industrial

Open-Space Land

Rural Land

Utilities

Residential Inventory

Other

Vacant Lots

Colonia Lots

Totally Exempt Property

Property Not Classified

Corpus Christi RTA

Stops

Routes

Existing Bicycle Facilities

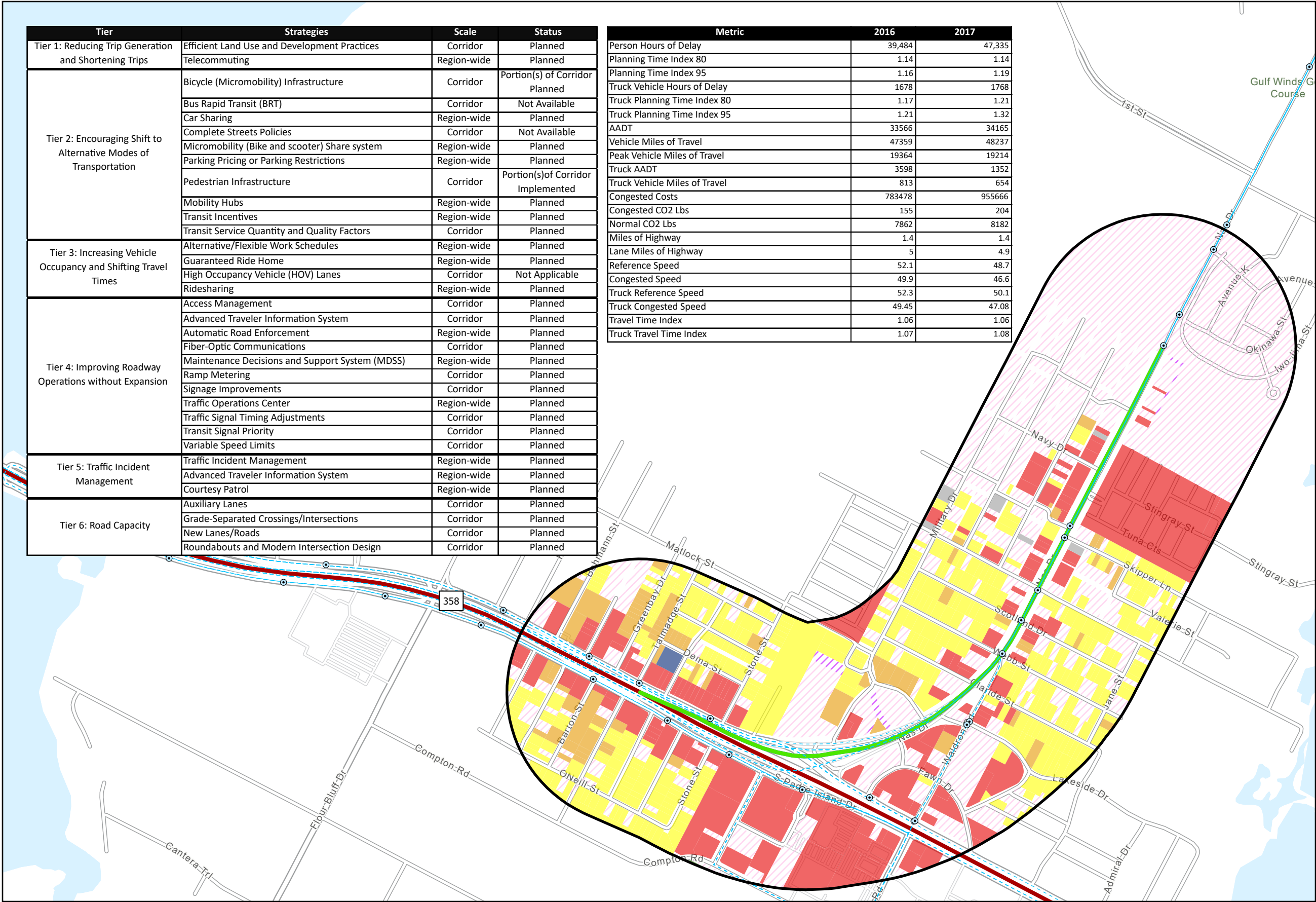
Off Road Bicycle Facility

On Road Bicycle Facility



- Parties Responsible:
- TxDOT
 - City of Corpus Christi
 - Corpus Christi RTA

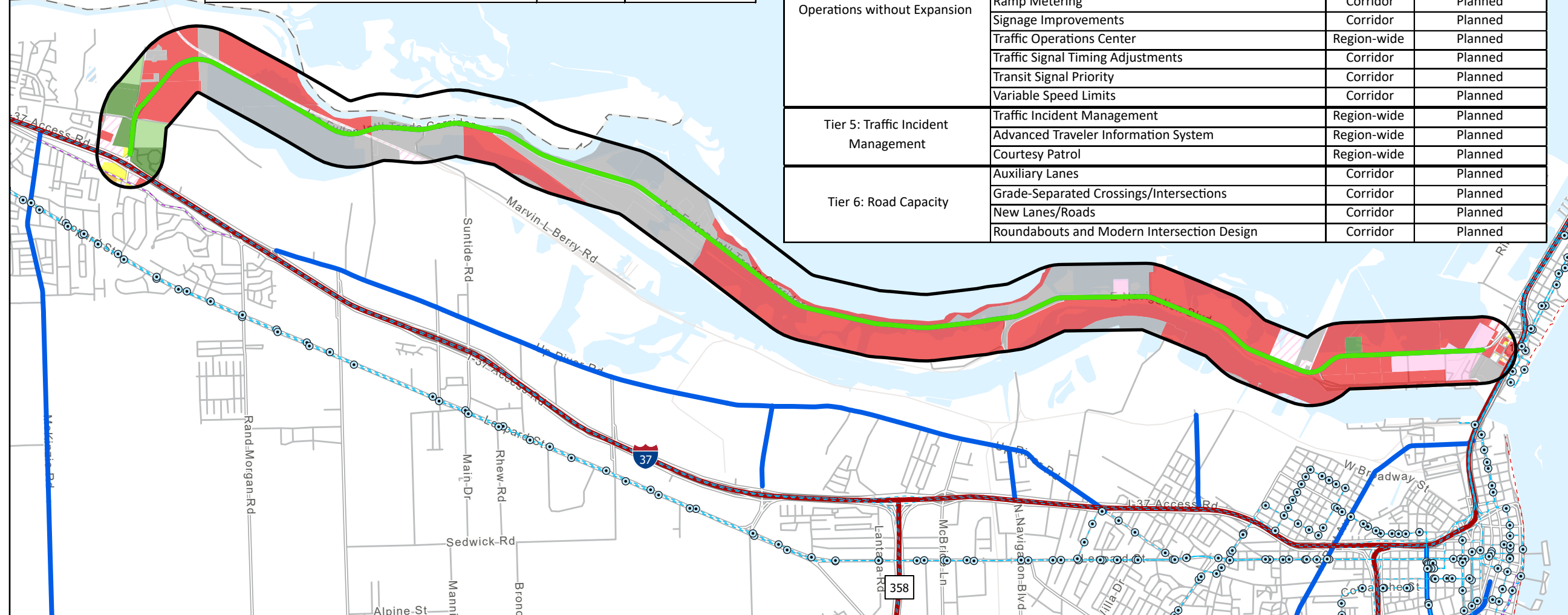
- Data Sources:
- ESRI World Terrain Basemap
 - Texas Transportation Institute's COMPAT (2017)
 - Corpus Christi RTA Stops and Routes (2019)
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CON #23: Joe Fulton Int'l Trade Corridor (I-37 to Avenue F)

Metric	2016	2017
Person Hours of Delay	21,948	14,985
Planning Time Index 80	1.13	1.07
Planning Time Index 95	1.15	1.09
Truck Vehicle Hours of Delay	1798	1229
Truck Planning Time Index 80	1.17	1.09
Truck Planning Time Index 95	1.22	1.11
AADT	4,096	3,942
Vehicle Miles of Travel	46,653	44,904
Peak Vehicle Miles of Travel	15,574	18,221
Truck AADT	421	390
Truck Vehicle Miles of Travel	779	1524
Congested Costs	464,990	316,080
Congested CO2 Lbs	109	34
Normal CO2 Lbs	6,780	8,150
Miles of Highway	11.4	11.4
Lane Miles of Highway	22.8	22.8
Reference Speed	51.4	55.3
Congested Speed	49.5	53.5
Truck Reference Speed	43.9	57.1
Truck Congested Speed	41.33	55.19
Travel Time Index	1.05	1.03
Truck Travel Time Index	1.07	1.04

Tier	Strategies	Scale	Status
Tier 1: Reducing Trip Generation and Shortening Trips	Efficient Land Use and Development Practices	Corridor	Planned
	Telecommuting	Region-wide	Planned
Tier 2: Encouraging Shift to Alternative Modes of Transportation	Bicycle (Micromobility) Infrastructure	Corridor	Not Planned
	Bus Rapid Transit (BRT)	Corridor	Not Available
	Car Sharing	Region-wide	Planned
	Complete Streets Policies	Corridor	Not Available
	Micromobility (Bike and scooter) Share system	Region-wide	Planned
	Parking Pricing or Parking Restrictions	Region-wide	Planned
	Pedestrian Infrastructure	Corridor	Implemented
	Mobility Hubs	Region-wide	Planned
	Transit Incentives	Region-wide	Planned
	Transit Service Quantity and Quality Factors	Corridor	Planned
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times	Alternative/Flexible Work Schedules	Region-wide	Planned
	Guaranteed Ride Home	Region-wide	Planned
	High Occupancy Vehicle (HOV) Lanes	Corridor	Not Applicable
	Ridesharing	Region-wide	Planned
Tier 4: Improving Roadway Operations without Expansion	Access Management	Corridor	Planned
	Advanced Traveler Information System	Corridor	Planned
	Automatic Road Enforcement	Region-wide	Planned
	Fiber-Optic Communications	Corridor	Planned
	Maintenance Decisions and Support System (MDSS)	Region-wide	Planned
	Ramp Metering	Corridor	Planned
	Signage Improvements	Corridor	Planned
	Traffic Operations Center	Region-wide	Planned
	Traffic Signal Timing Adjustments	Corridor	Planned
	Transit Signal Priority	Corridor	Planned
	Variable Speed Limits	Corridor	Planned
Tier 5: Traffic Incident Management	Traffic Incident Management	Region-wide	Planned
	Advanced Traveler Information System	Region-wide	Planned
	Courtesy Patrol	Region-wide	Planned
Tier 6: Road Capacity	Auxiliary Lanes	Corridor	Planned
	Grade-Separated Crossings/Intersections	Corridor	Planned
	New Lanes/Roads	Corridor	Planned
	Roundabouts and Modern Intersection Design	Corridor	Planned



Legend

Regionally Significant Corridors

— Corridor of Concern (COC)

Corridor of Note (CON)

Travel Time Index

 Poor

 Fair


 Good

Property Classification

Single-family Residential

 Multi-family Residential

Commercial

 Industrial


■ Open-Space Land

 Rural Land

Utilities

Residential Inventory

Other

 Vacant Lots

Colonia Lots

 Totally Exempt Property

Property Not Classified

Corpus Christi RTA

- Stops

Routes

Existing Bicyclic

--- Off Road Bicycle Facility

- - - On Road Bicycle Facility



0 0.45 0.9 Miles

Parties Responsible:

- TxDOT
- City of Corpus Christi
- Corpus Christi RTA

Data Sources:

- ESRI World Terrain Basemap
- Texas Transportation Institute's COMPAT (2017)
- Corpus Christi RTA Stops and Routes (2019)
- County Appraisal District Land Use (2019)



CORPUS CHRISTI
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