



# *The Island Way*

SOUTH PADRE ISLAND, TX



COMPREHENSIVE  
PLAN

APPROVED MARCH 2, 2022



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# Executive Summary





# Introduction

South Padre Island is a community situated on the southern tip of the barrier island that lies between mainland Texas and the Gulf of Mexico. Founded as a resort town in 1973, the history of the area now known as South Padre Island stretches back to the 19th century, when Padre Nicolás Ballí established the first known settlement nearby. South Padre Island developed rapidly after World War II, and soon became a popular destination for ranching, oil and gas, and tourism. Today, the City of South Padre Island is a modern City that retains many of the characteristics that originally drew pioneering settlers to its shores two centuries ago.

As the City looks forward from its storied past, community members have expressed a desire to plan for the challenges and opportunities that lie ahead for South Padre Island. This plan, *The Island Way: The South Padre Island Comprehensive Plan*, outlines a path for achieving the shared vision for the City described by community members through the visioning and goal-setting process. It succeeds, updates, and replaces the *Town of South Padre Island, Texas Comprehensive Plan 2008*, which was drafted more than a decade earlier. *The Island Way* synthesizes a series of component master plans into one, seamless document that will guide the growth and evolution of the City between the writing of this plan and its horizon of 2050. Because three decades will pass between the adoption and achievement of this plan, it should be visited and updated regularly at five- to ten-year intervals.

# Projections

Non-demographic projections include an increased demand for commercial and residential space on the Island and an increase in the likelihood of extreme weather events, both of which are broader trends seen throughout the country. As the Island continues to grow, this plan assumes that real estate values will increase over the long term and encourage development and redevelopment in key parts of the Island (see “Strategic Opportunity Areas” in Chapter 4, “Land Use”). Changes in weather patterns due to larger climatological phenomena are addressed through the proactive approaches to planning outlined by the Land Use, Drainage, and Shoreline master plans. The Storm Drainage Master Plan, in particular, details the City’s role in preparing the Island for storm surges and other flooding that can occur (see Chapter 10).



# Component Plans

**Land Use Plan**

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**Business, Economy, and Tourism Plan**

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**Master Thoroughfare Plan**

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**Parks and Recreation Master Plan**

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**City Facilities Master Plans**

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**Shoreline Master Plan**

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**Storm Drainage Master Plan**

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**Implementation Plan**

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# 2

## The Island Way: Plan Overview and Mission

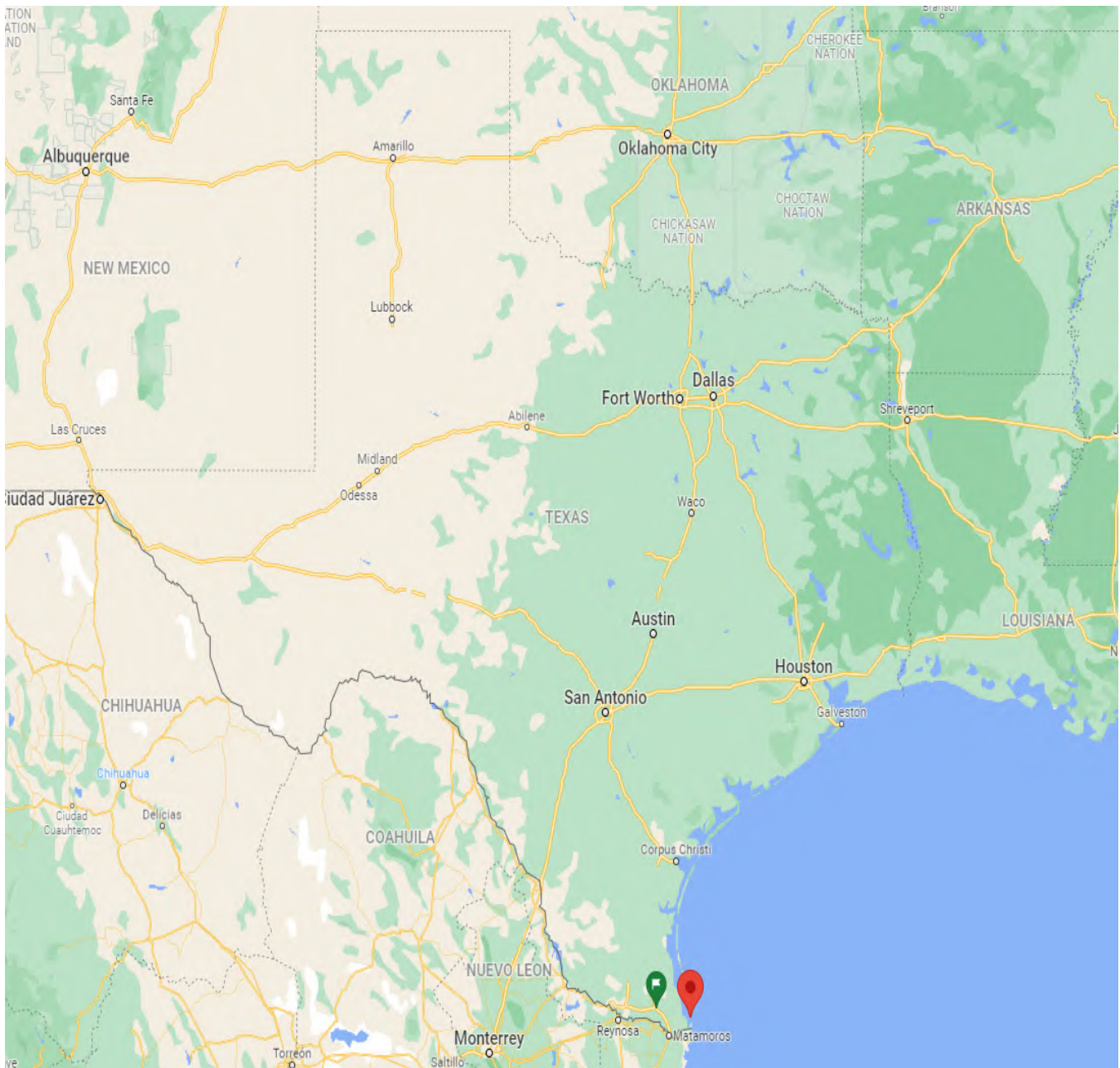


# Introduction

This plan, *The Island Way: The South Padre Island Comprehensive Plan*, has been developed as an update to the *Town of South Padre Island, Texas Comprehensive Plan 2008*. The purpose of this plan is to prepare the City for the future while balancing various community-wide goals and achieving the community's Vision Statement. It establishes the basis upon which future physical and economic development decisions will take place.



Community members participate in the planning process





# History

by Steve Hathcock, Historian and a founding member of the South Padre Island Historical Museum

**15,000 BC:** Near the end of the Wisconsin Period, the waters of the Gulf of Mexico were about 350 to 450 feet lower than present day levels and the land extended fifty or more miles eastward of today's shoreline.

Paleo Native Americans along with Ice Age mammals including, mammoths, native horses, camels, long horned bison, giant armadillos, and equally giant sloths roamed the vast coastal prairie that stretched from Baffin Bay southward to the mouth of the Rio Grande. There were also wolves, bears and saber tooth tigers, all of which were not above dining on an occasional human.

As the glaciers in the north melted the shoreline began to creep westward. Our barrier island (known today as Padre Island) was formed between 3,000 and 1,000 BC.

The Paleo Native Americans were replaced by nomadic Karankawa and Coahuiltecan peoples of the Rockport culture, who visited on a seasonal basis through the Spanish colonial period.

During this time, Padre Island was known to Europeans as "Isla Blanca", for its white, sandy beaches.

**May 1554:** Three Spanish galleons, part of a larger silver fleet trying to outrun a tropical cyclone that sprang up in the Gulf of Mexico, ran aground near the present-day Mansfield Channel also known to locals as the "Cut".

Roughly three hundred passengers and crewmembers survived. Erroneously, they assumed they were only forty or fifty miles north of a Spanish settlement at Panuco. After waiting six days for help they decided to walk south. That was their first mistake, as Panuco lay some four hundred miles away. Within several days of hiking the Spaniards ran afoul of local natives and most of them were killed. Their story became known as the "flight of the 300".

The Spaniards launched a salvage expedition and recovered some 40% of the ship's cargo but the rest remains strewn along the shores of Padre Island.

The island remained an undeveloped wilderness for another 250 years.

**In 1804:** a Catholic priest named Padre Nicolás Ballí, for whom the Island was named, established the first known, permanent settlement on the island, El Rancho Santa Cruz de Buena Vista.

The good priest recruited civilian families to his new settlement and established a church for the conversion of local indigenous peoples. Padre Ballí died shortly after Mexican independence, deeding half the island to his nephew, Juan José, who helped him establish the settlement.



Padre Ballí founded the first European settlement on the island



**July 4, 1848:** After the Treaty of Guadalupe Hidalgo Juan Jose Balli began to sell his interests on the Padre's Island.

**1852:** John Singer, a native of New York and brother of the founder of the Singer Sewing Machine Company, purchased 2500 acres that included most of the buildings of Balli's Rancho Santa Cruz.

Sometime in the early 1850's Singer was appointed Wreck-Master along the lower stretch of the Texas coastline. A wreck-masters job was simple, rescue the crew and passengers of a foundering vessel and if possible, salvage the cargo. At some point after being appointed wreck master, John and his sons found a sizable cache of Spanish coins while scouring the beach. No one knows for sure how many coins were found but the 1860 census shows Singer owning 100,000 acres of Padre Island including the southern tip where he established a headquarters for his ranching operation.

**1861:** Varying accounts have Singer being forced from his island home by the confederates due to his supposed Union leading however there is no record of that fact.

We do know for sure that his family moved to Flour Bluff near Corpus Christi where they resided for the duration of the war.

In a 1935 newspaper interview, Singer's oldest son Alex told the reporter that prior to departing the Island Singer and his sons buried a fortune of gold and silver coins and a small jar of gemstones estimated to be worth \$80,000.

When the war ended Singer returned for his treasure but found all the landmarks had been washed away in an unnamed storm. Supposedly, the treasure has never been found.

The southern tip of the island was not to be inhabited again for another 40 years.

**1908:** Tarpon Beach was established on the southern end of the Island. The development was surveyed, platted, and filed in the county records. Though the small community failed for the most part, some of the original businesses flourished as a resort area and were used by convalescing soldiers who had traveled to the Valley in response to the turmoil in Mexico.

**1926:** James A Dickinson and his group of investors built a brand-new casino complete with a water toboggan slide. Two fast speedboats were put in service to transport passengers to and from the Island. The Great Depression put an end to the Dickenson plan.

**1930-31:** A group of Ohio investors teamed up with the Port Isabel Company and began construction. A bulkhead was built at the end of Powers and Maxan Streets that extended into the bay about a city block.

Plans called for the construction of a causeway that would span the Laguna Madre with a boulevard to be built across the Island where it would terminate at the site of a new 150 room hotel that would be built on the beach itself.

**1934:** Designs for the new causeway were approved by the War Department and the company wasted no time moving forward with the project. However, the advent of World War II put the project in limbo.



**March 1950:** Valley voters approved an \$850,000 bond to help build a causeway from a point on South Garcia Street in Port Isabel to just north of where the blue towers now reside in the KOA RV Park on South Padre Island. The new structure would help pay for itself with the installation of a toll booth at the entrance in Port Isabel. The total cost of the new causeway was estimated to run more than \$2,000,000.

A special steel barge, named the Isabel, constructed in Tell City, Indiana, was sent down the Mississippi River then proceeded along the Intercoastal Waterway to Port Isabel. Once here, she was outfitted with a roadway, hoists, and a crew. The Isabel became a swing bridge leading to the new causeway.

(The old swing bridge continues to operate to this day as the only route to and from Long Island Village.)

**July 7, 1953:** A barge rammed the new bridge, toppling two 70-foot pilings and breaking the cap that connected the rest of the pillars. But soon the repairs began, and work continued at a feverish pace. The last link was poured October 15, 1953.

**1954:** Construction began on a 400-locker bath house to be located at the southern tip of the Island in Isla Blanca Park. A bait stand and other concessions were also built to provide for the expected onslaught of visitors.

**July 3, 1954:** The new causeway was dedicated and by August 20th, 73,462 vehicles had paid the toll to cross to the island. A ceremony to celebrate the 100,000th crossing occurred in late October.

**September 20, 1967:** Hurricane Beulah caused severe damage. Cracks could be seen spider webbing along the concrete and huge potholes dotted the roadway.

**March 1, 1968:** Collection of tolls on the bridge ended at 12:01 a.m.

**August 9, 1969:** Plans were announced for a new, four lane causeway to be built a half-mile or so north of the old one. State Highway 100 was extended through the business district of Port Isabel all the way to the edge of the bay. Several blocks of buildings in Port Isabel were razed to make way for the divided highway that would cross the Laguna Madre.

**April 10, 1973:** The Town of South Padre Island is incorporated.

**1974:** Billed as the longest bridge in Texas and the only roadway connecting the Island to the mainland, the new Queen Isabella Causeway, which was built at a cost of \$12 million, stretched 15,272 feet across the bay. Its long curving design would enable the bridge to withstand the most powerful hurricane.

Since the day of its dedication, the causeway has suffered repeated 'hits' by errant barges and even withstood a plane crash in 1996. The scarred, wooden pilings, framing the Channel that flows underneath the bridge, offer mute testimony of the difficulty in navigating the Intracoastal Waterway during high tide or on windy days.

**September 15, 2001:** In the early morning hours, a group of barges under tow hit the Queen Isabella Causeway, dropping a 240-foot section of the bridge and several vehicles into the water eighty-five feet below. Eight people died as a result.

The bridge reopened two months later on the Wednesday before Thanksgiving.

**November 21, 2003:** During a ceremony held on Friday, State Senator Eddie Lucio, renamed the Queen Isabella Causeway, the Queen Isabella Memorial Bridge in honor of both those who died and the survivors of the tragedy. Also honored were the many men and women of various state, federal, county, city agencies and private firms whose efforts helped prevent further loss of lives and the rebuilding of the causeway in record time.

(We who live on a barrier Island know that our home is always just one bad storm away from total devastation.)

**July 23, 2008:** Valley residents were warned of wind gusts up to 105 mph as Hurricane Dolly bore down on the lower Texas Coast. Experts predicted a six-hour window of hurricane force winds with as much as ten inches of rainfall and the potential for weak tornadoes. Dolly slammed the Island as a category two storm with 100 mph winds and torrential rainfall. Most small businesses weather the storm fairly well, suffering some damage but not enough to shut them down for good, unlike some of the major hotels. Power was restored to most of the Island within 3-4 days. Damage to the bayside bars and restaurants was heavy with docks blown away and minor flooding from the Laguna Madre.

But the Island prevailed, and its residents cleaned up the damage and our community continued forward.

\*"The historical timeline of the City of South Padre Island, Texas outlined above, has been provided by, and remains the protected property of the author, Steve Hathcock, and any use or reproduction or re-publishing or any portions thereof is prohibited without the written consent of the author".

# Demographics

South Padre Island has a residential population density that reflects many suburban communities around the country. When this figure is mixed with the seasonal residential, visitor, and employment populations, however, the City exhibits a much greater density of people—particularly during the daytime. The estimated population of residents was 2,808 for 2020, according to the most recent data from the Opportunity Zone Investment Prospectus. South Padre Island Economic Development Corporation May 2020.



The Island’s population is projected to grow significantly by 2050

The relatively smaller change in the full-time residential population is partially explained by the increasing age of its average resident. In 1990, the average resident of South Padre Island was 11.1 years older than the median Texan and 8.9 years older than the median American. As of 2018, Esri data shows that those gaps have widened to 26.0 and 22.5 years, respectively. The median age in the City of South Padre Island now stands at 60.8 years, higher than the median age of all Texans (34.8) and Americans (38.3).

The average daytime population of South Padre Island is much larger than its full-time residential population. The 2017 Resort Market Analysis, commissioned by the Island’s Economic Development Corporation (EDC), estimated that the bulk of the City’s daytime population comes from day visitors, who stop by for the day but sleep elsewhere—often their homes in neighboring towns or cities. Day visitors amount to 41% of all daytime inhabitants on the Island, or an estimated 10,598 people on an average day. Permanent residents who are on the Island during the day are the smallest minority, accounting for an estimated 7% (1,761) of all inhabitants. The Island’s workforce (e.g., employees) constituted a fifth (4,970) of the average daytime population while hotel visitors and seasonal residents account for 3,920 and 4,400 inhabitants, respectively. The estimated average daytime population for the City of South Padre Island is 25,649, a figure that varies significantly based on the season.

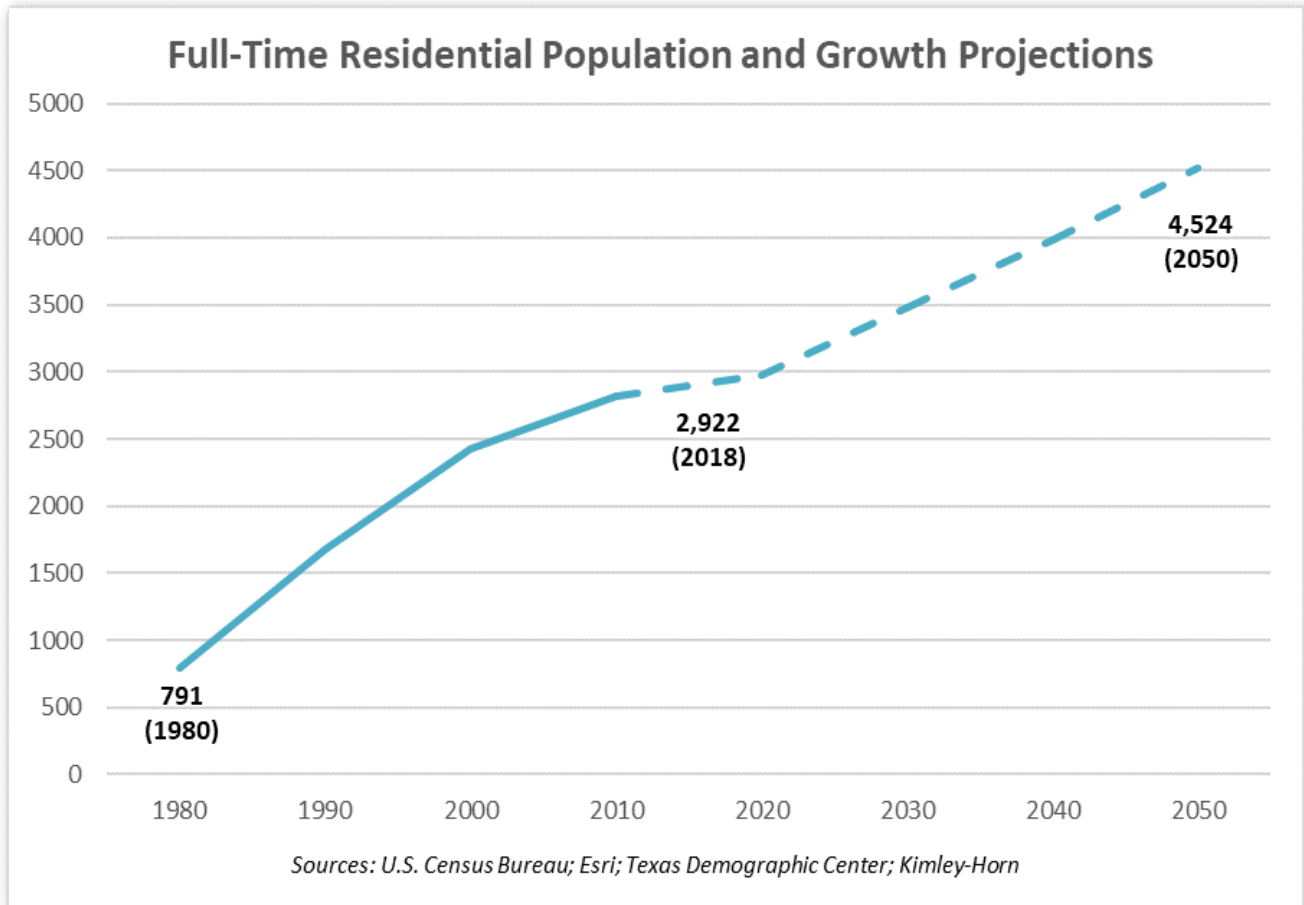


The SPI community is active and engaged

As with most of the nation, households with a family tend to have greater income than non-family households in South Padre Island. The Census Bureau defines non-family households as those in which the householder lives alone or exclusively with people to whom he or she is not related. While median household income in South Padre Island has dipped below state and national averages after leading both for years, the average family on the Island still earns more than families around the state and country. In 2016, median household income in South Padre Island was estimated to be \$42,825; families, which constitute a subset of all households on the Island, took home a median income of \$85,378.

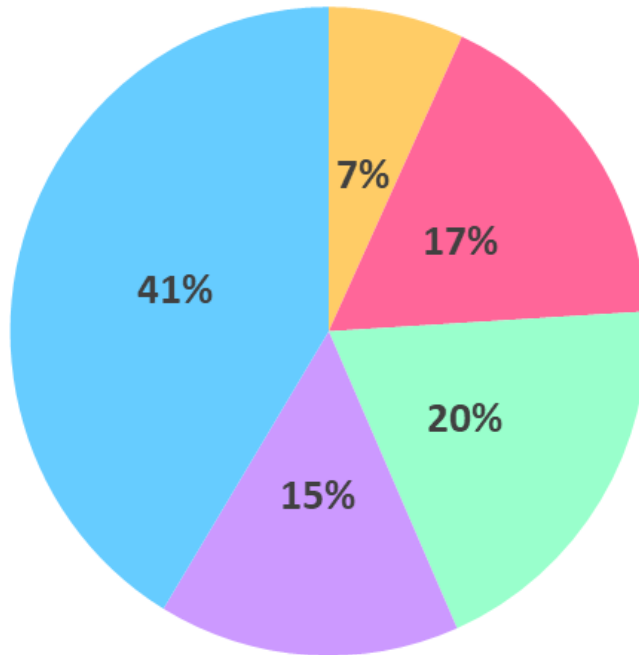
According to 2011-2016 American Community Survey five-year estimates from the U.S. Census Bureau, the poverty rate in South Padre Island (18.8%) is slightly higher than the state (16.7%) and nation (15.1%). The poverty rate for children in South Padre Island (i.e., people 17 years or younger) stood at 18.2% in 2016, lower than the figures for Texas (23.9%) and the United States (21.2%). The Census Bureau uses a formula that calculates poverty rates based on family size and composition. These estimates are standard across the country and do not vary by geography, but they are adjusted annually based on changes in the Consumer Price Index.

A city’s Diversity Index is the probability that two randomly-selected individuals from that area will be of different racial or ethnic categories. In South Padre Island, the Diversity Index stands at 0.42, which is significantly lower than Texas (0.69) and the United States (0.58). The largest ethnic group is single-race, non-Hispanic white, which accounts for nearly three-quarters of the permanent residential population. Census estimates for 2016 describe the remainder of the population (27%) as entirely Hispanic, with white Hispanics accounting for the vast majority of that particular ethnic group. White residents of either Hispanic or non-Hispanic origin amount to 96% of the Island’s permanent population.



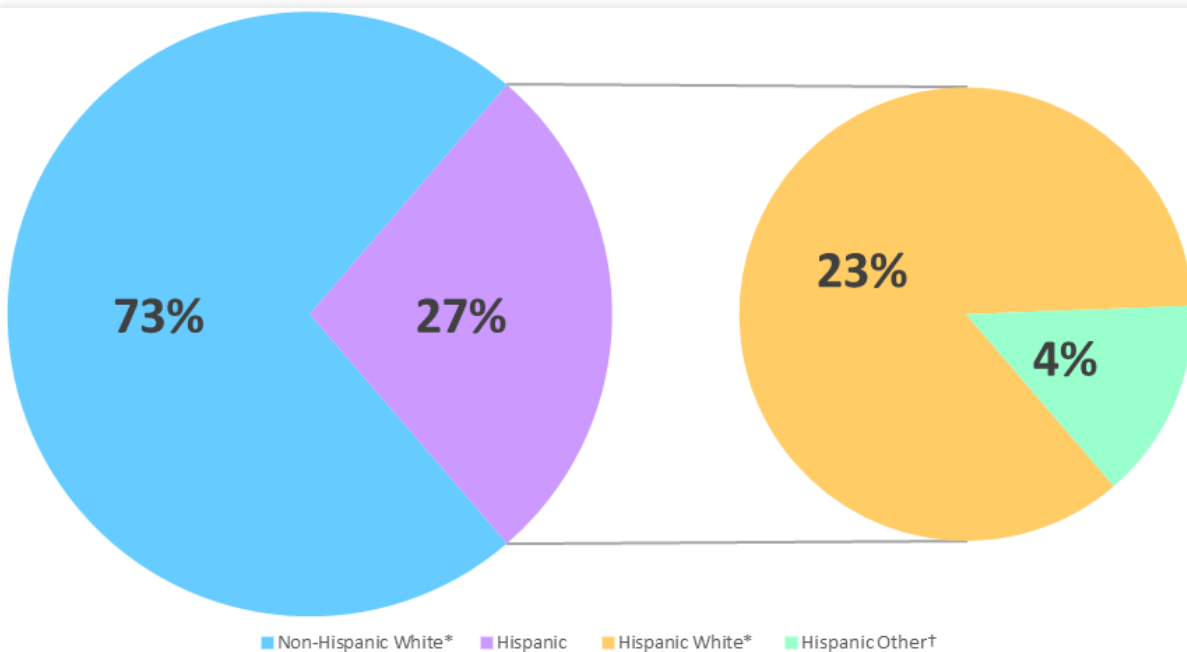


### Island's Daytime Population



■ Permanent Residents ■ Seasonal Residents ■ Workers ■ Hotel Visitors ■ Day Visitors

Source: Esri; U.S. Census Bureau; 2017 South Padre Island Resort Market Analysis; Kimley-Horn



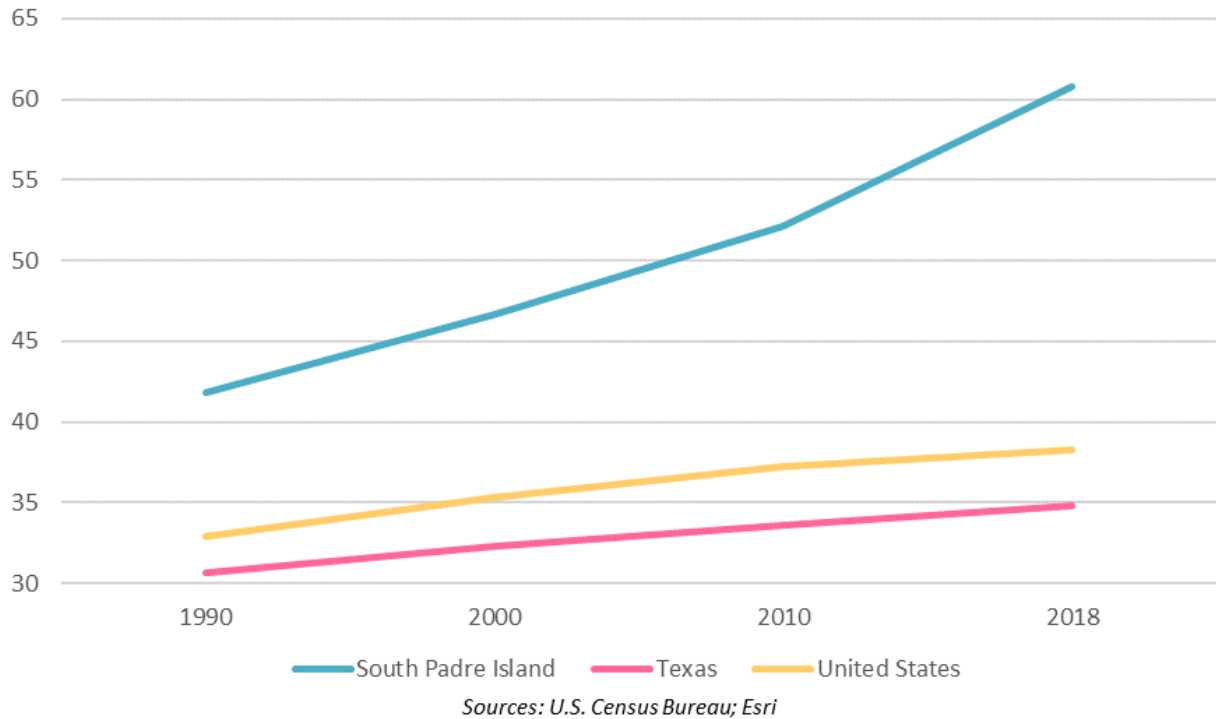
■ Non-Hispanic White\* ■ Hispanic ■ Hispanic White\* ■ Hispanic Other†

Source: U.S. Census Bureau, American Community Survey 5-year estimates (2016)

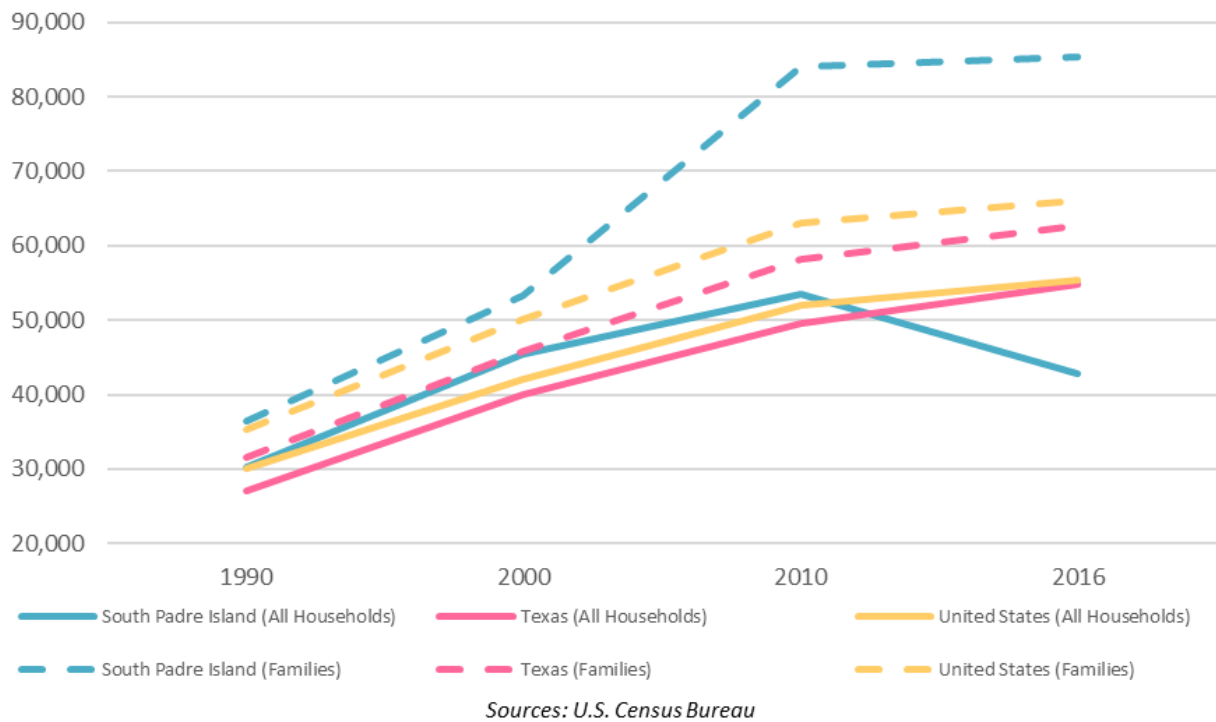
Notes: "Hispanic or Latino" may be of any race; \*Respondent selected only one race; †Hispanic respondents who identified as black, multiracial, or some other race.



### Median Age of Full-Time Residents in Years



### Median Income for Full-Time Residents







# Vision Statement

The Vision Statement captures the shared aspirations of residents, business owners, workers, and other stakeholders in South Padre Island over the coming years. It answers the question, “Where would we like our community to be by the year 2050?” The Vision Statement for the City of South Padre Island in 2050 is as follows:

In 2050, South Padre Island will be a vibrant and attractive tropical community that welcomes people from all walks of life to its shores. Characterized by its active, walkable community and diverse ecosystem, South Padre Island will be a destination where people come to make memories that last a lifetime.



Word art depicting common themes in the Vision Statement process

# Plan Goals

Plan Goals provide specific direction to assist decision makers in achieving the Vision Statement. They encompass the many topics that the plan addresses, such as the development of residential condominiums, the designation of municipal parks, and the improvement of mass transit in the City. While grounded in less abstract language than the Vision Statement, Plan Goals are still aspirational in character. The goals were derived from the 2008 Comprehensive Plan, vetted by the Comprehensive Plan Steering Committee, and further refined following community input.

The following is a grouping of the goals for this comprehensive plan, with their associated goals from the 2008 comprehensive plan:



## Land Use

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An established land use guidance policy that provides a continuous contribution to the community's high quality of life.

## Mobility

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An established mobility plan that provides a continuous contribution to the community's high quality of life.

## Parks

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An established high quality park system that provides a continuous contribution to the community's high quality of life.

## City Facilities and Infrastructure

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A proactive and well maintained facility / infrastructure system that provides a continuous contribution to the community's high quality of life.

## Shoreline

---

A pristine beach and rich ecological system that provides a continuous contribution to the community's high quality of life.

3

# Community Engagement



# Introduction

Facilitating the development of the community’s vision for the future of South Padre Island required extensive community engagement. The planning team prioritized this aspect of the plan by offering stakeholders a variety of opportunities for sharing their ideas. Those opportunities ranged from participating in community open houses to providing feedback at public hearings related to the adoption of the plan, with two opportunities for online engagement serving in an additional, crucial capacity for engaging people who were otherwise unable to attend events. This chapter discusses each opportunity or method of community engagement, offering an overview of the community engagement process and its results.

## Methods of Engagement

### Comprehensive Plan Steering Committee

The Comprehensive Plan Steering Committee (CPSC) served as the primary, guiding body of community stakeholders during the planning process. CPSC members provided strategic direction to the planning process by assisting in the development of the intent and purpose of the plan: the Vision Statement and Plan Goals. The committee also gave the planning team direction on next steps in the development of the plan following each community open house. The committee was engaged throughout the visioning process, ensuring that the plan’s strategic direction was formed in alignment with the community’s vision for the future.



CPSC members served as citizen guides during the drafting of the comprehensive plan, ensuring a transparent process where all voices were heard.

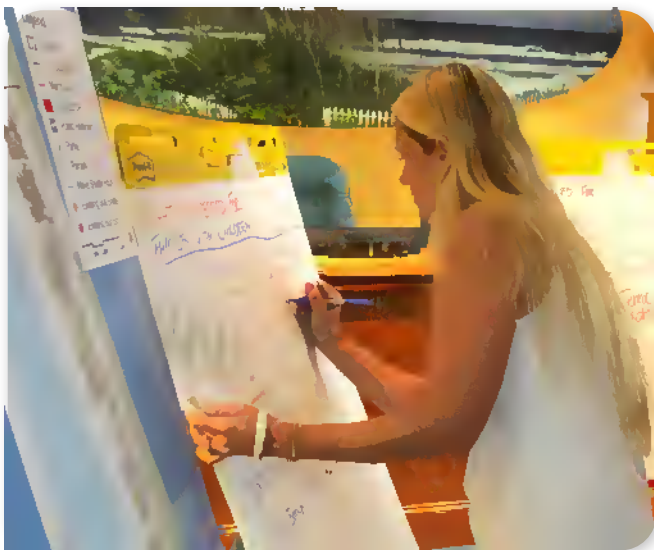
The committee met four times throughout 2018 to provide direction related to the development of the plan vision. The members of the committee debated issues related to the strategic direction for the plan and offered useful input at each meeting. The committee met four other times in 2020 to review and discuss updates and revisions. The committee met one last time on Jan. 2022 to review updates and revisions. A DRAFT was posted on the City’s website on Feb. 1, 2022 to obtain public feedback. An Open House will be held on Feb. 28, 2022 from 4:00 pm. to

7:00 pm. The Final Draft will be presented on March 2, 2022 to the City Council for final review.



# Community Open House

A Community Open House was held on May 1, 2018 at the South Padre Island City Hall. At the event, more than 50 attendees were given an overview of the project’s background, including the reasons why the City was proactively planning for its future by updating the comprehensive plan. Stations around the room offered opportunities for participants to provide their ideas related to South Padre Island’s existing community assets, economic development and growth opportunities, existing facilities and amenities, and desired future amenities. Participants used stickers and markers to give feedback related to their desired future for South Padre Island. The Master Thoroughfare Plan (MTP), which will guide the long-term development of the Island’s mobility network, was also displayed at this event. Open House attendees offered suggestions and posed questions to staff about the implications of the MTP.



Community members provided written feedback at the Community Open House

Themes that emerged from participants at the Community Open House included the following: “creating lifelong memories,” “establishing a world-class city,” “providing an environment for people from all walks of life,” and “preservation and protection of the Island’s assets.” These words, ideas, and key phrases were assembled into a draft Vision Statement that was vetted by Comprehensive Plan Steering Committee and the community in several iterations. Ultimately, the final version of the South Padre Island Vision Statement for 2050 was shaped and drafted as a direct result of this process.



The Community Open House was one of several interactive events held for members of the public in 2018, during the comprehensive planning process

# Community Workshop

A Community Workshop was held on June 19, 2018 at the Birding and Nature Center in the Island’s emerging Ecotourism Area. Several topical stations offered attendees a broad overview of the comprehensive planning process, explaining the context for its development (e.g., “What is a comprehensive plan?,” “Why prepare one?,” “How will it be used?”), the schedule for its drafting, and the opportunities for public involvement that would become available as the plan’s timeline unfolded. More than 125 attendees shared their thoughts on several topics, including Plan Goals, Place Types, a draft Vision Statement, and existing conditions maps. The planning team also received feedback on the Shoreline Master Plan, beach access, and public preferences for beach restrooms.

The goal of this event was to confirm a preliminary strategic direction for the comprehensive plan. Written feedback was received from the community on flip charts and exhibits, and plan elements were modified to reflect the community’s input. A high level of interest in the comprehensive planning effort was evident as community members illustrated their ideas for the future of South Padre Island through a series of visual preference boards and by answering several open-ended questions.



A number of exhibits were displayed for the perusal of attendees



The Community Workshop provided a venue for communication between community members



Planning team members met with attendees to gather verbal feedback

## Business Community Outreach

The business community is an integral part of the social and economic fabric of the Island. There are an estimated 391 businesses in South Padre Island that employ 3,832 people. In 2018, the two largest sectors were the Accommodation and Food Services industry and the Real Estate, Rental, and Leasing industry. Combined, these two industries account for a little less than half of all businesses and a little more than half of all employees on the Island. These leading industries, and the businesses in other sectors of the economy that also support the residential and seasonal populations, are important to the Island.



The business community is the commercial backbone of the Island

Suggested areas of improvement that were mentioned in this stakeholder group included wayfinding signage, the pedestrian experience and walkability, parking, transportation and transit, the Convention Centre, lighting, recreational facilities and amenities, street infrastructure, and beach maintenance. These local business owners also mentioned ideas for new amenities such as eateries on the beach and an airlift service to San Antonio for community members to use in cases of an emergency.

## Social Media and Website

Over the course of the project, the City of South Padre Island utilized its social media presence on Facebook and Twitter to conduct public outreach and publicize the comprehensive planning process. The City has 19,893 followers on Facebook and 7,557 on Twitter, and thousands of people were reached using social media. Facebook and Twitter were useful in soliciting attendance at the community events that were held during the planning effort. Posts were shared on other widely-followed websites as well.

Additionally, the City maintained a website for the comprehensive plan to inform and communicate with members of the community. The website featured plan documents, a schedule, a background on comprehensive planning, and links to other useful pages such as the community surveys.

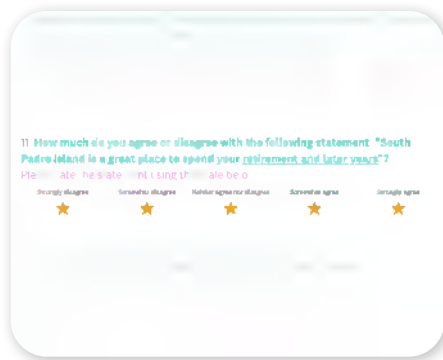


Social media supported outreach efforts for the comprehensive plan

# Community Surveys

Two Community Surveys were conducted to gauge public opinion and solicit feedback from residents, business owners, workers, and other Island stakeholders. The first survey took place over four weeks in May of 2018; the second survey began October 1 and ended on October 18, 2018. The level of participation relative to the size of the South Padre Island community was high: 515 and 105 respondents in the first and second surveys, respectively. Surveys were also conducted separately for individual sub-plans, such as the Shoreline Master Plan, which also featured strong response rates. For a city of 2,922 residents, the number of responses shows the high level of interest from members of the community in the comprehensive plan.

## Community Survey #1



The first Community Survey solicited feedback from respondents by asking them to rank responses

The first Community Survey was intended to gain an understanding of participants desired vision for the future on the Island, and was general in nature. It included topics such as ideas for generating year-round activity on the Island and respondents’ favorite places to take out-of-town visitors. In total, 515 community members responded: 264 (52%) women and 242 (48%) men. Reflecting South Padre Island’s median age of 60, most respondents were between the ages of 50 and 69. Residents (permanent and seasonal) accounted for nearly two-thirds of responses. Twenty-one percent of respondents never lived in South Padre and 62% had never been employed on the Island. Three quarters of participants were homeowners and 88% drove as their primary means of transportation.

Most respondents said that they enjoyed living or working in South Padre Island. In addition, most people agreed that the Island provided a great place for people to spend their retirement and later years in life. The survey found that Brownsville, Port Isabel, Harlingen, and McAllen—in that order—were the most popular destinations for those who could not find a good, service, amenity, opportunity, or venue in South Padre Island. The most important priority for the City, as indicated by respondents, was addressing shoreline issues such as erosion and storm protection. Padre Boulevard (Park Road 100) was singled-out as the key focus area for growth and opportunity in the City, while the Gulf-front area was listed as the best area for future preservation and protection efforts.

After giving input on the future vision for the community, respondents then rated the state of the City as it related to several elements including economic development, the housing market, and sustainability. Feedback was also requested on the state of public facilities and services operated by the City, such as parks, waste services, fire and police protection, and the Convention Centre.



## Community Survey #2

The second Community Survey largely focused on the draft Vision Statement and Plan Goals, gauging public support for the direction of these two components of the comprehensive plan. This survey was shorter than the first, with four questions in total, excluding demographics. Respondents were asked to state the extent to which they agreed or disagreed with both the Vision Statement and fifteen, pre-selected Plan Goals for the year 2050—the plan horizon. Comment boxes were provided for those who wished to submit written feedback.

Over 100 individuals responded to the second Community Survey, with a similar demographic representation to the first survey. At this point in the comprehensive planning process, support for the draft Vision Statement was very high and the vast majority of respondents expressed agreement with the statement in the second survey. Goals related to environmental sensitivity and proactive infrastructure planning were also well-received by survey respondents.

### Land Use Questions

The draft **Future Land Use Plan** is a visual depiction of the ideal layout of Place Types that will comprise South Padre Island in 2050. **Place Types** represent the different types of land uses and development character that could exist on South Padre Island (e.g., residential, non-residential, or mixed use) in the future. [Please click here for a detailed printout of all the Place Types in this plan.](#)

**Strategic Opportunity Areas** are distinct within the larger plan area that feature a significant amount of parcels that are suitable for development or redevelopment. These parcels are referred to as Future Investment/Reinvestment Sites. **Strategic Opportunity Areas** represent key locations in which the City and community stakeholders may guide development in a positive direction that supports the needs of neighborhoods and businesses on the island.

Please take a moment to answer some questions about the draft Future Land Use Plan and Strategic Opportunity Areas. As with the other sections of this survey, these questions are entirely **optional**, but we do encourage you to answer as many as possible.

Both Community Surveys offered background information on the plan

## Thoroughfare Plan Public Meetings

An important component of the creation of the City of South Padre Island's Master Thoroughfare Plan (MTP) was the identification and integration of the community's transportation priorities,



The first public meeting took place in 2017

which acted as a guide for the development of the new plan. Instead of addressing limited components of the network with a focus only on vehicular movement, current transportation planning best practices include improving the efficiency of the system in ways that promote the community's values. Cities are implementing complete streets and context sensitive solutions to create safer, more livable and visually appealing places that are consistent with their social, environmental, and economic values. For this MTP, the priorities of residents, business owners, and community leaders were evaluated to reflect the desires of the community.

The public input process was designed to encourage involvement from a broad spectrum of stakeholders in a variety of formats.

## First Public Meeting

The First Public Meeting took place on Thursday October 5, 2017 at City Hall. The information displayed and discussed at the meeting included street classifications, typical sections, and improvements to parking and sidewalk on each street. Stakeholders were able to discuss the information with City staff and the consultant team and were encouraged to write their thoughts on comment cards. Generally, stakeholders gave insight on which streets are private, where they are experiencing major drainage issues, and what they like and dislike about the current design and construction of PR 100 (Padre Blvd).

## Second Public Meeting

The Second Public Meeting took place on May 1, 2018 at City Hall. The information displayed and discussed included updated materials from the first public meeting and also the initial prioritization tables. Stakeholder participants were invited to visit, walk through, and provide feedback. Generally, stakeholders gave insight on the need for a median opening at Clipper Lane, the City's sidewalk installation requirement and Sidewalk In-Lieu Payment program, and what they like and dislike about various street elements on Laguna Blvd and Gulf Blvd. The insight provided by stakeholders at both public meetings has been incorporated into this plan.

## Drainage Planning

A Public Meeting was held on August 1, 2018 at City Hall. The Public Meeting was held to gather data and inform the community of the Storm Drainage Master Plan update. At the Public Meeting, Comment Sheets were collected to determine locations of drainage issues and further details regarding the flooding issues. In addition to collecting Comment Sheets, a roll plot map of the City was utilized as a board for marking problem areas. Stakeholders were able to discuss areas of drainage concerns with City staff and the consultant team and were encouraged to mark the areas of concern on the roll plot map by areas of significant flooding, moderate flooding, and minor flooding.

As part of the data collection process for the Storm Drainage Master Plan study, a Community Drainage Survey was distributed to residents and business owners in the City of South Padre Island, and community participation was collected to determine priority areas for further analysis. The Community Drainage Survey and responses were used to establish locations with drainage and flooding issues as well as locations with drainage improvements.



Stakeholders attend a meeting to discuss drainage planning in South Padre Island

# Parks Plan Outreach

The South Padre Island's 2018 Parks and Recreation Master Plan update was the result of stakeholder participation, community surveys and workshops that provided valuable insight on what the community expects from the park system. The community engagement process was a vital component that aided in the development of a Master Plan that will aid the City in its continuing efforts to effectively deliver a community driven parks and recreation system. The development of the Parks and Recreation Master Plan was driven through an engaged stakeholder input process that provided ample opportunity to understand citizen expectations, contributing to a better understanding of community needs and interest.

The first step in obtaining community input was an initial Parks and Recreation Department Survey that was completed in March 2017. The survey focused on a series of questions that addressed residency, park utilization, parks visited, favorite park features, safety of parks, park priorities and various other questions to obtain community input. A total of 167 responses were gathered from the community survey, which were evaluated during an August 2017 Parks and Recreation Committee meeting that resulted in a completed Strength, Weaknesses, Opportunities & Threats (SWOT) analysis.

On March 28, 2018 the newly formed Parks and Keep SPI Beautiful Committee appointed a subcommittee that could assist in the completion of the plan and insure community input played a vital role in its completion. The result was a series of subcommittee meetings and discussions



The ribbon-cutting ceremony at Tompkins Park

that ultimately shaped the initial draft of the Master Plan. At the completion of the initial draft, a community workshop meeting was held on June 1, 2018 to obtain additional public input and participation to finalize the proposed plan to present to the Parks and Keep SPI Beautiful Committee. On June 16, 2018 the Committee conducted a public hearing and formally recommended the Master Plan to City Council for approval. The 2018 City of South Padre Island Parks and Recreation Master Plan was formally adopted on July 18, 2018 after a second public hearing and formal City Council action approving the Master Plan.



# 4

## Land Use Plan



# Introduction

Land is one of South Padre Island’s most precious assets, a fact exemplified by the Island’s limited geography. Bounded by the Gulf of Mexico on one side and by the Laguna Madre on the other, the corporate limits of South Padre Island encompass 3.73 square miles. This requires careful consideration of the uses on the small, urbanized tracts that extend towards each body of water from Padre Boulevard. The following chapter addresses growth and population trends, the various categories of Place Types that exist or are desired in the future community, the City’s Future Land Use Plan, and the Strategic Opportunity Areas located around the Island.

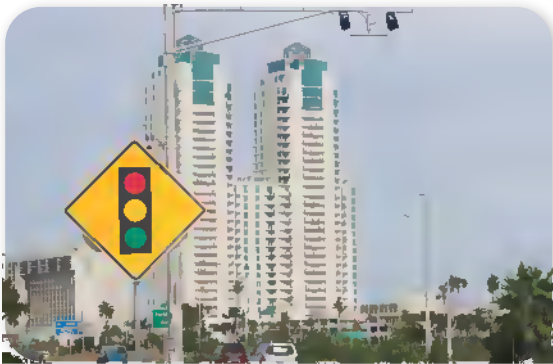


South Padre Island displays a mix of suburban and urban land use patterns in the context of an island resort town

# Existing Conditions

## Existing Land Use

Most commercial development—including the Island’s tallest buildings—is concentrated in the southern third of the City, with the densest development located near the intersection of Padre Boulevard and the Queen Isabella Memorial Bridge. In the south, commercial, service, transportation, communication,



The Island’s tallest buildings are located in the southern third of the City proper

utility, and mixed uses are common. Residential uses dominate the central area and northern reaches of the City. Parcels are generally smaller in the center of the City, with single-family attached and detached homes along the Padre Boulevard corridor between Sunset Drive and Haas Street. Parcels are largest in the northern third of the City and the extraterritorial jurisdiction (ETJ), which extends five miles northward from the City limits. This difference in parcel size reflects the historical trajectory of development of the Island from south to north. See the map of the existing land use in South Padre Island on the following page.

Figure 1 Existing Land Use

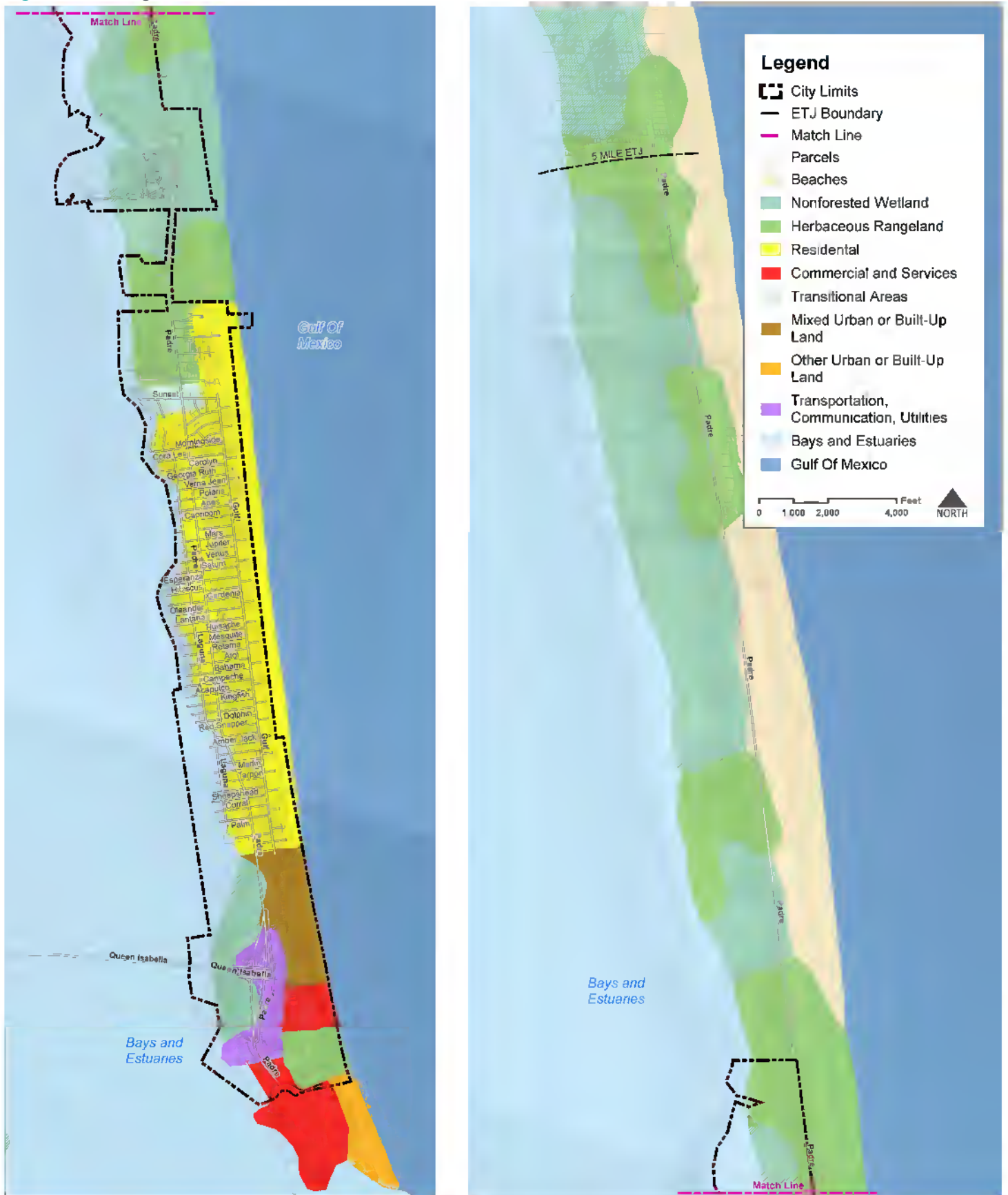




Figure 2 Existing Zoning

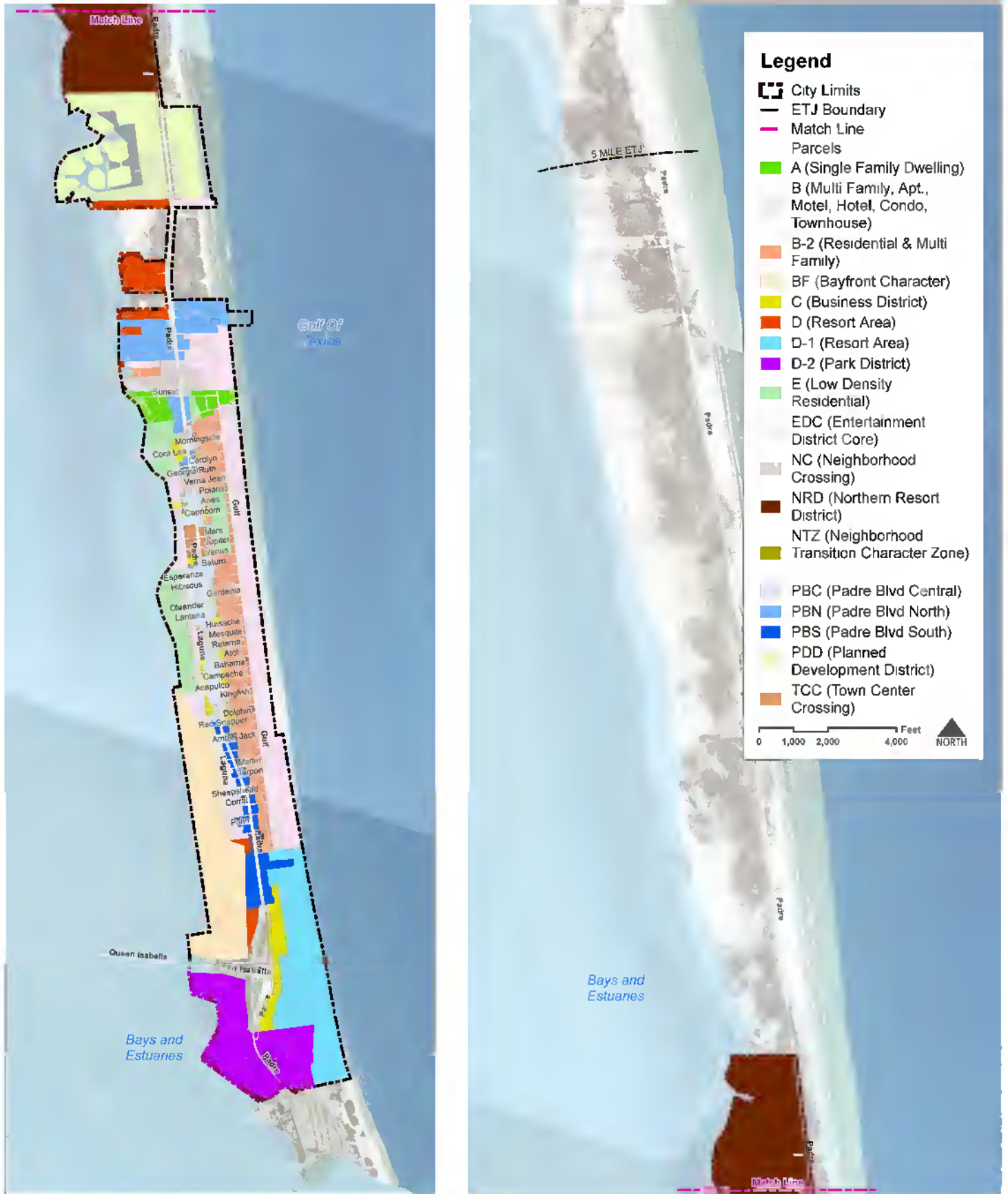


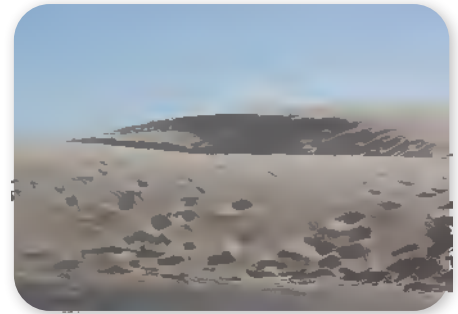
Figure 3 Floodplains





# Existing Zoning

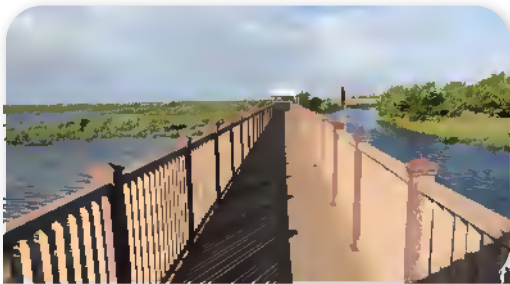
Zoning generally follows land use, and most parcels south of Acapulco Street are zoned as business, commercial, or resort districts, although Bayfront Character (BF) and Park District (D-2) zones dominate the western shore in this area. Zoning for traditional residential uses is more common for parcels north Acapulco Street, with hotels, motels, and condominiums accounting for most development along the shoreline. Residential density diminishes in the north approaching the City limits, with zoning following suit. See a map of the existing zoning in South Padre Island in Figure 2.



Zoning helps protect sensitive areas like the Island's dunes

# Floodplains

As a barrier island, the vast majority of the City of South Padre Island falls within a 100-year floodplain, while the remainder of the City sits within a 500-year floodplain. Flooding poses a high risk to



As a barrier island with an average elevation of seven feet, water can quickly rise in South Padre Island

public services, transportation infrastructure, and private development on the Island. Federal Emergency Management Agency data shows that the risk of submersion from flooding is greater in the west, where the Island borders the Laguna Madre and the elevation is generally lower. The eastern shore falls within the boundaries of a less likely, but still threatening, 500-year flood. 2017 was the second-hottest year for which we have data in Texas; worldwide, the five hottest years on record have all taken place since 2010. Because of this and many other factors, an increase in extreme weather will likely impact the prevalence of flooding in South Padre Island in the future.

For additional information on the City's flood management plans, please see the Storm Drainage Master Plan in Chapter 10. See the previous page for a map of existing floodplains in South Padre Island.

# Parcel Ownership

South Padre Island has nearly 3,200 parcels, the greatest concentration of which is in the central third of the City where most of the Island's stock of single-family homes is located. Parcels are smallest here, increasing in size as one moves northward or, to a lesser extent, southward. Major property owners in the south include the State of Texas, Cameron County, Sapphire Condominiums, and other hotels and condominium associations. In the north, Padre Shores Ltd., CAB Partners LP, and Playa Del Rey Properties own some of the largest parcels on the Island. See the following page for a map of parcel ownership.

Figure 4 Parcel Ownership

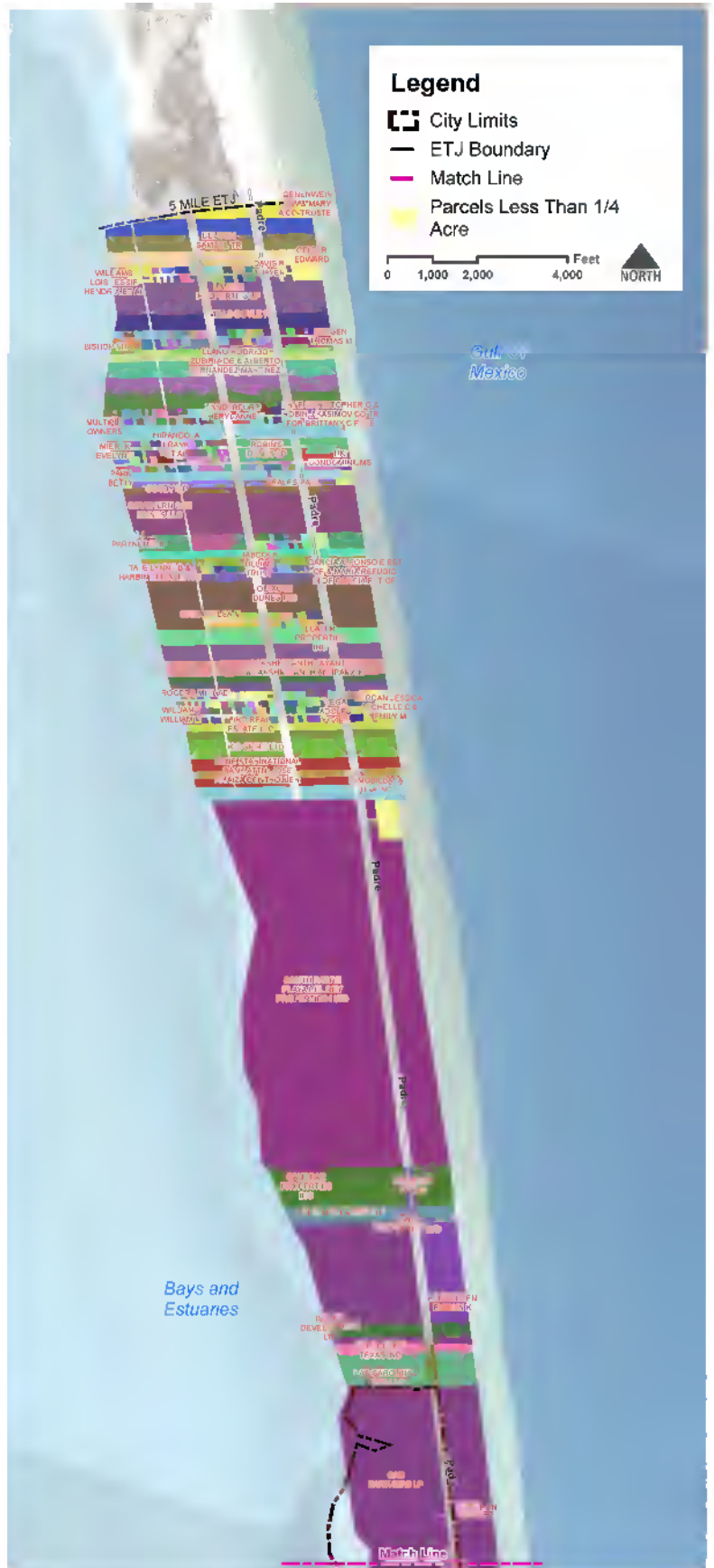


Figure 5 Parks, Open Space, and the Shoreline

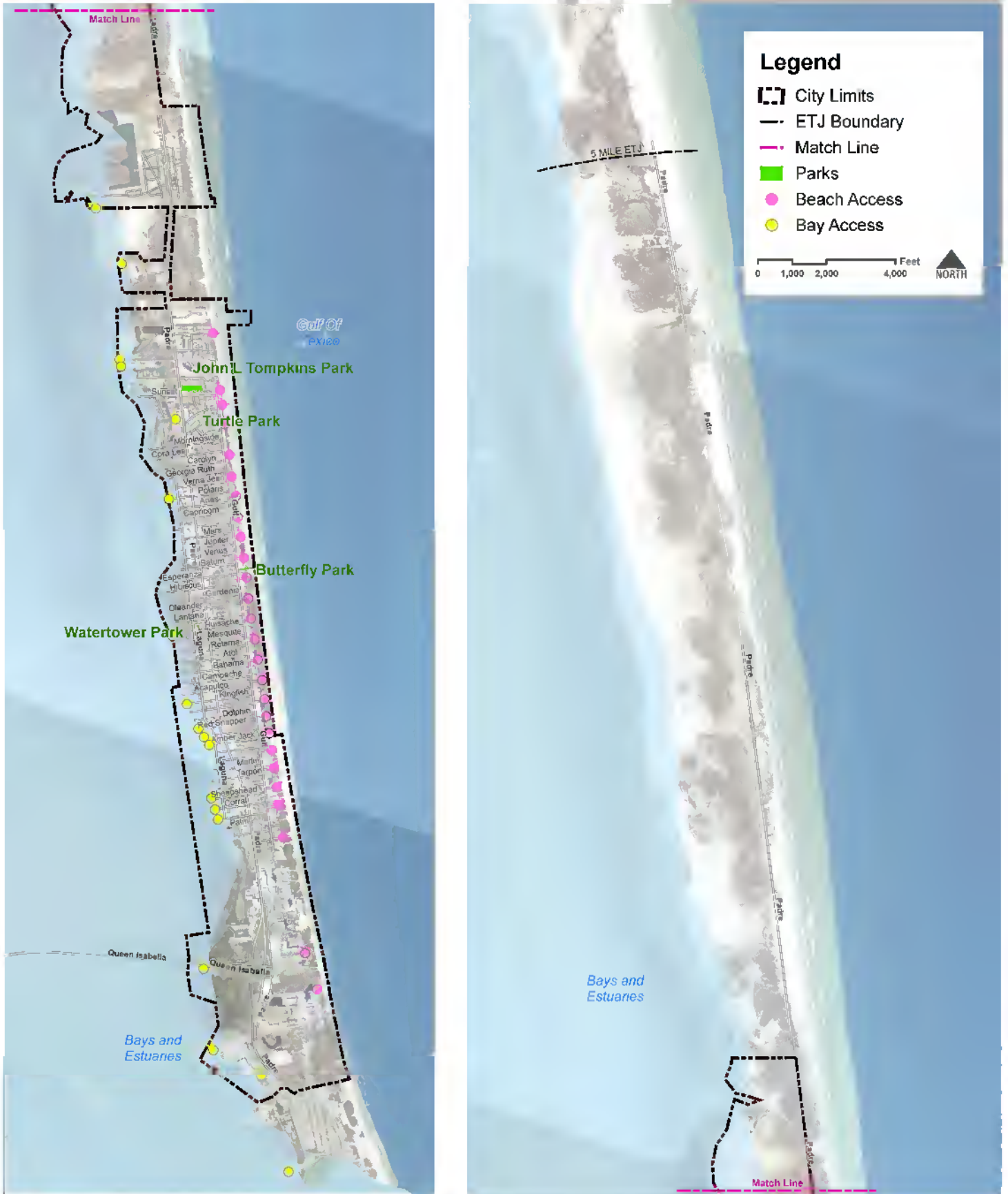
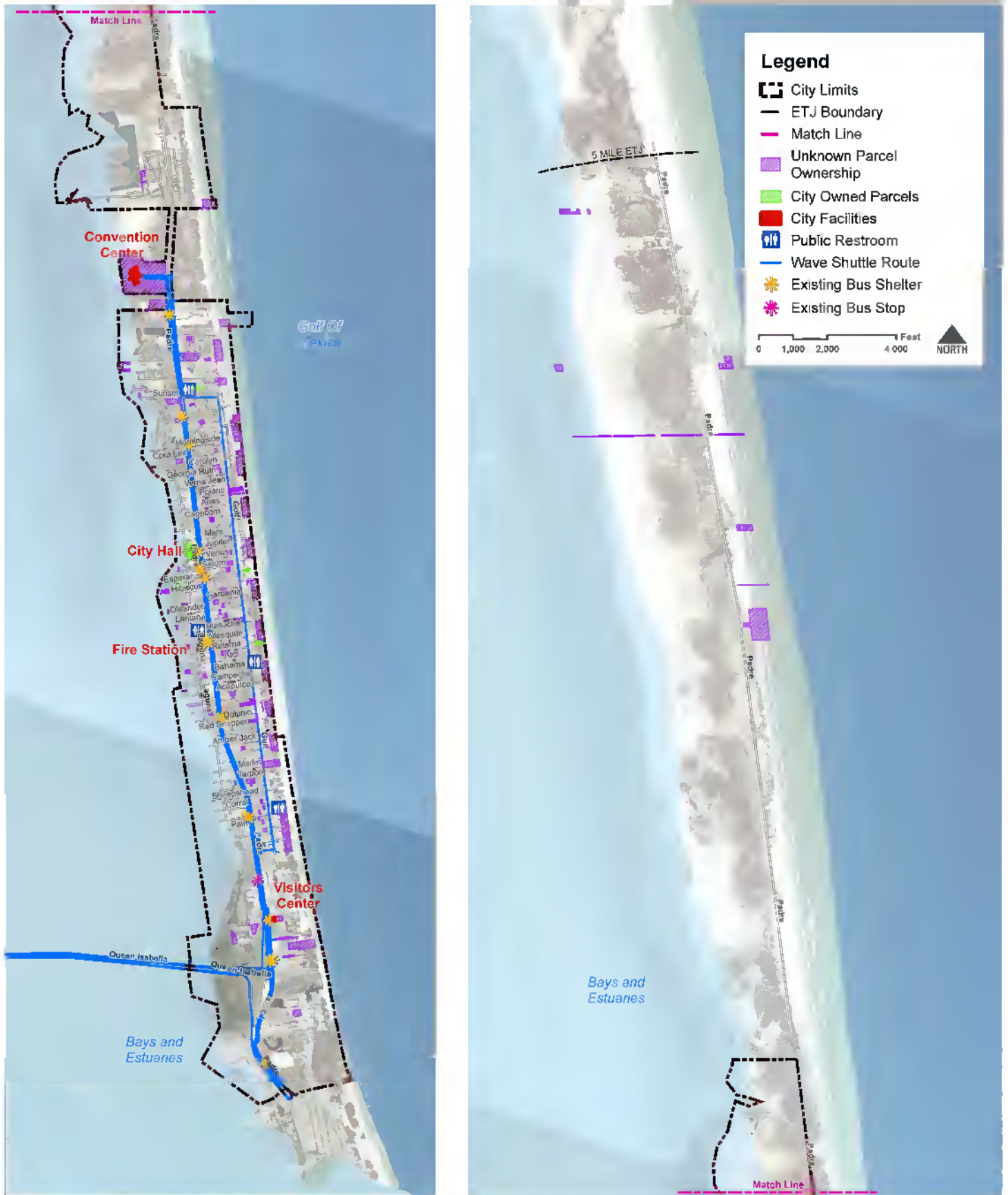


Figure 6 Public Facilities and Amenities





# Parks, Open Space, and the Shoreline

Gulf beach access points are available throughout the Island’s eastern shoreline with relatively even frequency between Harbor Street and Sunset Drive. Bay access to the Laguna Madre is more limited, but access points are scattered around the City, never more than a quarter mile apart.

Municipal parks are available throughout the City, with county parks north and south of the City limits. The City maintains several parks: Water Tower Park at Laguna Boulevard and Huisache Street, John L. Tompkins Park at 6100 Padre Blvd., Turtle Park on East Morningside Drive, Butterfly Park on the east side of Gulf Boulevard near Esperanza Street, Lis Memorial Park on Esperanza Street west of Laguna Boulevard, and Queen Isabella Memorial Park at the intersection of Padre Boulevard and the Queen Isabella Memorial Bridge. The county maintains three parks: Isla Blanca Park just south of the City limits, Andy Bowie Park bordering the City’s northern boundary, and Edwin K. Atwood Park a mile and a half north of that.

For additional information on parks, open space, and shoreline management, please see the Parks and Recreation Master Plan in Chapter 7 and the Shoreline Master Plan in Chapter 9. See a map of the existing parks, open spaces, and shorelines in South Padre Island in Figure 5.

## Existing Soils

The City of South Padre Island displays a diversity of soils within and around its corporate limits. According to the City’s data, two of the most common soils in the City are Galveston Fine Sand in the interior of the Island and Coastal Beach Sand along the gulf-front. Coastal Dunes and Mustang Fine Sand dominate the extra-territorial jurisdiction north of the City limits. Galveston soils generally occur at elevations of five feet or more above sea level, are sandy in nature, and drain rapidly. Mustang series soils generally occur at elevations of five feet or less, experience ponding after heavy rainfall due to slow drainage, and can often be marshy due to their very high water tables. The primary uses found on Mustang soils is generally limited to wildlife habitat and recreation. See the following page for a map of existing soils in South Padre Island.



Water is vital to the sustainability and growth of the community



Figure 8 Wastewater Network



Figure 9 Water Network





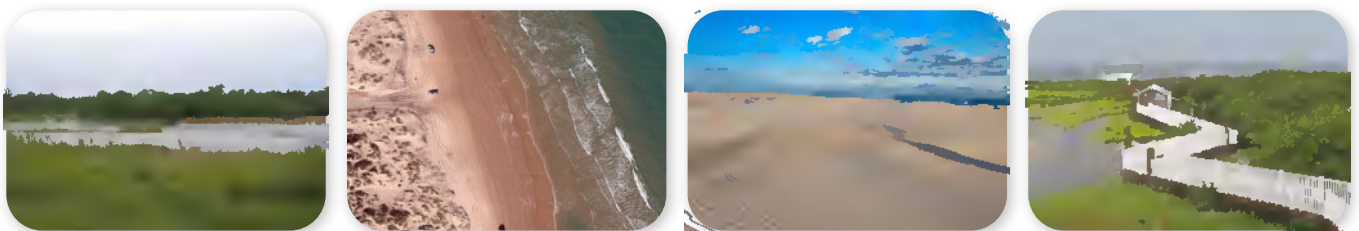
# Place Types

Place Types represent the various land uses and development character that either exist now, or could exist in South Padre Island in the future. Place Types describe the character of a place, including the mix of uses, building scale, the pedestrian experience, and other features that impact how a place feels to its inhabitants. They give the community flexibility when considering development proposals, and allow the City to respond more quickly to changing market conditions. It is important to note that while Place Types guide the development type and character envisioned within specific areas of the City, it is not the same thing as zoning, which results in specific allowable uses and design elements such as setbacks, lot sizes, or number of building stories.

## Open Space & Outdoor Tourism (OSOT) ■

### Character and Intent

Open Space and Outdoor Tourism areas are characterized by large tracts of open land utilized for wildlife management, erosion and storm protection, and passive recreation. These tracts provide much of the character of the community and include opportunities for additional uses that support environmental preservation, quality of life, and the economic viability of outdoor tourism. While dune management is one of the primary land uses for this Place Type, all development within the Dune Protection Line, as defined by Chapter 22 of the Code of Ordinances, should consider dune protection.



### Land Use Considerations

#### *Primary Land Uses*

Wildlife management, dune protection, ecotourism, and outdoor recreation

#### *Secondary Land Uses*

Civic and institutional uses, and outdoor-related tourism

# Island Living (IL)

## Character and Intent

The Island Living Place Type is predominantly composed of single-family houses on detached lots that are the backbone of the full-time residential population on the island. Homes are generally serviced with all utilities, paved residential streets, and serviceable sidewalks. Because of the Island's limited geography, lot sizes are generally smaller than those of single-family detached homes in the suburbs of mainland cities and rarely exceed half an acre. Island Living areas may contain a limited number of convenience commercial businesses to support the neighborhood.



## Land Use Considerations

### *Primary Land Uses*

Single-family detached homes

### *Secondary Land Uses*

Civic and institutional uses, parks and open space, and small amounts of neighborhood-serving retail and office in specific locations

### *Indicators and Assumptions*

Densities of 2 to 10 units per acre; connected to public utilities

# Transitional Living (TL)

## Character and Intent

Transitional Living can support a variety of housing types in a compact network of complete, walkable streets that are easy to navigate by car, bike, or on foot. Housing types can include smaller lot, single-family detached homes or patio homes, townhomes, duplexes, condominiums, or apartments. This Place Type may also include a small amount of local retail and neighborhood services in carefully chosen locations.



## Land Use Considerations

### *Primary Land Uses*

Small-lot single-family detached, patio homes, town homes, duplexes, condominiums, and apartments

### *Secondary Land Uses*

Civic and institutional uses, parks and open space, and minor retail and commercial

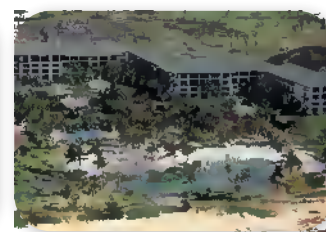
### *Indicators and Assumptions*

Densities of 6-40 units per acre

# Coastal Mix (CM)

## Character and Intent

The Coastal Mix Place Type contains a variety of medium and high intensity uses in close proximity to the Gulf-side beaches, including condominiums, apartments, and hotels. These uses are found along a network of complete, walkable streets that are easy to navigate by car, bicycle, or foot. This Place Type may also contain a small number of commercial businesses, either on the ground floor of mixed-use residential buildings or urban stand-alone developments, to support the neighborhood.



## Land Use Considerations

### *Primary Land Uses*

Condominiums, apartments, and hotels

### *Secondary Land Uses*

Civic and institutional uses, parks and open space, retail and commercial, and public beach access points

### *Indicators and Assumptions*

Densities of 20 units per acre or greater

# Community Commercial (CC) ■

## Character and Intent

This Place Type provides a variety of services for the surrounding neighborhoods and the City. It is characterized by a mix of both small, free-standing buildings and multi-tenant commercial centers along both sides of large arterial streets, primarily Padre Boulevard. A complete street treatment provides walkable connections to adjacent neighborhoods, while on-street parking and intermittent small parking lots provide accessibility for automobiles. Community Commercial primarily provides services for the surrounding neighborhoods within the City. The types of businesses that may be found here include restaurants, local retail, medical offices, banks, and other retail and service uses. Within or adjacent to these centers, multi-unit housing developments, such as apartments or condominiums, may be an appropriate use.



## Land Use Considerations

### *Primary Land Uses*

Retail, commercial, apartments and condominiums, business parks, hotels, entertainment centers, and service and office uses

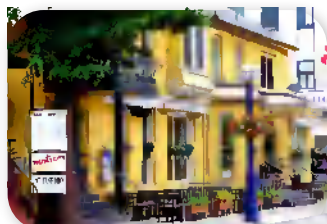
### *Secondary Land Uses*

Civic and institutional uses, and parks and open space

# Mixed-Use Center (MUC) ■

## Character and Intent

Mixed-Use Centers offer the ability to live, work, and play in one geographically compact area. This Place Type contains a high intensity of uses and various housing options within proximity of the goods and services that residents use daily. These areas may serve as employment centers or shopping destinations for adjacent neighborhoods as well. Buildings typically stand two or more stories, with residences or offices above street-level storefronts. The design and scale of development in a Mixed-Use Center encourages active living through a comprehensive network of walkable, complete streets.



## Land Use Considerations

### *Primary Land Uses*

Retail, commercial, condominiums, apartments, offices, hotels, entertainment centers, service and office uses, and planned development districts

### *Secondary Land Uses*

Civic and institutional uses



# Lifestyle, Resort, & Entertainment (LRE)

## Character and Intent

Lifestyle, Resort, & Entertainment centers are commercial centers with variety of uses and activities. They are often developed with master plans, and may include destination hotels, retail, restaurants, recreational activities, and commercial uses that serve both the community and the region. These centers may include some housing, and are often developed in several phases. They may have anchors such as traditional shopping centers, amusement parks, resort hotels, event centers, or lifestyle areas, and may contain entertainment uses such as theaters, fine dining, or recreational facilities.



## Land Use Considerations

### *Primary Land Uses*

Retail, commercial, condominiums, apartments, offices, hotels, entertainment centers, and service and office uses

### *Secondary Land Uses*

Civic and institutional uses

# Future Land Use Plan

The Future Land Use Plan (FLUP) details the community's shared vision related to the future pattern for development, redevelopment, and preservation of the Island. It is not a zoning map, and should not be confused with official zoning policy, regulations, or law. However, the FLUP will lay the foundation for future zoning decisions.

North of the Gateway and Southern Resort areas, the Community Commercial (CC) Place Type dominates the Padre Boulevard corridor, offering residents access to the goods and services they need for daily life. Running alongside this corridor and west of Gulf Boulevard is the bulk of the Island's Transitional Living (TL) housing stock, representing the residential core of the City. These lots are typically smaller than a quarter of an acre, with one- or two-story structures that are privately owned and utilized by the people who live there. Further east is a string of parcels designated as Coastal Mix (CM). These properties are often hotels, resorts, and condominium associations, representing some of the most expensive real estate on the Island today.

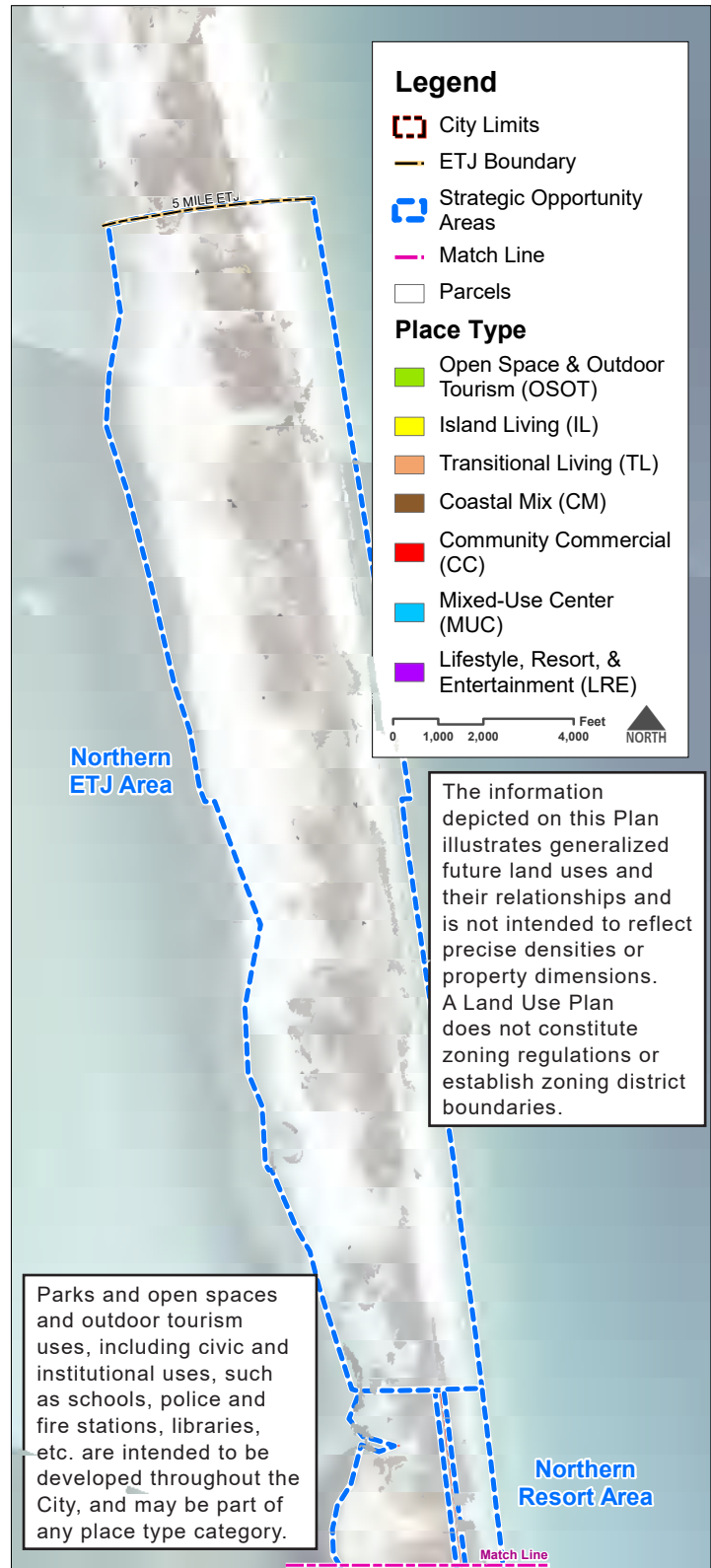
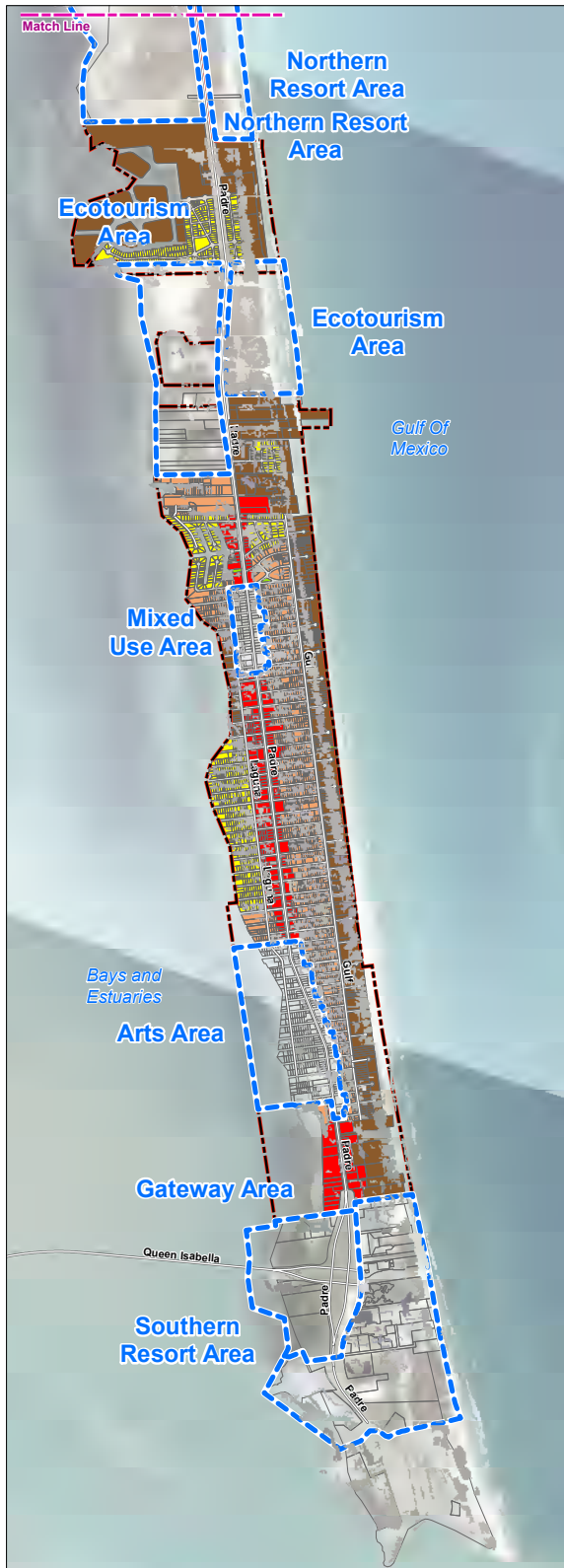
Island Living (IL) is found in clusters around the City, in contrast with the linear pattern of the Community Commercial (CC), Transitional Living (TL), and Coastal Mix (CM) Place Types. Similarly, Open Space and Outdoor Tourism (OSOT) is dotted around the map where parks and other natural amenities are found. The Lifestyle, Resort, & Entertainment (LRE) and Mixed-Use Center (MUC) Place Types are localized in certain Strategic Opportunity Areas, districts that are discussed in the following pages.

## Existing Form-Based Code

In 2010, the City of South Padre Island contracted with Gateway Planning Group to develop a plan for the improvement of Padre Boulevard and the Entertainment District that straddles Laguna Boulevard south of Swordfish Street. The result of this project was the City's current form-based code: regulations that emphasize the importance of the physical appearance and character of development and de-emphasize the prescription of specific land uses. Form-based codes contrast with traditional zoning codes that seek to allow or, conversely, disallow particular uses of land in a given district.

The City of South Padre Island's form-based code envisions the physical future of Padre Boulevard and the Entertainment District, balancing the existing predominance of the vehicular space with a newfound friendliness towards pedestrians. The code discourages overly-large setbacks and traditional surface parking lots along Padre Boulevard, which will remain somewhat oriented around the automobile.

Figure 10 Future Land Use Plan Map



# Strategic Opportunity Areas

Through the comprehensive planning process, a number of areas were identified as special districts with significant development or redevelopment potential capable of benefitting the entire community. These districts, termed “Strategic Opportunity Areas”, encompass much of the City north and south of the central, residential core, particularly its commercial areas and undeveloped land. Strategic Opportunity Areas have the potential to provide venues or sites for catalytic projects in the City as it grows inward and northward, with each district offering a unique contribution to the character and offerings of the Island.

The following pages discuss each of the seven Strategic Opportunity Areas in South Padre Island and their associated maps and ideal Place Types. They are organized from south to north and offer an overview of each district’s theme. The theme of the area may range from a focus on entertainment, which is ideal for mixed-use development and retail, to a focus on more passive and preservational uses, which enhance the Island through the retention of its unique assets. The descriptions of the visions for these areas are not intended to dictate the developmental trajectory of the districts, but rather offer a shared view of each that is derived from public outreach efforts and the collaborative work of members of the community. The descriptions conclude with a list of ideal Place Types that would best suit this vision and compliment the efforts aimed at achieving the broader Plan Goals and Vision Statement for South Padre Island in 2050.



The Birding and Nature Center is located in the burgeoning Ecotourism Area

Additionally, these Strategic Opportunity Area maps provide an aerial overview of a number of sub-district areas known as “Future Investment and Reinvestment Sites.” These sites are based on parcel data and correspond to property lines delineated by the Cameron Appraisal District. Future Investment and Reinvestment Sites are a granular look at properties in districts that may be suitable for development or redevelopment. As with other elements of these maps, they are not intended to dictate policy or slate a particular property for any sort of construction, renovation, enhancement, or other development. However, the map of these sites is intended to offer information and serve a role in guiding discussions about land use in these areas.



# Southern Resort Area

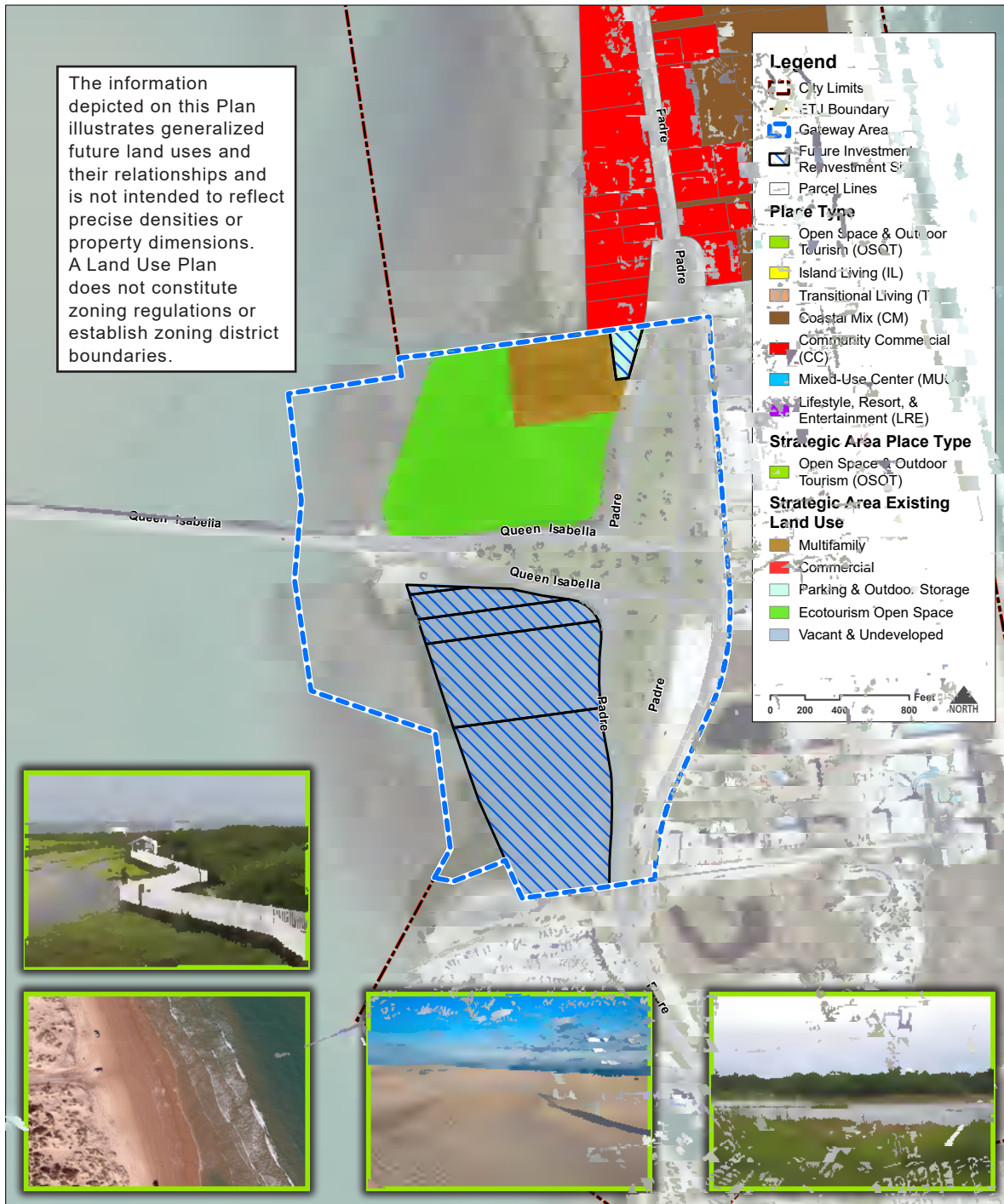
The Southern Resort Area is a largely developed commercial area in the southern third of the City proper. Although the land in this district has mostly been built out or otherwise improved, developable parcels do exist. The Southern Resort Area hosts the two tallest buildings in the City: Sapphire Condominiums and Bridgepoint Condominiums. Open Space and Outdoor Tourism (OSOT), Coastal Mix (CM), and Lifestyle, Resort, & Entertainment (LRE) were all identified by the community as appropriate Place Types for this area.





# Gateway Area

The Gateway Area provides the first impression most visitors have of South Padre when they first arrive to the Island. As such, it has the important responsibility of upholding the Island’s image as a tropical, friendly, and casual resort town. The ideal mix of Place Types for this area, as identified by the community during the planning process, includes Open Space and Outdoor Tourism (OSOT), Community Commercial (CC), and Lifestyle, Resort, & Entertainment (LRE).



# Arts Area

The Arts Area, which includes the part of town known as the “Entertainment District” along Laguna Boulevard south of Red Snapper Street and north of Haas Street, is envisioned as the center of a thriving arts and culture scene on the Island. Lined with retailers, entertainment options, restaurants, and a mix of housing, the Arts Area has a number of developable parcels south of Marlin Street. The ideal Place Types for this Strategic Opportunity Area are Open Space and Outdoor Tourism (OSOT), Transitional Living (TL), Community Commercial (CC), and Lifestyle, Resort, & Entertainment (LRE).





# Mixed-Use Area

The Mixed-Use Area follows Padre Boulevard, and is roughly bordered by Aries Drive and Morningside Drive. It is the most centrally located of all Strategic Opportunity Areas, being bisected by Padre Boulevard and surrounded by the residential core of the Island. As its name suggests, the sole Place Type envisioned for this area is Mixed-Use Center (MUC).



# Ecotourism Area

The Ecotourism Area is a northern district that includes popular destinations such as Sea Turtle, Inc. and the South Padre Island Birding and Nature Center. This Strategic Opportunity Area is envisioned as a destination for nature-based tourism, anchored in its environmental and natural attractions. The sole Place Type deemed appropriate for this area by the community was Open Space and Outdoor Tourism (OSOT).



# Northern Resort Area

The Northern Resort Area is envisioned in a similar vein as the more-developed Southern Resort Area, and it also houses a sizable share of the Island’s resorts, recreational facilities, and entertainment venues. The Northern Resort Area reaches to the City’s northern corporate limits and goes as far south as Wharf Street. The two Place Types for this area, selected through the community-driven planning process, are Open Space and Outdoor Tourism (OSOT) and Lifestyle, Resort, & Entertainment (LRE).





# Northern ETJ Area

The Northern Extraterritorial Jurisdiction (ETJ) is bounded by the corporate limits of the City of SPI to the south, stretching five miles northward near the terminus of PR 100. This targeted area has natural land development challenges. Open Space and Outdoor Tourism (OSOT) and Lifestyle, Resort, & Entertainment (LRE) is the only Place Type that has been identified as appropriate for this area through the planning process. The City encourages all new development plans to be responsibly designed. Development plans should take into account the erosion rate for the property, setback lines that will need to be established by the City and approved by the Texas General Land Office, beach renourishment, possible sediment sources, and innovative ideas to provide accountable development in this dynamic environment (westward movement of PR 100).



# Land Use Plan Goals

A comprehensive plan requires implementation, and implementation requires actionable goals to achieve the Vision Statement for the community—the Plan Goals discussed in the Plan Overview and Mission chapter of this document. The following Plan Goals apply to development and the use of land within the City of South Padre Island between the date of this plan’s approval and its horizon in 2050:

1. **LU.1:** Land Use Standards – Standards that establish the overall framework for land use policy to promote flexible development and redevelopment while preserving the conformity and integrity of the Island’s residential and business community. (*LU.A, LU.B, LU.D, LU.E, LU.F, LU.H, LU.I, LU.J*)
  - **LU.A:** Land uses should harmonize so as not to detract from the enjoyment and value of surrounding properties.
    - Preserve the conformity and integrity of existing development.
  - **LU.B:** Land uses should concentrate similar uses and densities. Where a mix of uses is the intended use, the physical appearance should be cohesive and coordinated.
    - Provide increased buffering between zoning districts. Evaluate ordinances.
  - **LU.D:** Development zoning patterns should provide for suitable transitions and buffering between land uses and densities.
    - Streamline the review and permitting process.
  - **LU.E:** To preserve views and enhance values in the northern ETJ, development should favor dense, high-rise buildings in the inland center of the Island and mid-rise and low-rise structures towards the Bay and Gulf shores.
    - Collaborate with neighbors and property owners prior to altering present land uses in a zoning district.
  - **LU.F:** The development or redevelopment of infill lots should consider a similar scale and density as that of surrounding properties within a zone.
    - Provide for reuse and redevelopment of older and under-utilized structures.
  - **LU.H:** Development should favor districts over strip centers.
    - Develop and implement a “Main Street” enhancement program for Padre Boulevard.
    - Encourage imaginative and “unique” subdivision designs.

- **LU.I:** Small-scale neighborhood retail and service facilities should be located at the edge of neighborhoods and busy intersections.
    - Improve the quality and appearance of new development.
  - **LU.J:** Development should preserve and enhance the physical environment and natural features of the Island. Nature reserve areas, greenbelts, and open areas should be set aside for preservation and recreation and leveraged as buffering areas.
    - Protect sensitive lands and conserve natural resources.
    - Accumulate land to facilitate the building of additional public tourist attractions such as: parks, Bayfront access, facilities with educational exhibits, an amphitheater, performing arts theater, historical museum and public boat ramps.
- 2. LU.2:** Appearance & Redevelopment of Existing Structures and Properties – Policies and programs that enhance the appearance of public and private space while promoting the adaptive reuse and redevelopment of underutilized structures. *(LU.I, LU.C)*
- **LU.I:** Small-scale neighborhood retail and service facilities should be located at the edge of neighborhoods and busy intersections.
    - Improve the quality and appearance of new development.
  - **LU.C:** Commercial and residential development should encourage a pedestrian- and bike-friendly experience.
    - Allow increased flexibility while also establishing improved minimum standards.
    - Enhance the standards and appearance of public rights-of-way and properties.
- 3. LU.3:** Development and Preservation – Support quality public, private, green and tourist related development projects while insuring the continued preservation of the island’s unique characteristics and open space. *(LU.A, LU.B, LU.E, LU.F, LU.G, LU.H, LU.J, LU.K, LU.L)*
- **LU.A:** Land uses should harmonize so as not to detract from the enjoyment and value of surrounding properties.
    - Preserve the conformity and integrity of existing development.
  - **LU.B:** Land uses should concentrate similar uses and densities. Where a mix of uses is the intended use, the physical appearance should be cohesive and coordinated.
    - Provide increased buffering between zoning districts. Evaluate ordinances.

- **LU.E:** To preserve views and enhance values in the northern ETJ, development should favor dense, high-rise buildings in the inland center of the Island and mid-rise and low-rise structures towards the Bay and Gulf shores.
    - Collaborate with neighbors and property owners prior to altering present land uses in a zoning district.
  - **LU.F:** The development or redevelopment of infill lots should consider a similar scale and density as that of surrounding properties within a zone.
    - Provide for reuse and redevelopment of older and under-utilized structures.
  - **LU.G:** High-density housing development should be concentrated where roadway and utility infrastructure and off-street parking can support it.
    - Establish and enforce landscaping requirements.
  - **LU.H:** Development should favor districts over strip centers.
    - Develop and implement a “Main Street” enhancement program for Padre Boulevard.
    - Encourage imaginative and “unique” subdivision designs.
  - **LU.J:** Development should preserve and enhance the physical environment and natural features of the Island. Nature reserve areas, greenbelts, and open areas should be set aside for preservation and recreation and leveraged as buffering areas.
    - Protect sensitive lands and conserve natural resources.
    - Accumulate land to facilitate the building of additional public tourist attractions such as: parks, Bayfront access, facilities with educational exhibits, an amphitheater, performing arts theater, historical museum and public boat ramps.
  - **LU.K:** Public beaches, Bayfront shores, and ecological health should be proactively preserved and protected.
    - Use incentives and bonuses to encourage enhancements, preservation, and open space.
  - **LU.L:** Zoning should be flexible enough to allow for building alternatives that provide open space and views.
    - Encourage “Green” development and enhancement (e.g., energy, waste handling, renewable resources).
4. **LU.4:** Plan Implementation – Established review process to evaluate plans, ordinances and policies to consistently re-evaluate and enforce regulations in an efficient and equal manner. (LU.D, LU.I, LU.J, LU.L)

- **LU.D:** Development zoning patterns should provide for suitable transitions and buffering between land uses and densities.
  - Streamline the review and permitting process.
- **LU.I:** Small-scale neighborhood retail and service facilities should be located at the edge of neighborhoods and busy intersections.
  - Improve the quality and appearance of new development.
- **LU.J:** Development should preserve and enhance the physical environment and natural features of the Island. Nature reserve areas, greenbelts, and open areas should be set aside for preservation and recreation and leveraged as buffering areas.
  - Protect sensitive lands and conserve natural resources.
  - Accumulate land to facilitate the building of additional public tourist attractions such as: parks, Bayfront access, facilities with educational exhibits, an amphitheater, performing arts theater, historical museum and public boat ramps.
- **LU.L:** Zoning should be flexible enough to allow for building alternatives that provide open space and views.
  - Encourage “Green” development and enhancement (e.g., energy, waste handling, renewable resources).



5

# Business, Economy, and Tourism Plan



# Introduction

Comprehensive planning is a proactive way for communities to address current and projected changes in population and economic conditions, and to allocate resources more effectively to take advantage of opportunities and to mitigate threats. Comprehensive planning is a process that helps identify challenges and opportunities as well as formulate strategies and solutions that leverage a community's strengths to take advantage of opportunities and to deal with weaknesses and threats, declining economic situations, and making cities and towns more resilient to economic downturns and recessions.

South Padre Island's geography predetermines its economy. Two principal sectors dominate the Island's economy – 1) hospitality and tourism, and 2) real estate. As a tourist destination, South Padre Island's economy fluctuates wildly between peak and off-peak months. **The City's primary economic goals are to dampen the impact of seasonality by developing a year-round economy and by attracting more businesses, residents, and more tourists during the off-peak season.**

## Identification of South Padre Island Trade Area

### Ongoing Measurement of Key Local Economic Metrics of South Padre Island Economy

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Effective economic development planning creates the proper environment to attract investors, new businesses, new residents, and new visitors. Implementing effective economic development planning requires collaboration and partnerships. In addition, benchmarks, milestones, and evaluation metrics must be developed to measure progress during the implementation stage and the effectiveness of strategies. Traditionally, the number of jobs created was a measure of progress and effectiveness of policies. However, the number of new jobs created may not be an adequate or sufficient indicator of effective economic development policies. The seasonality of South Padre Island's economy requires a different set of metrics to evaluate the effectiveness of sustainable economic development strategies. These metrics should include business turnover, hotel/motel occupancy tax, sales tax, beverage tax revenues, retail sales, new construction permits, months inventory, bridge crossings, and appraised property values, which are all reported on the City's transparency performance indicator webpage.



## Identification of South Padre Island Trade Area

Texans make up the lion's share of visitors at 62 percent while out of state visitors make up the remaining 38 percent. Because of the distance that separates the Island from large urban centers like Houston and the Dallas-Fort Worth Metroplex, most visitors originate from surrounding communities such as Brownsville-Harlingen and McAllen-Weslaco-Mission, which contribute 19 percent of visitors. San Antonio is the closest large urban center to the Island and the largest contributor of out of town visitors with 16 percent of visitors to the Island. Houston contributes 13 percent of visitors and is within a relatively short driving distance from Galveston. The Dallas Fort-Worth Metroplex contributes 9 percent. Mexico contributes the largest share of non-Texan visitors (out of state and international) with 14 percent. The Bureau of Transportation Statistics<sup>1</sup> shows that most Mexican visitors to Cameron County and Hidalgo County originate from the states of Tamaulipas and Nuevo Leon. A detailed discussion of South Padre Island's trade area is included in the appendix for this chapter.

TABLE 1. SOUTH PADRE ISLAND TRADE AREA			
IN STATE DMAS		OUT-OF-STATE DMAS	
TOTAL TEXANS (INTRASTATE)	62.30%	TOTAL NON-TEXANS (INTERSTATE)	37.70%
Harlingen-Weslaco-Brownsville-McAllen	19.40%	Minneapolis-St. Paul & Mankato, MN	5.80%
San Antonio	16.46%	Lexington, KY	3.90%
Houston	13.20%	Peoria-Bloomington & Chicago, IL	5.90%
Dallas-Fort Worth	8.90%	Denver, CO	2.50%
Austin	3.40%	Knoxville, TN	1.60%
Corpus Christi	2.20%	<b>Canada</b>	3.80%
Laredo	2.10%	<b>Mexico</b>	14.20%
Waco-Temple-Bryan	1.50%		

Source: Office of the Texas Governor and AEC

# Characteristics of South Padre Island Visitors

According to the South Padre Island Convention and Visitors Bureau, Texans generated 65 percent of person-days to South Padre Island. The top three Texan origin Designated Marketing Areas (DMA) are Brownsville-Harlingen-Weslaco-McAllen, Houston, and San Antonio. The data also show that non-Texans contribute 35 percent of person-days with Minneapolis-St. Paul, MN, Paducah, KY, Cape

<sup>1</sup> <https://www.bts.gov/content/border-crossingentry-data>

Girardeau, MO, Harrisburg-Mt. Vernon, IL, and Lexington, KY contributing the largest share of non-Texan DMAs.

**TABLE 2. CHARACTERISTICS OF SOUTH PADRE ISLAND VISITORS**

	SPRING VISITORS	SUMMER VISITORS	FALL VISITORS	WINTER SHORT-TERM VISITORS	WINTER LONG-TERM VISITORS
	MARCH 2016- MAY 2018	JUNE 2016 - AUGUST 2017	SEPTEMBER 2016 - NOVEMBER 2017	DECEMBER 2015 - FEBRUARY 2018	DECEMBER 2015 - FEBRUARY 2019
<b>AVERAGE AGE OF RESPONDENT</b>	<b>47.2 YEARS OLD</b>	<b>45.3 YEARS OLD</b>	<b>52.5 YEARS OLD</b>	<b>53.5 YEARS OLD</b>	<b>66.0 YEARS OLD</b>
Teens	0.80%	1.1%	0.0%	0.0%	0.0%
Twenties	14.20%	8.8%	2.8%	5.3%	0.0%
Thirties	16.8%	22.6%	15.4%	13.9%	6.0%
Forties	22.7%	33.3%	19.2%	19.2%	6.0%
Fifties	19.8%	20.5%	29.4%	21.8%	8.4%
Sixties	20.9%	10.3%	26.6%	26.7%	60.6%
Seventies	4.5%	2.8%	5.6%	12.0%	28.4%
Eighties	0.3%	0.6%	0.9%	1.1%	1.3%

Source: South Padre Island Convention and Visitors Bureau and AEC

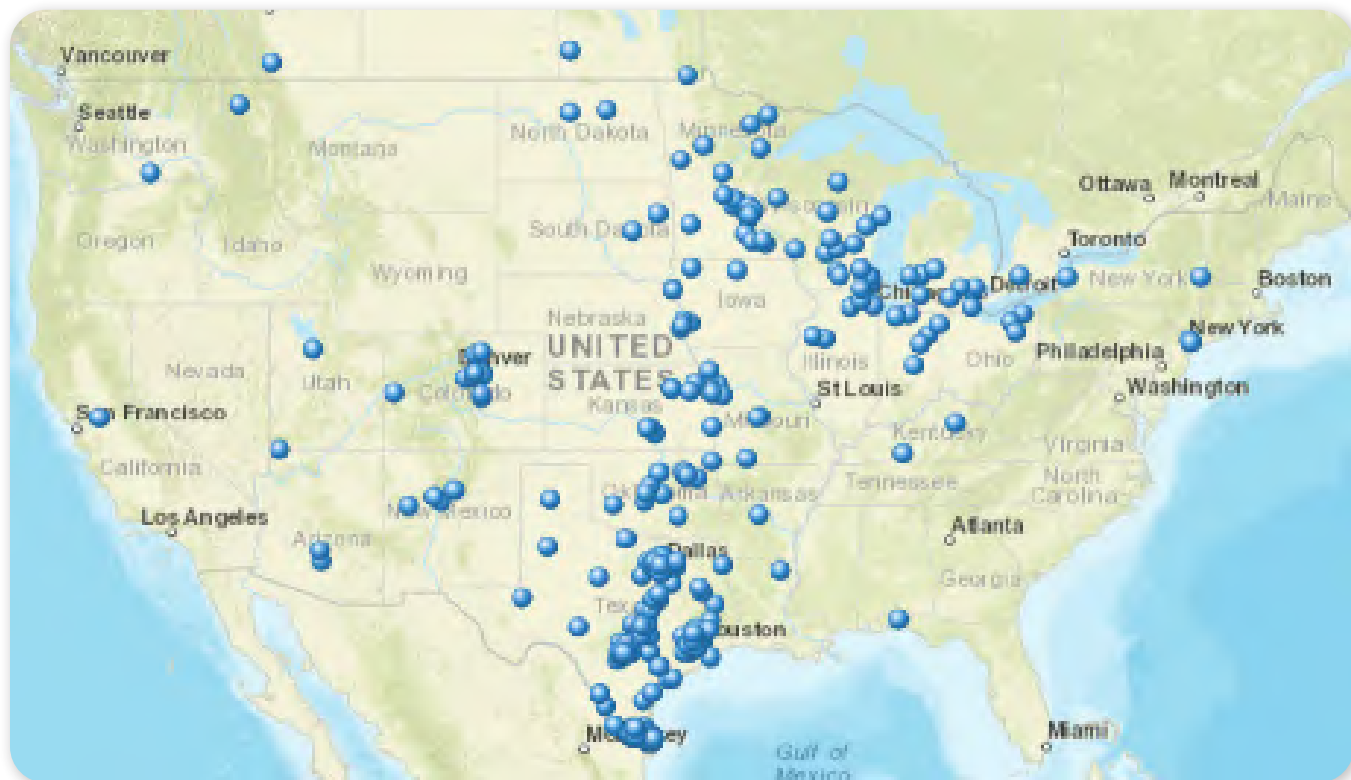
## Visitor Distribution

The largest percentage of visitors to South Padre Island originate from Texas except for long-term winter visitors. Figure 1 shows the distribution of visitors. Detailed discussions, figures, and tables listing visitors by point of origin and by season, causeway crossing and Causeway Effective Crossing Index are included in the appendix for this chapter.

## Demographics analysis of visitors

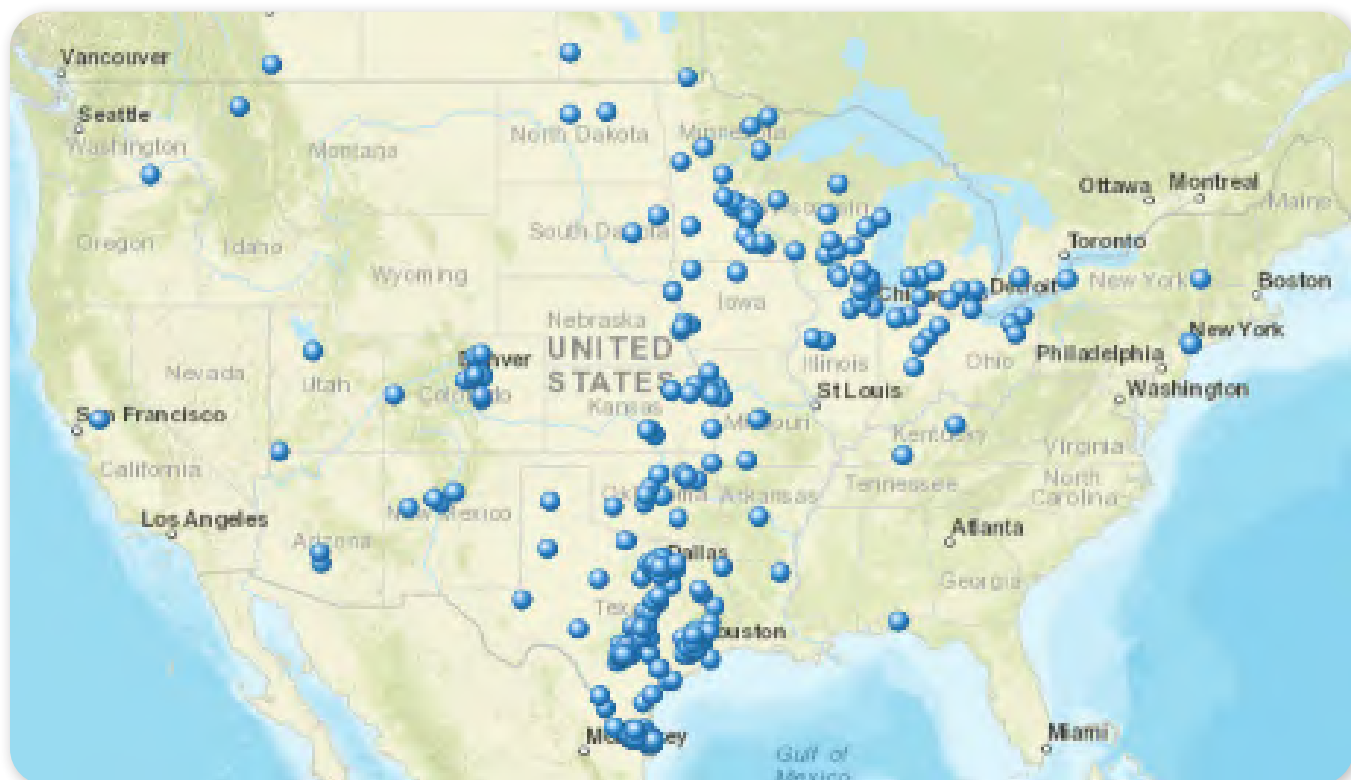
South Padre Island attracts visitors from all age groups. Analysis of the demographic profile of South Padre Island visitors shows that the distribution of visitors by age group is relatively even. One third of all visitors were between the ages of 18 and 34 years old, 27 percent were between the ages of 35 and 49 years old, 23 percent were between the ages of 50 and 64 years old, and 17 percent were 65 years old or older. The average visitor is 45.2 years old with a **household income of \$88,098 compared to \$82,768 in Texas and \$52,297 in Cameron County.**

Figure 1 Distribution of Spring Visitors



Source: South Padre Island Convention and Visitors Bureau

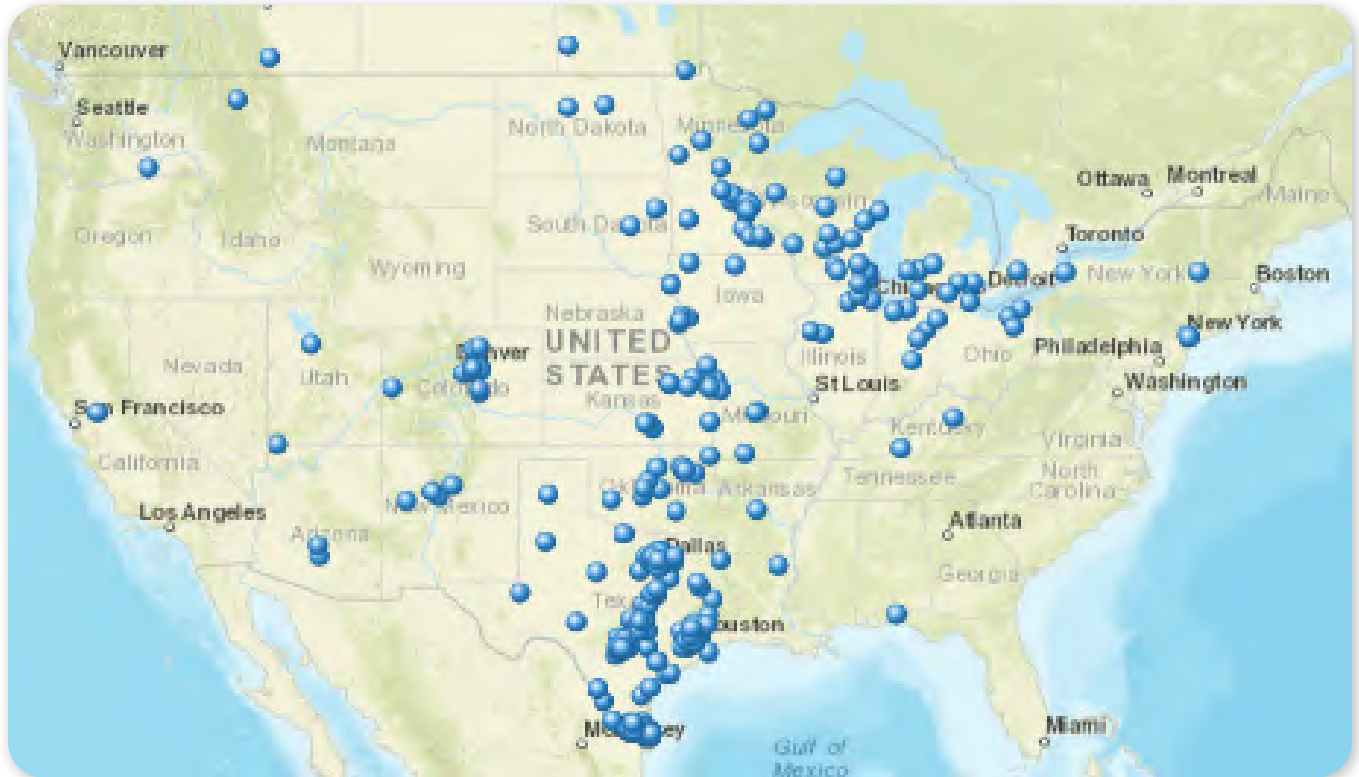
Figure 2 Distribution of Summer Visitors



Source: South Padre Island Convention and Visitors Bureau

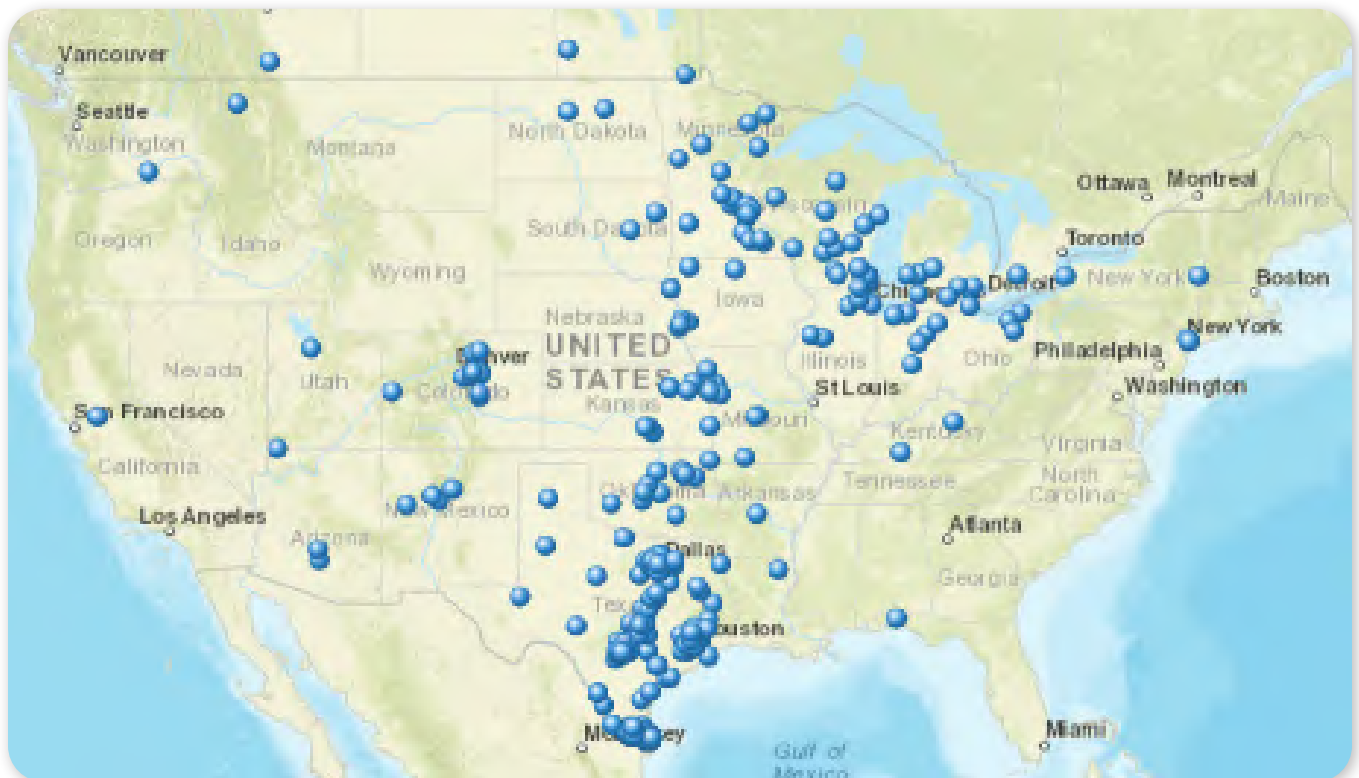


Figure 3 Distribution of Fall Visitors



Source: South Padre Island Convention and Visitors Bureau

Figure 4 Distribution of Winter Visitors



Source: South Padre Island Convention and Visitors Bureau

<b>TABLE 3. DEMOGRAPHIC PROFILE OF VISITORS</b>	
<b>Demographic Profile (Person-Days)</b>	<b>45.2</b>
18-34 Years	33.00%
35-49 Years	27.40%
50-64 Years	22.60%
65+ Years	17.00%
<b>Average Household Income (in \$1,000)</b>	<b>\$88,098</b>
Under \$25,000	8.10%
\$25,000-\$49,999	14.30%
\$50,000-\$74,999	23.10%
\$75,000-\$99,999	14.30%
\$100,000+	40.20%
<b>Employment</b>	
Employed	72.80%
Retired	14.90%
Not Employed	12.30%
<b>Marital Status</b>	
Married	64.70%
Never Married	25.20%
Divorced/Widowed	10.10%
<b>Children in Household</b>	
Yes	36.60%
No	63.40%
Source: Office of the Texas Governor, US. Census, and AEC	

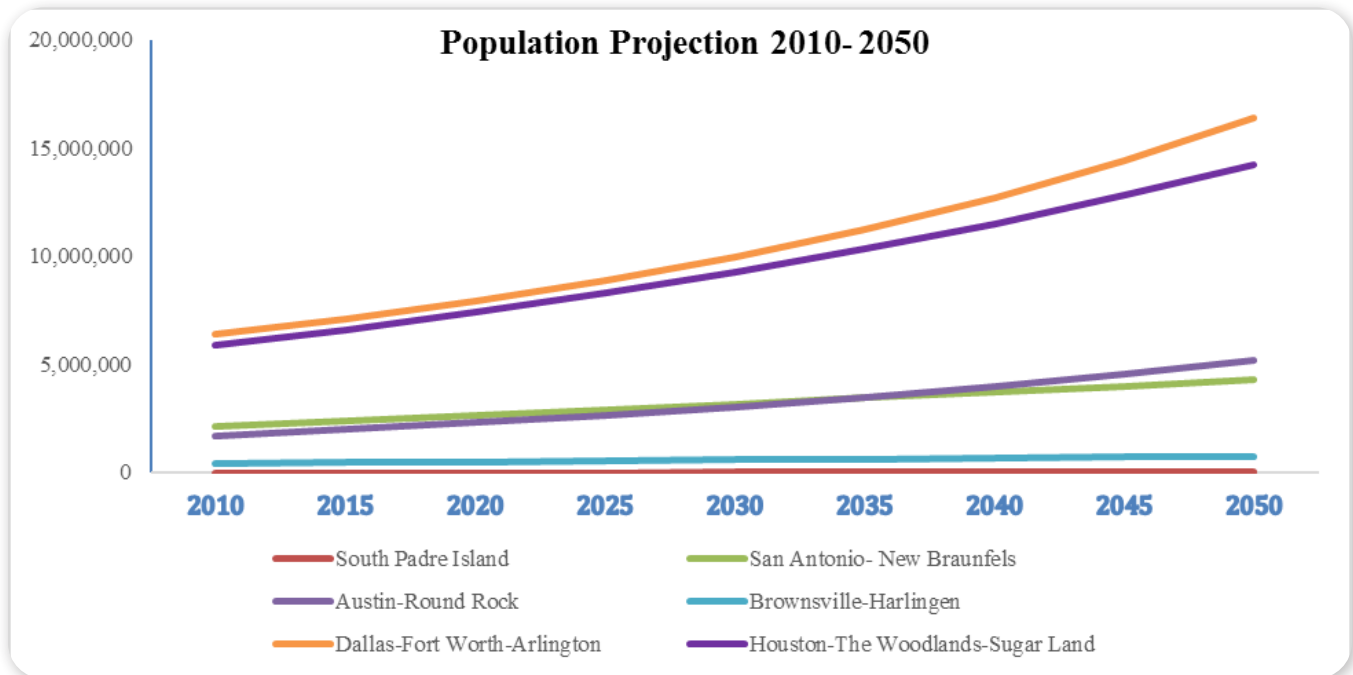
## Population Projection

The Office of the State Demographer and the Texas State Data Center produce population projections for 40 years beyond the most recent Census using three alternative migration scenarios. The first alternative assumes there will be no migration (Zero Scenario). The Zero scenario projects a state population of 31.2 million in 2050. The second alternative assumes a migration rate that is half of the migration of 2000-2010 (0.5 scenario). The 0.5 scenario projects a population of 40.5 million in 2050. The third scenario uses the migration trend observed in Texas between 2000 and 2010 (1.0 scenario). The 1.0 scenario assumes a rapid growth in many parts of the State and projects a total population of 54.4 million in 2050. The Office of the State Demographer projects a change in the shape of the population pyramid from a relatively triangular shape to a rectangular shape as the population gets older. The projected population change shows that the fastest growing segment is older people, a segment that constitute the primary visitors' demographic during the off season. In addition, all originating markets which currently come to South Padre Island are projected to grow significantly over the next forty years.

Additional tables and charts comparing South Padre Island’s projected population with projected population for the top Texan DMA’s are included in the appendix for this chapter.

TABLE 4. POPULATION PROJECTION TOP TEXAN ORIGIN DMAS							
YEAR	SOUTH PADRE ISLAND	SAN ANTONIO-NEW BRAUNFELS	AUSTIN-ROUND ROCK	BROWNSVILLE-HARLINGEN	DALLAS-FORT WORTH-ARLINGTON	HOUSTON-THE WOODLANDS-SUGAR LAND	MCALLEN-EDINBURG-MISSION
2010	2,755	2,142,508	1,716,289	406,220	6,426,214	5,920,416	774,769
2015	2,888	2,380,005	1,990,437	449,166	7,117,896	6,622,047	883,903
2020	3,174	2,635,183	2,306,857	493,571	7,920,671	7,413,214	1,005,539
2025	3,470	2,904,769	2,653,615	539,676	8,862,581	8,300,084	1,136,822
2030	3,760	3,182,644	3,035,547	584,883	9,970,678	9,278,789	1,271,656
2035	4,036	3,459,143	3,466,270	627,835	11,254,710	10,349,257	1,403,758
2040	4,296	3,735,981	3,960,317	668,322	12,728,992	11,519,566	1,531,900
2045	4,540	4,013,515	4,528,746	706,203	14,418,083	12,802,736	1,657,018
2050	4,770	4,294,232	5,176,940	741,902	16,367,293	14,221,267	1,779,370

Figure 5 Population Projection 2010- 2050



Source: US. Census, Texas Demographic Center, and AEC

# Situational Analysis of South Padre Island Economy (SWOT and Gap Analysis)

## SWOT Analysis of South Padre Island Economy

The first steps in developing sound sustainable economic development strategies and policies are to identify South Padre Island's strength, weaknesses, opportunities and threats, and to set and prioritize attainable goals.

The following analysis provides a summary of strengths, weaknesses, opportunities, and threats for South Padre Island. Strengths and weaknesses refer to the existing conditions in South Padre Island, which are either helpful or inhibit the attainment of the community's goals. Strengths are favorable conditions that need to be built upon, whereas weaknesses are unfavorable conditions that need to be considered and changed when possible during the design and implementation of a project. Strength and weaknesses are conditions that the community and stakeholders have some control over, and therefore, can generally alter. Opportunities are favorable conditions and trends that South Padre Island can seek to take advantage of to achieve its goals and expand its economy. Threats are potential conditions that can impede the realization of the community's goals. Opportunities and threats are external conditions that a community may have no control over but can either take advantage of or take measures to minimize and mitigate their impact.

## Gap Analysis of South Padre Island Economy

Gap analysis identifies industries that are either not present or do not meet the local demand. Location Quotient (LQ) is a technique that compares the share of local employment by industry to the share of national employment for the same industries. Industries with a LQ of less than 1 means that those industries are underrepresented and do not meet the local demand (importing industries). Industries with a LQ greater than 1 means that those industries not only meet their local demand but export their excess production (exporting industries). Table 1 provides a summary of the results and shows some of the industries that are underrepresented in Cameron County and South Padre Island. The fourth column shows the changes in employment in each industry listed relative to the employment at the national level between 2013 and 2018. For example, Nonresidential building construction has a LQ of 0.22 which means that this industry does not meet its local demand. The change in LQ is -0.28 which indicate that this industry has shrunk relative to its national counterpart. There are a number of reasons

that could have caused this decline: the industry grew at a faster rate nationally than locally, or the industry grew or remained stable nationally and declined locally. The appendix for this chapter includes a more detailed analysis and data on underrepresented industries.

### Strengths

- Small town, quiet relaxed lifestyle
- Outdoor recreation
- Strong identity and name recognition
- Surfing, kite surfing, biking, kayaking, fishing, and other water sports
- Natural resources (scenic and ecological value)
- Passionate leadership
- Support for local businesses
- Strong interest by developers
- Low property tax rates
- Strong municipal finances
- Destination for retirement
- Destination for tourism
- Local arts community
- Proximity to airports in Brownsville and Harlingen
- Good community participation
- Large inventory of real estate

### Weaknesses

- High reliance on single industry
- Limited roadway access to the Island
- Limited retail and dining choices
- Slow commercial growth
- Improvement to broadband/internet access needed
- City ordinances are sometimes outdated or limiting
- Seasonality of the economy
- Infrastructure needs ongoing attention
- Slow growth in retail sales
- Seasonal congestion on roads and beaches
- Appearance of Padre Island Boulevard

### Opportunities

- Growth in the Valley’s population and economy
- Changing nature of age structure of Texas population
- Global growth of ecotourism
- Industrial development in the Port of Brownsville
- Expanding Mexico’s economy along the border (maquila, and oil and gas exploration)
- Expanding economic opportunities in the Valley
- Construction of liquefied natural gas terminals at the Port of Brownsville
- Development of Space X launch pad
- Structural shift in energy power generation and transportation
- More year-round residents to stimulate the economy during off-peak months
- Abundant labor force to support tourism and service industry growth

### Threats

- Limited direct air transportation
- Natural/unnatural disasters to ecology (tropical storms, hurricanes, oil spills)
- Periodic red tide algae bloom
- Potential change in treatment of tourists visas for Mexicans
- Increased competition from other beach destinations and elsewhere along the Gulf coast
- Beach erosion
- Drilling for oil and gas close to the Island
- Strong regional dependence on the Mexican economy and the value of the Mexican peso
- Restricted fresh water supply
- Confusing development regulations



TABLE 5. SUMMARY GAP ANALYSIS RESULTS

NAICS	NAICS TITLE	LOCATION QUOTIENT	CHANGE IN LQ 1ST QUARTER 2013 1ST QUARTER 2018
2362	Nonresidential building construction	0.22	-0.28
6215	Medical and diagnostic laboratories	0.25	-0.24
7139	Other amusement and recreation industries	0.51	0.04
5313	Activities related to real estate	0.52	-0.19
7223	Special food services	0.52	0.09
6213	Offices of other health practitioners	0.56	-0.27
5617	Services to buildings and dwellings	0.59	0.18
6219	Other ambulatory health care services	0.6	0.07
6214	Outpatient care centers	0.61	-0.01
6232	Residential mental health facilities	0.65	0.32
6221	General medical and surgical hospitals	0.68	-0.09
6243	Vocational rehabilitation services	0.74	-0.29
7224	Drinking places, alcoholic beverages	0.79	-0.16
7211	Traveler accommodation	0.84	-0.02
6242	Emergency and other relief services	0.9	0.07
4461	Health and personal care stores	0.92	0.04
4451	Grocery stores	0.96	-0.03
6212	Offices of dentists	0.96	-0.13

Source: LMCI Tracer 2, and AEC

# The Convention and Visitors Bureau Strategic Plan

The Convention and Visitors Bureau strategic plan was developed by Young Strategies Inc. on June 2018.

The South Padre Island Convention and Visitors Bureau (SPICVB) promotes South Padre Island as a premier beach destination on the Texas coast. The SPICVB operates as a department of the City of South Padre Island with oversight provided by the Convention and Visitors Advisory Board (CVA). The CVA is appointed by and reports to the City Council. The Director of SPICVB manages the team and reports to the City Manager. The SPICVB markets the destination and manages the SPI Convention Centre.



Travel promotion is a unique approach to economic development because it has a dedicated funding source from traveler-paid lodging taxes and a quick measurable return on investment (typically within 6 months).

**Vision: A unique coastal destination, unlike any other, providing an active lifestyle, preservation of promoting our natural assets and a friendly community for citizens and visitors alike.**

**Mission: The Convention and Visitors Bureau’s mission is to promote South Padre Island as a unique coastal destination driving year-round, sustainable economic growth and quality of life.**

The strategic plan developed by Young Strategies, Inc. is divided into short-term strategies and long-term strategies:

- Short-Term : Build an Active-Outdoors Coastal Island Brand
  - 1. Maintain and support the highest skilled and most dynamic sales and marketing team.**

SPICVB will meet the highest standards of accreditation and performance (research driven ROI) with measurable results as a research-based DMO.

    - a. Operate the SPICVB as a creative and supportive work environment based on core values.
    - b. Maintain competitive wage and benefits structure to retain the highest qualified team possible.
    - c. Achieve and maintain accreditation with Destinations International.
    - d. Support all team members in continued education online and at industry conferences and certification programs offered through TTIA, Destinations International, US Travel Association, Travel and Tourism Research Association, National Association of Sports Councils, vendors.
  - 2. Develop Promote a new active-lifestyle brand based on the market research.** SPI requires a brand that sets it apart as unique from other beach destinations while capturing the active outdoors vacation/getaway experience. The new brand will serve as a foundation for all marketing, sales and public relations as well as future destination development.
    - a. Drive increased visitation during slower months of the year to become a year-round destination. Nine priority months (in rank order): August, April, May, September, October, November, February, January, December.
    - b. Marketing targeted to lifestyle segments: a) Active couples; b) Singles; c) Friends; d) Families with kids; e) Empty Nesters; f) Outdoors enthusiasts (fishing, sailing, birding, paddling, etc.).
    - c. Geographic targeting: a) Texas population centers: Houston, Rio Grande Valley, Austin, San Antonio, DFW; b) Oklahoma cities; c) MX-Monterrey region. FLY Markets: DFW, Denver, Kansas City, Chicago, Minneapolis, and St Louis.
    - d. Group sales to drive weekdays and off-season weekends: meetings & conferences, sports, competitions, weddings, reunions, festivals & events, etc.
    - e. Public Relations targeted at core drive and fly markets featuring the active beach lifestyle brand.

3. **Maintain/expand a comprehensive research/ tracking program to guide all decisions**–Track KPIs (Key Performance Indicators) for all programs with ROI reported at all SPICVB CVA Board meetings. Quarterly reports to City Council.
  - a. Lodging Market Metrics – overnight visitors drive 3 -4 times the spending of day-trippers and lodging taxes fund the program of work. Track all aspects of the overnight market. Tax Revenue Reports, STR, VRMIIntel,
  - b. Annual Economic Impact of Visitors- annual report of statistics to show the impact of visitor spending.
  - c. Visitor Profile Research – every other year to track.
  - d. Digital Analytics – track effectiveness of the website and e-marketing through Google Analytics, conversion surveys.
  - e. Social Media Analytics – monitor followers and engagement on social media platforms including Facebook, Twitter, Instagram.
  - f. Big Data – Arrivalist aggregates data from lodging, airlines, rental cars, etc. to provide visitor analytics.
  - g. Attribution Analytics – Arrivalist to determine the conversion of those who visit the website and arrive in the destination.
  - h. Brand Image & Awareness of SPI – online surveys and focus groups conducted as needed in core feeder markets to determine image and awareness of the destination and its brand.
4. **All plans, marketing, activities, events must be on-brand**–deliver on the active beach lifestyle experience. Use research to guide all efforts and focus on those attributes that set SPI apart as a unique experience unlike other beach destinations. SPI must be unique and offer experiences that are worth the travel time/expense in order to compete with other coastal destinations.
  - Long-Term : Enhance the Active Outdoors Lifestyle – a beach destination unlike any other
1. **Landscape and beautify Padre Boulevard as “the Main Street”** to create an island atmosphere with attractive pedestrian and bicycle walkways and crosswalks. Padre Boulevard is the primary traffic artery on island and as such is often the first and last impression of South Padre Island. Padre Boulevard must visually deliver an attractive image of a unique and scenic coastal island. Connect Padre Boulevard to Gulf and Laguna Boulevards with attractive pedestrian/bike trails/lanes. Pedestrian and bike paths assist visitors in getting out of the cars and engaging in the active outdoors lifestyle of the island.
2. **Create a town center(s)**, a village-style town square with gathering places where citizens and visitors come together to celebrate the active outdoors lifestyle of South Padre Island. Create unique island atmosphere that delivers on the brand where the gathering places are outdoor town “living rooms” for families and friends. Convert green spaces to support activities like bocci ball, volleyball, croquet, putting greens, horse-shoes, shuffle board, badminton, and small-scale entertainment.

3. **All plans, marketing, activities, events must be on-brand**—deliver on the active beach lifestyle experience.
4. **Encourage and support unique coastal dining, shopping and entertainment that set SPI apart from other beach destinations. The island currently has ample outdoor activities to deliver on an active outdoors brand.**
  - a. Unique Activities & experiences - SPI has an opportunity to expand indoor activities that fit within the brand and drive year-round visitation. The newly expanded Sea Turtle Inc. is a perfect example of an indoor activity based on an outdoor experience.
  - b. Unique Dining – keep it local featuring fresh seafood and Texas beef offered in charming coastal settings. Add entertainment and activities where possible.
  - c. Unique Shopping – most travel research identifies shopping as a top visitor activity and it is typically one of the top categories of discretionary visitor spending. Shopping is usually one of the top rainy day activities in coastal destinations. Encourage retail that offers unique and local shopping experiences and merchandise that will drive higher visitor spending and satisfaction.
  - d. Unique Entertainment – something fun every night of the year focused on entertainment and activities for all demographics. Develop green spaces into activity parks.

# South Padre Island Market & Economics

## Economic Development Projects, Businesses and Industries to Target

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The nature of the South Padre Island's economy and its dependence on a single industry limits the type of industries and businesses that can be targeted.

The following includes a summary of businesses and strategies identified during a workshop conducted with SPI-EDC and through gap analysis. In addition, a number of regional economic development projects including projects at the Port of Brownsville.

## Niche Retail

- Full-service and limited-service unique, independent restaurants.
- Artisanal cafes.
- Creating an innovation center and business incubator to promote local entrepreneurship and the development of organic businesses with a focus on food and arts.
- Culinary and arts hub with
  - Culinary incubator
  - Arts business incubator
  - Farm-to-table restaurants
  - Specialty food retailers
  - Commercial grade kitchens
- Boutique hotels.
- Promoting local arts and culture scene and assisting in the incubation of local arts and culture businesses.
- Beauty and wellness centers with salons, spas, fitness training/gyms, yoga studios.
- Establishing and expanding Cameron County regional bike and kayaking trails in SPI, and developing a cycling, kayaking, and walking app.
- Ecotourism tours.

## Medical and Healthcare

- Health and beauty with specialized facilities for cosmetic procedures, and healthy living programs.
- Specialized senior clinic / outpatient facilities.
- Medical facilities including an emergency care center.
- Developing assisted living and retirement homes.

## Technologies

South Padre Island could be a test site for the following technologies:

- Water related technologies.
- Renewable energy.



## Infrastructure Projects

- Making South Padre Island a year round Port of Call for cruise ships. This will bring thousands of cruise ship passengers to the Island weekly and will lift the local economy especially during off-peak months.
- South Padre Island deep-water Marina.
- Promoting the construction of a second causeway.
- Building an aquarium or butterfly pavilion in collaboration with existing venues and with ecotourism businesses.
- Expanding the convention center to grow convention tourism.
- Promoting projects that support ongoing recreational fishing opportunities:
  - Development of artificial reefs.
  - Addition of launching and docking facilities.
  - Construction of fishing piers.
- Building a rocket launch viewing site.

**Business tourism** is an untapped source of potential visitors and can provide South Padre Island with off-season income. As a tourist destination, South Padre Island provides an ideal destination to accommodate business visitors and tourists alike. Staying at South Padre Island while visiting the region for business can enhance the experience of business visitors and improve the impression they have of the region. South Padre Island should seek to establish collaborative partnerships with surrounding communities and the county, and develop a program for accommodating visiting business people.

South Padre Island can market itself as a cost-effective destination, where corporate objectives can be met in a relaxing and rejuvenating setting. The challenge is to meet business travelers' needs for both efficiency and relaxation. Business travel accounts for approximately 9 percent of all international travel.

## Economic Development Incentives

The SPI-EDC has established a number of incentives for targeted business creation and retention programs to support and improve business success in the community. These programs include:

- Sand Dollars for Success is a competitive grant program for new and existing businesses
- Small business training supported by the University of Texas Rio Grande Valley that includes entrepreneurial training utilizing the Kauffman program and the Small Business Development Center workshops on small business subjects.



- Business mentoring.
- Façade improvement grants.

TABLE 6. ECONOMIC DEVELOPMENT INCENTIVES RECOMMENDATIONS	
RECOMMENDATION/POLICY	IMPLEMENTATION MATRIX
<ul style="list-style-type: none"> <li>• Prioritize strategic investment of public funds to attract and retain high quality businesses that fit the vision of South Padre Island</li> </ul>	<ul style="list-style-type: none"> <li>• Create clear economic development incentive guidelines that are aligned with the objectives of South Padre Island in attracting and retaining high quality businesses.</li> <li>• Structure the policy to allow quantifiable measures that determine town investment as well as economic, fiscal, and quality of life impacts</li> </ul>
<ul style="list-style-type: none"> <li>• Establish regular monitoring and performance reporting process.</li> </ul>	<ul style="list-style-type: none"> <li>• Set-up a consistent monitoring and reporting process to include periodic evaluations of                             <ul style="list-style-type: none"> <li>• Individual project performance by incentive</li> <li>• Cumulative costs, benefits and progress status</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Maintain ongoing, dedicated funding to achieve economic development goals</li> </ul>	<ul style="list-style-type: none"> <li>• Create an Economic Development Investment Fund.</li> <li>• Funding amounts should be clearly articulated in the budget process to anticipate supported needs.</li> </ul>
<ul style="list-style-type: none"> <li>• Expenditure of Economic Development Investment funds should be aligned with established economic development goals, policies and master plan recommendations</li> </ul>	<ul style="list-style-type: none"> <li>• Establish a process to ensure that the EDC Board reviews and provides comments to the City Council on policy and master plan alignment for public funds investment requests.</li> </ul>

# Economic Recommendations

- a. **Identify and prioritize economic development projects, and business opportunities with high development value to South Padre Island.**
- b. **Develop economic incentives guidelines for businesses and projects by type and industry, whether the business is a new business or an existing one, and if it is an existing business whether it is an expanding business or a business targeted for retention.**
- c. **Identify the appropriate incentives to match each identified project or business opportunity.**

South Padre Island should identify and prioritize projects and business opportunities of high value to its economy. These projects and business opportunities should be organized and ranked from the most valuable to the least valuable to the economy of the Island. The ranking of these businesses and projects can be done by selecting businesses that fit the overall economic development plans of South Padre Island and by using economic impact analysis to derive impact multipliers. In addition, South Padre Island should develop a list and guidelines of all available economic incentives from the city, the county, the state and the federal government. Each identified economic development project or business opportunity should have a description and list of incentives it qualifies for included.

- d. **Continue to promote a diversified visitors base.**

Sustainable economic development planning requires a diversified economy to withstand economic downturns and recessions. Economic diversification improves community's economic resilience. Ideally, South Padre Island should strive to diversify its economy to become more resilient and to mitigate the impact of the seasonality of its economy. However, because its location makes it almost exclusively reliant on tourism, the Island cannot have a diversified economic or industrial base in the traditional sense. Instead it has focused on diversifying its visitor flows throughout the year with respect to tourism related business while enhancing the attractiveness of the community for full-time and long-term seasonal residents. Diversifying its visitor flows throughout the year will help enhance off peak cash flows.

- e. **Offer training and business counseling for industry expansion and job creation.**

The state of Texas has a few good incentive programs for job retention. Some incentive programs provide flexible funding that can be used for equipment, job training, and other job retention activities.

- f. **Continue to pursue business recruitment and business expansion efforts.**

SPI-EDC, the South Padre Island Chamber of Commerce, and the City can work together to create a priority list of businesses, identify ideal locations, create a strategy to attract them, and then implement that strategy.



- g. Continue to work with community colleges, University of Texas-Rio Grande Valley and the Regional workforce Development Board on workforce training and development.**

Coordinating with the regional Workforce Development Board for ongoing on the job training. Other partnerships should be developed with Texas Southmost College (TSC) and Texas State Technical College (TSTC) workforce development programs, and UTRGV's Hospitality and Tourism program.

- h. Offer rocket launch viewing.**
- i. Working with the CVB marketing agency to establish a strong brand for South Padre Island as a premier beach resort and one of the top destinations in Texas.**
- j. Establish an annual film tourism festival.**
- k. Continue working with the CVB to further develop Film, Art, and Music festival.**
- l. Encourage international partnerships for future collaboration and economic development.**
- m. Continue to promote the construction of a second causeway to support economic development, improve safety and mobility in and out of South Padre Island.**

# Business Recruiting and Retention

## Business Climate

South Padre Island's main goal of economic development is improving the economic well-being of the community through efforts that lead to tax base enhancements, business recruitment, business development, and job creation and job retention. Successful businesses, and diversity of businesses are the foundation of strong economies. When businesses thrive, so does the community. Thriving businesses are more likely to expand in their host community and to provide the best opportunity to expand their community's tax base. However, a community's welfare can also be threatened and its economy could be destabilized when businesses close or relocate. South Padre Island's priorities are to create a welcoming business climate and to reduce the variability of business activity that exists between peak and off-peak months to make businesses on the Island more stable and more profitable.



## Partnerships & Alliances

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It is very common for private and public groups to come together by partnering and forming non-profit Private-Public Partnerships (PPP) to undertake economic development projects, promote sustainable business development, and improve the economic competitiveness of a region. Private-Public Partnerships are efficient and effective because they have greater flexibility than public organizations. They work by combining contributed resources both financial and in-kind to champion the interests of local businesses, or community while, at the same time, having immediate access to the highest levels of local government and officials. PPPs have been formed in some communities to lead large infrastructure projects like the building of fiber-optic telecommunications networks. Universities have also taken the lead in creating PPPs to spearhead economic development projects in their communities, and in many instances small PPPs were formed to direct economic development projects in small-defined geographic areas.

# Business Retention and Expansion Recommendations

## Proposed Business Retention and Expansion Strategies

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- Work with strategic partners to create an innovation center and business incubator focused on food and arts. All businesses should be encouraged to join the center. This will ensure a proactive interaction between the City and the business community. The center should sponsor periodic business training, mentoring and advising.
- Developing a list and guidelines of the different incentives will help prioritize and encourage local and non-local entrepreneurs and existing businesses to create new businesses or expand existing ones. It also signals to businesses outside the area the readiness and the business friendly climate South Padre Island has created.
- Develop a system that collects business intelligence and data, business ideas, concerns and needs, and schedule periodic meetings through the innovation center and business incubator to select projects based on data and intelligence collected. The data and business intelligence should be organized in a coherent way into goals and objectives, and strategies, consistent with the comprehensive plan recommendations and the community's vision, and assign these initiatives to

parties responsible for their implementation. An evaluation and performance metrics should also be developed and included with each initiative to measure progress and performance.

- Create a dynamic marketing plan that is consistent, with the comprehensive plan recommendations and the City's vision. The marketing plan should be evaluated using performance metrics. SPI-CVB should coordinate all marketing efforts with all stakeholders to improve effectiveness and efficiency.
- Create a system that monitors leasing activity to identify areas for redevelopment and/or expansion and areas to be designated as shopping district or entertainment district.
- Create a plan for assisting property owners and/or brokers with marketing large vacancies within designated shopping or entertainment districts and identify incentives to promote the type of development desired.
- Assess shopping and entertainment areas to identify and implement solutions to challenges such as sidewalks, traffic, and parking especially during the peak season.
- Conduct annual surveys to evaluate the business community's perception about South Padre Island's business climate and to evaluate the City's programs in meeting the community's needs.

# Impact Analysis, Prioritization, Implementation, and Evaluation

## Economic Impact Analysis

Economic Impact Analysis (EIA) is an important analysis tool for decision-making and for ranking and prioritizing projects. EIA is a methodology for evaluating the impacts of a project, program or policy on the economy of a specified region. It is useful to show impacts on jobs, income, operating costs, productivity and competitiveness

EIA addresses the following issues:

- The expected future economic impact of proposed projects, programs, and policies in terms of jobs, income, value-added, output and local and state tax revenues.
- The current economic contribution of existing projects, programs or policies to the local or regional economy.
- The actual, cumulative economic impact of previously implemented programs and projects.

EIA results may be used as a tool to prioritize and rank a series of projects or programs and as indicators to measure the impact of each implemented project on the local or region's economy.

## Task Matrix with Time Frames

**Goal:** Sustain and increase business including educational opportunities.

**Strategy Time Frames and Responsible Parties:**

- Increase utilization of the SBA’s Small Business Development Center at UTRGV – Short-Term
- Create “How to do Business on SPI” feature on website – Short-Term
- Continue Sand Dollars for Success – Short-Term
- Address seasonality issue with CVB – Long-Term
- Strengthen relationship with universities - Marine Biology/research, coastal studies – Long-Term
- Establish a framework and protocol to identify and prioritize economic development projects, and business opportunities with high development value to South Padre Island – Short-Term
- Expand the business mentoring programs South Padre Island Economic Development Corporation offers to include professional training – Short-Term
- Expand the research and analytics program – Short-Term

**Goal:** Take strategic actions to actively recruit new businesses that result in a stronger business environment.

**Strategy Time Frames and Responsible Parties:**

- Enhance online presence – Short-Term
- Develop strategic approach for recruiting businesses – Short-Term

**Goal:** Enhance and grow entrepreneurship.

**Strategy Time Frames and Responsible Parties:**

- Look at shared workplace – Short-Term
- Look into establishing an arts incubator – Long-Term
- Look into establishing an innovation center and business incubator – Mid-Term
- Develop a list and guidelines of all available incentives and advertise available grants and business opportunities – Short-Term
- Improve and strengthen existing business areas by encouraging agglomeration of similar businesses – Long-Term
- Continue support for the Kauffman Entrepreneurship Class – Short-Term
- Initiate a Business Mentoring Program for existing businesses – Short-Term

**Goal:** Grow eco-tourism.



### Strategy Time Frames and Responsible Parties:

- Assist Birding Center to build capacity to be self-sustaining – Long-Term
- Support CVB efforts in development of marketing and assets for eco-tourism – Long-Term
- Look for opportunities to partner on the Padre Trails System / Wayfinding Project – Long-Term
- Support development of the RGV Reef - Artificial Reef Project – Short-Term
- Join international birding and ecotourism associations – Short-Term
- Establish bike and kayak trails, and developing a cycling, kayaking, and walking app.- Mid -Term
- Build an aquarium or butterfly pavilion in collaboration with the Brownsville Zoo - Long -Term
- Coordinate with Sea Turtle Inc., Birding and Nature Center, UTRGV Marine Center, Native Plants Center for joint projects – Long -Term
- Continue planting of habitat for birding and butterflies - Long -Term
- Support the Native Plants Center including the development of a Botanical Garden- Short -Term

**Goal:** Grow event tourism and convention tourism.

### Strategy Time Frames and Responsible Parties:

- Support CVB efforts in development of marketing and assets for event tourism and convention tourism – Short-Term
- Expand the convention center to allow for larger groups – Mid-Term
- Grow airlift – Mid-Term

**Goal:** Grow business tourism.

### Strategy Time Frames and Responsible Parties:

- Hold leadership, visionary, strategic planning, team building corporate retreats on South Padre Island- partner with the CVB – Mid-Term
- Develop business tourism by entering into a strategic partnership with industrial trade associations including Matamoros Maquila Association – Short-Term
- Develop a corporate retreat destination marketing plan – Mid-Term
- Develop strategies to take advantage of development at the Port of Brownsville – Short-Term
- Develop strategies to take advantage of development of LNG projects – Short-Term
- Develop strategies to take advantage of development of SpaceX – Short-Term

**Goal:** Support regional efforts for business development

### Strategy Time Frames and Responsible Parties:

- Facilitate progress when possible and assess how South Padre Island prepares for them when they happen: SpaceX, - Short -Term
- Promoting the construction of a second causeway – Short-Term
- Port of Brownsville Projects LNG and Steel Mill – Short-Term
- One Metropolitan Planning Organization (MPO) for the region- Consolidating the two we have and adding the Laguna Madre Area to the MPO – Short-Term
- South Padre Island deep-water Marina – Mid-Term
- Water taxi project for SpaceX launches - Long –Term
- Develop a plan and strategies to take advantage of SpaceX- viewing facilities, observatory/ planetarium, night sky ordinances, etc.) – Mid-Term
- Analysis of Cruise Ship Port of Call - Short -Term
- Support efforts to do a comparative study to improve destination - Short -Term

**Goal:** Diversify SPI visitor base.

**Strategy Time Frames and Responsible Parties:**

- Develop SPI as a film location in coordination with the Governor’s office- Short-Term
- Establish an annual FAM Fest – Long-Term
- Promote the establishment of an arts destination through events, venues, galleries, etc.– Short-Term

**Goal:** Improve broadband/internet access and speed.

**Strategy Time Frames and Responsible Parties:**

- Identify and apply for EDA and USDA grants for infrastructure improvement – Short-Term

# Appendix

## South Padre Island Trade Area

Table A1 lists the visitor contribution of each state to South Padre Island. The data shows a clear pattern of point of origin for non-Texas visitors. The data shows that most visitors originate from states west of Arkansas, Missouri, Ohio, and Michigan, and east of Kansas, Nebraska, South Dakota, and North Dakota.

South Padre Island is the principal tourist destination in the Rio Grande Valley. Most leisure travel to the Brownsville-Harlingen MSA can be attributable to South Padre Island.



**TABLE A1. SOUTH PADRE ISLAND VISITORS POINT OF ORIGIN BY SEASON - 2017**

VISITORS POINT OF ORIGIN – SPRING	VISITORS POINT OF ORIGIN – SUMMER	VISITORS POINT OF ORIGIN – FALL	VISITORS POINT OF ORIGIN – WINTER SHORT-TERM	VISITORS POINT OF ORIGIN – WINTER LONG-TERM
Texas- 61.3%	Texas- 79.3%	Texas- 65.9%	Texas- 42.7%	Minnesota-19.7%
Minnesota- 5.7%	Oklahoma- 4.0%	Oklahoma- 5.0%	Minnesota- 9.6%	Wisconsin- 17.0%
Wisconsin- 5.2%	Missouri- 2.4%	Missouri- 3.2%	Wisconsin- 7.5%	Iowa- 10.9%
Oklahoma- 4.5%	Kansas- 1.8%	Arizona- 2.7%	Iowa- 5.0%	Illinois- 6.8%
Colorado- 4.2%	Colorado- 1.4%	Colorado- 2.3%	Missouri- 4.6%	Missouri- 6.8%
Kansas- 2.7%	Illinois- 1.4%	Nebraska- 2.3%	Michigan- 3.2%	Ohio- 6.1%
Michigan- 2.7%	Nebraska- 1.2%	Arkansas- 1.8%	Nebraska- 3.2%	Michigan- 5.4%
Indiana- 2.0%	Wisconsin- 1.2%	Iowa- 1.8%	Kansas- 2.8%	Texas- 3.4%
Illinois- 1.5%	Louisiana- 1.0%	Indiana- 1.8%	Indiana- 2.5%	Indiana- 2.7%
Missouri- 1.2%	California- 0.6%	Michigan- 1.8%	Ohio- 2.5%	Kansas- 2.7%
Nebraska- 1.2%	Florida- 0.6%	California- 1.4%	Colorado- 1.8%	Pennsylvania- 2.7%
Iowa- 1.0%	Minnesota- 0.6%	Kansas- 1.4%	Illinois- 1.8%	Nebraska- 2.0%
New Mexico- 1.0%	New Mexico- 0.6%	New York- 1.4%	Oklahoma- 1.4%	Colorado- 1.4%
New York- 0.7%	Arkansas- 0.4%	Nevada- 0.9%	Arkansas- 1.1%	Florida- 1.4%
Ohio- 0.7%	Indiana- 0.4%	Ohio- 0.9%	Pennsylvania- 1.1%	South Carolina- 1.4%
Arizona- 0.5%	Maryland- 0.4%	Pennsylvania- 0.9%	Tennessee- 1.1%	Tennessee- 1.4%
Kentucky- 0.5%	Michigan- 0.4%	Tennessee- 0.9%	Wyoming- 1.1%	California- 0.7%
North Dakota- 0.5%	Ohio- 0.4%	Wisconsin- 0.9%	California- 0.7%	Idaho- 0.7%
South Dakota- 0.5%	Pennsylvania- 0.4%	Alaska- 0.5%	Florida- 0.7%	Maryland- 0.7%
Utah- 0.5%	Iowa- 0.2%	Alabama- 0.5%	Massachusetts-0.7%	North Carolina-0.7%
Arkansas- 0.2%	Kentucky- 0.2%	Idaho- 0.5%	Maine- 0.7%	North Dakota- 0.7%
California- 0.2%	Massachusetts-0.2%	Illinois- 0.5%	North Dakota- 0.7%	New Jersey- 0.7%
Florida- 0.2%	Montana- 0.2%	Minnesota- 0.5%	New Mexico- 0.7%	New Mexico- 0.7%
Louisiana- 0.2%	North Carolina-0.2%	Mississippi- 0.5%	South Dakota- 0.7%	Nevada- 0.7%
Montana- 0.2%	Nevada- 0.2%	New Mexico- 0.5%	Arizona- 0.4%	Oregon- 0.7%
Washington- 0.2%	Oregon- 0.2%	Rhode Island- 0.5%	Idaho- 0.4%	South Dakota-0.7%
<b>INTERNATIONAL</b>	Utah- 0.2%	<b>INTERNATIONAL</b>	Montana- 0.4%	Virginia- 0.7%
Mexico- 57.1%	Wyoming- 0.2%	Canada- 70.0%	North Carolina-0.4%	Washington- 0.7%
Canada- 35.7%	<b>INTERNATIONAL</b>	Mexico- 30.0%	Rhode Island- 0.4%	<b>INTERNATIONAL</b>
United Kingdom- 7.1%	Mexico- 85.7%		Washington- 0.4%	Canada- 100%
	Canada- 7.1%		<b>INTERNATIONAL</b>	
	England- 7.1%		Canada- 62.5%	
			Mexico- 37.5%	

Source: South Padre Island Convention and Visitors Bureau and AEC

South Padre Island visitors represent the core source of economic activity for the hospitality and tourism industry, retail sector and other service sectors. In addition, they are direct and indirect catalysts for the real estate market. Visitors’ spending drives the demand for lodging, food and drinks, and other hospitality and tourism related activities and stimulate employment.

Because of the seasonality of South Padre Island’s hospitality and tourism industry, the Island’s non-local visitors and subsequently its economic activity fluctuates widely from month to month. The variation in the number of visitors tends to be very pronounced when comparing the four peak months of March, June, July and August, with off-peak months. Starting in September, the number of visitors declines and reaches its lowest point in December. AEC computes a Causeway Crossing Effectiveness Index to effectively measure the impact of visitors and separate local from non-local visitors. This index is a first step in identifying South Padre Island’s natural assets that can be leveraged to mitigate the effect of seasonality.

AEC summarized annual and monthly traffic crossing the Queen Isabella Causeway to South Padre Island in Tables A2 and A3. In Table A2, crossing statistics show that causeway traffic increased every year from 5,704,585 in 1990 to 8,136,813 in 2007 before declining in 2008 because of hurricane Dolly. Between 2008 and 2016 the number of causeway crossing fluctuated, in part due to the financial and economic crisis, increasing in some years and decreasing in others but following an overall upward trend. Table A3 breaks down the crossing by month and highlights the seasonality of the island and the variability in crossing from one month to the next. For example, the number of crossing in November 2015 was only 43.6 percent of July’s crossings. Figure A1 plots data from Table A3 and shows the consistent and ever occurring crossing seasonality patterns

TABLE A2 ANNUAL AND DAILY TRAFFIC COUNTS ACROSS CAUSEWAY TO SOUTH PADRE ISLAND (1990-2016)			
YEAR	ANNUAL TRAFFIC	DAILY TRAFFIC	PERCENT CHANGE
1990	5,704,585	15,629	-
1995	6,758,705	18,517	3.70%
2000	7,476,295	20,483	2.12%
2001	-	-	-
2002	7,632,150	20,910	2.08%
2003	7,807,715	21,391	2.30%
2004	7,831,424	21,456	0.30%
2005	7,908,090	21,666	0.98%
2006	8,053,360	22,064	1.84%
2007	8,136,813	22,293	1.04%
2008	7,760,441	21,261	-4.63%
2009	8,211,184	22,496	5.81%
2010	7,829,591	21,451	-4.65%
2011	7,846,949	21,498	0.22%

**TABLE A2 ANNUAL AND DAILY TRAFFIC COUNTS ACROSS CAUSEWAY TO SOUTH PADRE ISLAND (1990-2016)**

YEAR	ANNUAL TRAFFIC	DAILY TRAFFIC	PERCENT CHANGE
2012	7,896,573	21,634	0.63%
2013	7,629,748	20,903	-3.38%
2014	7,864,219	21,546	3.08%
2015	7,944,308	21,765	1.02%
2016	8,164,404 *	22,307	2.49%
<b>Forecasted crossing</b>			
2017†	8,124,359	22,259	-0.22%*
2025†	9,672,380	26,500	2.20%*
2030‡	10,217,074	27,992	1.10%*
<b>Annual Change</b>			
Change 2010-2015	568,203	1,557	1.45%
Change 2015-2025	1,728,072	4,734	1.99%
Change 2025-2030	544,694	1,492	1.10%
* Forecasted annual traffic for December 2016 Annual percent change relative to 2015 Source: Texas Department of Transportation and AEC.			

**TABLE A3 AVERAGE DAILY TRAFFIC COUNTS ACROSS CAUSEWAY BY MONTH, 2007-2016**

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
2007	18,933	21,941	25,445	22,849	21,990	28,750	31,768	25,862	18,988	18,353	16,166	16,355
2008	19,047	23,432	26,606	19,992	24,248	26,772	26,492	22,550	15,992	17,502	16,097	16,418
2009	20,682	23,727	24,737	24,174	24,826	29,079	32,881	26,433	17,922	16,108	14,577	14,792
2010	18,789	21,828	24,069	22,022	23,884	28,027	29,571	25,680	17,547	17,094	14,278	14,532
2011	17,876	22,345	25,234	23,026	22,584	25,149	32,031	25,465	17,450	17,344	15,140	14,253
2012	17,925	20,502	24,147	23,518	23,120	29,117	32,946	26,299	18,292	15,632	14,445	13,522
2013	17,011	20,331	24,157	19,099	21,529	29,716	32,307	26,707	16,344	15,407	14,038	13,997
2014	17,594	20,702	22,475	22,409	23,682	28,541	32,639	27,555	16,554	16,480	14,396	15,303
2015	17,542	19,346	22,915	22,626	25,659	30,323	34,722	27,160	17,296	14,220	14,124	14,927
2016	18,688	22,289	22,820	20,785	23,796	28,975	35,998	26,939	19,858	17,370	16,544	-

Source: Texas Department of Transportation and AEC.

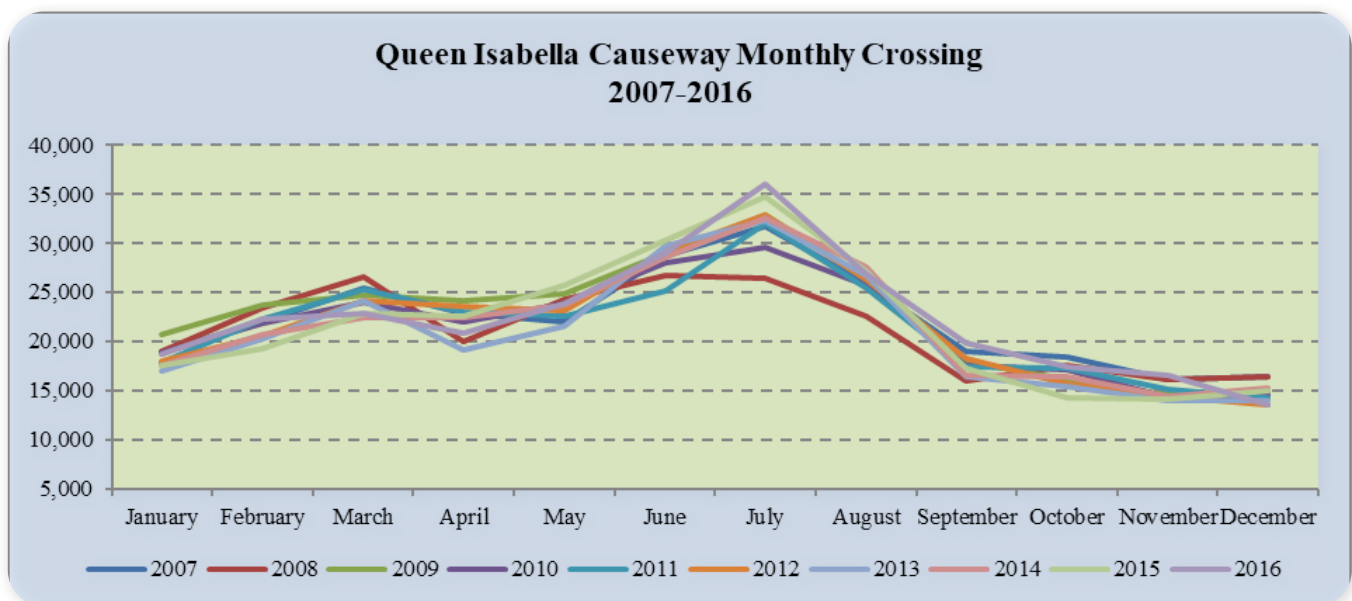
**TABLE A4: CAUSEWAY CROSSING EFFECTIVENESS INDEX BY MONTH, 2007-2016**

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
2007	\$5.41	\$8.50	\$21.93	\$18.47	\$19.85	\$30.67	\$37.77	\$29.57	\$14.89	\$13.20	\$8.58	\$8.60
2008	\$7.89	\$8.11	\$23.22	\$13.60	\$19.89	\$37.04	\$31.39	\$17.85	\$7.63	\$7.76	\$6.82	\$6.28
2009	\$5.64	\$5.68	\$17.32	\$13.43	\$15.31	\$25.29	\$35.13	\$26.64	\$16.43	\$11.76	\$7.19	\$8.37
2010	\$6.58	\$8.73	\$24.00	\$16.57	\$19.49	\$31.28	\$38.26	\$28.16	\$19.13	\$14.20	\$8.41	\$9.08
2011	\$6.12	\$8.08	\$23.61	\$22.93	\$17.68	\$36.96	\$41.40	\$28.73	\$19.49	\$12.02	\$8.71	\$8.69
2012	\$6.12	\$8.36	\$28.46	\$21.14	\$20.86	\$34.14	\$43.12	\$36.35	\$19.65	\$13.12	\$11.33	\$11.49
2013	\$7.25	\$9.82	\$35.43	\$17.71	\$22.99	\$36.29	\$46.67	\$39.20	\$21.45	\$15.23	\$10.83	\$10.70
2014	\$7.97	\$9.86	\$31.97	\$23.90	\$25.05	\$38.07	\$51.44	\$41.86	\$25.53	\$16.32	\$11.22	\$11.58
2015	\$7.41	\$12.13	\$29.69	\$21.32	\$24.84	\$35.95	\$49.79	\$40.91	\$25.85	\$20.31	\$13.67	\$12.42
2016	\$7.73	\$11.77	\$41.06	\$20.60	\$25.81	\$39.68	\$46.19	\$35.32	\$26.40	\$17.92	\$15.38	-

Source: Texas Department of Transportation and AEC.

Figure A2 maps the number of crossings and the CCEI index. The figure shows that AADT had more variability than CCEI. In addition CCEI statistics show an upward trend from 2009 to 2016 while in 2013 average daily traffic decreased by 3.4 percent relative to 2012 before resuming its upward trend in 2014, 2015 and 2016. The data also show that between 2013 and 2016 AADT experienced a sharp increase while between 2010 and 2014 the CCEI index increase was relatively modest and was unchanged in 2015, before resuming its modest growth in 2016.

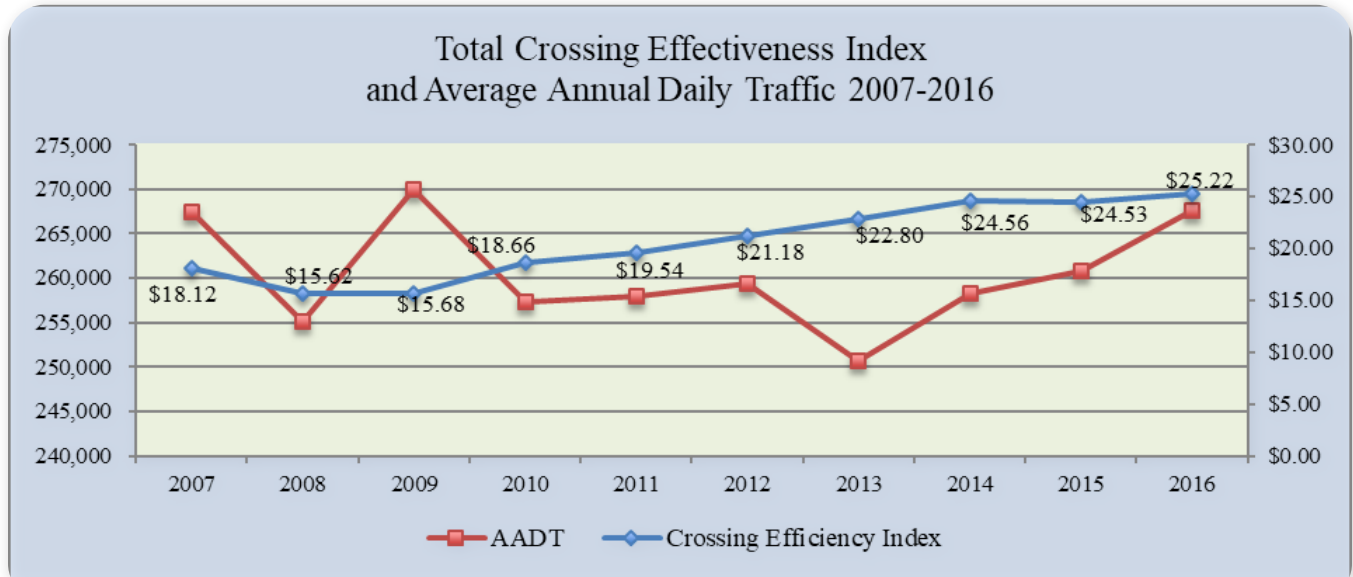
**Figure A1 Queen Isabella Causeway Monthly Crossing**



Source: Texas Department of Transportation and AEC.



Figure A2 Total Crossing Effectiveness Index and AADT 2007-2016



Source: Texas Department of Transportation and AEC.

## Characteristics of South Padre Island Visitors

TABLE A5. CHARACTERISTICS OF SOUTH PADRE ISLAND VISITORS

	SPRING VISITORS	SUMMER VISITORS	FALL VISITORS	WINTER SHORT TERM VISITORS	WINTER LONG TERM VISITORS
	MARCH 2016 - MAY 2018	JUNE 2016 - AUGUST 2017	SEPTEMBER 2016 - NOVEMBER 2017	DECEMBER 2015 - FEBRUARY 2018	DECEMBER 2015 - FEBRUARY 2019
<b>Average age of Respondent</b>	<b>47.2 years old</b>	<b>45.3 years old</b>	<b>52.5 years old</b>	<b>53.5 years old</b>	<b>66.0 years old</b>
Teens	0.80%	1.1%	0.0%	0.0%	0.0%
Twenties	14.20%	8.8%	2.8%	5.3%	0.0%
Thirties	16.8%	22.6%	15.4%	13.9%	6.0%
Forties	22.7%	33.3%	19.2%	19.2%	6.0%
Fifties	19.8%	20.5%	29.4%	21.8%	8.4%
Sixties	20.9%	10.3%	26.6%	26.7%	60.6%
Seventies	4.5%	2.8%	5.6%	12.0%	28.4%
Eighties	0.3%	0.6%	0.9%	1.1%	1.3%
<b>Gender of Respondents</b>					
Female	69.5%	75.7%	69.8%	77.7%	62.8%
Male	29.2%	23.6%	27.9%	21.6%	35.9%
Transgender	0.8%	0.4%	2.3%	0.4%	1.3%
Other	0.3%	0.2%	0.0%	0.4%	0.0%
Prefer not to answer	0.3%	0.0%	0.0%	0.0%	0.0%
<b>Ethnicity of Respondents</b>					



**TABLE A5. CHARACTERISTICS OF SOUTH PADRE ISLAND VISITORS**

	SPRING VISITORS	SUMMER VISITORS	FALL VISITORS	WINTER SHORT TERM VISITORS	WINTER LONG TERM VISITORS
	MARCH 2016- MAY 2018	JUNE 2016 - AUGUST 2017	SEPTEMBER 2016-NOVEMBER 2017	DECEMBER 2015-FEBRUARY 2018	DECEMBER 2015 - FEBRUARY 2019
White/Caucasian	64.9%	58.0%	71.6%	77.2%	93.0%
Hispanic or Latino	30.2%	34.1%	20.0%	20.0%	6.4%
Black or African American	4.0%	4.9%	5.6%	1.9%	1.9%
Prefer not to answer	4.0%	3.4%	3.7%	1.9%	0.0%
American Indian or Alaska Native	1.9%	2.6%	2.8%	1.1%	0.0%
Asian or Pacific Islander	0.5%	1.3%	2.8%	1.1%	0.0%
<b>Life Stage</b>					
Full-time Employed (working outside of home)	55.1%	62.6%	49.1%	43.5%	1.3%
Retired	18.6%	12.1%	18.2%	31.6%	82.1%
Stay-at-home	6.9%	7.9%	11.2%	7.4%	0.0%
Semi-retired	5.1%	3.2%	8.9%	6.3%	12.8%
Full-time Employed (working from home)	4.3%	5.3%	5.1%	4.8%	1.3%
Part-time employed	4.3%	3.6%	7.5%	3.4%	2.6%
Student	4.3%	3.0%	0.0%	1.1%	0.0%
Other	1.6%	2.3%	0.0%	1.9%	0.6%
<b>Occupation</b>					
Retired	16.1%		15.1%	22.4%	66.7%
Healthcare industry	14.6%	15.0%	15.1%	13.3%	4.6%
Education	10.9%	13.6%		15.4%	9.9%
Home maker/Stay home parent	-	8.4%	7.5%	-	-
Self employed	-		9.9%	5.4%	3.8%
Executive/manager	-	7.9%	-	-	-
Secretary/Clerk/					
Office	7.0%	-	-	-	-
Professional/					
Technical	6.1%	7.5%	11.0%	5.4%	3.8%
Length of Stay	4.2 nights	4.3 nights	4.5 nights	5.4 nights	60.6 nights
Average Party Spending	\$1,237.32	\$1,887.85	\$1,459.38	\$1,274.66	\$5,479.90

Source: South Padre Island Convention and Visitors Bureau and AEC

TABLE A6. CATEGORY OF SOUTH PADRE ISLAND VISITORS BY SEASON

	SPRING	SUMMER	FALL	WINTER SHORT-TERM	WINTER LONG-TERM
Short-term	Winter	11.60%	35.60%	34.30%	67.90%
Long-term	23.40%	41.20%	18.00%	15.90%	0.60%
Family & Friends	17.80%	21.50%	16.20%	13.40%	12.60%
Extended family	12.50%	16.20%	13.10%	14.40%	5.00%
Friends	11.20%	4.90%	11.30%	13.00%	6.30%
Children only - no spouse	3.80%	4.30%	2.30%	4.00%	0.00%
I visited alone	3.10%	0.40%	3.60%	4.30%	7.60%
Organized group (School, tour, church)	0.80%	0.00%	0.00%	0.70%	0.00%

Source: South Padre Island Convention and Visitors Bureau and AEC

The make-up of visitors' party by season in Table A6 shows that the largest percentage of visitors during fall and winter do not have children accompanying them. This observation is consistent with the average age group of visitors during each season. Fall and winter visitors are older and tend to have grown children. CVB data shows that 36 percent of fall visitors, 34 percent of short-term winter visitors and 68 percent of long-term winter visitors visited the Island with a spouse and no children, while 41 percent of summer visitors, visitors with the youngest average age, visited the Island with spouse and children.

When disaggregated data for small communities is sometimes not available, we use county data and extrapolate the data for smaller communities.

Data from the Office of the Texas Governor show that leisure travel represented 97 percent of person-days to the Brownsville-Harlingen, TX MSA, and business travel accounted for 3.4 percent of person-days to the Brownsville-Harlingen, TX MSA. The principal activities visitors engaged in are Attractions 26 percent, Culture 28 percent, Family/Life Events 43 percent, Libation/Culinary 33 percent, Nature 67 percent, Outdoor Sports 26 percent, General 45 percent. The average party size was 2.3 persons and the average length of Stay was 2.6 days for overnight and days stay, and 3.2 nights for overnight stay only. Table A7 summarizes the visitors' purpose of stay. Table A8 shows the length of stay. Table A9 shows the type of accommodations visitors choose, and Table A10 shows the type of activities visitors engaged in.

**TABLE A7. PURPOSE OF STAY (PERSON-DAYS)**

<b>Leisure</b>	96.60%	<b>Total Business</b>	3.40%
<b>Vacation</b>	49.40%	<b>Meetings</b>	0.70%
<b>General Vacation-Overnight</b>	29.40%	<b>Seminar/Training</b>	0.50%
<b>Getaway Weekend-Overnight</b>	15.60%	<b>Convention</b>	0%
<b>Day Trip Vacation/Getaway</b>	4.30%	<b>Other Group Meeting</b>	0.20%
<b>Visit Friend/Relative</b>			
<b>Non-Vacation</b>	47.20%	<b>Transient</b>	2.70%
<b>Visit Friend/Relative</b>	23.30%	<b>Inspection/Audit</b>	1.00%
<b>Special Event (celebration, reunion)</b>	17.00%	<b>Sales/Purchasing</b>	0.90%
<b>Seminar/Class/Training (personal)</b>	1.60%	<b>Government/Military</b>	0.30%
<b>Medical/Health Care</b>	0.10%	<b>Consulting/Client Service</b>	0.20%
<b>Convention/Show/Conference</b>	0%	<b>Construction/Repair</b>	0%
<b>Other Leisure/Personal</b>	5.20%	<b>Other Business</b>	0.30%

Source: Office of the Texas Governor and AEC

**TABLE A8. LENGTH OF STAY (STAYS)**

<b>Length of Stay (Stays)</b>	
Average Length (Incl. Days)	2.64
Average Length (Overnight Only)	3.24
Day-Trip	41.70%
1-3 Nights	39.60%
4-7 Nights	15.90%
8+Nights	2.80%
<b>Primary Mode of Transportation (Person-Days)</b>	
Air	6.70%
Auto Travel (Net)	92.90%
Other Transportation (Net)	0.40%
Bus	0.40%
Train	0%
Other	0%
<b>Distance Traveled One-Way from Home (Person-Days)</b>	
Average Distance Traveled	501 miles
250 Miles or Fewer	42.40%

TABLE A8. LENGTH OF STAY (STAYS)

251-500 Miles	26.40%
500-1000 Miles	7%
1001 Miles or More	24.10%
<i>Source: Office of the Texas Governor and AEC</i>	

TABLE A9. ACCOMMODATION TYPE (PERSON-DAYS)

Paid Accommodations	68.80%
Hotel/Motel	30.80%
High-End	6.80%
Mid-Level	8.80%
Economy	14.10%
Other Hotel/Motel	1.10%
Non-Hotel/Motel	38.00%
Non-Paid Accommodations	31.20%
Other Overnight	0%
<i>Source: Office of the Texas Governor and AEC</i>	

TABLE A10. ACTIVITIES SUMMARY (STAYS)

<b>Attractions (Net)</b>	25.80%	<b>Nature (Net)</b>	67.00%
<b>Nightlife (bar, nightclub, etc.)</b>	16.90%	<b>Beach/Waterfront</b>	63.70%
<b>Theme/Amusement/Water Parks</b>	4.80%	<b>Wildlife Viewing (birds, whales, etc.)</b>	15.20%
<b>Zoo/Aquarium</b>	4.70%	<b>Parks (national/state, etc.)</b>	9.00%
<b>Culture (Net)</b>	28.00%	<b>Outdoor Sports (Net)</b>	25.90%
<b>Touring/Sightseeing</b>	11.70%	<b>Water Sports</b>	10.20%
<b>Historic Sites</b>	7.10%	<b>Fishing</b>	8.90%
<b>Concerts/Theatre/Dance, etc.</b>	5.80%	<b>Biking</b>	6.10%
<b>Family/Life Events (Net)</b>	42.50%	<b>General (Net)</b>	44.60%
<b>Visit Friends/Relatives (general visit)</b>	22.30%	<b>Shopping</b>	30.00%
<b>Holiday Celebration (Thanksgiving, July 4th, etc.)</b>	13.90%	<b>Business</b>	5.90%
<b>Personal Special Event (Anniversary, Birthday)</b>	9.20%	<b>Religious/Faith Based Conference</b>	5.60%

**TABLE A10. ACTIVITIES SUMMARY (STAYS)**

<b>Libation and Culinary (Net)</b>	32.90%	<b>Trip Party Composition (Trip-Days)</b>	
<b>Culinary/Dining Experience</b>	32.70%	<b>Avg. Party Size (Adults and Children)</b>	2.30 persons
<b>Winery/Distillery/Brewery Tours</b>	6.10%	<b>One Male Only</b>	15.10%
<b>One Female Only</b>	16.30%	<b>Two Males and Two Females</b>	2.20%
<b>One Male and One Female</b>	36.60%	<b>Three or More Adults</b>	12.50%
<b>Adult(s) with Children</b>	17.20%		

*Source: Office of the Texas Governor and AEC*

The most current data show that the number of person-stays to the Brownsville-Harlingen MSA is estimated at 3.42 million in 2016 and the volume of person-days was estimated at 8.85 million. The Brownsville-Harlingen MSA’s share of total person-days to Texas ranked 7 out of 26 Texas MSAs.

**TABLE A11. BROWNSVILLE-HARLINGEN, TX MSA VOLUME (MILLIONS)**

<b>Person-Days</b>	<b>Total</b>	<b>Leisure</b>	<b>Business</b>
2016	8.85	7.87	0.98
2015	8.14	7.25	0.90
2014	7.47	6.64	0.82
<b>Person-Stays</b>	<b>Total</b>	<b>Leisure</b>	<b>Business</b>
2016	3.42	2.77	0.65
2015	3.11	2.52	0.59
2014	2.76	2.23	0.52

*Source: Office of the Texas Governor and AEC*

**TABLE A12. BROWNSVILLE-HARLINGEN, TX MSA SHARE OF TEXAS TRAVEL**

<b>Person-Days</b>	<b>Total</b>	<b>Leisure</b>	<b>Business</b>
2016	1.68%	2.16%	0.21%
2015	1.61%	2.02%	0.28%
2014	1.40%	1.81%	0.14%

*Source: Office of the Texas Governor and AEC*



# Demographics and Psychographics Analysis of Visitors

The average length of overnight stay of visitors is 3.24 days. Table A13 breaks down visitors spending both as a percentage of total spending and in dollar value. The average per person per day spending is \$120.30 during their visit to South Padre Island. Lodging represents the largest single expenditure with 27 percent of total expenditure followed by food with 25 percent of total expenditure and transportation with 22 percent of total expenditure.

**TABLE A13. EXPENDITURE SUMMARY (PERSON-DAYS)**

		<b>Avg. Per Person Per Day Spending</b>	\$120.30
<b>Transport-Total</b>	22.00%	<b>Transportation-Total</b>	\$26.50
<b>Transportation-Excluding Airfare</b>	18.20%	<b>Transportation-Excluding Airfare</b>	\$21.90
<b>Transportation-Airfare</b>	3.80%	<b>Transportation-Airfare</b>	\$53.20
<b>Transportation-Car Rental</b>	2.90%	<b>Transportation-Car Rental</b>	\$39.10
<b>Transportation-Other</b>	15.3%	<b>Transportation- Other</b>	\$18.40
<b>Food</b>	25.40%	<b>Food</b>	\$30.50
<b>Lodging-Total</b>	27.60%	<b>Lodging-Total</b>	\$33.20
<b>Lodging-Room</b>	27.20%	<b>Lodging-Room</b>	\$32.70
<b>Lodging-Services</b>	0.40%	<b>Lodging-Services</b>	\$0.50
<b>Shopping</b>	15.20%	<b>Shopping</b>	\$18.20
<b>Entertainment</b>	8.50%	<b>Entertainment</b>	\$10.20
<b>Miscellaneous</b>	1.40%	<b>Miscellaneous</b>	\$1.70

Source: Office of the Texas Governor and AEC

## Characteristics of South Padre Island Visitors

According to the South Padre Island Convention and Visitors Bureau, Texans generated 65 percent of person-days to the Brownsville- Harlingen MSA. The top three Texan origin DMAs are Brownsville-Harlingen-Weslaco-McAllen, Houston, and San Antonio. The data also show that non-Texans contribute 31 percent of person-days with Minneapolis-St. Paul, MN, Paducah, KY, Cape Girardeau, MO, Harrisburg-Mt. Vernon, IL, and Lexington, KY contributing the largest share of non-Texan DMAs.

The average age of visitors in the spring and summer is 47 and 45 years old respectively, while fall and winter visitors are much older with an average age of 52 years old and 53 years old for fall and short time winter visitors and 66 years old for long term winter visitors.

Female visitors outnumber male visitors according to South Padre Island Convention and Visitors Bureau (SPI-CVB). Females represent approximately 70 percent of visitors in the spring, 76 percent in the summer, 70 percent in the fall, 78 percent in the short-term winter, and 63 percent in the long-term winter.

**TABLE A14. CHARACTERISTICS OF SOUTH PADRE ISLAND VISITORS**

	Spring Visitors	Summer Visitors	Fall Visitors	Winter Short term Visitors	Winter Long term Visitors
	March 2016- May 2018	June 2016 - August 2017	September 2016 - November 2017	December 2015 - February 2018	December 2015 - February 2019
<b>Average age of Respondent</b>	47.2 years old	45.3 years old	52.5 years old	53.5 years old	66.0 years old
Teens	0.80%	1.1%	0.0%	0.0%	0.0%
Twenties	14.20%	8.8%	2.8%	5.3%	0.0%
Thirties	16.8%	22.6%	15.4%	13.9%	6.0%
Forties	22.7%	33.3%	19.2%	19.2%	6.0%
Fifties	19.8%	20.5%	29.4%	21.8%	8.4%
Sixties	20.9%	10.3%	26.6%	26.7%	60.6%
Seventies	4.5%	2.8%	5.6%	12.0%	28.4%
Eighties	0.3%	0.6%	0.9%	1.1%	1.3%

Source: South Padre Island Convention and Visitors Bureau and AEC

## Demographics Analysis of Visitors

The distribution of household income of visitors is more skewed towards higher income. Less than 10 percent of visitors has a household income under \$25,000, 14 percent have a household income between \$25,000 and \$49,999, 23 percent have a household income between \$50,000 and \$74,999, 14 percent have a household income between \$75,000 and \$99,999, and 40.20 percent have a household income of at least \$100,000.

Approximately three quarters of visitors are employed, 15 percent are retired, and 12 percent are not employed. Most visitors are married and do not have children in the household.

**TABLE A15. DEMOGRAPHIC PROFILE OF VISITORS**

Demographic Profile (Person-Days)	45.2	<b>Employment</b>	
18-34 Years	33.00%	Employed	72.80%
35-49 Years	27.40%	Retired	14.90%
50-64 Years	22.60%	Not Employed	12.30%
65+ Years	17.00%	<b>Marital Status</b>	
Average Household Income (in \$1,000)	\$88,098	Married	64.70%
Under \$25,000	8.10%	Never Married	25.20%



**TABLE A15. DEMOGRAPHIC PROFILE OF VISITORS**

\$25,000-\$49,999	14.30%	Divorced/Widowed	10.10%
\$50,000-\$74,999	23.10%	<b>Children in Household</b>	
\$75,000-\$99,999	14.30%	Yes	36.60%
\$100,000+	40.20%	No	63.40%

Source: Office of the Texas Governor, US. Census, and AEC

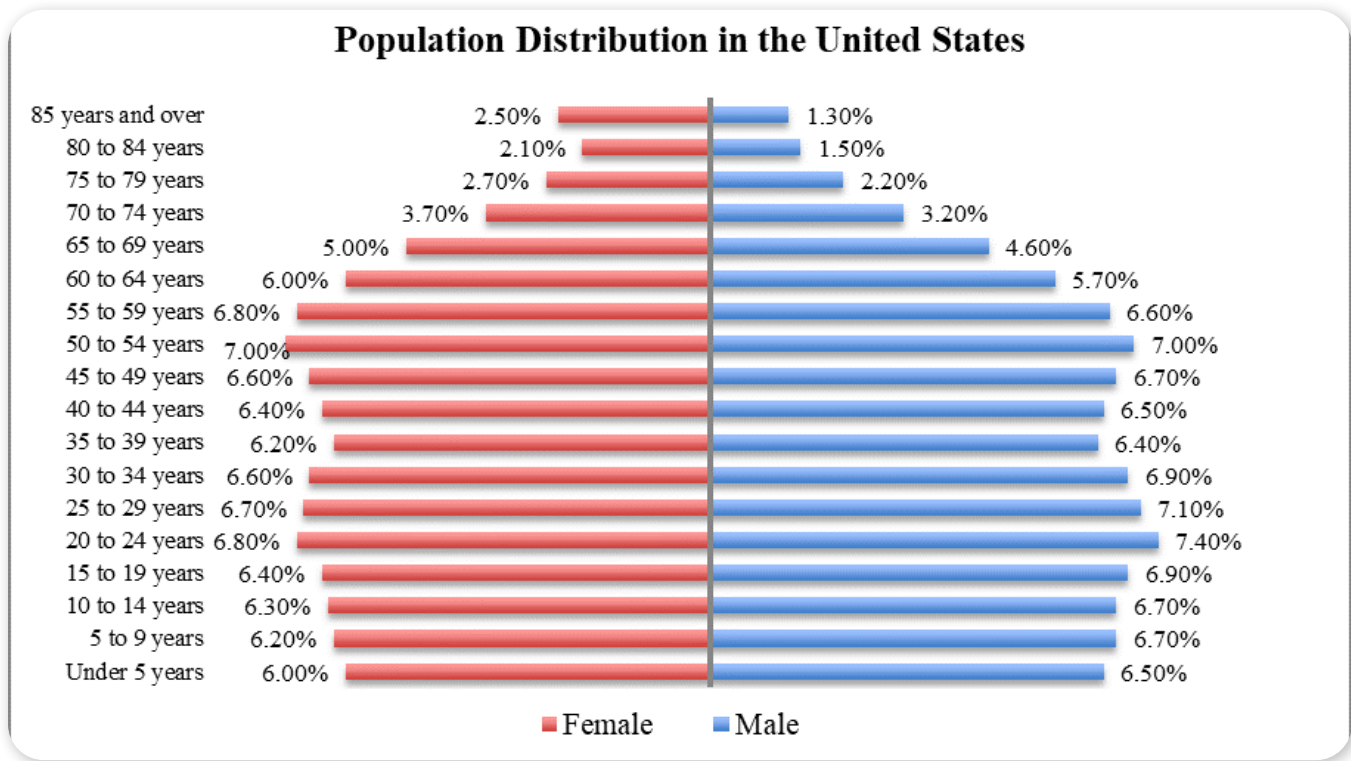
## Population Projection

Projections for population growth by gender show nearly equal proportions of males and females population growth. Each group is projected to grow to over 20 million by 2050 with slightly more males than females. In addition, the Office of the State Demographer projects a change to the age structure and gender of the population, and to the proportions of the ethnic and racial make-up of the state. The projections show that the Hispanic population will increase to 21.5 million by 2050, while the non-Hispanic black population is projected to increase at a steady pace, growing to nearly 4.1 million by 2050. In contrast, the non-Hispanic white population is projected to grow at a progressively slower pace, peaking at 11.8 million in 2028 and ultimately decreasing to a total population of 11.3 million by 2050. The non-Hispanic Other group, consisting of mostly Asian Americans make up the smallest proportion of the total State population, are expected to grow at the fastest rate.

A comparison of the population pyramid the United States, Texas, and South Padre Island shows that the U.S. and Texas have populations with relatively similar age structure patterns. Unlike the U.S. and Texas, South Padre Island’s population pyramid has a very distinct shape, with an age structure that is markedly different than that of the U.S. or Texas indicating a significantly large concentration of older people. More than 76 percent of the Island’s population is 45 years old or older, 23 percent of the population is under 45 years old, and only 14 percent are under the age of 25.

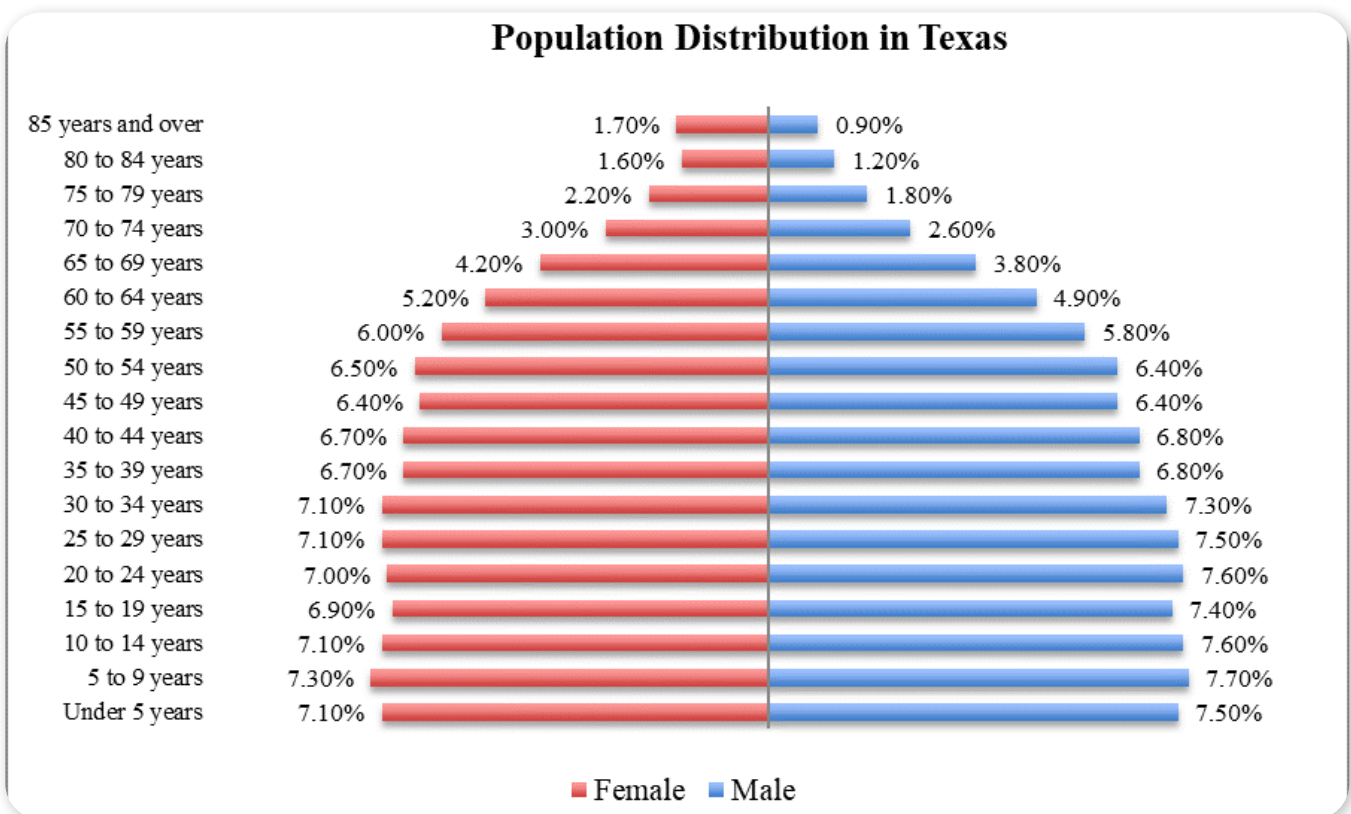
Educational attainment data shows that South Padre Island has a higher rate of people with a high school degree or higher, and bachelor degree or higher compared with Houston, San Antonio and Dallas-Fort Worth, but lags behind Austin in both categories. The data also shows that South Padre Island’s population that is under 44 years of age is less educated than their counterparts in Austin, Houston, Dallas, and San Antonio, but the population over 45 years of age is significantly more educated than their counterparts in Austin, Houston, Dallas, and San Antonio.

Figure A7 Population Distribution in the United States



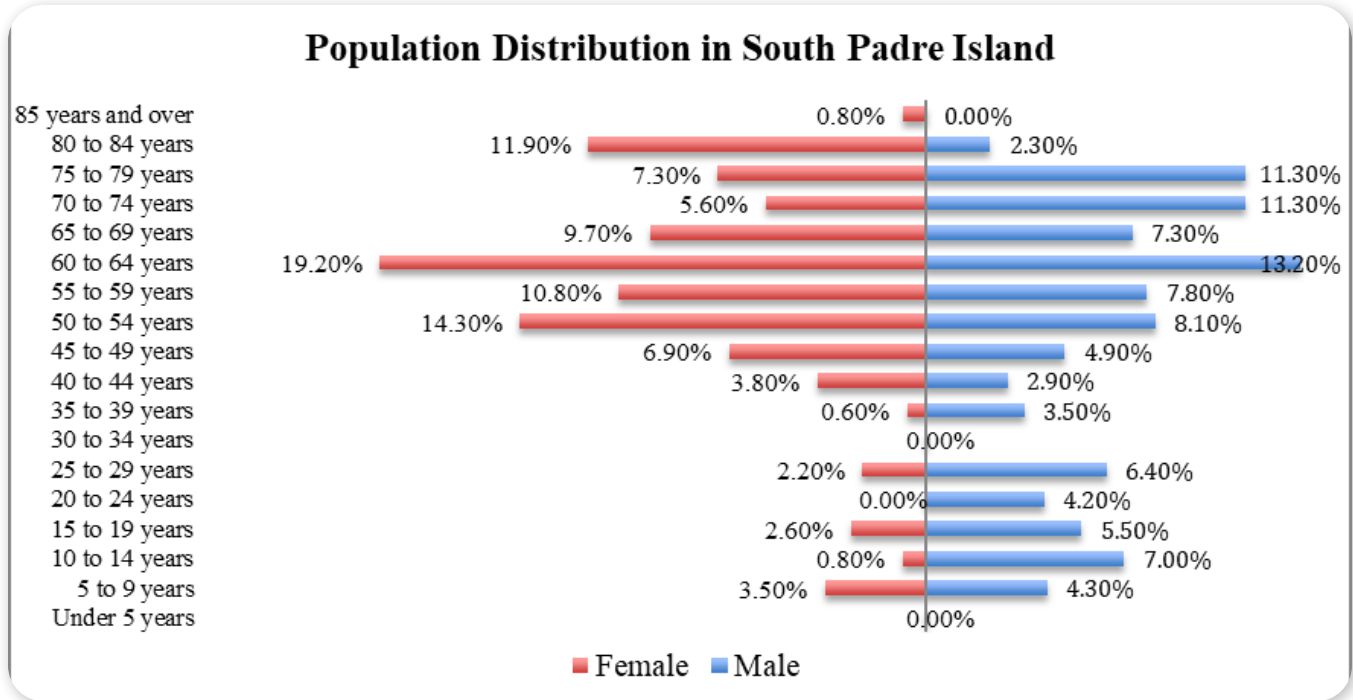
Source: US. Census and AEC

Figure A8 Population Distribution in Texas



Source: US. Census and AEC

Figure A9 Population Distribution in South Padre Island



Source: US. Census and AEC

TABLE A16. EDUCATIONAL ATTAINMENT OF POPULATION 18 AND OLDER

	AUSTIN CITY, TEXAS		DALLAS CITY, TEXAS		HOUSTON CITY, TEXAS		SAN ANTONIO CITY, TEXAS		SOUTH PADRE ISLAND TOWN, TEXAS	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent
	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate
Population 18 to 24 years	104,001	100.00%	131,659	100.00%	232,939	100.00%	160,041	100.00%	75	100.00%
Less than high school graduate	10,291	9.90%	25,900	19.70%	45,835	19.70%	24,061	15.00%	17	22.70%
High school graduate (includes equivalency)	21,862	21.00%	40,293	30.60%	71,725	30.80%	50,851	31.80%	19	25.30%
Some college or associate's degree	55,765	53.60%	48,100	36.50%	89,265	38.30%	72,612	45.40%	39	52.00%
Bachelor's degree or higher	16,083	15.50%	17,366	13.20%	26,114	11.20%	12,517	7.80%	0	0.00%
Population 25 years and over	609,516	100.00%	818,850	100.00%	1,440,346	100.10%	909,352	100.00%	2,495	99.90%
Less than 9th grade	39,722	6.50%	109,724	13.40%	189,576	13.20%	81,462	9.00%	223	8.90%
9th to 12th grade, no diploma	33,425	5.50%	92,176	11.30%	136,465	9.50%	85,837	9.40%	118	4.70%
High school graduate (includes equivalency)	100,001	16.40%	175,792	21.50%	327,017	22.70%	237,144	26.10%	484	19.40%
Some college, no degree	114,465	18.80%	150,206	18.30%	268,223	18.60%	208,179	22.90%	484	19.40%
Associate's degree	31,113	5.10%	37,020	4.50%	70,354	4.90%	67,135	7.40%	339	13.60%
Bachelor's degree	184,101	30.20%	159,729	19.50%	274,496	19.10%	148,250	16.30%	457	18.30%
Graduate or professional degree	106,689	17.50%	94,203	11.50%	174,215	12.10%	81,345	8.90%	390	15.60%

Source: U.S. Census and AEC



Income distribution is also very different in South Padre Island relative to Texas and the U.S. Figure A10 shows that on average, household income in South Padre Island is lower than in the U.S. and Texas. The median income in South Padre Island of \$42,825 is almost \$12,000 below the state median income and almost \$13,000 below the national median income.

TABLE A17. POPULATION PROJECTION IN TEXAS 2010 - 2050									
Texas	2010	2015	2020	2025	2030	2035	2040	2045	2050
00-09	3,856,707	3,994,712	4,247,429	4,628,689	5,040,786	5,445,276	5,857,595	6,316,032	6,835,645
10-19	3,765,007	4,124,485	4,427,316	4,602,341	4,886,415	5,347,723	5,863,430	6,381,224	6,909,470
20-29	3,670,118	3,991,138	4,431,366	4,924,466	5,361,403	5,608,321	5,964,854	6,577,230	7,287,415
30-39	3,524,021	3,869,609	4,247,093	4,662,850	5,230,239	5,884,731	6,488,512	6,833,602	7,288,135
40-49	3,455,262	3,606,793	3,904,020	4,312,582	4,756,666	5,255,153	5,933,579	6,733,397	7,495,495
50-59	3,097,793	3,475,652	3,598,691	3,792,828	4,132,226	4,588,254	5,083,703	5,645,080	6,405,515
60-69	2,027,867	2,550,468	3,047,679	3,444,951	3,597,808	3,829,129	4,200,239	4,692,263	5,224,332
70-79	1,096,401	1,350,205	1,796,338	2,278,586	2,750,932	3,139,394	3,315,917	3,581,924	3,966,769
80 and over	82,629	90,831	105,263	141,115	190,719	235,973	277,593	293,833	323,035

Source: US. Census and AEC

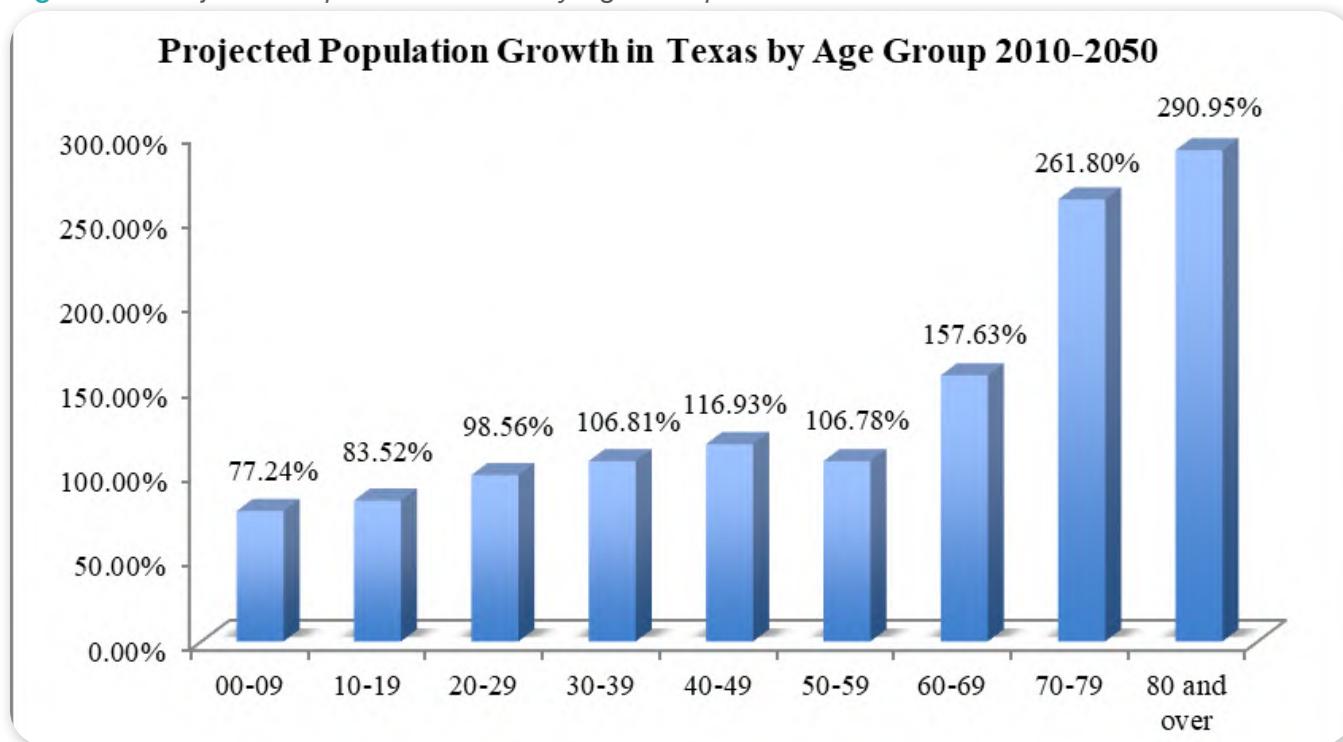
Figure A10 Household Income Distribution



Source: US. Census and AEC

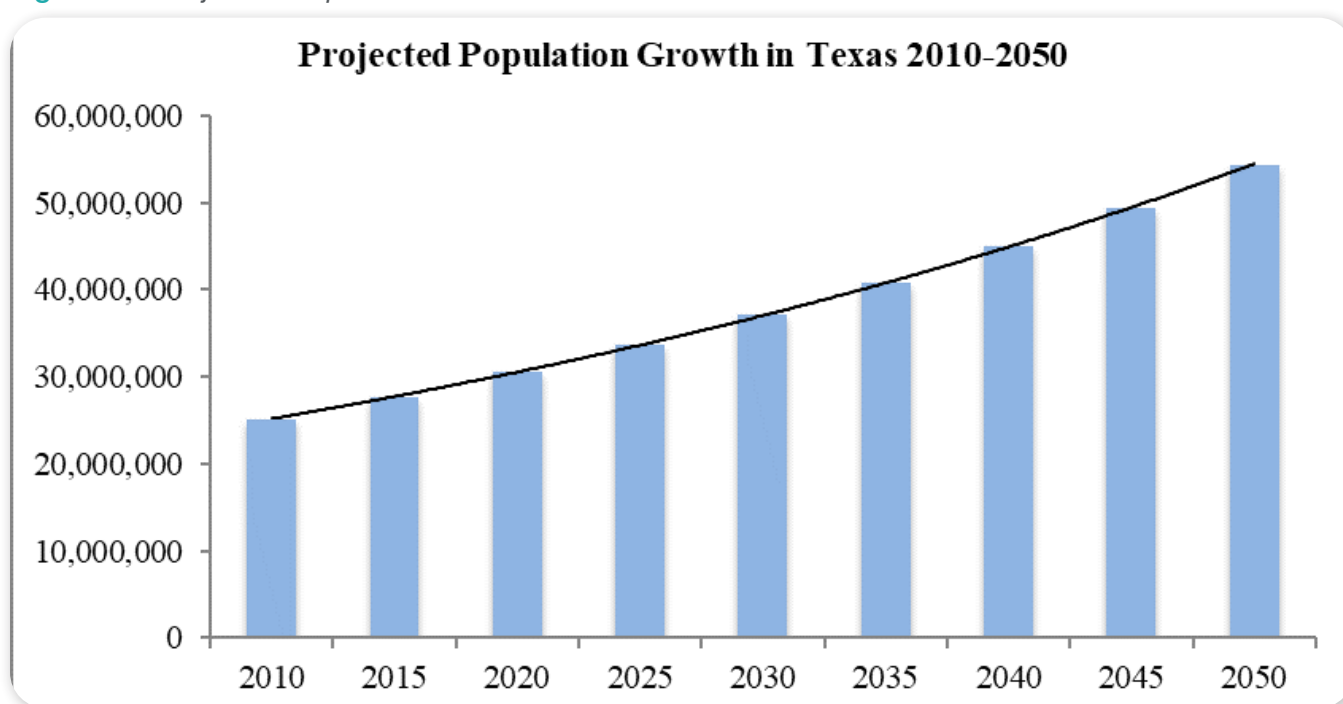


Figure A11 Projected Population Growth by Age Group 2010-2050



Source: US. Census and AEC

Figure A12 Projected Population Growth in Texas 2010-2050



Source: US. Census and AEC

**TABLE A18. EDUCATIONAL ATTAINMENT OF POPULATION 25 AND OLDER**

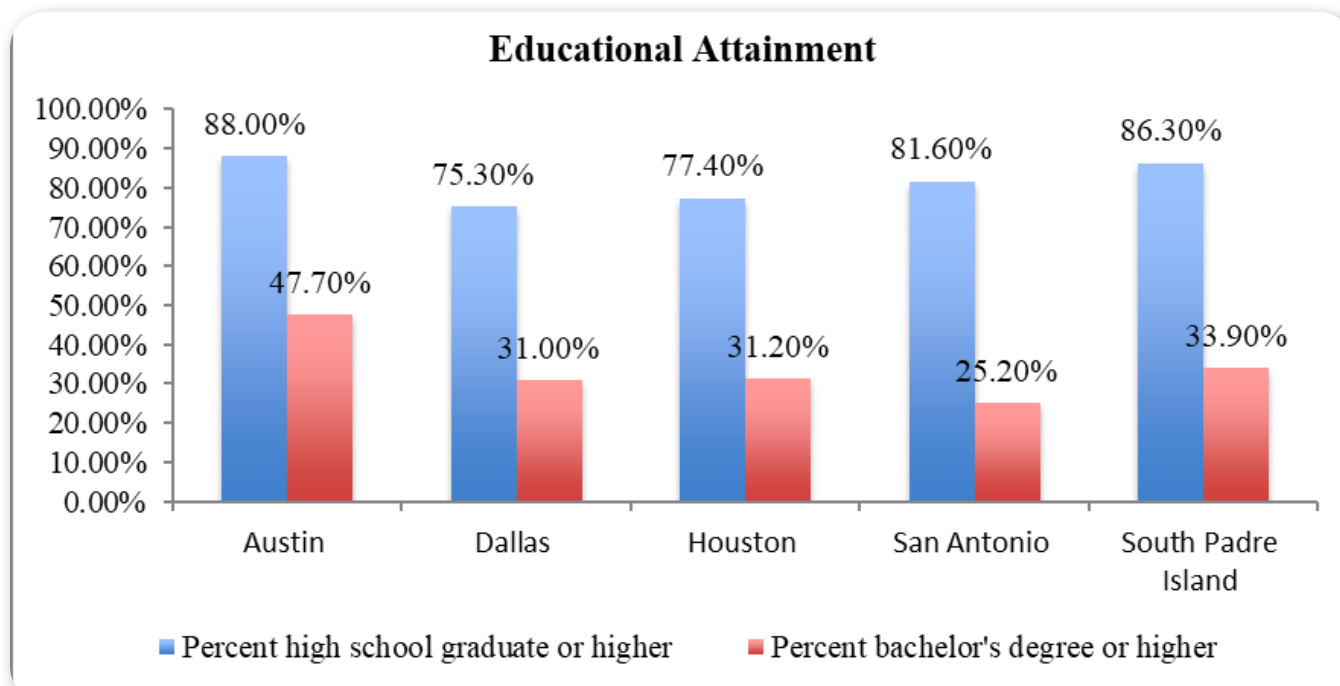
	AUSTIN CITY, TEXAS		DALLAS CITY, TEXAS		HOUSTON CITY, TEXAS		SAN ANTONIO CITY, TEXAS		SOUTH PADRE ISLAND TOWN, TEXAS	
Population 25 to 34 years	199,941	(X)	233,335	(X)	404,491	(X)	228,884	(X)	122	(X)
High school graduate or higher	180,978	90.50%	187,081	80.20%	335,503	82.90%	200,759	87.70%	85	69.70%
Bachelor's degree or higher	100,421	50.20%	81,879	35.10%	141,446	35.00%	61,308	26.80%	0	0.00%
Population 35 to 44 years	142,568	(X)	178,439	(X)	313,765	(X)	187,030	(X)	155	(X)
High school graduate or higher	125,383	87.90%	126,092	70.70%	231,956	73.90%	156,991	83.90%	144	92.90%
Bachelor's degree or higher	71,312	50.00%	49,982	28.00%	93,910	29.90%	49,508	26.50%	12	7.70%
Population 45 to 64 years	195,088	(X)	285,211	(X)	503,078	(X)	328,784	(X)	1,241	(X)
High school graduate or higher	169,452	86.90%	212,048	74.30%	381,739	75.90%	264,857	80.60%	1,047	84.40%
Bachelor's degree or higher	88,913	45.60%	83,903	29.40%	146,793	29.20%	82,344	25.00%	394	31.70%
Population 65 years and over	71,919	(X)	121,865	(X)	219,012	(X)	164,654	(X)	977	(X)
High school graduate or higher	60,556	84.20%	91,729	75.30%	165,107	75.40%	119,446	72.50%	878	89.90%
Bachelor's degree or higher	30,144	41.90%	38,168	31.30%	66,562	30.40%	36,435	22.10%	441	45.10%
Total Population	1,323,033		1,769,359		3,113,631		1,978,745		5,065	

Source: U.S. Census and AEC

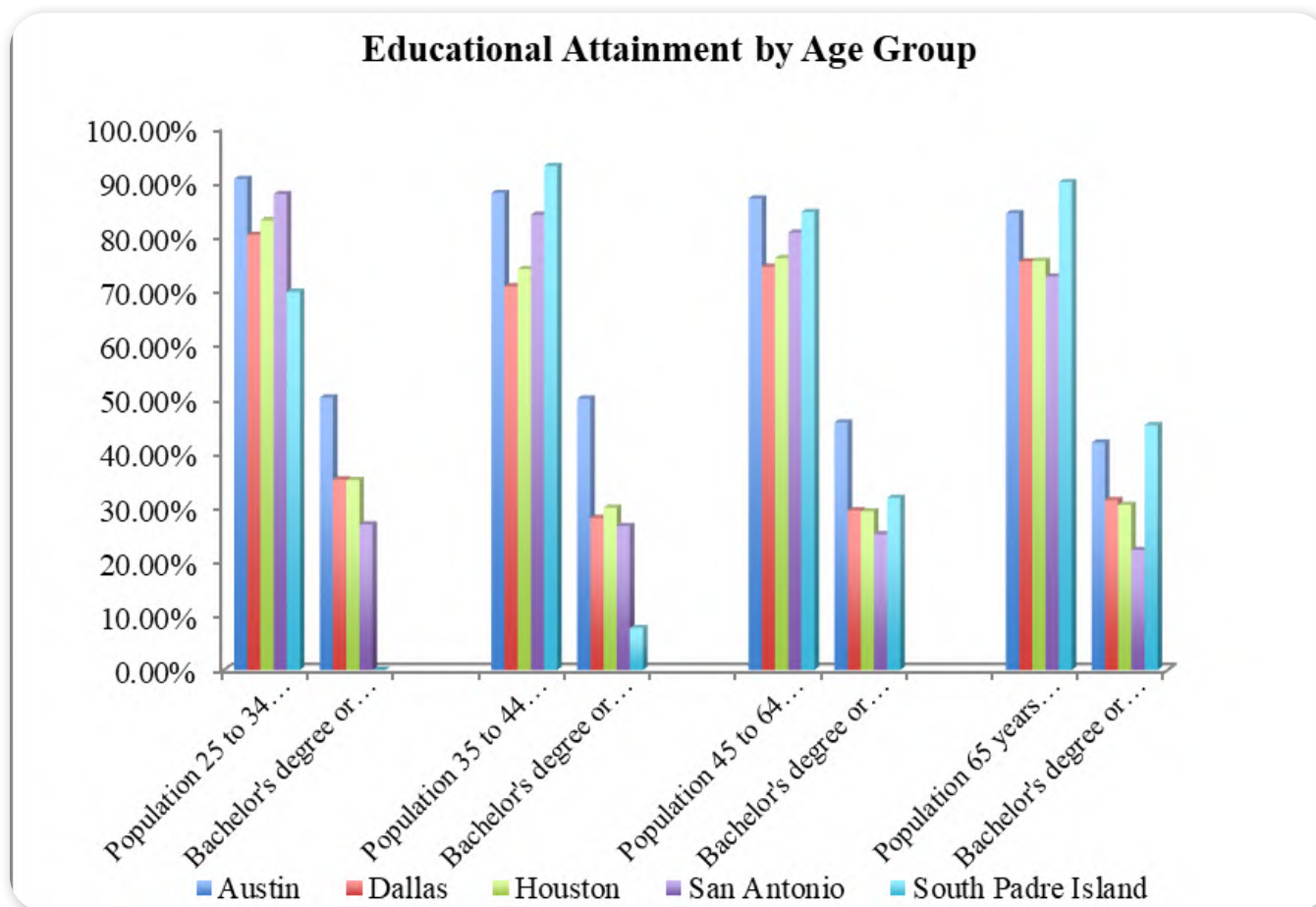
South Padre Island’s poverty rates by educational attainment are more pronounced than those of Austin, Houston, Dallas, and San Antonio at almost every level of educational attainment, especially for low levels of education. For example, people with less than a high school diploma are more than twice as likely to be below the poverty rate than their counterparts in Austin, Dallas, Houston, and San Antonio. One possible explanation is the relative lack of earning opportunities in the Rio Grande Valley region compared with bigger urban centers like Houston and Dallas.



Figure A13 Educational Attainment

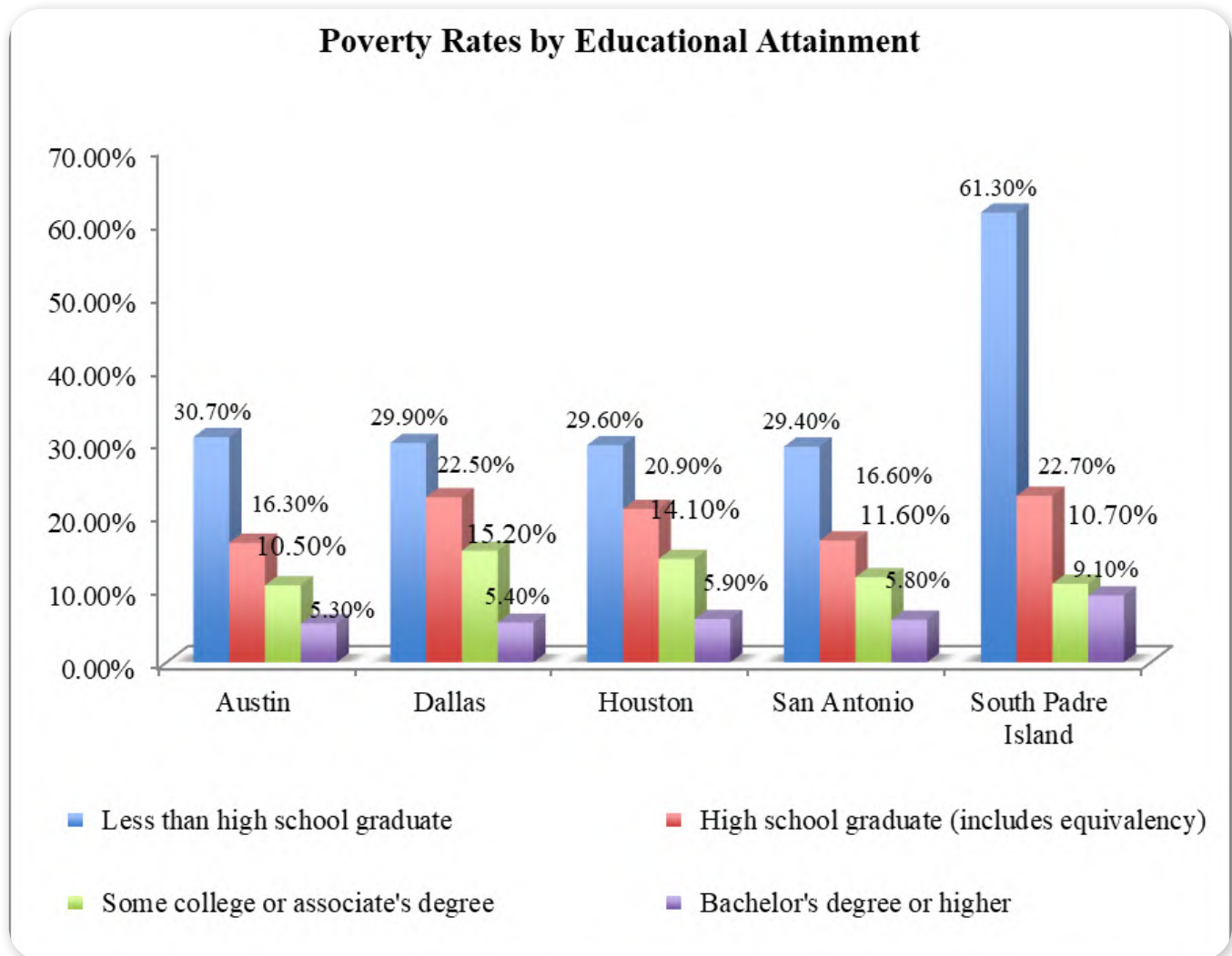


Source: US Census and AEC  
Figure A14 Educational Attainment by Age Group



Source: US Census and AEC

Figure A15 Poverty Rate by Educational Attainment



Source: US. Census and AEC



**TABLE A19. EDUCATIONAL ATTAINMENT OF POPULATION 25 AND OLDER**

<b>Median Earnings in the Past 12 Months (In 2016 Inflation-Adjusted Dollars)</b>	<b>Austin</b>	<b>Dallas</b>	<b>Houston</b>	<b>San Antonio</b>	<b>South Padre Island</b>
Population 25 years and over with earnings	39,552	32,000	31,924	31,346	35,155
Less than high school graduate	20,453	20,944	19,725	18,939	-
High school graduate (includes equivalency)	26,381	24,995	24,269	25,393	29,000
Some college or associate's degree	33,553	31,811	31,186	31,464	34,444
Bachelor's degree	49,364	54,150	55,089	48,622	70,292
Graduate or professional degree	67,399	73,358	75,485	62,283	-

Source: U.S. Census and AEC

## Economic Profile, Strategic Location, Employment & Development Trends

In this section, Aaron Economic Consulting (AEC) provides a shift-share analysis of the economy of Cameron County. Shift Share analysis help identifies industries that are growing and those that are contracting as well as the reason for their growth or contraction. A detailed explanation of Shift Share analysis is included in the appendix for this chapter.

As stated in previous sections, the economy of South Padre Island is heavily reliant on tourism. In fact, most businesses are directly or indirectly connected to the hospitality and tourism industry. South Padre Island's location makes it an ideal tourist destination at the exclusion of every other vocation. However, its location at the southern most point in the U.S. and across from Mexico is strategic. Although, its layout and location makes it unsuitable for manufacturing or other types of industrial activities, South Padre Island is located in the heart of a region with significant potential for industrial activity. The construction of a launch site for Space X across from the Island, the construction of liquefied natural gas terminals at the Port of Brownsville, and the potential construction of a steel mill at the Port of Brownsville are all within very short driving distance from the Island. In addition, Matamoros, Mexico, Maquila industries offer other opportunities as businessmen, managers, engineers, and consultants travel regularly from their company headquarters from all over the U.S. and the world to their manufacturing facilities in Matamoros.

# Existing Economic Conditions & Labor Force (Local and Regional)

The economy of the Lower Rio Grande Valley has experienced modest growth over the last 10 years. The largest employing industries by NAICS code are Education and Health Services with 29 percent of total employment, Leisure and Hospitality including restaurants and other eating places 19 percent, Trade, Transportation and Utilities with 18 percent, Elementary and Secondary Schools with 13 percent, Home Health Care Services 11 percent.

The Bureau of Labor Statistics show that labor participation and unemployment in South Padre Island are lower than in Texas and the U.S. In fact, the number of jobs in South Padre Island exceeds the number of year round residents. Most of the jobs are in the hospitality and tourism industries, and are filled with people from surrounding areas. Table 22 shows a labor force participation in South Padre Island of 54 percent and an unemployment rate of 1 percent compared to 64 percent in the U.S. with 5 percent unemployment, and 65 percent in Texas with 4 percent unemployment. Table 23 shows employment distribution by industry in South Padre Island, Texas, and the U.S. Additional labor data is included in the appendix for this chapter.

TABLE A22. LABOR FORCE AND EMPLOYMENT STATUS						
Subject	United States		Texas		South Padre Island, Texas	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Employment Status						
Population 16 years and over	253,323,709	253,323,709	20,599,223	20,599,223	2,609	2,609
In labor force	160,818,740	63.50%	13,312,277	64.60%	1,417	54.30%
Civilian labor force	159,807,099	63.10%	13,219,523	64.20%	1,417	54.30%
Employed	148,001,326	58.40%	12,371,392	60.10%	1,392	53.40%
Unemployed	11,805,773	4.70%	848,131	4.10%	25	1.00%
Armed Forces	1,011,641	0.40%	92,754	0.50%	0	0.00%
Not in labor force	92,504,969	36.50%	7,286,946	35.40%	1,192	45.70%

Source: Bureau of Labor Statistics and AEC



**TABLE A23. SOUTH PADRE ISLAND’S INDUSTRIES**

Industry	United States		Texas		South Padre Island, Texas	
	Estimate	Percent	Estimate	Per-cent	Es-ti-mate	Per-cent
Civilian employed popula-tion 16 years and over	148,001,326		12,371,392		1,392	
Agriculture, forestry, fish-ing and hunting, and min-ing	2,843,703	1.90%	412,286	3.30%	29	2.10%
Construction	9,256,637	6.30%	991,020	8.00%	56	4.00%
Manufacturing	15,316,355	10.30%	1,105,928	8.90%	0	0.00%
Wholesale trade	3,993,420	2.70%	371,317	3.00%	0	0.00%
Retail trade	17,027,853	11.50%	1,425,241	11.50%	119	8.50%
Transportation and ware-hous-ing, and utilities	7,411,283	5.00%	677,152	5.50%	91	6.50%
Information	3,131,838	2.10%	221,994	1.80%	40	2.90%
Finance and insurance, and real estate and rental and leasing	9,731,609	6.60%	818,426	6.60%	197	14.2%
Professional, scientific, and management, and ad-minis-trative and waste management services	16,516,075	11.20%	1,386,202	11.20%	151	10.8%
Educational services, and health care and social as-sistance	34,202,980	23.10%	2,676,715	21.60%	472	33.9%
Arts, entertainment, and recre-ation, and accommo-dation and food services	14,316,298	9.70%	1,115,923	9.00%	183	13.1%
Other services, except public administration	7,275,839	4.90%	652,272	5.30%	44	3.20%
Public administration	6,977,436	4.70%	516,916	4.20%	10	0.70%

Source: Bureau of Labor Statistics, Census, and AEC

## Business Resources and Incentive

There are a number of incentives available to businesses and entrepreneurs both at the local and state levels. Texas communities may offer financial incentives made possible by local sales and use tax allotments dedicated to economic development. Usually this type of financing requires businesses to enter into a performance agreement.

Tax Abatements are one of the most important incentives for business recruitment and start-ups. Authorized by the state legislature, this incentive relieves businesses and industries of taxes on a portion of or all increase in the value of a property or capital investment after the date of the abatement agreement. The abatement does not apply to taxes on existing property, so no properties are taken off of the tax rolls. Instead, the financial incentive is designed to encourage businesses and industry to make new investments that will create jobs and increase property values.

Tax abatement agreements include contracts to monitor performance, and annual reviews of a company's investment and job growth. If the terms of the contract are not met, local governments may reduce the allowed abatement by a percentage proportional to the percentage of the contract that has not been accomplished. Limits also may be placed on total allowed abatements over the abatement term.

Section 380 Economic Development Agreements of the Texas Local Government Code permits municipalities to enter into agreements with developers to fund public improvements for economic development projects. Section 380 agreements have been subject to litigation, and in 2005, the Texas Constitution was amended by popular vote to clarify that these development agreements are constitutional. It also has been determined that these agreements may apply to projects in a city's extraterritorial jurisdiction (ETJ) and that bonds or sales tax revenues may be used to fund a Section 380 project.

Sales tax financing has proved popular with Texas municipalities, primarily because no ad valorem (property) tax revenues must be used and Section 380 agreements involving retail projects are not uncommon. Section 380 agreement terms vary according to project, but an agreement involving the use of sales tax revenue typically provides that a local government rebate future sales tax revenues generated by the project over a specific term (often a 20-year period) in return for the business undertaking agreed-upon actions or improvements. The development agreement will include a percentage of sales tax revenues that will be rebated annually, and a cap usually is placed on the total amount of sales tax rebates a developer can receive. The agreement may also contain a project completion date and a requirement that incentives will only be paid when the project is operational. Other terms and conditions may be set—some relating to the design of the project, if desired—and the tax rebate is usually tied to the fulfillment of contract terms. If a developer fails to meet these terms, the municipality may reduce the tax rebate by a proportional percentage. Section 380 agreements do not have to be retail projects and can involve a variety of activities, as long as they meet the general goal of promoting economic development.

Economic Development Grant Program – Local Government Code Sec.380.003. A municipality may, as an agency of the state, provide matching funds for a federal program that requires local matching funds from a state agency to the extent state agencies that are eligible decline to participate or do not fully participate in the program.

Tax Increment Financing (TIF) is another economic tool authorized by the Texas legislature. A community can use TIF to finance new buildings and infrastructure within a designated development area, typically to attract new business development. Under TIF, a local government establishes a project area and “freezes” the taxes in the area at the rate of the year in which the TIF project originates. This “freeze” will last for a designated period. As the project is constructed and its appraisal value increases, the new taxes owed will be used to finance public improvements in the form of site improvements and development costs. Ideally, these public improvements will induce new private investment. The local government usually uses a bond to pay for project development and then assigns

the new taxes collected (the “tax increment”) to pay off the bond. Once the bond is paid off (or the TIF period expires), the property with the new development will be returned to the tax rolls at the prevailing tax rate.

Tax Increment Reinvestment Zones (TIRZ) Tax increment financing (TIF) is a financing method local governments can use to pay for improvements that will draw private investment to an area. Tax increment financing isn’t a new tax; instead, it redirects some of the ad valorem tax from property in a geographic area designated as a Tax Increment Reinvestment Zone (TIRZ) to pay for improvements in the zone.

When a municipality or county creates a TIRZ, it records the total taxable value of all real property within the zone. It’s like a snapshot in time of what the property values are at that specific moment. That snapshot is the zone’s base value.

Each year, property taxes collected in the zone on base value continue to go into the municipality’s or county’s general fund, as most property taxes do. But as property in the TIRZ develops and becomes more valuable, a portion of the taxes collected on property above the base value is deposited into a tax increment fund. Revenue deposited in the tax increment fund can be only used to financing projects within the zone, including infrastructure, facade programs, landscaping or practically any type of public enhancement.

Tax Increment Reinvestment Zones generally last 20 to 25 years, but some last longer. The return on the investment in infrastructure isn’t going to come overnight or even in one or two years. When a local government makes the commitment to create a TIRZ, it’s a long one. A TIF project jumpstarts development to get things moving a bit faster and, ultimately, to generate new tax revenue.

Enterprise Zones is a program that was established under a federal program, Enterprise Zones are a state economic development program that applies to areas that have high poverty and unemployment rates. This program is designed to promote job creation, workforce development, and economic revitalization by giving benefits to businesses that agree to locate within or near a designated Census block (“Enterprise Zone”) that had a 20 percent or greater rate of poverty in the 2010 Census. Enterprise Zone benefits primarily target new businesses or industries, but it also is possible to receive benefits for business retention. Under state law, Enterprise Zones automatically qualify as areas for local tax abatement and tax increment financing, which provide additional incentives for new business development.

Texas Enterprise Zone Program (EZP) is a state sales and use tax refund program designed to encourage private investment and job creation in economically distressed areas of the state. Texas communities nominate companies in their jurisdiction to receive Enterprise Zone expenditures by submitting an application on the company’s behalf. Companies must contribute information to the application packet where required. Companies must meet minimum capital investment thresholds and create and/or retain jobs that employ a certain percentage of economically disadvantaged individuals, enterprise zone residents, or veterans.



Revolving Loan Fund are loan programs offered by some Texas Counties and usually administered by Economic Development Corporations. To qualify a business or industry creates or retains jobs within the funding county while producing goods or services that are exported to areas outside of the county. The county presets the maximum loan amount and the term of the loan is tied to the life of the assets financed. Revolving loan funds have interest rates that are at or above current market rates.

Texas Enterprise Fund provides economic development funds to attract or retain major businesses in Texas. Funds are used as incentives in competitive situations and must be approved by the Governor, Lieutenant Governor, and Speaker of the House.

Workforce Development is offered by the Texas Workforce Commission who administers the Skills Development Fund (SDF), a program that provides financial assistance to businesses that seek to create job training opportunities. To apply, a business must partner with a local community/technical college or community organization that works with one of these colleges. The fund allots an average of \$1,000 per worker for job training, but the total amount awarded may be limited to \$500,000 per business .

Opportunity Zone are a new community development program established by Congress in the Tax Cuts and Jobs Act of 2017 to encourage long-term investments in low-income urban and rural communities nationwide.

The Opportunity Zones program provides a tax incentive for investors to re-invest their unrealized capital gains into opportunity funds that are dedicated to investing into opportunity zones designated by the chief executives of every U.S. state and territory.

Each state may designate up to 25 percent of its eligible low-income census tracts as Opportunity Zones. After an extensive analysis of Texas' eligible tracts, and using a multi-step process to identify eligible areas in particular need due to chronic unemployment, lower population density, and significant economic disruptors such as natural disasters within the past two years, Texas designated 628 census tracts in 145 counties as opportunity zones.

Table A20 *Smart Incentives*

## Smart Incentives

**Is this a good deal?** Smart incentives start with a solid understanding of the benefits they are likely to generate. This can be evaluated along three lines:

### Project benefits:

- Does it fit with your economic development strategy?
- Does it have favorable characteristics (jobs, wages, investment, location)?
- How does it compare with the risk level?
- What is the likelihood of success?

### Fiscal & Economic Impact:

- What is the estimated contribution to the local economy?
- How do projected tax revenues compare with any increase in cost of service?
- What is the timing of the incentive, and what are the implications with regard to budget?

**Was this a good deal?** A smart policy means taking time to figure out what is working and what is not.

- Monitor compliance using clearly defined performance agreements.
- Evaluate performance after the fact. Did the incentive affect the choices businesses made? Were there any existing businesses harmed? Did the project's benefits outweigh the costs of incentives?
- Report findings and use them to inform future incentives policies.

Source: Business Development Advisors presentation to the National League cities, Economic Development Financing Tools workshop, November 2013

# Economic and Incentives Recommendations

## Incentives Recommendations

There are an array of economic development incentives and programs available to communities. However, to remain in a strong financial position, communities must have a conservative approach when choosing incentives, and be selective about which project to award incentives to and which ones to reject.

## Establishing an Economic Development Incentive Policy

Using financial incentives for economic development purposes generally involves the transfer of public funds to private parties to entice them to locate a business or make investments in the community. This process is an asymmetric one that introduces risk factors (moral hazard and adverse selection) usually not found in other public financing areas. For this reason, economic development incentive policies should set restrictions with regards to the community economic development goals.

The Government Finance Officers Association (GFOA) has a set of best practices that can guide municipalities when developing economic incentive policies. The GFOA recommends that before using economic development incentives, municipalities should create a policy that clearly set the proper use of economic development incentives and that the finance officer actively participate in the development of the incentives policies.

Economic development incentives policies should include the following core features:

- **Goals and Objectives.** Measurable Goals and Objectives create a framework for accountability when using economic development incentives.
- **Financial Incentive Tools and Limitations.** An economic development policy should establish a list of projects the town will consider for incentives and the type of incentives it will apply to each type of project.
- **Evaluation Process.** Clear evaluation metrics should be outlined in an economic development policy for the purposes of consistency and transparency. The evaluation metrics should include:
  - A list of required documentation for the economic development application.
  - An impact analysis of the incentivized project on:
    - Tax impact, both in terms of increases in taxable value and, where a TIF is proposed, the impact on all overlapping taxing jurisdictions.
    - New jobs created.
    - Cannibalization of existing businesses.
    - A cost/benefit analysis.
    - How a proposed project meets established priorities and criteria for economic development.
    - A determination of whether the project would proceed if incentives were not offered.
    - A list of officials who are a part of the review team.
- **Performance Standards.** An economic development policy should require that specific performance standards and milestones with timelines be established for each project receiving incentives. Performance standards and milestones help a community assess progress and the effectiveness of its economic development program. In addition, performance standards and milestones can be used to recover promised financial benefits when recipients fail to fulfill their commitments.
- **Monitoring and Compliance.** A process should be established to monitor progress of incentivized projects. The policy should have organizational placement and staff to monitor and insure compliance. Ongoing monitoring of these projects should become part of an overall economic development program.

# 6

# Master Thoroughfare Plan



# Introduction

## Purpose of the Master Thoroughfare Plan

A Master Thoroughfare Plan (MTP) establishes a community's transportation policy direction and provides a long-term vision of the major street network necessary to meet future mobility needs. The thoroughfare network forms one of the most visible and permanent elements of the community. The MTP, Future Land Use Plan and Comprehensive Master Plan establish the framework for community growth and development, and forms a long-range statement of public policy.

This plan serves as the primary tool to enable the City to preserve future corridors and the necessary right-of-way to establish appropriate thoroughfare corridors as development occurs and to improve the existing street system as the need arises. The MTP locates and classifies streets by needed capacity for through traffic, access to adjacent land uses, and compatibility with each street's development character. Street design guidance in this plan provides the ability to better integrate networks of other mode choices, including walking and bicycling. The plan guides future investments and provides the public and the development community with information about the long-term plan for the road network. Simply put, a Master Thoroughfare Plan is a community's blueprint for a safe, efficient, and sustainable transportation system. It seeks to create and sustain a system that balances local and regional priorities and existing and future conditions, to steer the community toward its vision for the future.

**The Thoroughfare Plan Classification section** includes information related to roadway classification, right-of-way requirements, basic design criteria, and future alignments and roadways.

**The Thoroughfare Design Standards section** provides guidance on sidewalk, on-street parking, and bicycling design to support alternative modes of travel and also includes typical sections for each type of thoroughfare classification.

**The Implementation and Recommendations section** outlines recommended prioritization of transportation improvement needs to provide the City with the ability to best determine effective timing for mobility investments. It also discusses additional steps for successful implementation of the MTP.



## City Overview

The City of South Padre Island is a coastal city located on a barrier island of the same name along the Gulf Coast of Texas. The City has a burgeoning variety of permanent and seasonal residents and visitors. Many people who work on the Island, live elsewhere and commute to the City every day. Visitors peak during Spring Break and the summer, causing high demands on Queen Isabella Causeway, the only road connecting the City to the mainland, and the existing thoroughfare network.

“Wave was very kind to my mother with mobility issues”

- Open House

## Existing Transportation System

### Existing Thoroughfare Network

Figure 1 shows the City’s existing thoroughfare network. PR 100 (Padre Blvd) is the spine that runs north-south along the City of South Padre Island and is currently under design and construction for sidewalks, medians and boardwalks. It is currently a five-lane undivided roadway north of Dolphin Street and a four-lane divided roadway south of Dolphin Street maintained by the Texas Department of Transportation (TxDOT). The buildings along PR 100 (Padre Blvd) are at a significantly higher elevation



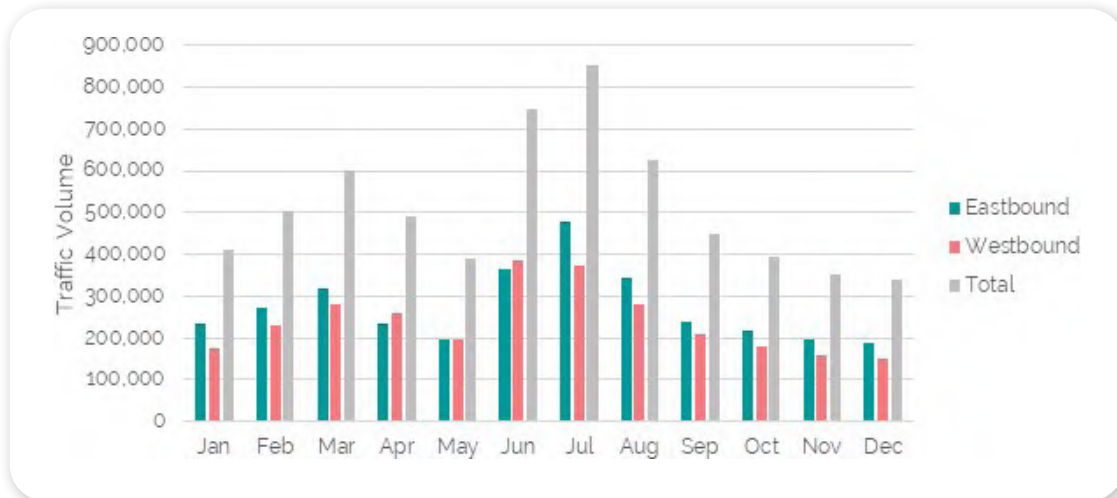
Queen Isabella Causeway

than the adjacent roadway sidewalk due to changes in Base Flood Elevation requirements over the years. There is a significant amount of pull-in parking spaces along PR 100 (Padre Blvd) where drivers can drive over the sidewalk to park on private property. Laguna Blvd and Gulf Blvd are the other two streets that run north-south along South Padre Island. Gulf Blvd is a two-lane undivided street that was reconstructed in 2017 to include parallel on-street parking along the west side, brick paver crosswalks, and a shared use path on the east side of Gulf. Laguna Blvd is currently a two-lane undivided street with an eight-foot sidewalk along the east side of the road. There are 55+ east-west streets along the Island, most of which do not currently have curb and gutter or sidewalk. Of these east-west streets, some are private and some have been recently reconstructed to include elements such as curb and gutter, sidewalk, and parallel on-street parking.



## Traffic Volume Trends

The traffic demand on the network is variable to the season due to the tourism attractions of South Padre Island. There are relatively few year-round residents and a significant amount of people commute from other cities in Cameron County and the Lower Rio Grande Valley to the Island daily to access their employment. South Padre Island’s peak season is during spring break and summer, as seen in the spikes of traffic crossing the causeway in March, June, July and August in **Figure 2**.



**Figure 2** - 2017 Causeway Crossing Data Provided by SPI PD (with volume adjustments for missing information in August and September)

## Bicycle and Pedestrian System

PR 100 (Padre Blvd) is currently under design and construction to implement new ADA compliant sidewalk and buffered bike lanes. Gulf Blvd currently has sidewalk on the west side and a shared use path on the east side, while Laguna Blvd currently has an eight-foot sidewalk on the east side. Most east-west streets operate at slow speeds and are comfortable for bicyclists, but do not have consistent sidewalk along at least one side of the street currently. This lack of a connected bicycle and pedestrian system pushes people to walk on the street and jaywalk across PR 100 (Padre Blvd). A majority of bus riders in South Padre Island walk to the bus stop and walk from the bus stop to their final destination, making a connected bicycle and pedestrian system even more imperative.



Existing Sidewalk on E Red Snapper St

## Transit System

South Padre Island is currently served from 7:00AM to 9:00PM by Island Metro, a fare-free transit service, that also includes routes to Port Isabel and Laguna Heights. Although South Padre Island has the lowest ridership out of the three routes, it experiences the most dramatic variances in ridership in March when students have Spring Break. Island Metro's South Padre Island Route runs north-south on PR 100 (Padre Blvd) from the transfer center on the south end to the Convention Centre to the north, north-south on Gulf Blvd from Harbor St to Sunset Dr, and crosses between Gulf Blvd and PR 100 (Padre Blvd) on East Harbor St and East Sunset Dr. A study was completed in February 2017 that discusses transit efficiency and effectiveness on South Padre Island and also recommends improvements to the transit system that the City can implement in the future.

## Key Considerations

The following key considerations guided the development of this Master Thoroughfare Plan and the project prioritization:

- **Parking Capacity** – prioritizes projects that maximize the parking capacity of the Island to meet the General Land Office (GLO)'s requirements.
- **Connectivity** – enhance access and connectivity across the community for all modes of transportation.
- **Maintenance** – prioritizes projects that requires urgent maintenance.
- **Emergency Access** – provide adequate access for emergency vehicles to reach their destination in a safe and timely manner.

## Transportation Planning Framework

The following previously adopted plans of the City and County were used to inform this Master Thoroughfare Plan and are summarized as follows:

### 1994 Cameron County Thoroughfare Plan

The 1994 Cameron County Thoroughfare Plan shows the PR 100 (Padre Blvd) alignment closer to the bay side than the beach side, where it has actually been built.

### 2008 Town of South Padre Island Comprehensive Plan

The comprehensive plan sets forth the Town of South Padre Island's vision and blueprint for its future physical and economic development.

## 2011 Padre Boulevard and Entertainment District Form-Based Code (Revised in 2015)

This Form Based Code was developed to “revitalize Padre Boulevard to be an attractive, vibrant commercial corridor in the community, and to develop the Entertainment District into a walkable, mixed-use regional destination.”

## 2011 City of South Padre Island Transportation Plan Report

This transportation report presents a comprehensive set of roadway, transit and parking recommendations to address future mobility and development needs.

## 2016 City of South Padre Island Street Master Plan

The City of South Padre Island Street Master Plan was developed by City Staff to “create aesthetically pleasing and functionally connected side streets within the City” and also to “provide conceptual ideas and alternatives for engineering phases” for the areas from Oleander Street to Morningside Drive.

## 2016 PR 100 (Padre Blvd) Raised Median Analysis

This document was developed to address the impacts of implementing raised medians where a two-way left-turn lane existed before, as well as evaluating the problematic areas with close driveway access spacing, conflict points or other operational issues, and to recommend the appropriate improvements to PR 100 (Padre Blvd) from Kingfish St to the Convention Centre. This document is the base analysis for the PR 100 (Padre Blvd) Median Construction project anticipated to be constructed in 2019. The future median openings shown in the Master Thoroughfare Plan Classification Map are based on this analysis and the construction plans agreed upon by the City and TxDOT.

## 2017 South Padre Island Transit Efficiency and Effectiveness Study Final Plan

This document was developed to “help identify new strategies and service designs to meet the growing needs of the region and serve as a blueprint for decision makers to rely on when considering service changes in the future.”

## 2022 City of South Padre Island Comprehensive Plan

City Council approved the 2018 City of South Padre Island Comprehensive Plan in January 2022



# Public Input

An important component of the creation of the City of South Padre Island's MTP was the identification and integration of the community's transportation priorities, which acted as a guide for the development of the new plan. Instead of addressing limited components of the network with a focus only on vehicular movement, current transportation planning best practices include improving the efficiency of the system in ways that promote the community's values. Cities are implementing complete streets and context sensitive solutions to create safer, more livable and visually appealing places that consistent with their social, environmental and economic values. For this MTP, the priorities of residents, business owners, and community leaders were evaluated to reflect the desires of the community.

The public input process was designed to encourage involvement from a broad spectrum of stakeholders in a variety of formats.

The **First Public Meeting** took place on Thursday October 5th, 2017 from 4:00PM to 6:00PM at City Hall. The information displayed and discussed at the meeting included street classifications, typical sections, and improvements to parking and sidewalk on each street. Stakeholders were able to discuss the information with City staff and the consultant team and were encouraged to write their thoughts on comment cards. Generally, stakeholders gave insight on which streets are private, where they are experiencing major drainage issues, and what they like and dislike about the current design and construction of PR 100 (Padre Blvd).



First Public Meeting

The **Second Public Meeting** took place on May 1st, 2018 from 4:00PM to 6:00PM at City Hall. The information displayed and discussed included updated materials from the first public meeting and also the initial prioritization tables. Stakeholder participants were invited to visit, walk through, and provide feedback. Generally, stakeholders gave insight on the need for a median opening at Clipper Lane, the City's sidewalk installation requirement and Sidewalk In-Lieu Payment program, and what they like and dislike about various street elements on Laguna Blvd and Gulf Blvd. The insight provided by stakeholders at both public meetings has been incorporated into this plan.

# Thoroughfare Plan Classification

## Master Thoroughfare Plan Overview

The Master Thoroughfare Plan is the tool that enables the City to preserve future roadway corridors, to protect or acquire the necessary right-of-way to improve the local transportation system, and to guide the City in its endeavor to develop a cohesive street look.

The Master Thoroughfare Plan Classification Map is presented in [Figure 3](#).

## Functional Classification System

The City of South Padre Island’s transportation network comprises of a variety of standard street types, with the overall system designed to maintain a balance between mobility (the through movement of trips) and access to destinations. The network is made up of five classifications of streets: Arterial, Major Collector, Minor Collector, Local, and Established Local Street.

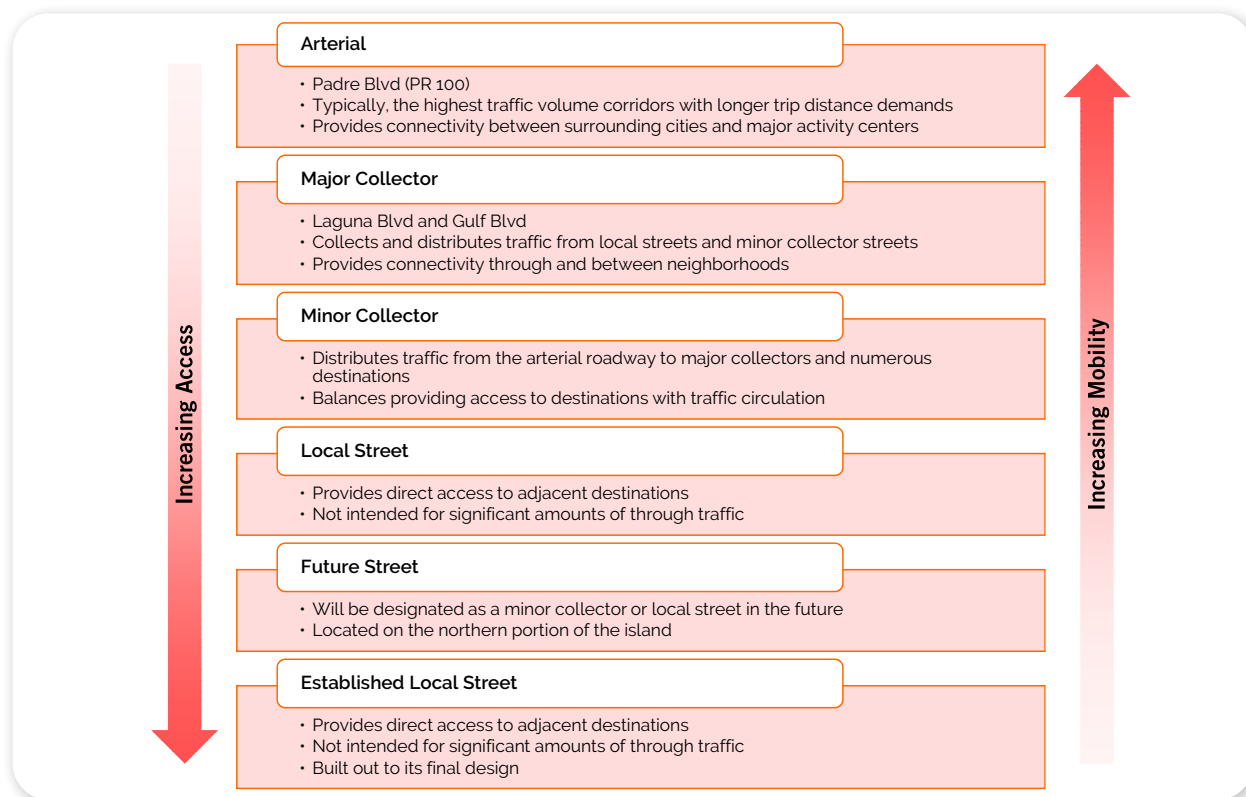


Figure 3 South Padre Island Master Thoroughfare Plan - Classification Map



## One-way Street Considerations

Currently the City of South Padre Island's transportation network is comprised of two-way streets. The City wants to consider potentially converting some of its two-way streets to one-way streets due to safety concerns from citizens, especially during the City's peak tourist season. Traffic congestion on the Island becomes a large concern since PR 100 (Padre Blvd) is the Island's only arterial. When there is large queueing on PR 100 (Padre Blvd) that affects side street access, there have been accounts of emergency vehicles not being able to reach their destination in a timely manner.

Typically, one-way streets result in faster traffic flow with less turning movements at intersections and easier traffic signal coordination. Converting from two-way to one-way could provide additional space for other improvements, such as bike lanes, wider sidewalks, curb extensions, landscaped islands and angled parking. On the other hand, two-way streets create a standard grid of streets that is more intuitive for drivers, particularly visitors who are unfamiliar with the area. Unexpected one-way streets can lead to wrong-way driving and increased safety hazards and need to be designed and implemented under the supervision of an engineer. Two-way streets can also reduce trip length due to improved accessibility to the destination.

## Extraterritorial Jurisdiction

The extraterritorial jurisdiction (ETJ) includes an area outside the City limits where the City can make certain decisions in agreement with the encompassing County. This Master Thoroughfare Plan does not include planning for thoroughfares in the City's ETJ, but in the future it should be in compliance with the Metropolitan Planning Organization (MPO) Plan.

# Thoroughfare Design Standards

## Alternative Modes of Travel

A city's active transportation network is intended to provide transportation alternatives and recreational opportunities for people of all ages and abilities. The installation of pedestrian and bicycle facilities can be the most visible element of a city's multimodal transportation network. The use of sidewalks, trails and bicycles is a transportation choice that benefits personal health, reduces traffic congestion and air

pollution, and enhances quality of life by creating opportunities for cost savings and social interaction. Increased bicycle and pedestrian facility choices not only address safety, but enhance long-term community livability, create welcoming streets and neighborhoods, and strengthen local economic competitiveness.

## Complete Streets

Complete Streets is a concept that supports the idea that streets should be designed for everyone, with safe access for pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. There is no single design for a Complete Street and typical sections are not intended to be rigid, but rather to act as templates that can be adapted to fit the local context, the adjacent land use and development type, and the physical and financial constraints of each future roadway project.

## Typical Sections Refinement

The typical sections development was guided by the key considerations of the South Padre Island community and refined based on the recent roadway construction and constraints seen on South Padre Island.

## Recent Construction

A number of streets on South Padre Island have been redesigned and constructed prior to or during the development of this document. Therefore, the typical sections created did not deviate significantly from prior designs to still give a consistent approach to each roadway classification.

## Constraints

Although the right-of-way (ROW) of each minor collector and local street is 50', there are many streets that have palm trees and landscaping in the ROW that limit the actual width of roadway and sidewalk that can be designed and implemented. Along with the limited width, many of the buildings along each minor collector and local street were built at a finished floor elevation much higher than the street. Due to this difference in elevation, it is difficult at times to redesign each street with sidewalks on both sides, while accommodating driveways and remaining ADA compliant. The City has also focused on proper drainage throughout the Island and on its roadway network due to rising tides and sea levels. Therefore, the typical sections were refined to accommodate these constraints.



## On-street Parking

The City must meet the Open Beaches Act’s parking requirements of “parking on or adjacent to the beach... to accommodate one car for each 15 linear feet of beach.” The City has approximately 25,897 feet of total linear beachfront, which results in a total of 1,726 parking spaces required. Therefore, the City has implemented a parking analysis and digital parking tool to measure and document their on-street parking spaces. For an on-street parking space to be counted under the Open Beaches Act’s parking requirement, the street must be built with curb and gutter. Along with that, many unimproved side streets have parking prohibited or restricted to certain seasons. The City needs to prioritize streets with high on-street parking potential to meet the parking requirements. [Figure 4](#) shows the different types of on-street parallel parking across the City, including allowed, existing marked, future marked, and prohibited.



Parallel On-Street Parking on W Aries Dr

## Sidewalk

As discussed earlier in the report, it is difficult at times to redesign each street with sidewalk along both sides of the street. Therefore, sidewalk was proposed for at least one side of every street to ensure a connected pedestrian facility network. As part of reconstruction of each street existing and proposed sidewalk along the City can be seen in [Figure 5](#).

Figure 4 South Padre Island Master Thoroughfare Plan - Parallel On-Street Parking Map

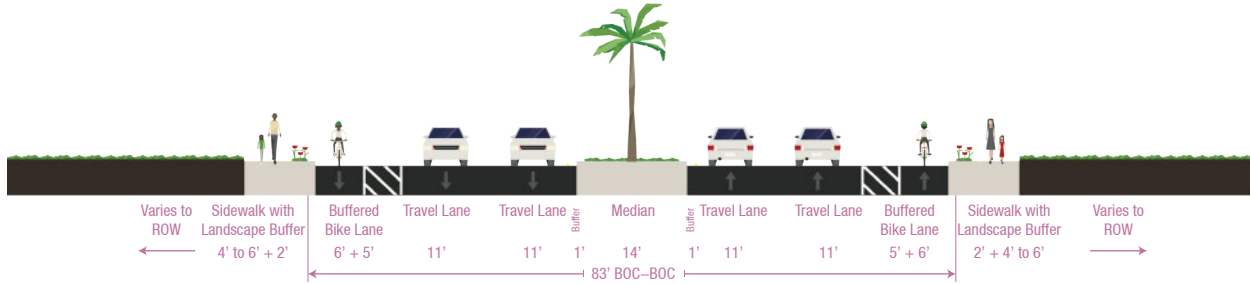




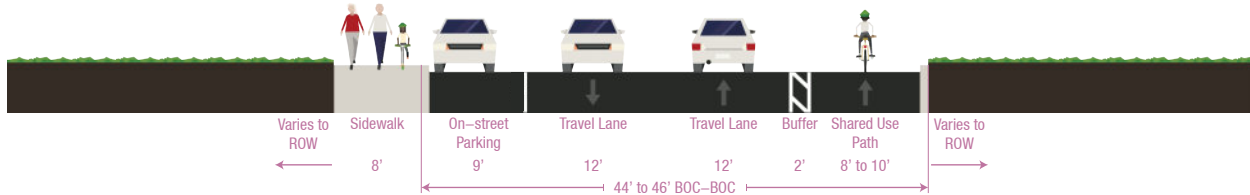
# Typical Sections

The following typical sections illustrate the standard design for each thoroughfare functional class. Each section represents the predominant section of roadway and identifies the preferred street elements and widths.

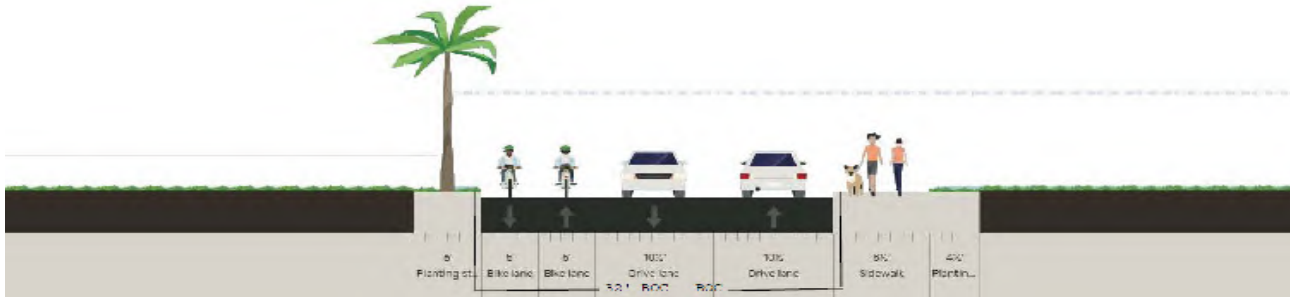
## Arterial (100' ROW) - PR 100 (Padre Blvd)



## Major Collector (75' ROW) - Gulf Blvd

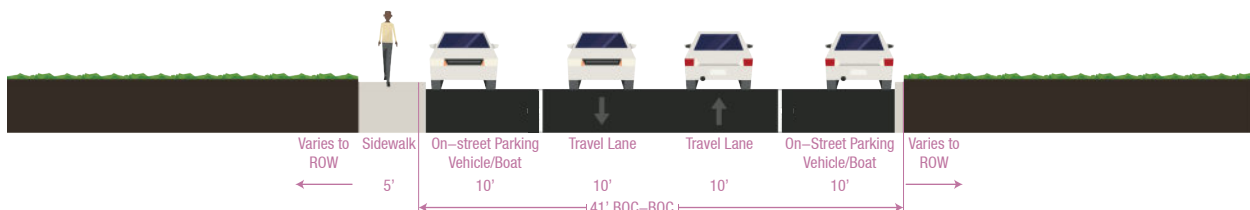


## Major Collector (50' ROW) - Laguna Blvd



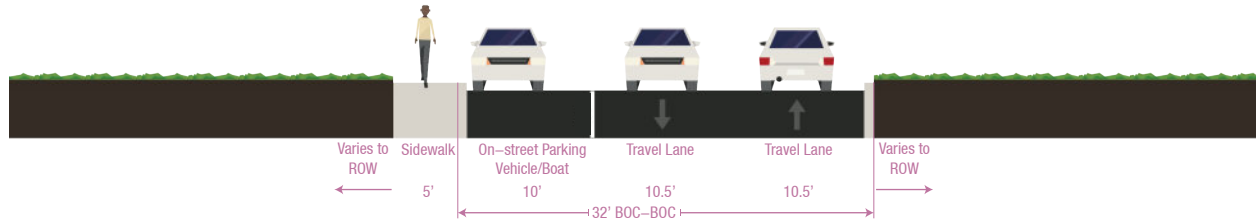
## Minor Collector (50' ROW) - West of PR 100 (Padre Blvd)

41' BOC - BOC, Striped On-street Vehicle/Boat Parking on Both Sides



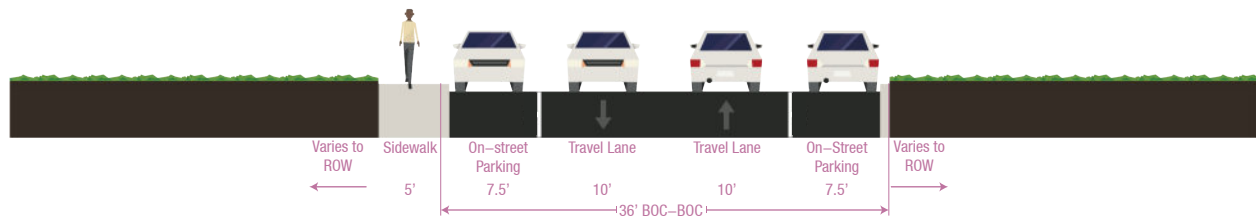
## Minor Collector (50' ROW) - West of PR 100 (Padre Blvd)

32' BOC - BOC, Striped On-street Vehicle/Boat Parking on One Side

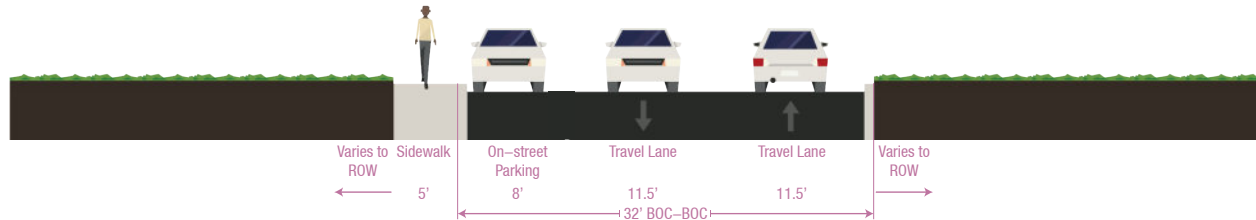


## Minor Collector (50' ROW) - East of PR 100 (Padre Blvd)

36' BOC - BOC, Striped On-street Vehicle Parking on Both Sides

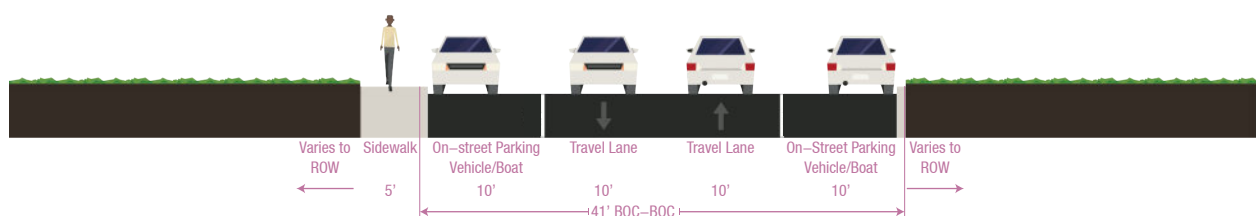


32' BOC - BOC, Potentially Unmarked On-street Vehicle Parking

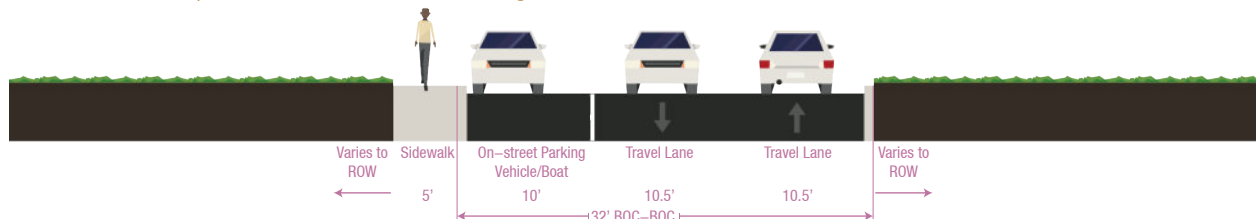


## Local Street (50' ROW) - West of PR 100 (Padre Blvd)

41' BOC - BOC, Striped On-street Vehicle/Boat Parking on Both Sides



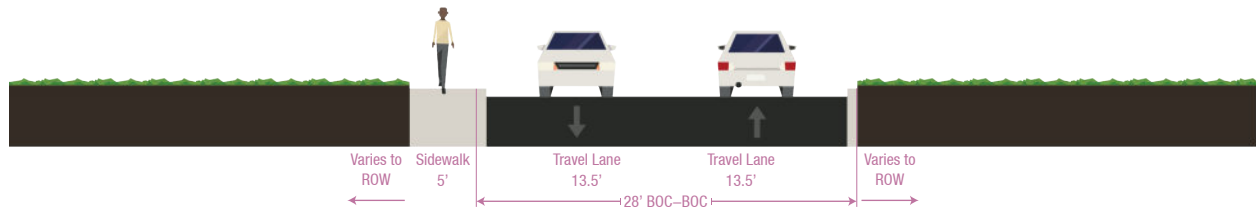
32' BOC - BOC, Striped On-street Vehicle/Boat Parking on One Side





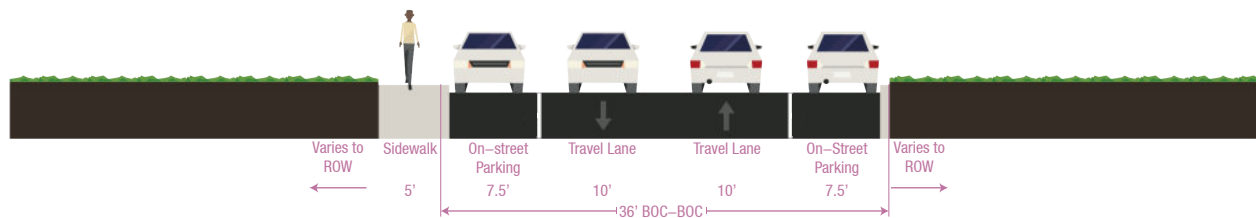
## Local Street (50' ROW) - West of PR 100 (Padre Blvd)

28' BOC - BOC, No Defined Parking

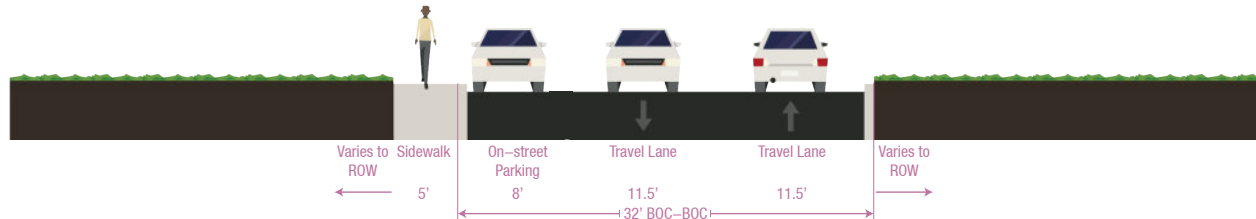


## Local Street (50' ROW) - East of PR 100 (Padre Blvd)

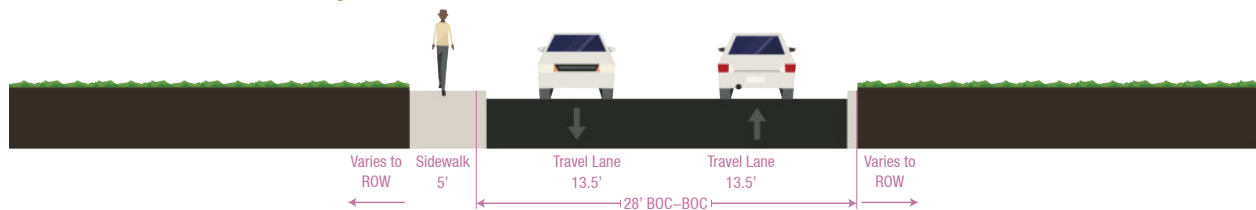
36' BOC - BOC, Marked On-street Vehicle Parking on Both Sides



32' BOC - BOC, Potentially Unmarked On-street Vehicle Parking



28' BOC - BOC, No Defined Parking



# Implementation and Recommendations

Improvements to the transportation system will mainly consist of the enhancement of existing facilities to further support the mobility and economic vitality of the community. These improvements are intended to not only provide improved vehicular connectivity as the City grows, but also provide increased options for alternative modes of transportation and enhance the community's image through quality street design.

## Prioritization of Transportation Needs

The City of South Padre Island has implemented a street improvement plan spreadsheet that ranks and thus prioritizes their transportation needs. The spreadsheet has been updated to include the following information for each street: Classification, Classification Priority, Recently Reconstructed or Under Design, Sidewalk Condition, On-street Parallel Parking Condition, Estimated Parking Spaces, On-street Parallel Parking Spaces Priority and Overall Priority.

The four categories, each with a point system of 0-10, that affect a street section's overall priority include:

- **Classification Priority** (Established Local = 0, Local = 3, Minor Collector = 7, Major Collector = 10)
- **Total Estimated Parking Spaces Priority** (0 = 0, 1-10 = 2, 11-21 = 4, 22-31 = 6, 32-42 = 8, 43-54 = 10)
- **Repair Priority** (0 – Low to 10 – High, based on City Staff Input)
- **Usage Priority** (0 – Low to 10 – High, based on City Staff Input)

The street section's overall priority score consists of the sum of the points of each category with a maximum overall priority score of 40 points. Streets can then be sorted so that streets that were recently reconstructed, under design, established or private can be excluded from the reconstruction priority list and organized under a maintenance priority list. That way, the City has a prioritized list of streets that still need to be reconstructed to include elements such as curb and gutter, sidewalk, and parallel on-street parking, and also a list of streets that need to be maintained.

Initial lists for street reconstruction prioritization and street maintenance prioritization can be seen in [Table 1](#) and [Table 2](#). The spreadsheet however is a tool that the City can update and sort as they continue to implement roadway reconstruction projects.

Table 1 Initial Street Reconstruction Prioritization

RANK	SEGMENT	STREET NAME	STREET CLASSIFICATION	REPAIR PRIORITY (0-10)	DETERIORATION	VOLUME FACTOR	CLASSIFICATION FACTOR	RECONSTRUCTION PRIORITY (0-10)	PARKING FACTOR (0-10)	COMPLAINT FACTOR (0-10)	ESTIMATED SPI PRIORITY
							Private = 0 Established Local = 1 Minor Local = 2 Major Local = 4 Minor Collector = 7 Major Collector = 10				
1	All	Laguna	Collector	10	80.52%	9.8	10	5.3	0	10	46.09
2	W	Morningside	Major Local	9	77.27%	9.4	5	8.4	4	3	39.53
3	E	Mars	Collector	8	65.03%	8.4	8	5.2	4	6	39.23
4	C	Lantana	Collector	9	65.03%	6.9	8	8.4	4	1	37.58
5	E	Bahama	Collector	7	65.03%	8.8	8	4.4	6	2	34.96
6	C	Capricorn	Collector	8	47.55%	7.8	8	5.2	4	2	33.94
7	C	Gardenia	Collector	7	44.06%	9.0	8	5.1	6	1	33.69
8	C	Esperanza	Collector	8	47.55%	9.2	8	5.4	2	1	33.62
9	C	Oleander	Major Local	9	50.00%	9.2	4	8.4	2	0	33.31
10	C	Acapulco	Minor Local	9	70.00%	7.9	3	8.4	4	0	32.77
11	E	Retama	Collector	5.5	40.56%	7.8	8	1.0	8	7	32.77
12	W	Sunset	Minor Residential	9	54.55%	8.8	2	8.4	5	0	32.61
13	C	Hibiscus	Minor Local	9	50.00%	8.8	2	8.4	4	0	31.87
14	W	Oleander	Minor Residential	9	72.73%	7.7	2	8.4	4	0	31.73
15	C	Campeche	Minor Local	10	72.73%	8.0	2	7.1	4	0	31.34
16	C	Kingfish	Minor Local	9	50.00%	8.1	2	8.4	4	0	31.17
17	C	Marlin	Collector	8	47.55%	7.2	7	5.7	4	0	30.98
18	C	Red Snapper	Minor Local	8	31.82%	8.4	2	9.2	4	0	30.73
19	C	Carolyn	Minor Local	8	31.82%	7.3	3	5.4	8	3	30.39
20	E	White Sands	Minor Local	7	27.27%	7.3	2	1.6	7	10	30.09
21	W	Hibiscus	Minor Local	9	54.55%	6.2	2	8.4	5	0	29.96
22	E	Georgia Ruth	Collector	5.7	40.56%	6.8	8	1.3	6	4	28.44
23	C	Corral	Minor Local	8	50.00%	8.5	2	6.2	4	0	27.98
24	E	Gardenia	Minor Local	7	31.82%	7.4	4	4.4	6	2	27.56
25	E	Kingfish	Minor Local	8	31.82%	8.4	2	5.4	6	0	26.82
26	E	Capricorn	Collector	5.5	40.56%	6.9	8	0.7	6	2	25.74
27	C	Dolphin	Minor Local	8	31.82%	8.1	2	5.2	4	0	25.59
28	C	Red Snapper	Minor Local	8	31.82%	8.4	2	4.9	4	0	25.52
29	C	Whiting	Minor Local	8	25.00%	6.3	2	7.6	0	0	25.45
30	W	Gardenia	Minor Residential	8	54.55%	7.1	2	5.2	4	0	25.43
31	E	Tarpon	Minor Local	8	50.00%	7.7	2	4.6	4	0	25.21
32	C	Atol	Minor Local	8	25.00%	7.6	2	5.4	4	0	25.13
33	C	Cora Lee	Minor Local	8	31.82%	6.5	2	5.4	6	0	24.91
34	W	Carolyn	Minor Local	8	31.82%	7.4	2	5.2	4	0	24.90
35	E	Acapulco	Collector	5	22.73%	7.9	8	0.5	6	2	24.88
36	C	Red Snapper	Collector	5.5	40.56%	8.9	7	1.0	4	0	24.20
37	W	Marisol	Minor Residential	8	20.00%	7.7	2	4.6	3	0	23.83
38	W	Polaris	Minor Local	8	25.00%	6.7	2	5.4	2	0	23.71
39	E	Amberjack	Collector	5	37.06%	9.5	7	0.5	4	0	23.65
40	N	Gulf	Collector	3	2.60%	9.9	10	0.3	10	0	23.51
41	C	Pompano	Collector	5.3	26.57%	8.9	7	0.5	6	0	23.47
42	E	Carolyn	Minor Local	5.5	31.82%	7.8	2	0.7	6	5	23.07
43	C	Swordfish	Minor Local	8	25.00%	5.2	2	6.0	2	0	22.85
44	N	Laguna Circle	Minor Residential	7	27.27%	6.9	2	4.0	7	0	22.56
45	W	Acapulco	Minor Residential	8	25.00%	4.9	2	5.4	3	0	22.14
46	S	Gulf	Collector	2	0.00%	9.9	10	0.0	10	0	21.87
47	E	Swordfish	Minor Local	6	22.73%	7.7	2	1.1	6	3	21.42
48	C	Bahama	Minor Local	7	31.82%	8.3	3	1.2	2	1	21.41
49	E	Campeche	Minor Local	6.5	31.82%	8.8	2	1.4	6	0	20.88
50	E	Saturn	Major Local	5	31.82%	9.2	4	0.5	6	0	20.71
51	C	Venus	Minor Local	6	15.00%	9.0	3	1.2	2	1	20.71
52	C	Ling	Major Local	7	20.00%	9.0	2	1.6	4	0	20.67
53	E	Aries	Major Local	5.3	28.03%	9.0	4	0.5	6	0	20.67
54	E	Pompano	Major Local	5.5	62.12%	9.0	4	0.8	2	0	20.64
55	C	Huisache	Minor Local	7	27.27%	8.0	2	1.4	6	0	20.39



Table 1 Initial Street Reconstruction Prioritization (continued)

RANK	SEGMENT	STREET NAME	STREET CLASSIFICATION	REPAIR PRIORITY (0-10)	DETERIORATION	VOLUME FACTOR	CLASSIFICATION FACTOR	RECONSTRUCTION PRIORITY (0-10)	PARKING FACTOR (0-10)	COMPLAINT FACTOR (0-10)	ESTIMATED SPI PRIORITY
							Private = 0 Established Local = 1 Minor Local = 2 Major Local = 4 Minor Collector = 7 Major Collector = 10				
56	E	Palmetto	Minor Local	5.3	6.82%	7.6	3	0.5	10	3	20.25
57	E	Harbor	Collector	4	24.83%	9.8	5	0.3	4	0	20.10
58	E	Red Snapper	Major Local	5	20.45%	9.1	4	0.5	6	0	19.94
59	E	Red Snapper	Major Local	5	20.45%	9.1	4	0.5	6	0	19.94
60	W	Marlin	Minor Residential	7	50.00%	4.4	2	4.6	2	0	19.91
61	E	Harbor	Collector	4	24.83%	9.8	5	0.3	2	0	19.60
62	E	Pike	Minor Local	5	2.27%	6.7	2	0.5	6	5	19.45
63	C	Saturn	Minor Local	7	25.00%	7.1	2	1.4	6	0	19.23
64	E	Constellation	Minor Local	7	13.64%	7.9	2	1.4	4	0	19.11
65	W	Harbor	Minor Local	7	13.64%	8.0	1	2.4	0	0	18.90
66	E	Marlin	Minor Local	5.5	31.82%	8.7	2	1.1	4	0	18.81
67	E	Marlin	Minor Local	5.5	31.82%	8.7	2	0.7	4	0	18.30
68	E	Dolphin	Major Local	5	24.00%	9.2	2	0.5	6	0	18.29
69	C	Retama	Collector	2	0.00%	9.2	7	0.0	4	0	18.17
70	W	Campeche	Minor Residential	8	31.82%	0.2	2	5.4	4	0	18.03
71	W	Swordfish	Major Local	7	20.00%	7.2	2	1.4	0	0	17.96
72	E	Sunset	Collector	2	3.25%	8.6	7	0.0	10	0	17.90
73	E	Palm	Minor Local	5.5	4.55%	8.9	2	0.7	4	0	17.45
74	W	Sheepshead	Minor Local	8	50.00%	-0.3	2	5.4	2	0	17.26
75	W	Retama	Minor Residential	7	20.00%	5.3	2	1.7	4	0	17.21
76	C	Marlin	Collector	2	26.57%	7.2	7	0.0	2	0	16.78
77	E	Marisol	Minor Local	5.5	25.00%	6.8	2	0.7	6	0	16.63
78	E	Whiting	Minor Local	5	4.55%	8.7	2	0.5	6	0	16.62
79	W	Palm	Minor Local	7	15.00%	5.6	2	1.7	0	0	16.61
80	S	Laguna Circle	0	5	2.27%	8.7	2	0.5	6	0	16.50
81	C	Pike	Minor Local	7	20.00%	5.1	2	1.4	4	0	16.49
82	E	Ling	Minor Local	5.5	22.73%	6.2	2	0.7	6	0	15.95
83	W	Cora Lee	Minor Local	7	20.00%	4.2	2	1.4	5	0	15.92
84	E	Sheepshead	Minor Local	5	6.82%	7.8	2	0.5	6	0	15.83
85	W	Sunny Isle	Minor Local	6	-5.00%	6.5	2	1.1	2	0	15.73
86	C	Aries	Minor Local	5.5	15.00%	6.6	2	0.7	5	0	15.67
87	C	Tarpon	Minor Local	7	50.00%	-1.4	2	5.1	4	0	15.64
88	W	Mezquite	0	5	22.73%	7.0	2	0.5	4	0	15.53
89	N	Circe	Minor Local	5.5	5.00%	6.4	2	1.0	6	0	15.40
90	E	Esperanza	Minor Local	2	4.55%	8.8	4	0.0	6	0	15.10
91	W	Lantana	0	5	2.27%	7.2	2	0.5	6	0	15.01
92	W	Huisache	0	5	22.73%	5.3	2	0.5	8	0	14.82
93	W	Tarpon	Minor Local	7	20.00%	3.1	2	1.7	3	0	14.76
94	C	Georgia Ruth	Collector	1	-7.69%	7.0	7	0.0	4	0	14.71
95	W	Mezquite	0	5.3	15.00%	5.5	2	0.5	6	0	14.35
96	S	Lynda	0	3	0.00%	9.2	2	0.0	2	0	14.18
97	C	Palm	Major Local	1	-10.00%	9.5	4	0.0	5	0	14.03
98	W	Atol	0	5.3	15.00%	4.9	2	0.5	6	0	13.78
99	C	Sheepshead	Minor Local	7	25.00%	0.5	2	1.5	10	0	13.78
100	N	Yucca	Minor Residential	5	2.27%	4.5	3	0.5	5	0	13.28
101	W	Bahama	Minor Residential	7	15.00%	1.3	2	1.8	4	0	13.06
102	N	Tropical	Minor Residential	5	15.00%	4.4	2	0.5	4	0	12.61
103	E	Coronado	0	2	7.50%	8.3	2	0.0	4	0	12.60
104	W	Esperanza	0	5	2.27%	4.6	2	0.5	10	0	12.47
105	W	Saturn	Minor Residential	7	5.00%	1.1	2	1.6	4	0	12.27
106	E	Parade	Minor Local	5	2.50%	4.2	2	0.5	10	0	12.10
107	N	Havana	0	5	15.00%	3.0	2	0.5	8	0	11.83
108	E	Cora Lee	Minor Local	2	2.27%	7.1	2	0.0	8	0	11.33
109	W	Dolphin	Minor Residential	5	15.00%	3.2	2	0.5	2	0	11.17
110	E	Huisache	Minor Local	2	0.00%	6.4	2	0.0	8	0	10.40

Table 1 Initial Street Reconstruction Prioritization (continued)

RANK	SEGMENT	STREET NAME	STREET CLASSIFICATION	REPAIR PRIORITY (0-10)	DETERIORATION	VOLUME FACTOR	CLASSIFICATION FACTOR Private = 0 Established Local = 1 Minor Local = 2 Major Local = 4 Minor Collector = 7 Major Collector = 10	RECONSTRUCTION PRIORITY (0-10)	PARKING FACTOR (0-10)	COMPLAINT FACTOR (0-10)	ESTIMATED SPI PRIORITY
111	E	Sunny Isle	Minor Local	1	-10.00%	7.8	2	0.0	6	0	10.24
112	E	Haas	Minor Local	4	4.55%	3.3	2	0.3	4	0	9.85
113	W	Red Snapper	0	5	2.27%	2.9	1	0.5	2	0	9.55
114	W	Verna Jean	Minor Local	2	5.00%	4.3	2	0.1	4	0	8.65
115	W	Capricorn	0	5	15.00%	-2.5	2	0.5	0	0	5.15
116	W	Clipper	Minor Local	7	50.00%	-6.7	1	1.8	0	0	3.48
117	N	Lynda	0	3	15.00%	-2.5	2	0.0	4	0	3.10
118	E	Mezquite	Minor Local	3	0.00%	-2.9	2	0.0	10	0	2.11
119	W	Kingfish	0	11	0.00%	6.7	0	0.0	0	0	0.00
120	W	Corral	Minor Local	6.5	15.00%	-11.1	2	1.4	3	0	-0.39
121	W	Venus	Minor Local	7	15.00%	-13.5	1	1.4	3	0	-3.45
122	W	Pompano	Minor Local	5	15.00%	-12.2	2	0.5	4	0	-3.97
123	W	Mars	Minor Local	7	20.00%	-16.7	2	1.4	3	0	-5.35
124	W	Georgia Ruth	Minor Local	7	20.00%	-20.8	2	1.4	5	0	-9.05
125	W	Constellation	Minor Local	6	5.00%	-18.6	1	1.3	2	0	-9.96
126	C	Amberjack	Collector	5	40.56%	-40.0	7	0.5	2	0	-26.54
127	C	Amberjack	Collector	5	40.56%	-40.0	7	0.5	0	0	-27.35
128	W	Jupiter	Minor Local	7	20.00%	-123.3	2	1.4	3	0	-112.02



Table 2 Initial Street Maintenance Prioritization

Rank	Street Name	Segment	Limits	Recently Reconstructed or Under Design	MTP Classification	Repair Factor
1	Verna Jean	E	PR 100 (Padre Blvd) to Gulf Blvd	Yes	Local	10
2	Polaris	C	Laguna Blvd to PR 100 (Padre Blvd)	Yes	Minor Collector	8
3	Polaris	E	PR 100 (Padre Blvd) to Gulf Blvd	Yes	Minor Collector	7
4	Lantana	E	PR 100 (Padre Blvd) to Gulf Blvd	Yes	Minor Collector	7
5	White Sands	E	East of PR 100 (Padre Blvd)	Yes	Local	7
6	Clipper	W	West of PR 100 (Padre Blvd)	Established	Established Local	7
7	Mars	W	West of Laguna Blvd	Established	Established Local	7
8	Venus	W	West of Laguna Blvd	Established	Established Local	7
9	Constellation	W	West of Laguna Blvd	Established	Established Local	6
10	Palm	W	West of Laguna Blvd	Established	Established Local	6
11	Harbor	W	West of PR 100 (Padre Blvd)	Established	Established Local	6
12	Palm	C	Laguna Blvd to PR 100 (Padre Blvd)	Yes	Minor Collector	5
13	Venus	E	PR 100 (Padre Blvd) to Gulf Blvd	Yes	Local	5
14	Red Snapper	W	West of Laguna Blvd	Established	Established Local	5
15	Jupiter	E	PR 100 (Padre Blvd) to Gulf Blvd	Yes	Local	4
16	Sunny Isle	E	East of PR 100 (Padre Blvd)	Yes	Local	4
17	Verna Jean	W	West of Laguna Blvd	Yes	Local	4
18	Atol	E	PR 100 (Padre Blvd) to Gulf Blvd	Yes	Local	4
19	Verna Jean	C	Laguna Blvd to PR 100 (Padre Blvd)	Yes	Local	3
20	Mezquite	E	PR 100 (Padre Blvd) to Gulf Blvd	Yes	Local	3
21	Retama	C	Laguna Blvd to PR 100 (Padre Blvd)	Yes	Minor Collector	2
22	Huisache	E	PR 100 (Padre Blvd) to Gulf Blvd	Yes	Local	2
23	Gulf	S	Gardenia St to Haas St	Yes	Major Collector	1
24	Gulf	N	Sunset Dr to Gardenia St	Yes	Major Collector	1
25	Sunset	E	PR 100 (Padre Blvd) to Gulf Blvd	Yes	Minor Collector	1
26	Aries	C	Laguna Blvd to PR 100 (Padre Blvd)	Yes	Local	1
27	Hibiscus	E	PR 100 (Padre Blvd) to Gulf Blvd	Yes	Local	1
28	Oleander	E	PR 100 (Padre Blvd) to Gulf Blvd	Yes	Local	1

## Funding

The recommended improvements in the Master Thoroughfare Plan will vary in cost depending on the necessary funds for project design, right-of-way acquisition, and construction. The City will develop a financial plan based on debt pledged with property taxes to sustain a long-term street reconstruction plan. If available, operation expenses could be allocated on an annual basis to enhance the existing infrastructure.

## City Code Modifications to Design Standards

To keep consistent with the information provided in the Master Thoroughfare Plan, it is imperative that the City also modify its Standards and Specifications. Items to update include information pertaining to the various street classifications and typical sections and the reduction of the minimum width of sidewalk in business areas from eight feet to six feet.

## Prioritization of Maintenance Needs

The City of South Padre Island took the transportation needs further to determine what the immediate needs for maintenance of streets and develop a preservation plan.

The four categories were determined for each street which include:

- **Reconstruction Category** Widen and add curb and gutter
- **Repair Category** Reclamation and Overlays
- **Repair and Maintenance Category** Overlays and Pot Hole Repair
- **Maintenance Category** Crack filling and Sealing

This distinction is crucial in ensuring that the newly reconstructed streets and existing streets are properly maintained and preserved providing a longer service life.

# 7

# Parks and Recreation Master Plan



# About SPI

Padre Island is the largest of the Texas barrier islands and is the world's longest barrier island. The island is located along Texas's southern coast of the Gulf of Mexico and is noted for its white sandy beaches. Meaning father in Spanish, it was named after Father Jose Nicolas Balli (c.1770-1829), who owned the island and served as a missionary priest and collector of finances for all the churches in the Rio Grande Valley (RGV). He also founded the first mission in present-day Cameron County.

Padre Island is the second-largest island by area in the contiguous U.S. after Long Island in New York on the Atlantic Coast. It is about 113 miles (182 km) long and 1.8 miles (3 km). The southern end of the island is separated from Brazos Island by the Brazos Santiago Pass.

The City of South Padre Island, commonly known as SPI, is located on its southern end. However, the island as a whole is sparsely

populated. The central part of the island is preserved in a natural wild state as Padre Island National Seashore and part of the lower island is protected as part of the Laguna Atascosa National Wildlife Refuge. Since 1964, the island has been divided by the artificial Port Mansfield Channel. The terms "North Padre Island" and "South Padre Island" are often used to refer to the separated portions of the island. Padre Island is included within the jurisdictions of Cameron, Kenedy, Kleberg, Nueces and Willacy counties in Texas.

The City of South Padre Island is located at the southern end of South Padre Island with the City limits extending approximately 6.8 miles from the northern edge of Isla Blanca Park in the south to the northern municipal boundaries located approximately .5 miles north of Edwin King Atwood Park Road. The Queen Isabella Causeway is the only road access to the mainland; it is 2.5 miles (4.0 km) across the Laguna Madre to the City of Port Isabel. Brownsville is 25 miles (40 km) southwest of South Padre Island.

According to the United States Census Bureau, the City has a total area of 2.3 square miles (6.0 km<sup>2</sup>), of which 2.1 square miles (5.5 km<sup>2</sup>) is land and 0.2 square miles (0.5 km<sup>2</sup>), or 8.44, is water.



South Padre Island

# Climate

South Padre Island has a warm, humid, subtropical climate. Despite having average temperatures falling just short of a tropical climate classification, just like the rest of the lower Rio Grande Valley, the City is in a transitional climate zone where it falls into a tropical savanna climate during years with warmer than usual winter months. South Padre Island receives less precipitation and slightly higher summer maximum temperatures and humidity than some areas in south Florida, except Miami. The region experiences relatively high dew point values, around 75 °F (24 °C) in the summertime, resulting in higher relative humidity values from June through September. Rainfall tends to be the highest during the summer and autumn months, usually ranging from 2 to 6 inches of rain each month. September has the highest rainfall, averaging 6.3 inches, followed by October, which averages 4 inches of rain. Due to the Island's proximity to the ocean, temperatures above 100 °F (37.8 °C) are not common.

SOUTH PADRE ISLAND, TX AVERAGE TEMPERATURES	
January	69°
February	71°
March	74°
April	80°
May	84°
June	88°
July	89°
August	90°
September	89°
October	85°
November	79°
December	72°
Source: NOAA	



# Ecological Importance

## Birds

The Island is a very important component of the habitat system for migratory and shore birds. More than 380 species of birds have been found on South Padre Island. This is nearly half of all bird species that have been documented in North America! From November through May, visitors can enjoy these lovely creatures in their natural habitat at the National Seashore, SPI Birding and Nature Center and the SPI Convention Centre grounds and boardwalks. While visiting South Padre Island, you may catch a glimpse of the Black Skimmer grazing the water with its bill, a White-tailed Hawk keeping watch on top of a telephone pole, or hear the song of an Eastern Meadowlark happily celebrating spring. South Padre Island is dedicated to the protection of a variety of habitats that are critical to the health of the myriad of bird populations. Some habitats, like wind-tidal flats, are extremely fragile and rare, and provide an abundance of food that migratory and resident birds depend upon. Other bird habitats found on SPI include beach, coastal prairie, dunes, grasslands, wetlands and ponds. Its range of habitats makes South Padre Island an essential stop-over point for migrating and resident birds that are seeking out grounds for rest, food, nesting and breeding. As such, the Island has been designated as a Globally Important Bird Area by the American Bird Conservancy and a Site of International Importance by the Western Hemisphere Shorebird Reserve Network.

Based on the Texas Colonial Waterbird Survey, bird counts show decreasing numbers of Waterbird species on the spoil islands, but participants in the Waterbird survey provide varied explanations to suggest why the decrease is occurring. Explanations include habitat loss, disappearance of nesting grounds, marine debris, depletion of food sources, windmills impeding flight, and light pollution affecting migratory patterns.

These are critical reasons why continuing education on birds and promoting worldwide bird and bird habitat conservation is so very important.



South Padre Island Birding and Nature Center (Source: NPS.gov)

## Butterflies

South Padre Island is located within the Monarch migration route and encourages the proliferation of butterfly friendly plants. The City is taking the opportunity to partner with The SPI Birding and Nature Center to educate the public on the importance of Monarch's to our world. Through the National Wildlife Federation the City of South Padre Island has adopted the Mayor's Monarch Pledge as of October of 2016. Through this pledge Mayors and tribal government chief executives agree to take action to help save the Monarch Butterfly. Through the Mayors' Monarch Pledge, U.S. cities, municipalities, and other communities are committing to create habitat for the Monarch Butterfly and pollinators, and to educate citizens about how they can make a difference at home and in their community. There are four steps to taking and implementing the pledge: Take the pledge, specify your actions, take those actions and report progress annually. South Padre Island has taken this pledge and has developed a Butterfly Park, Monarch Waystation, brochures to educate the public about encouraging butterfly population growth and had their annual October "Hallowings" event to raise awareness.

In late September, migrating Monarch butterflies come through what is called the "Texas Funnel" on their way south to wintering grounds in the Oyamel Fir Tree forests in the mountains of central Mexico. Their annual migration is truly one of the wonders of nature. Every fall, a Monarch "Super Brood" recognized as a special generation that can live up to six months, makes its way south to wintering grounds that they've never been to before, but are hard-wired to find. By mid-October the migration has reached the Lower Rio Grande Valley (LRGV). The Texas coastline becomes a Monarch superhighway during the fall migration.

Nectar sources are not all the Monarchs are looking for. The first waves are also looking for their host plants (plants that the caterpillars eat) to lay eggs on. These are specific plants in the Milkweed family (Asclepiadaceae). There are a few native milkweed species in the Lower Rio Grande Valley that serve as hosts to the Monarch. Closer along the coast, the Prairie Milkweed (*Asclepias oenotheroides*), also known as Zizotes Milkweed, is an important host that can be quite common. Female Monarchs are experts at finding their host plants and can lay many eggs on them. This usually results in several hungry caterpillars that can consume entire milkweed plants before pupating and enclosing as adults.



**Monarch Migration Superhighway, SPI BNC**  
Naturalist, Javier Gonzalez

Unfortunately, the natural marvel that is the Monarch migration is under threat. Studies have shown alarming Monarch population declines in recent years. This is mainly due to human-caused habitat loss and overuse of pesticides and herbicides.

## Sea Turtles

South Padre Island is also a fairly popular resource for public education regarding sea turtle conservation. Sea Turtle Inc. is based on South Padre Island and their mission is to educate, rehab and conserve the endangered Kemp Ridley Sea Turtle for release back into the wild. Founded in 1977 by Ila Fox Loetscher, better known as “the Turtle Lady of South Padre Island.” In 1999 Sea Turtle, Inc. was moved from Loetscher’s backyard into its current location at 6617 Padre Blvd. In 2018, at a cost of \$6 million, construction to add an educational center, amphitheater, gift shop, new tanks, a vet clinic and intern housing were completed.



## Beaches

South Padre Island has the conveniences and attractions of a modern resort coupled with miles of pristine island terrain which draw millions of visitors to the Island each year. The white, sandy beaches are known throughout the United States as one of America’s top 10 beaches. While its many amenities make South Padre Island the premiere vacation spot in the state, the location of the Island also makes it a prime spot to observe wildlife in its natural state. The City recognizes the importance of maintaining what is left of our open space and undeveloped land and at the same time providing active and passive recreational opportunities for not only our residents, but all of the many visitors that come to our Island.

# The Importance of Parks and Recreation

Parks and recreation has three values that make them essential services to communities:

1. **Economic value**
2. **Health and environmental benefits**
3. **Social importance**

Just as water, sewer, and public safety are considered essential public services, parks are vitally important to establish and maintain the quality of life in a community, ensuring the health of families and youth, and contributing to the economic and environmental well-being of a community and a region.

Parks are a tangible reflection of the quality of life in a community. They provide identity for citizens and are a major factor in the perception of quality of life in a given community. Parks and recreation services are often cited as one of the most important factors in surveys of how livable communities are. Parks provide gathering places for families and social groups, as well as for individuals of all ages regardless of economic status.

According to studies by the National Recreation and Parks Association, parks improve the local tax base and increase property values. It is proven that private property values increase the value of privately-owned land the closer such land is to parks. Quality parks and recreation are cited as one of the top three reasons that business and residents cite in relocation decisions in a number of studies.

Eighty-five percent report that the proximity to parks, playgrounds, and open space or recreation centers is a major factor in their decision on the neighborhood or area where they live. This includes two in three people who say that it is “very important” or “extremely important” in where they choose to live. Park and recreation opportunities are a particularly strong driver when choosing a place to live for millennials, Gen Xers, those who identify as Hispanic or non-white, parents and those earning higher incomes.

Parks and recreation programs and services contribute to the health of children, youth, adults and seniors. According to studies by the Centers for Disease Control and Prevention, creating, improving and promoting places to be physically active can improve individual and community health and result in a 25 percent increase of residents who exercise at least three times per week. A study by Penn State University showed significant correlations to reductions in stress, lowered blood pressure, and perceived physical health to the length of visits to parks. The sedentary lifestyle many Americans live today is directly linked to obesity, which can cause a number of health problems, including certain forms of cancer, diabetes and heart disease. Parks make a neighborhood more enjoyable and healthier. You can walk to a neighborhood park and play sports, walk, enjoy nature and this encourages physical activities.

The *2017 NRPA Americans' Engagement with Parks Survey* further demonstrates the importance of parks and recreation to a community. A park is perfect for a picnic, a concert, or a farmer's market—whatever your community feels it needs. It seems obvious that a place where people are able to make connections, meet new friends and participate in recreational activities is also good for the locals' mental health. After all, physical health and strong relationships are important to maintaining mental well-being. Direct exposure to nature has its own benefits on mental health, reducing stress and increasing happiness.

The majority of Americans see it as “extremely” or “very” important for their parks and recreation departments to devote resources to **conservation**, including protecting open spaces and engaging their communities in conservation practices. Americans place a high value on the protection of the natural environment in their communities. In turn, there is widespread agreement — 95 percent — among survey respondents that their local government should work to protect natural resources, such as fresh air, clean water and unpolluted green spaces, trails and green spaces adjacent to waterways.

This includes a great desire for their local park and recreation agency to offer guided nature walks, environmental education and nature-focused camps or service days, such as litter cleanups. Nearly 88 percent of survey respondents agree that it is important their local park and recreation agency provides these types of programs and scheduled activities to engage community members more closely with nature and the outdoors.

Additionally 87 percent of survey respondents agree that the local government and their park and recreation agency should make the needed investments to ensure their community is more resilient. Some examples include:

- Parks doubling as flood control areas
- In open spaces, selecting vegetation that mitigate pollution from storm water runoff
- Cultivating tree canopies that help lessen heating effects
- Planting drought-resistant plants

Finally, 79 percent of survey respondents support their park and recreation agency devoting efforts to improve social equity, including ensuring access for all people in their communities to the benefits of local parks, regardless of race, age, income or any other characteristic. Using recreation/community facilities to serve as emergency centers during excessive heating/cooling events or during and after a natural disaster are examples of social equity that can be utilized throughout the community.



# The Need for Parks and Recreation

The purpose of the Parks and Recreation Master Plan is to provide an assessment of South Padre Island's parks and recreation system. The park planning process allows the citizens of South Padre Island to determine what their park and recreation priorities should be for the next eight years.

The term "Parks" refers to the land dedicated to outdoor areas programmed for recreation. Recreation refers to both active and passive recreation activities including ball play, jogging and picnicking, etc. Recreation can be either indoors or outdoors. Keep SPI Beautiful is dedicated to the conservation and preservation of our community. The focus here is on the ecological safety, habitat quality and to make the most of our resources such as land, water and quality of life.

## The 2018 Parks and Recreation Master Plan will:

- Point out opportunities and recommend alternatives for improving our park system;
- Look at the potential growth of the City, assess where additional facilities will be needed as we grow and assess the types of facilities that are needed;
- Guide City staff in acquiring land to meet future park needs;
- Guide City staff and City leaders in determining where and how parks funding should be allocated over the next five years.

Since Parks and Recreation just became an actual department of the City of South Padre Island in September of 2017, this plan will only span five years so that it allows for the growth and changes to come from these added resources. After five years it is recommended to take another look at the overall picture and reevaluate the plan.

# Planning Process

The City of South Padre Island desires to provide its citizens with a solid, well thought-out plan that offers quality of life services for all. To satisfy the needs, the following process has been planned with carefully organized opportunities for public participation: 1) the completion of a public survey, 2) adopting facility standards and 3) creating a priority list with staff and community input. Utilization of the aforementioned process has contributed to the completion of this plan and will continue to be a guideline for the City in developing a system that is appropriate for our residents and visitors.

Ongoing review of the current system will be essential to provide an optimized Parks and Recreation system. Assessing the condition of current parks, evaluating the status of their facilities and identifying needed repairs and improvements, allows the City to plan for maintenance and repairs with a given budget year. The prioritization of needed repairs and proposed improvements, resulting from evaluated cost estimates for each item, will allow the City to more fairly determine how available funds are best used.

# Trends in Park Planning

The National Recreation and Parks Association (NRPA, 2014) has identified these three key trends for Parks and Recreation:

- **Human Capital**
- **Green Infrastructure**
- **The Societal Piece**

## Human Capital

Human capital is the idea that one's knowledge, skills, personal attributes, creativity and more are combined in the ability to perform a job that equates to a measure of economic value. There is a better understanding emerging within the park and recreation industry of what defines the human-capital needs of the field and what those professionals look like now and in the future. We need to know and better define what makes a park and recreation professional; what skills, knowledge and abilities are needed to head up this endeavor in the future.

With general funds becoming ever tighter, consolidations and other influences on the composition of “traditional” park and recreation professionals will require employees to have business acumen and skill sets beyond the traditional expectations for revenue building, fundraising and marketing. A new understanding of the range of human capital needs will be necessary, especially a better understanding of the role of contractual, seasonal and private sector employees. What skill sets, training and professional development will these employees need? What will be the standards for top-notch public service?

Continuous development of communication skills, proficiency with all types of media and deeper marketing and supervisory skills will be critical. Overall, we must ensure that the human-capital needs for parks and recreation are met not only in traditional ways, but also within expanding models. Remaining relevant is always the challenge, but the pressures to anticipate, plan and deliver are considerably greater than they have ever been before.

## Green Infrastructure

Green infrastructure is a new approach to the management of land and water that utilizes the processes of natural systems to slow, store and treat stormwater, thereby reducing the costs of traditional hard infrastructure such as channelization, underground stormwater storage tanks, and combined storm and sewer overflows. Key components of green infrastructure are water management and water quality, areas in which parks definitely play a role that will become increasingly important in the future. Significantly, the cost of utilizing parks and conservation lands will be far less expensive than traditional gray infrastructure, and the best green infrastructure projects will bring new funding as well as new recreation opportunities and facilities for public use.



City commitment to take the lead role in green infrastructure solutions will be paramount. Engaging with key players in green infrastructure space, identifying best practices and contributing to research and development of implementation tools around green infrastructure strategies will be vital.

How we respond to this new challenge to re-envision our concepts of what parks do and how we look at the role of parks in providing conservation solutions to communities will profoundly influence the future of what parks look like and what value and benefits they provide for communities. By connecting with the stewards of water and conservation districts, for example, we can continue to create livable communities that are environmentally responsible, climate-resilient and sustainably built. This is clearly in the public interest and provides an exceptional opportunity to demonstrate our role in providing innovative solutions for communities.

## The Societal Piece

Changing demographics have shaped our nation since its founding. For parks and recreation, understanding how communities are changing and responding to those changes is critical to ensuring relevancy. Grasping the concept of one of National Recreation and Parks Association’s most intriguing yet least understood pillars, social equity, is key to understanding our role in participating in social innovation, place making and providing health solutions for communities.

This trend suggests that at the local level, departments work to become the “one-stop shop” for the community, and can connect with them in new ways. Identified opportunities such as mobile apps, search engine optimization and search engine marketing would be effective tools to respond to community needs. To be fully engaged, we must develop partnerships with community organizations as well as responsively tailor programs to best serve the cultural and social makeup of the community. Sharing best practices for addressing societal shifts and integrating new technologies to stay connected to the community will be vitally important to park and recreation agencies in the future.

## The New Narrative/Reframing our Proposition

Essential ingredient of the societal piece is the new narrative of how parks and recreation must reframe value propositions. The basic value propositions for why parks were created as public “goods” remain, but clearly, parks and recreation must evolve into something more to remain relevant in a dramatically changing society and environment. The concept of park and recreation agencies as a provider of services and programs to the public at large is rapidly changing. More and more, park and recreation agencies are being expected to be innovators for community solutions that involve conservation, health and wellness, and social equity. What must the City do to anticipate this trend and how can the resources that will be necessary to support the new narrative be provided to the field?



# Trends in Recreation

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The recreational offerings of a city play a large role in defining quality of life, as well as a city's identity and image. Especially in a tourist town people choose to vacation in an exciting and action packed community. It is therefore important for the City of South Padre Island to understand regional and national trends related to parks and recreation facilities. Several of the most prevalent trends are:

- We have many leisure activities to choose from. Greatly increased at-home leisure opportunities are available, such as hundreds of TV channels, smart phones, gaming consoles and the internet;
- Safety is a great concern. Parents can no longer allow their children to go to the neighborhood park alone, thus decreasing our parks opportunities for outside play;
- We live in an era of instant gratification. We expect to have high quality recreation. Cities must be willing to provide a broader menu of recreation activities;
- Through the media and internet, we are exposed to the best from around the world. We expect our facilities and activities to be of the highest quality possible;
- Obesity and diabetes are recognized as nationwide problems. Funding to reduce obesity rates by increasing outdoor activities may be more reality available in the future. It may lead to sources of grant funding for parks and recreation programs and facilities;
- Increased demand for passive recreation activities and facilities is growing. Activities such as walking and jogging on trails, picnicking, bird watching, etc. are becoming more popular every day. People look to parks for opportunities for these activities;
- In recreation facilities the trend is to have one large facility to serve all populations – not splitting them up based on age. Indoor walking tracks, workout equipment and sport courts are needed;
- As the City of South Padre Island grows, considerable thought should be put in to making a point of setting aside open space for recreation. Otherwise in the future we will look up and have nowhere to recreate. Preservation of our natural areas to encourage walking and bicycling will enhance property values and conserve what makes the City a beautiful place to visit and live;
- Community events outside in our lovely locale can only enhance our tourism draw. outside concerts, interactive games, public art displays, historical points of interest can all benefit our community and our recreational opportunities. Creativity in this area is a must.

Developing an excellent park and recreation system demonstrates a local government's commitment to offer a high quality of life for its residents.

# Concept of Parks Planning

The National Recreation and Parks Association (NRPA, 1995) guidelines provide parks and open space classifications and also offers recommendations for the location, size and general descriptions for each category. These can serve as useful comparisons with the inventory of facilities in the City of South Padre Island later in this document. The purpose of these guidelines is to present park and recreation space recommendations that are applicable for planning, acquisition, and development of park, recreation, and open space lands, primarily at the community level. They should be interpreted according to the particular situation to which they are applied and specific local needs. Therefore, even if the City exceeds these guidelines, the ultimate demand is determined by the number of users and the degree to which there are waiting lists or scheduling pressures associated with certain facilities.

## Functional Classifications & Guidelines

**A. Recreation Space Classification.** The following is a list of recreation area classifications, definitions and size criteria standards that are commonly recognized and recommended by the National Parks and Recreation Association:

- i. **Tot Lots.** A small park designed to serve a two to three block area (0.25 mile distance) and generally a population of up to 2,500. Tot lots are 0.5 to 1.25 acres in size. Tot lots generally contain the following types of recreation facilities: equipped play areas, benches, open space landscaping and picnic tables. Tot lots may be used in areas where it is difficult to acquire sufficient land for a neighborhood park. Traditionally, tot lot developments have been provided by developers.
- ii. **Mini-Park.** A Mini-Park has similar location and size criteria as tot lots, except it used to address limited, isolated or unique recreational needs.
- iii. **Neighborhood Park.** A park for intense and diverse recreational activities that may include, but are not limited to: activities in a tot lot, recreation building, field games, court games, picnic area, landscaping and gardens, internal trails, or senior citizen areas. Neighborhood parks are generally two to ten acres and are accessible by foot or bicycle with a service radius of about 0.25-0.5 mile and a service population of up to 5,000 persons.
- iv. **Community Park.** A park that provides a diverse range of recreational and leisure activities or contains an area of environmental or aesthetic quality. Facilities and activities may include, but are not limited to: athletic fields, swimming pools, gymnasiums, performing and designing art centers, crafts buildings, and any facilities associated with neighborhood or mini-park recreation areas. A community park is typically a “drive to” facility from ten to twenty-five acres in size that services the needs of up to 25,000 people. Community parks are ideally located near collector or arterial roads to accommodate adequate access and should be well-



buffered from adjacent residential areas. A community park can also have a dual function as a neighborhood park or tot lot when it provides facilities similar to these park types and its proximity to residential areas allows residents to walk or ride bicycles to the park.

- v. **Special Facilities.** Special recreation facilities are generally identified as specialized public recreational facilities that are unique in function and purpose. Examples of special facilities include public golf courses, boat ramps, beach access points, zoos, stadiums, and other single-purpose or unique facilities. While development standards are available for such facilities, special facilities are based more on the desires or unique characteristics of a community.
- vi. **District Parks (Large Urban Park).** A district park is usually designed to provide recreation opportunities for more than one community or to an entire county. These sub-regional parks are often based on a resource that cannot be provided by a community park. District parks typically serve populations of about 50,000 people and are typically located within 30-40 minutes driving time for its patrons. These parks may provide ample contact with natural resources and often include such facilities as large picnic areas, areas for field sports, nature trails, boating facilities or equestrian riding paths.
- vii. **Regional Parks.** Regional parks serving more than 100,000 people function primarily to make special natural resources accessible to people of all ages. They are generally more than 250 acres in size and within a one-hour driving time from the patron's residence. Activities available at a typical regional park include boating, swimming, hiking, horseback riding, picnicking, overnight camping, and nature appreciation.
- viii. **Nature Reserve Areas (Urban Open Space).** Areas primarily designed with consideration for outdoor recreation and nature preservation, including but not limited to, areas for viewing and studying land, aquatic, or avian wildlife, conservation activities, swimming, hiking, camping, trail facilities, nature centers, or botanical gardens. Service area radius and desirable acreage may vary. A nature reserve area may be one or more of the following:
  1. **Conservation/Open Space Area.** These areas are intended to preserve and manage natural resources and aesthetic quality, and to protect health, safety and welfare by providing open spaces between roadways or developments, with recreation and leisure activity serving as a secondary function.
  2. **Linear Recreation Area.** Area developed to provide travel routes for one or more types of recreational or human operated vehicles such as horseback riding, bicycling, hiking or jogging.
- ix. **Private Park / Recreation Facility.** Parks and recreational facilities that are privately owned yet contribute to the Public Park and recreation system.
- x. **Greenways.** Effectively tie the park system components together to form a continuous park environment.

## SITE GUIDELINES FOR COMMUNITY OUTDOOR RECREATION RESOURCES AND FACILITIES

Park	Location	Population served	Area per 1000 population	Size as a park adjoining school	Size as a separate park	Facilities
<b>Equipped Play and Tot Lot</b>	Less than 0.25 mile distance in residential setting	2,500 Max.	0.5 acre	Min. of 0.25 acre	Min. of 1 acre	Play structures, benches, picnic areas, open spaces, landscaping
<b>Mini-Park</b>	Less than 0.25 mile distance in residential setting	2,500 Max.			Between 2,500	Used to address limited, isolated or unique recreational needs.
<b>Neighborhood Park</b>	Neighborhood area (0.25 - 0.5 mile distance)	5,000 Max.	2 acres	Min. of 2 acres	Min. of 5 acres	Play structures, recreation buildings, court games, hard courts, tennis courts, internal trails, shuffleboard, volleyball courts, picnic area, open area, landscaping
<b>Community Park</b>	Usually serves two or more neighborhoods (0.5 - 3 miles distance)	25,000 Max.	2 acres	Min. of 5 acres	Min. of 20 acres; Optimal if 30-50 Acres	All of the facilities found in a neighborhood park plus informal ball fields, swimming pools, archery ranges, disc golf areas, ornamental gardens, open space and facilities for cultural activities
<b>Natural Resource Areas (Urban Open Space)</b>	Urban areas (0.25 - 0.5 mile)		1 acre		Min. of 0.1 acre	Resource-based recreation area
<b>Urban District Park (Large Urban Park)</b>	In a large urban area or its periphery with 30 – 40 minutes driving time	One park per 50,000	5 acres		Min. of 50 acres; Optimal is 75+ acres	Play structures, restrooms, trails, nature center, boating, swimming, picnic areas, sports fields
<b>Regional Park</b>	On the periphery of an urban area (30 – 60 minutes driving time)	> 100,000 population	20 acres		Min. of 250 acres (several thousand acres)	Camping, nature and bridle paths, picnicking, and other facilities non- intensive development
<b>Beach Access with Parking</b>	Within 0.25 mile of urban coastal beach or on its periphery, 1 access/0.5 mile of shoreline		0.5 acre		Min. of 1 acre	Walkways, parking and restrooms optional
<b>Sports Complex</b>	Strategically located community-wide facilities				Min. of 25 acres; Optimal is 40-80 acres	Ballfields, soccer fields, football fields, tennis courts, play structures, hard courts, volleyball, internal trails, picnic areas

\*When feasible, tot lots, neighborhood parks and community parks should be located adjacent to elementary, middle, and high schools

**B. Recreation Space Functions.** In addition to the recreation area classification system, recreation areas can be classified into two broad categories: active-based and passive-based recreation activities. Most public parks and open space can be classified as either active- or passive-based recreation depending on the facilities and natural resources located at the park site. These terms are defined as follows:

- i. Passive-Based Recreation Activities.** Passive-based recreation involves activities that do not necessarily raise the heart rate significantly above the resting level, but rather provide refreshment through furnishing a visual and/or psychological release from the pressure of everyday life. In passive-based recreation facilities, emphasis is placed on enjoyment of a natural resource or an activity and not on participation. The passive-based recreation facilities category includes picnic tables, observation areas, botanical gardens, historical or archaeological sites, and park benches. Passive recreation activities include sunbathing at the beach, walking through a scenic area, or visiting a historic site. Passive-based recreation areas typically serve as open spaces. Open spaces include fields, scenic viewpoints, landscaped areas, greenbelts, and conservation areas. Generally, open space areas have minimal facilities. Open space areas can be characterized as areas unsuitable for development or as areas set aside for the protection of natural resources. Open space can also be used to enhance urban areas by providing relief from expansive impervious surfaces such as parking lots and shopping centers.
- ii. Active-Based Recreation Activities.** Active-based recreation activities involve the pursuit of physical exertion that raises the heart rate to a level significantly above the resting level. This benefit may be achieved through a variety of activities, which may include team sports such as baseball and football, as well as individual activities including jogging, bicycling, hiking, swimming or playground activity. The main benefits of such recreation uses are increased cardiovascular fitness and improved mental health through release of energy and/or tensions. Active-based recreation activities rely on the presence of recreational facilities that enable certain activities to function. Without the provision of such facilities, the activity would either be limited in quality or eliminated altogether. Active-based recreation areas may include open space areas, especially when such areas are unsuitable for development and/or protect the existing natural resource. Active-based recreation facilities promote participation. Active-based recreation activities are further divided into two categories:
  - iii. Resource-Based.** Resource-based activities are those activities that can only occur in certain environments. This includes all water-related activities, hiking trails, hunting, camping and winter activities. Resource-based activities are designed to make maximum use of the natural resources, such as waterways, woodlands, and wetlands, since the resource is not present in all communities.



RESOURCE-BASED OUTDOOR RECREATION ACTIVITIES	AREA REQUIREMENTS	USER PER UNIT OF FACILITY	TURNOVER RATE	GUIDELINE
Bicycling	10-20 bicycles per mile	1 user per bike	4/day	40-80 cyclists per mile per day
Camping: RV, Trailer and Tent	3-10 sites/acre	4 campers per site	1/day	4 users per campsite per day
Freshwater and Saltwater Beach Activities	200-500 square feet of beach per person		2/day	100 square feet of freshwater or saltwater sandy beach/user/day
Freshwater and Saltwater Fishing (non-boat)	10 linear feet of pier, jetty or catwalk per person		2/day	5 linear feet of pier, jetty or catwalk per user per day
Freshwater and Saltwater Boat Fishing, Power Boating	1 boat per lane	3 users per boat	36 boats/day	108 users per single-lane ramp/day
Freshwater and Saltwater Swimming (non-pool)	5 linear feet of beach per person		2/day	2.5 linear feet of freshwater or saltwater sandy beach/user/day
Hiking	1-5 groups per mile	2 users per group	2/day	4-20 hiker per mile of trail/day
Horseback Riding	2-8 groups per mile	4 equestrians per group	3/day	24-96 equestrians/mile of trail/day
Hunting	90 acres per hunter		2/day	45 acres per hunter per day
Nature Study	5-20 groups per mile	2 users per group	4/day	40-160 users per mile of trail/day
Picnicking		4 persons per table	2/day	8 users per table per day
Visiting Archaeological and Historical Sites	Average visit is 40 minutes; Average day is 7.5 hours	20 persons at any point in the day	11/day	220 users per site per day

POPULATION GUIDELINES FOR RESOURCE-BASED OUTDOOR RECREATION ACTIVITIES	RESOURCE / FACILITY	POPULATION SERVED		
		MIN.	MAX.	MEDIAN
Bicycling	Linear mile of trail	1,500	10,000	5,000
Camping: RV, Trailer and Tent	Acre of camp area	5,600	25,000	6,750
Freshwater and Saltwater Beach Activities	Mile of freshwater or saltwater sandy beach shoreline	25,000	211,200	25,000
Freshwater and Saltwater Fishing (non-boat)	800 feet of pier, catwalk or jetty	5,000	25,000	5,600
Freshwater and Saltwater Boat Fishing, Power Boating, Water Skiing, Sailing	Boat ramp lane	1,500	12,500	5,000
Hiking	Linear mile of trail	5,000	10,000	6,750
Horseback Riding	Linear mile of trail	5,000	10,000	5,000
Nature Study	Linear mile of trail	6,250	10,000	6,750
Picnicking	Picnic area	5,000	10,000	6,000

- iv. **User-Oriented.** User-oriented activities can be provided on developable land, if funding and space are available. Activities include baseball, football, basketball, golf and tennis. User-oriented facilities generally are manmade, and should be located to best serve the population of the community.

USER-ORIENTED OUTDOOR RECREATION ACTIVITIES	RESOURCE / FACILITY	GUIDELINE
Baseball/Softball	Field	120 users per field per day
Basketball	Court	90 users per court per day
Football/Soccer/Rugby	Field	175 users per field per day
Golf	Course (9-hole)	200 users per 9-hole course per day
Physical exercise (urban jogging and hiking)	Linear mile of exercise trail	100 users per mile of trail per day
Racquetball/Handball	Court	40 users per court per day
Shuffleboard	Court	20 users per court per day
Swimming	Pool (a standard pool 81' X 60')	256 users per pool per day
Tennis	Court	30 users per court per day

POPULATION GUIDELINES FOR RESOURCE-BASED OUTDOOR RECREATION ACTIVITIES	RESOURCE / FACILITY	POPULATION SERVED		
		MIN.	MAX.	MEDIAN
Baseball/Softball	Field	2,000	10,000	5,000
Basketball	Court	500	20,000	5,000
Football/Soccer/Rugby	Field	4,000	25,000	6,000
General Play	Equipped play area	500	15,000	10,000
	Multipurpose field	500	10,000	3,750
	Multipurpose court	3,000	4,000	3,500
Golf	9-hole/18-hole golf course	8,000	50,000	25,000
		25,000	65,200	50,000
Physical Exercise (urban jogging and hiking)	Trails	10,000	50,000	15,000
Racquetball/Handball	Court	2,500	20,000	10,000
Shuffleboard	Court	1,000	12,000	6,000
Swimming	Pool	1,000	50,000	25,000
Tennis	Court	1,067	10,000	2,000
Volleyball	Court	4,000	12,000	6,000



- C. Pathway Classification.** A pathway has been defined as a linear corridor and any adjacent support parcels on land or water providing public access for recreation or authorized alternative modes of transportation. The types are classified as follows:
- i. **Park Trail:** Multi-purpose trails located within greenways, parks and natural resource areas. Focus is on recreational value and harmony with the natural environment.
    1. **Type I:** Separate/single-purpose hard-surfaced trails for pedestrians or bicyclists/in-line skates.
    2. **Type II:** Multipurpose hard-surfaced trails for pedestrians and bicyclists/in-line skaters.
    3. **Type III:** Nature trails for pedestrians, which may use either hard or soft surfaces.
  - ii. **Connector Trails:** Multipurpose trails that emphasize safe travel for pedestrians to and from parks and around the community. Focus is as much on transportation as it is on recreation.
    1. **Type I:** Separate/single-purpose hard-surfaced trails for pedestrians or bicyclists/in-line skates located in independent rights-of-ways (ROWS) e.g., old railroad ROW.
    2. **Type II:** Separate/single-purpose hard-surfaced trails for pedestrians or bicyclists/in-line skates. Typically, located within road ROW.
  - iii. **All-Terrain Bike Trail:** Off-road trail for all terrain (mountain) bikes. Single-purpose loop trails usually located in larger parks and natural resource areas.
  - iv. **Cross-Country Ski Trail:** Trails developed for traditional and skate-style cross-country skiing. Loop trails usually located in larger parks and natural resource areas.

The role of the trail system or identified pathway systems above should be one that promotes connectivity throughout the community resulting from park improvements that develop a connective park path system throughout the Island. The completion of the interconnected path system above promotes active recreational opportunities for both guests and residents while addressing the alternative transportation system demands of the Island.

## Municipal Roles

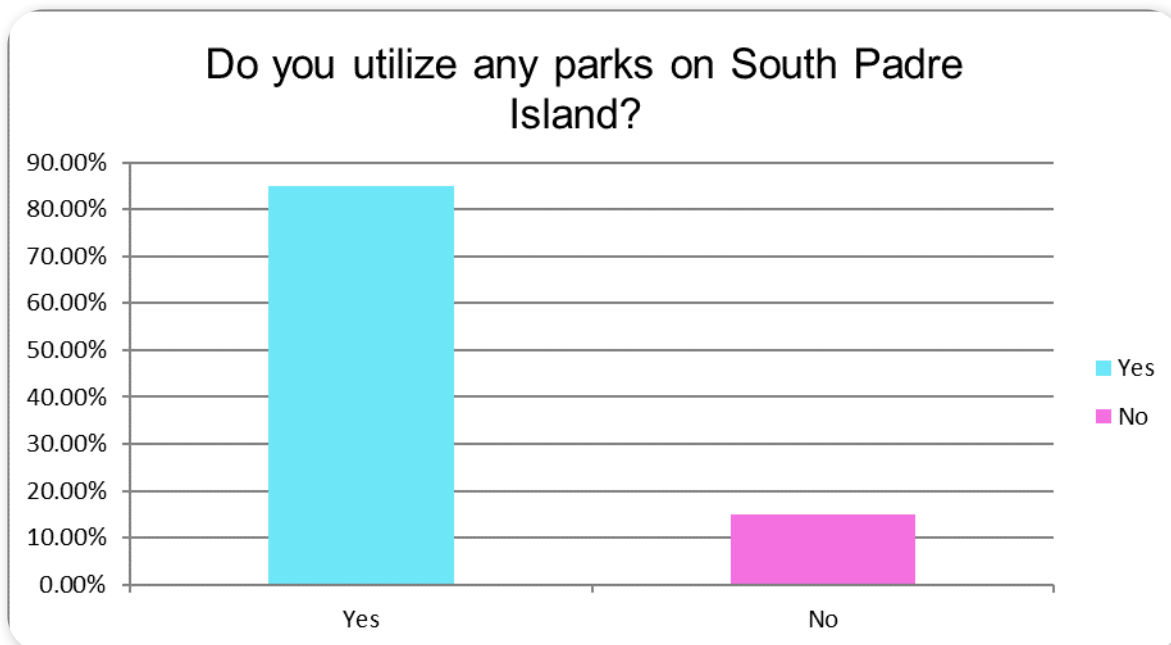
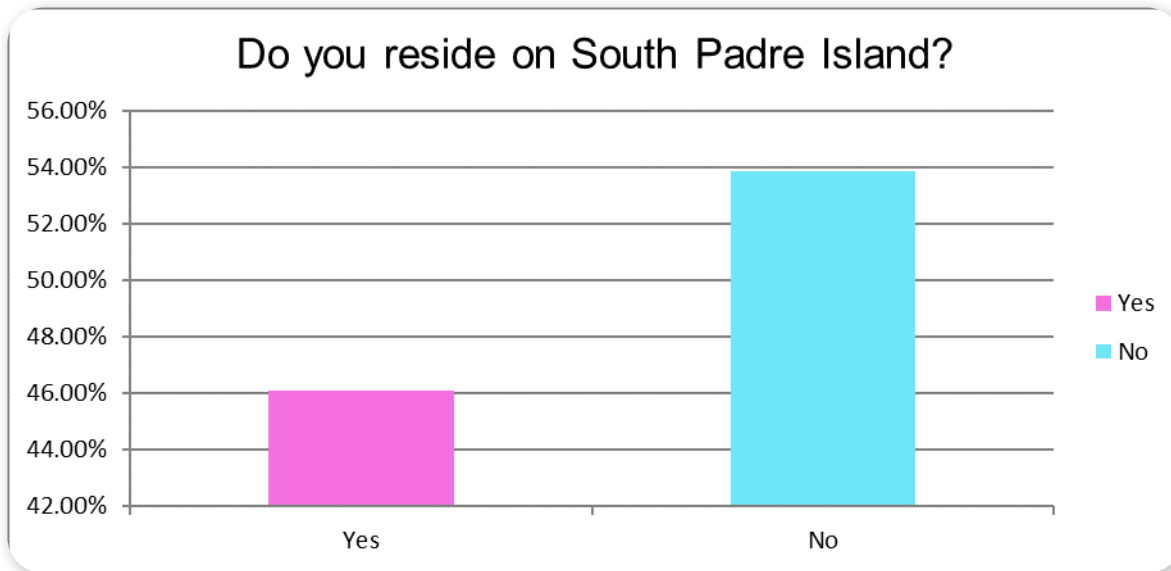
Because of population densities and the lack of large open space areas and resource-based recreation opportunities, municipal recreation systems tend to concentrate on providing more intensive user-oriented facilities that require relatively little space. By doing so, municipal programs play a vital role in the provision of user-oriented recreation opportunities. Typical municipal outdoor recreation facilities include playgrounds, swimming pools, ball fields, tennis courts and golf courses. Because of the near total reliance on user-oriented facilities, municipal programs have only a limited bearing on the statewide resource-based outdoor recreation program. There are some exceptions, however, especially in the cases of cities like South Padre Island located on bodies of water.

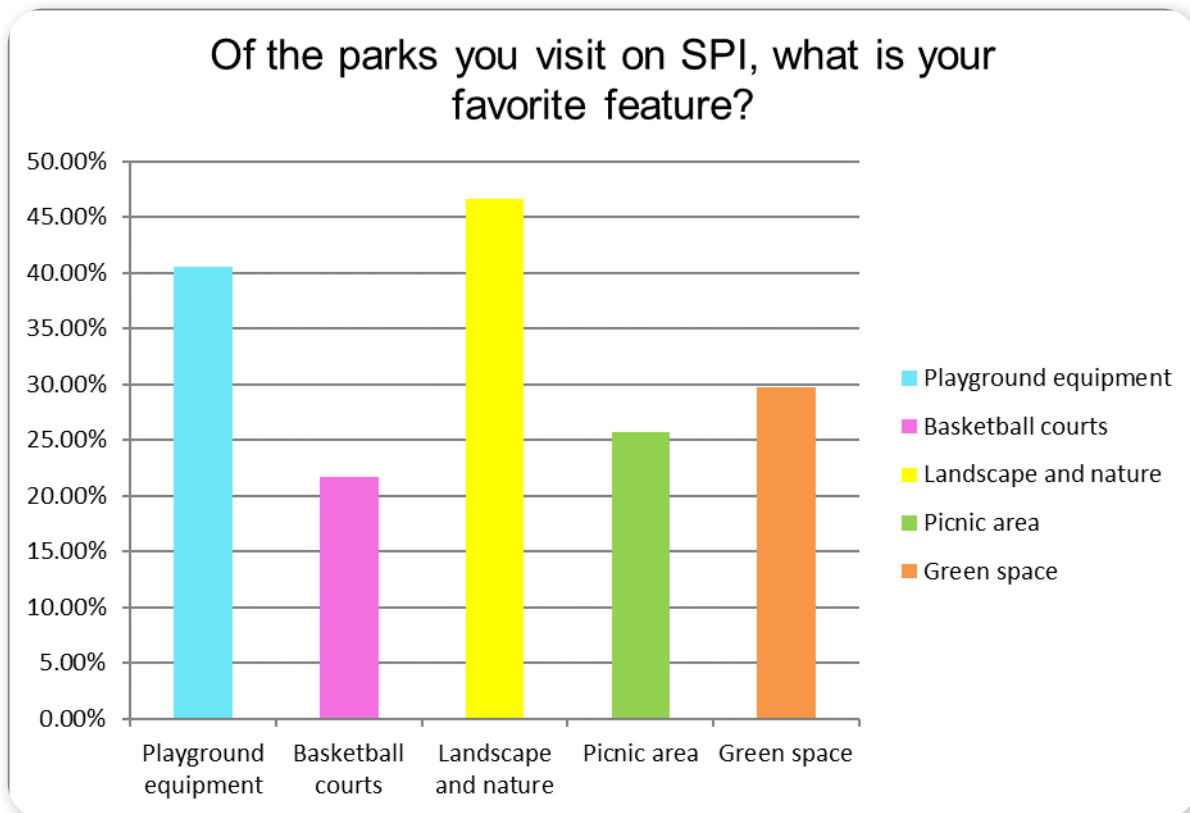
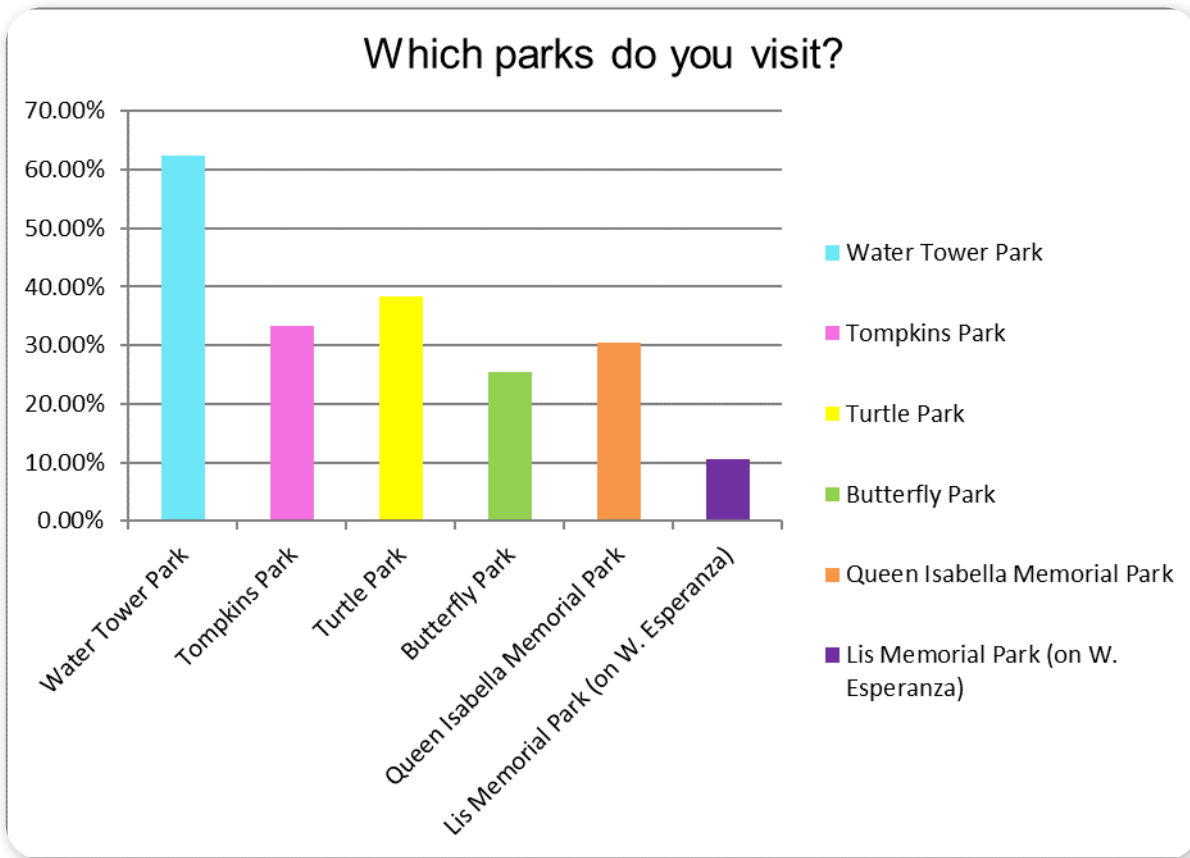
# Public Input

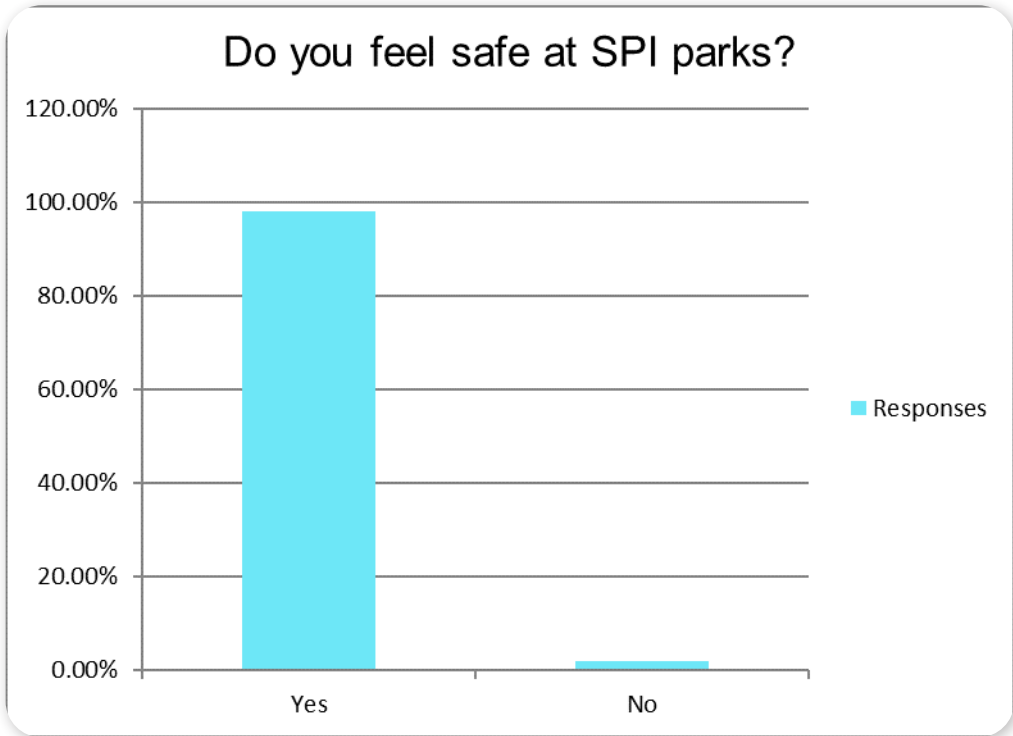
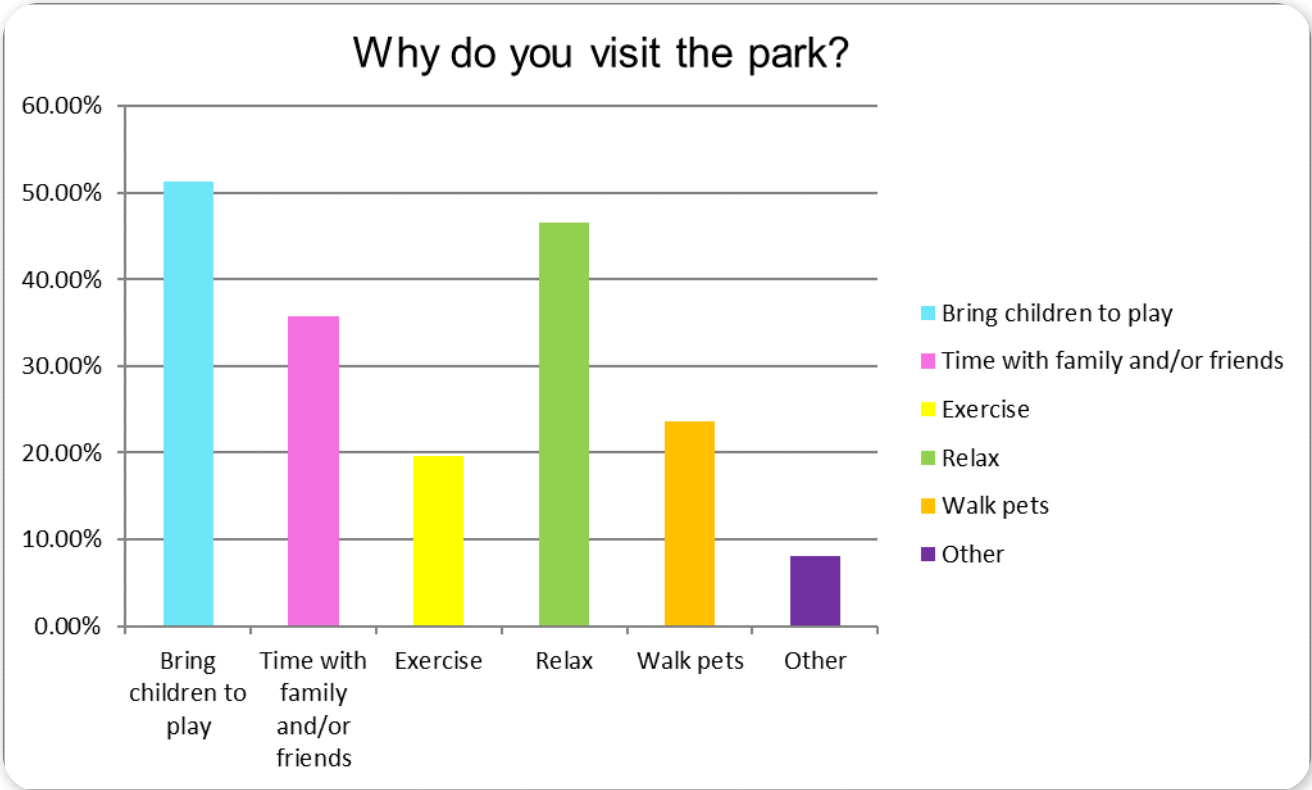
The Parks and Recreation Department promoted a survey of the SPI parks and recreation to gain input and insight into the community and what they want from Parks and Recreation. The results were presented to the Parks, Recreation and Beautification Committee in August, 2017.

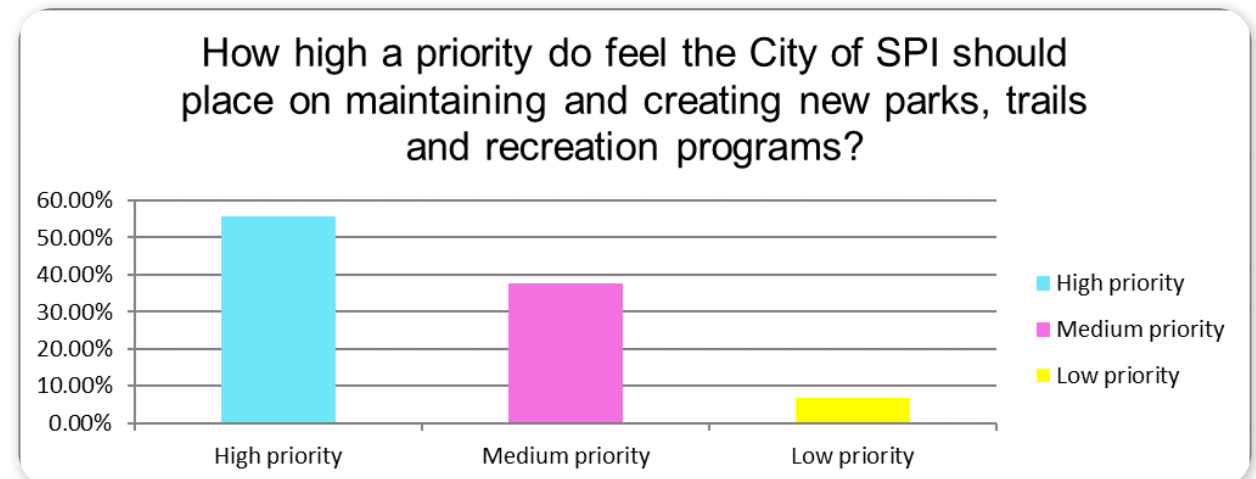
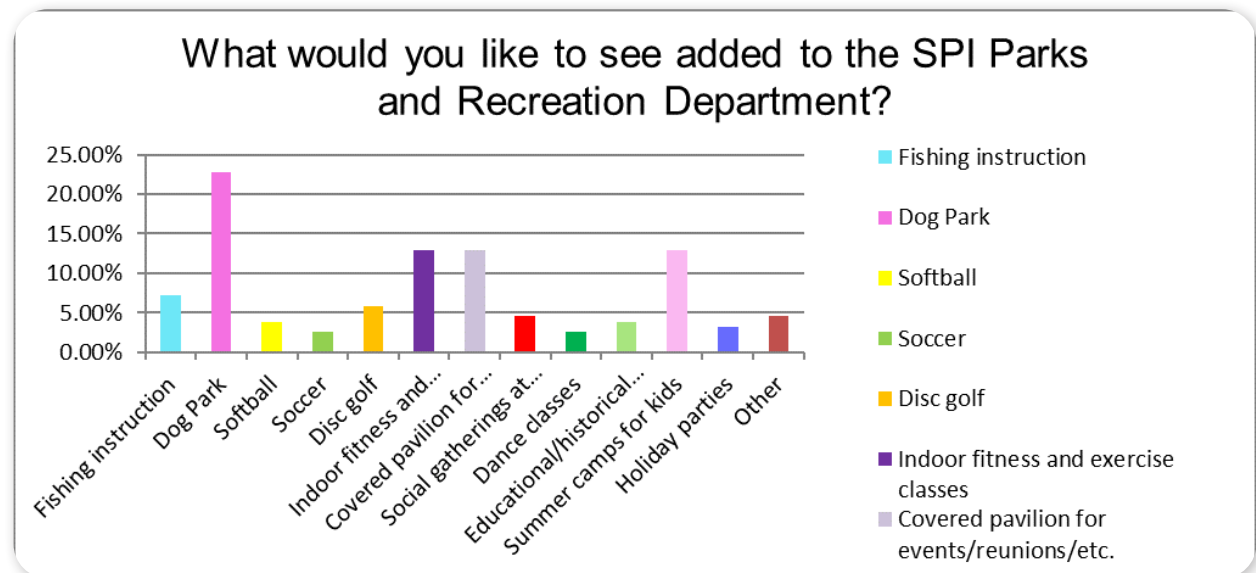
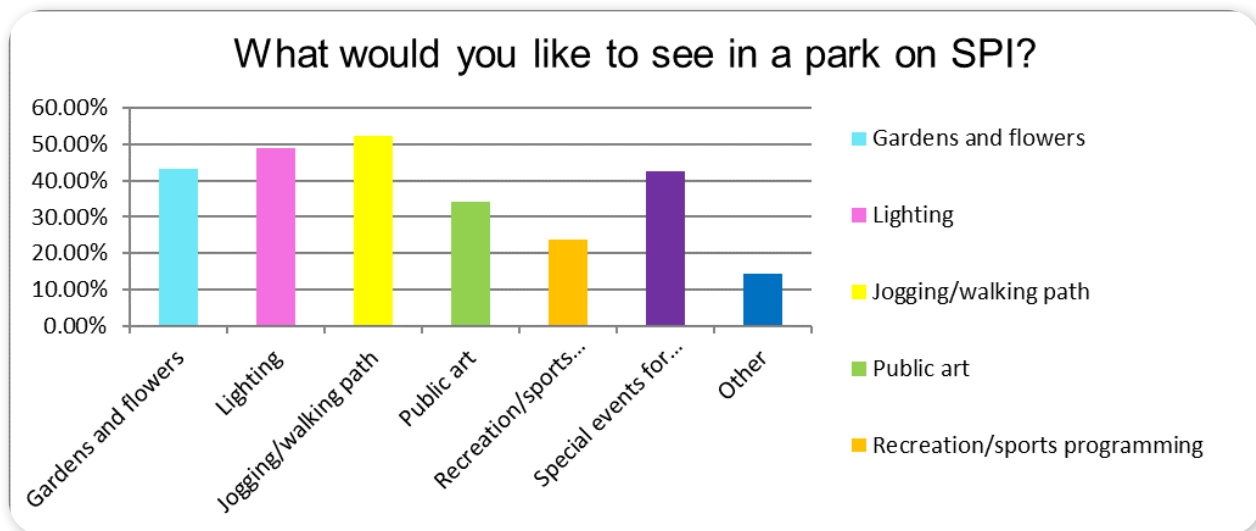
167 responses were gathered.

Questions asked were:



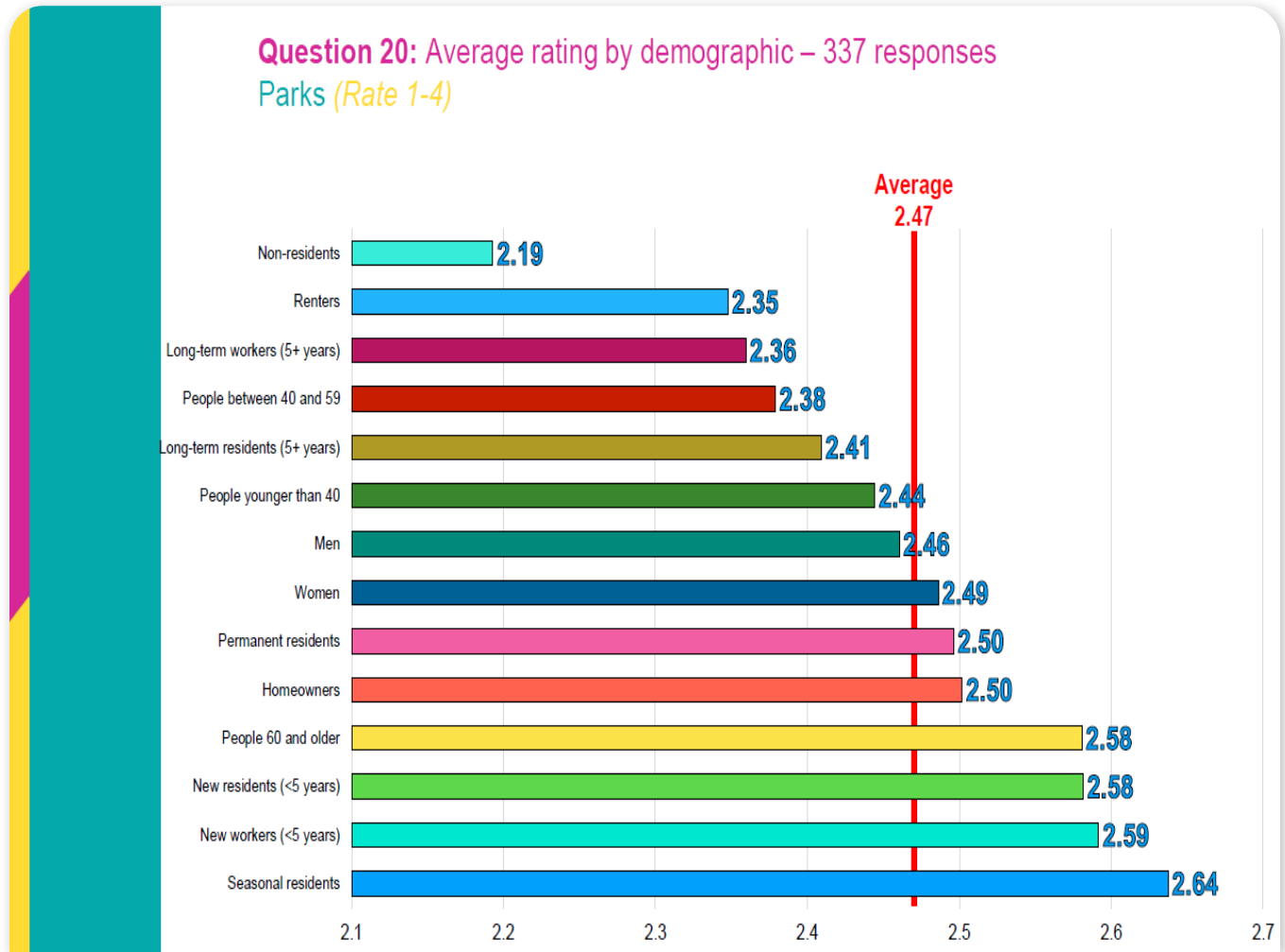








In addition, to the survey conducted by the Parks and Recreation Department, residents responding to Community Survey #1 as part of the Comprehensive Plan development process were able to rate the park system. The survey, based upon 337 respondents, identified an average satisfaction rate of 2.47 out of 4. The demographic breakdown of the respondents and there rating is provided below and should assist in identifying future needs to accommodate both residents and visitors.



## 07 | Parks and Recreation Master Plan

The Parks, Recreation and Beautification Committee met in March of 2017 to complete a SWOT analysis of the Parks and Recreation Programs. The committee considered the Parks and Recreation programs to find the strengths, weaknesses, opportunities and threats.

### Findings were:

### Strengths

- City support
- Council support
- Diverse committee/skills/views
- Parks are close to neighborhoods
- New park on main street/visibility
- Current maintenance crew
- New park equipment/good shape
- Eco tourism community
- Convention & Visitors Bureau
- Strong Christmas Parade event
- New ideas
- New web page for Parks
- TX Parks and Wildlife support
- Community support
- Size is maintainable
- Economic Development Corporation
- Restrooms at several locations

### Weaknesses

- Parks used as rest stops/washrooms/kitchens/for sleeping
- Volunteerism
- Not enough parks – all cater to children – small
- Need more adult activities
- Shaded sports court
- Need indoor recreation arena
- Lack of supervision of maintenance – parks not completed – things done incorrectly
- Need more swing sets
- Committee is not consulted enough on design and construction/key plans and concepts
- Need appropriate oversight for projects
- Coordination between organizations & committees
- Not enough security/police patrol
- Need fence between hotel and park

## Opportunities

- Surveys
- Park events
- Grants
- Stay on the cutting edge for development and ideas
- Sponsorships
- Vacant land needs to be sought and acquired for future parks
- Dog park
- Indoor arena/at least shaded play areas
- The new silent water sport park
- Organized recreational programs: Basketball/3 on 3 tournaments; what other sports do we already have resources for that we can leverage? Volleyball?
- Land under the causeway? Can it be used for park activities or is it TXDOT land?
- Grant funds for obesity/seniors/swim safety

## Threats

- Limited time
- Limited resources
- Limited budget
- Weather
- Misuse by visitors/tourists
- Lack of safety/night use for parks

# Park Inventory

## Parks

**Municipal Parks** – Parks owned and maintained by the incorporated City of South Padre Island are described below.

### A. Tompkins Park



**Location:** 6100 South Padre Blvd, South Padre Island, TX 78597

**Description:** Two playgrounds, basketball courts, restrooms, picnic tables, benches, trash receptacles, skatepark, bocce ball, two (2) shade structures, jogging trail and six (6) exercise stops. Although this park does not meet the recommended acreage requirements of a community park, its amenities represent traditional elements of a community park. Therefore, for the purposes of this plan this is being classified as a community park. (1.97 acres)

### B. Water Tower Park



**Location:** West Huisache Street, South Padre Island, TX 78597

**Description:** This approximate quarter of an acre park, situated under the water tower, includes a half basketball court and goal, three playscapes, restrooms, water fountains and picnic tables. It is on the Bay side of the Island. Although this park does not meet the recommended acreage requirements of a neighborhood park, its amenities represent traditional elements of a neighborhood park. Therefore, for the purposes of this plan this is being classified as a neighborhood park.

### C. Turtle Park



**Location:** East Morningside Drive, South Padre Island, TX 78597

**Description:** This quarter acre road island has picnic tables, a gazebo, swings and a climber. It is decorated with concrete sea turtles in memory of the “Turtle Lady,” Ila Loetscher. This park is classified as a Tot Lot.



**D. Butterfly Park**



**Location:** 4316 Gulf, South Padre Island, TX 78597

**Description:** A gazebo and a variety of butterfly plants, trash receptacle, bench, appreciation plaque, Monarch Way Station and short walking path and the community garden boxes. This park is considered a mini park (¼ acres).

**E. Dr. Joseph C. & Jeanne K. Lis Memorial Park**



**Location:** West Esperanza Street, South Padre Island, TX 78597

**Description:** This is a small lot with a bench, trash receptacle and a sign. This park is classified as a nature reserve.

# Boat Ramps and Marinas

- A. **Boat Ramps:** Two boat ramps are available for public use at West Palm Street and West Polaris Drive. Two boat ramps are available for public use at West Palm Street and West Polaris Drive. **The addition of a third boat ramp off West Marisol Drive is currently in the planning phase.**
- B. **Marinas:** Many privately owned marinas, boat basins that have docks, moorings, supplies, and other facilities for small pleasure boats are located on the west side of the island toward the Laguna Madre.

# Pathways

In 1999, the South Padre Island Economic Development Corporation initiated the Island Gateway Project that comprises the South Padre Island Gateway Beach to the Bay Alternative Transportation Loop (Island Gateway). With assistance from the Texas Department of Transportation in the form of a Transportation Enhancement Grant, the project has been used heavily. It includes approximately three miles of hike and bike trails along Padre Boulevard, including a low-level timber bridge under and around the east end of the Causeway. Select exhibits are included, as well as bird viewing platforms. This park could also be classified as a linear park.



# Other Publicly Owned or Regulated Open Space

- A. **Public Beaches**



South Padre Island is known for its beautiful, clean and open beaches. The beaches within the City limits encompass four and one half miles with varying widths. The beach within the City limits are for public use. Even though the hotels and motels line the beach front, there are twenty-eight Beach Access cul-de-sacs every one and one half blocks all along Gulf Boulevard. The beach would be identified as a Resource-Based Linear Park.

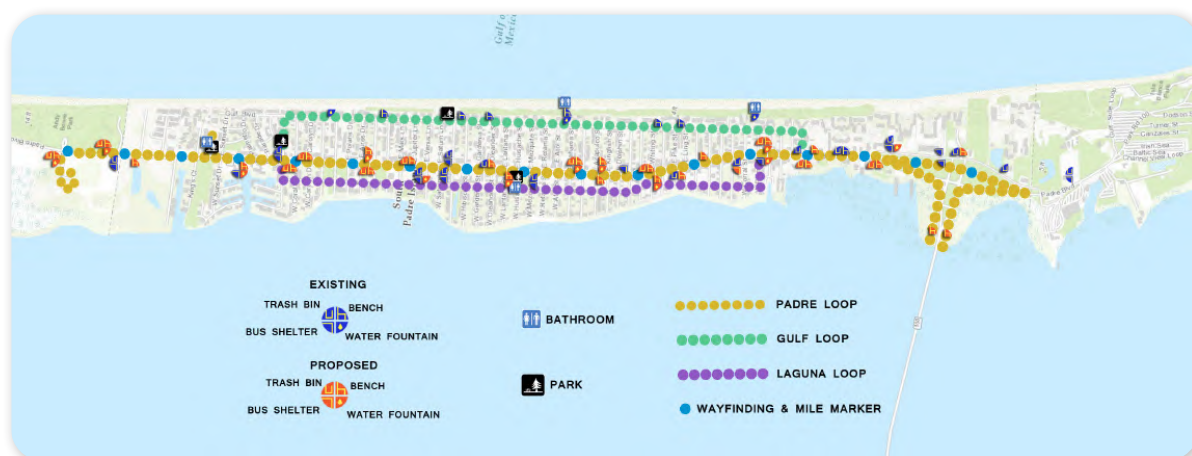
### B. Birding and Nature Center



**Location:** 6801 Padre Boulevard, South Padre Island, TX 78597

**Description:** The Economic Development Corporation, a recognized City partner agency, purchased 7.3 acres of land adjacent to the Laguna Madre Water District Wastewater Treatment Plant on which the Birding and Nature Center was built. This \$5 million facility features a five-story observation tower, seven bird blinds, an auditorium for guest lectures, meeting rooms, a gift shop, and over 4,800 linear feet of boardwalks that meander through wetlands and fresh/salt water marshes. It is classified as a “Wing” of the World Birding Center.

### C. Connector Trail/Future Trail Plan



The City has committed to a future trail plan that provides a series of transportation options promoting a more pedestrian/bike friendly community through the development of connector trails associated with its Future Trail Plan. This series of trails allow for connectivity to all aspects of the island and are oriented along the three primary north/south boulevards (Gulf, Padre, Laguna) on the island. To date, the connector trail along Gulf Boulevard has been completed providing pedestrian and bike path options throughout the community.



# Other Recreation Facilities

## A. Sea Turtles, Inc. (Natural Resource Area)



**Location:** 6617 Padre Boulevard, South Padre Island, TX 78597

**Description:** Founded in 1977 by Ila Fox Loetscher, better known as “the Turtle Lady of South Padre Island,” Sea Turtle, Inc is a non-profit organization 501(C)(3). The sole source of income is public donations which are used to achieve the three missions. Specifically, donations help with the upkeep of the sea turtles housed at the facility. This includes medical clinic equipment, medications, heaters, filters, water and electricity. Donations are also used to support Sea Turtle, Inc.’s educational programs. Approximately 20 percent of their donations are sent around the world to fund alternative resource and conservation projects involving sea turtles.

## B. Convention Center



**Location:** 7355 Padre Boulevard, South Padre Island, TX 78597

**Description:** The South Padre Island Convention Centre opened its doors in 1992 and underwent a significant renovation in 2014. The Convention Centre is a 45,865 square-foot facility that can accommodate groups from 20 to 3,000 in size. The Centre has a 22,500 square foot exhibit hall area with a ceiling height of 36 feet to accommodate large meetings, recreational opportunities and sporting events.

### C. Wind and Water Sport Venue

The City of South Padre Island is a “windustry” center and applauded as one of the premiere locations for kite-boarding, wind surfing, stand up paddle boarding, and kayaking. Traditionally the participants in wind sports have driven vehicles across mud flats and utilized the adjacent tidal environment as a parking and staging area for their activities. The proposed venue will decrease the direct impact on the adjacent flats and enhance access and recreation of the bay side shoreline. The main goal of this facility will be to give access to the submerged land that is necessary for launching and reduce pedestrian stress on the vulnerable marsh shoreline. This will give access to the deeper waters of Laguna Madre despite any tidal shifts and get feet and tires off of the mudflats, sea grass and wetlands on the way to the water. Although this facility provides additional recreational opportunities it will be a fee based sport venue and not considered a park.

The City is working towards building a venue on leased land that will provide access to the water. It will be a non-motorized sport launch to increase use and access to the Laguna Madre. The venue will provide a permeable driveway that will lead to permeable parking, a loading/unloading area for equipment, and matting to launch from. Additional construction options include restroom facilities and supplementary parking. The City has worked alongside the local residents and community members that currently utilize the area in order to create access that fits the needs of the wind and water sports community. The final designs of the project are currently complete and the City is waiting for approval from the US Army Corps of Engineers. Once that permit is obtained, the City can proceed with construction so South Padre Island can have a launch site that is “world-class”.

The second water access facility will be located behind the convention center. It is planned to include an ADA compliant raised walkway that will start in the existing park area and end at a T head which will have several floating ramps for descending into the water. This 3-4 foot tall walkway eliminates the heavy foot and vehicle traffic associated with getting the sporting equipment into the water. It will provide access to the depth of water necessary to launch without the deterrent of needing to trudge through water or saturated soils.

The City seeks to link the two facilities and the town with sidewalks which will allow for shared parking and increase foot traffic between the well utilized Convention Center and these new launching facilities.





ALL COORDINATES REFER TO THE TEXAS COORDINATE SYSTEM, SOUTH ZONE (#4205), AS DEFINED BY ARTICAL 21.071 OF THE NATURAL RESOURCES CODE OF THE STATE OF TEXAS, 1983 DATUM (2011), US FEET. ALL BEARINGS AND DISTANCES ARE FROM DEED RECORDS.

BENCHMARK TABLE			
MARKER	DESCRIPTION	COORDINATES	ELEVATIONS
TBM#1	TBM STEEL COTTON PICKER SPINDLE	N:16585138.91 E:1419435.11	3.73

NOTES:

1. BEARING & DISTANCES ARE DEED CALLS.
2. HIGH TIDE ELEVATION = 2.30' NAVD 1988.
3. SEE WETLAND HABITAT SHEET 9 OF 32.
4. LOCATION OF STEEL COTTON PICKER SPINDLE IN PAVEMENT IS 82.54' EAST OF PROPERTY CORNER.



### D. Community Center

At one time the location of City Hall and the South Padre Island Jail, the remodeled Community Center is intended to serve South Padre Island and Laguna Madre residents and organizations as a “hub for partnerships doing good for the community...with the community.” The City now provides an excellent facility for a variety of activities. Space available includes a 2500 sq. foot event venue with limited kitchen facilities.

**Some of the Community Center activities for residents and visitors are:**

- Yoga
- SPI Topics: Topics may include Recycling, History of SPI, Shoreline, Water Safety, Bike and Golf Cart Safety, Gardening with Native and Butterfly Plants, CPR and First Aid
- Art Classes
- Line Dancing
- Book Club
- Spanish Lessons
- Mahjong/Bridge/Games
- Ping Pong

The South Padre Island Community Center is also available for rent for private events. Reservations are accepted on a first-come first-serve basis. Reservations are available to South Padre Island and Laguna Madre residents and organizations serving the community.





## E. County Parks

### Isla Blanca Park



**Location:** 33174 State Park Rd 100, South Padre Island, TX 78597

**Description:** Located on the southernmost edge of South Padre Island the park provides recreational vehicle facilities, close access to the beach and various amenities.

## II. Additional County Coastal Parks

### 1. Edwin King Atwood Park



**Location:** 27159 State Park Rd 100, South Padre Island, TX 78597

**Description:** Located on the northern edge of the South Padre Island this park provides beach access and associated amenities such as a covered pavilion, picnic tables, restrooms and boardwalk access to the beach.

## 2. Andy Bowie Park



**Location:** 7300 Park Rd 100 N, South Padre Island, TX 78597

**Description:** Located across from the South Padre Island Convention Centre this park offers Recreational Vehicle Sites, Barbecue Areas, fishing areas, restrooms/showers and beach access.

### III. Additional Recreation Opportunities

1. Disc golf and bocce ball can also be played at the City parks. Equipment can be checked out from the Community Center.
2. Private enterprise recreational activities include bay related tours, sunset cruises, dolphin watching, snorkeling, parasailing and fishing. Another significant amenity, associated with the Island, is the Beach Park at Isla Blanca water park and beach resort which is located on the southern end of South Padre Island.



# Needs Assessment

An assessment of what deficiencies exist in the parks system is vital so that planning can occur to address those deficiencies. It is also important to determine what future needs are.

## Methods

A variety of different inputs and techniques are needed to evaluate SPI's current and future park needs. Three methodologies are used to make these determinations. These techniques follow general methodologies accepted by the Texas Parks and Wildlife Department for local park master plans.

- Standard-based assessment – this technique uses locally developed “target” level of service ratios of facilities to population so as to project where the city is today and where it might be in the future as the population grows.
- Demand-based assessment – This technique uses actual and/or anticipated usage growth data, as well as citizen input on the types of activities they would like to engage in, to determine which facilities and programs are most in demand.
- Resource-based assessment – this technique recognizes that SPI has many unique physical features and explores how to convert these into recreation or open space assets that help to meet the demand for recreation.

## The Need for Park Acreage

### Regional parks

Regional parks traditionally serve more than 100,000 population and function to make special natural resources accessible to people of all ages. Although they are generally more than 250 acres in size the geographic breakdown of South Padre Island makes that a difficult goal to reach. However, the Island does have approximately 170 acres of useable beach that is utilized by residents and guests year round and can be characterized as being similar to a regional park. As a result, the Island's available beach and associated resources should be a primary focus to achieve the same benefits and amenities that are associated with regional parks to better serve its permanent residents, seasonal residents and visitors.

### Linear parks

Linear parks are typically urban parks that are substantially longer than they are wide. These parks are generally incorporated into linear greenway projects. Typical activities associated with Linear Parks include active recreational opportunities such as walking, jogging or biking. Although the City has no identified Linear Parks there are existing bikeway paths that provide the recreational demand associated with traditional Linear Parks.





## Community parks

Community parks are large parks that serve several neighborhoods. They serve as locations for larger community events, sports and activities. The recommended standard for community parks is 5 acres for every 1,000 residents. South Padre Island currently has a total of approximately 1.97 acres of City-owned community parks. This leaves a need of approximately 12.5 acres or two community parks to meet this goal.

## Neighborhood and mini parks

The prominence of neighborhood parks reflects the importance of having them as centerpieces of a neighborhood. The recommended target level of 1.5 acres of neighborhood for every 1,000 residents is a good indicator. This target reflects the goal of providing parks within walking distance of residents. The suggested benchmark would be all residents living within a half mile of a park or green space. South Padre Island currently has .25 acres of City-owned neighborhood parks. This leaves a need of 4.25 acres to meet this goal.

# Recommendations

## Safety

When assessing the current park system and future park needs, the goal should be to develop, construct and utilize facilities that are suited to promote park safety while minimizing security and equipment safety problems. As a result, future considerations should be made to address the following security issues:

- Provide appropriate lighting for safety.
- Maintain clear views into and through the parks.
- Provide multiple attractions producing a diverse set of users (daily/seasonally).
- Coordinate with multiple groups to utilize parks in an organized and unorganized fashions.
- Continued investment into the parks addressing security and safety concerns.

## Aesthetic Standards

Aesthetic standards provide a framework for aesthetic elements (e.g., turf, trees, and flowers). SPI is highly involved with the Monarch Pledge to assist in increasing their population. We are also working to keep our plans in line with resource conservation and the use of drought resistant native plants. With these initiatives in the forefront of our planning for our parks and open spaces, we are better able to plan for design and maintenance focusing resources toward native plants and those that are butterfly friendly, encouraging the propagation of the species and being mindful of our water use. We are defining the role for future planning of landscaping and parks use to be in line with resource conservation efforts involving water, native species, etc...

- Encouraging the use of butterfly friendly plants in all of our planting needs.
- Develop written aesthetic quality standards.
- Set specific, realistic, and measurable aesthetic quality standards for all areas.
- Set quality expectations and guidelines for all maintenance activities and link these expectations to aesthetic quality standards.

## Functional Standards

Functional standards consider all types of use and outline common practices for coordinating the identity for a place and its appearance through consistent, appealing, and appropriate site furnishings and circulation approaches.

- Establish a sense of place.
- Create location character through branding (use of logos, local materials and consistent design).
- Set high expectations for design quality.
- Control access for safety.
- Design pathways and entrances to accommodate visitors' needs.
- Design to accommodate events and regular use with less impact.
- Flexible – able to accommodate activities for different seasonal demographics and weather.

# Maintenance Standards

Maintenance standards provide an important perspective on dealing with impacts resulting generally from high use.

- Assess different staffing models, including in-house staff, contract services, volunteers, and private/public partnerships.
- Maintain an adequate level of expertise in specialty skills on the park staff.
- Ensure goals, standards, design intent and quality are understood.
- Support the professional development and upward mobility of employees to boost morale and satisfaction levels.
- Develop plans for regular and emergency maintenance.
- Develop a creative and flexible approach and written schedules for recurring, periodic, and seasonal maintenance activities.
- Develop a system to address typical complaints.
- Respond to complaints in a timely manner; develop and maintain a system to convey that action has occurred.
- Limit the use of commercial fertilizers, pesticides, and herbicides, and use chemicals responsibly when necessary.

# Visitor Quality Standards (Visitor Information)

Visitor quality standards are to improve the visitor experience through coordinated way-finding, educational information and clearly stated rules for use.

- Provide information that is identifiable, consistent, understandable, and current.
- Partner with other departments and other surrounding recreational facilities to eliminate confusion and improve visitor experiences.
- Reinforce resource protection goals and programs.
- Encourage the responsible behavior of visitors. Display positive messaging and rules.

# Supply Standards (Event Management)

Supply standards look at many of the challenges of hosting large-scale and high-use events on vulnerable landscapes.

- Manage events proactively.
- Facilitate the permitting process.
- Charge fees and recover costs for use of public areas, supplies and manpower.
- Use variable permit fee schedules based on the type and location of events, as well as level of disruption.
- Charge direct costs for staff, utilities, trash collection, removing or relocating park furniture and repairing damage.
- Establish event parking requirements.
- Consider professionalizing events staff to approve event permits and measure compliance.
- Hire staff with hands-on experience in event production.
- Staff sufficiently to cover permitting, monitoring and reporting needs.

## Goals and Objectives

Natural resource management is fundamentally concerned with achieving integrated, productive and sustainable use of biological, physical, social and financial capital at different geographic and temporal scales. As our understanding of the resource base has improved, the need for integrated approaches to management has been more widely appreciated.

- A. To protect and preserve Environmentally Sensitive Areas and deal with pollution.
- B. To make communities safer and more livable by tempering the effects of natural events and human activities.
- C. To ensure environmental sustainability and healthy ecosystems that can assist economic needs/opportunities enjoyed by current residents and future generations.

# Preservation, Open Space, Quality of Life

## Roles of Parks and Open Space

Parks, recreation facilities, and open spaces provide a multitude of benefits to people. They provide people with formal and informal gathering places to be physically active, socialize, relax, build community, and connect with the natural world. They make urban areas more inviting for living, working and relaxing. And, they provide environmental benefits, such as storm water management, erosion control, buffering between built and natural environments and wildlife habitat. They also provide greens to absorb air pollutants.

## Applications

To encourage the use of Parks and Open Spaces and to minimize existing health issues the residents may have, the facilities should consider providing, at a minimum:

- A. Exercise alternatives for all ages and ADA accessibility;



- B. Multi-Purpose Trails;





C. Landscaping with greenery and native plants to absorb pollutants and prevent erosion;



D. Community Gardens



E. Shade

i. Native Planting / Natural Shade Features



## ii. Installed Shade Features



## Goals

This new Parks, Recreation and Keep SPI Beautiful Master Plan was initiated by the City Council of South Padre Island and comes out of ideas provided by the residents of City through public hearings, surveys, City Departments and review of past information. As a result, of the identified community stakeholder input, four primary goal categories were formulated. These four categories include 1) Increase facility usage, 2) Enhance natural resources, 3) Provide safe and well maintained facilities and 4) Build new facilities. With the formulation of these goals each category has a series of measurable objectives as identified below:

### Increase facility usage

- Lighting would allow residents and tourists to utilize the parks in the evenings after work or during our hot summer days.
- Assess shade at all parks; develop plan to increase shaded areas, secure funding and implement.
- Increase the number of picnic tables available.
- Mark off soccer or flag football field once the Tompkins Park lawn area has grown.
- At Tompkins Park - build out the walking path with exercise station alternatives for all ages and physical abilities.
- Provide year round Community Center activities for all ages and interests.
- Assess community interest in vegetable gardens. If there is enough interest support the community in building out the planters.

## Enhance natural resources

- Monarch migration path – identify where new butterfly friendly plantings can go, plant and maintain.
- Bird migration path – Green the City and educate residents on the importance of trees, flowers, feeders. Host citizen events to clear out bush and debris.
- As much as possible, utilize native drought tolerant plants to absorb pollutants and prevent erosion.

## Provide safe and well maintained facilities

- Reduce trash by holding events throughout the year that involve residents and tourists.
- Renovate and maintain existing parks as necessary.
- Provide lighting at Tompkins Park.
- Post rules and regulations at Tompkins, Water Tower and Turtle Park.
- Develop standard operating procedures for parks maintenance.
- Develop a preventive maintenance and replacement plan for buildings and equipment.

## Build new facilities

- Complete Tompkins Park Phase II (Skate Park, Walking Trail, Shade Structures)
- Work with partners to develop a non-motorized water sports venue – identify location, acquire land, secure funding, obtain bids, build and advertise
- Skate park – secure funding, obtain bids, build, post rules and advertise
- Dog Park
- Indoor recreation facility that would have flexible courts for Pickleball, badminton, shuffle board, and other activities requiring protection from our strong winds and other weather elements. Consider adaptive repurposing of existing buildings/properties.
- South Padre Trail.

GOAL METRICS				
CITY OF SOUTH PADRE ISLAND PARKS AND RECREATION MASTER PLAN				
2018-2026				
DESCRIPTION	YEAR(S) TO BE IMPLEMENTED 1-8 YEARS	ESTIMATED COST (\$)	RESPONSIBLE PARTY	POSSIBLE FUNDING SOURCES
<b>Increase Facility Usage</b>				
Lighting For Parks – Complete Lighting For Tompkins Park.	2019-2023	\$98,000	Planning & Parks Department	Texas Park and Wildlife Grant
Assess Shade At Parks; Develop Plan to Increase Shaded Areas, Secure Funding and Implement.	2018-2023	\$97,000	Planning, Parks & Public Works Department	Operating Budget & Grant Funding
Increase the Number of Picnic Tables Available.	2019-2023	\$1000 Per Year	Parks Department	General Fund
Mark off Soccer or Flag Football Field.	2019-2022	Staff Function	Parks & Public Works Department	Operating Budget
Tompkins Park Walking Path and Exercise Station Alternatives.	2019-2021	\$125,000	Planning & Parks Department	Texas Park and Wildlife Grant
Provide Year Round Community Center Activities.	2018-2023	Staff Function	Parks Department	Operating Budget
Assess Community Interest in Vegetable Gardens.	2019	Staff Function	Parks& Public Information Department	Operating Budget
<b>Enhance Natural Resources</b>				
Monarch Migration Path- Identify Where New Butterfly Friendly Plantings Can Go, Plant and Maintain.	2018-2023	Staff Function	Planning, Parks & Public Works Department	Operating Budget
Bird Migration Path – Green the City and Educate Residents on the Importance of Trees, Flowers, Feeders. Host Citizen Events to Clear Out Bush and Debris.	2018-2023	Staff Function	Planning, Parks & Public Works Department	Operating Budget
As Much as Possible, Utilize Native Drought Tolerant Plants to Absorb Pollutants and Prevent Erosion.	2018-2023	Staff Function	Planning, Parks, Public Works & Shoreline Department	Operating Budget



GOAL METRICS				
CITY OF SOUTH PADRE ISLAND PARKS AND RECREATION MASTER PLAN				
2018-2026				
DESCRIPTION	YEAR(S) TO BE IMPLEMENTED 1-8 YEARS	ESTIMATED COST (\$)	RESPONSIBLE PARTY	POSSIBLE FUNDING SOURCES
<b>Provide Safe and Well Maintained Facilities</b>				
Reduce Trash by Holding Events Throughout the Year That Involve Residents and Tourists.	2018-2023	Staff Function	Parks, Environmental Health & Public Information Department	Operating Budget
Renovate and Maintain Existing Parks as Necessary.	2018-2026	\$10,000 Staff Function	Parks & Public Works Department	Operating Budget
Provide Lighting at Tompkins Park.	2019-2023	\$115,000	Planning & Parks Department	Texas Park and Wildlife Grant
Develop Standard Operating Procedures For Parks Maintenance.	2019	Staff Function	Parks & Public Works Department	Operating Budget
Develop a Preventive Maintenance & Replacement Plan For Buildings and Equipment.	2019	Staff Function	Parks & Public Works Department	Operating Budget
<b>Build New Facilities</b>				
Complete Tompkins Park Phase II (Skate Park, Walking Trail, Shade Structures).	2019-2022	\$500,000	Planning, & Parks Department, and City Council	Texas Park and Wildlife Grant. \$500,000 March 2021
Work With Partners to Develop a Non-Motorized Wind and Water Sports Venue.	2019-2026	Staff Function	Planning, & Parks Department, and Shoreline	Operating Budget
Skate Park – Secure Funding, Obtain Bids, Build and Advertise.	2019-2021	Staff Function	Planning & Parks Department	Texas Park and Wildlife Grant
Dog Park	2018-2026	Staff Function	Planning & Parks Department	Operating Budget





<b>GOAL METRICS</b> <b>CITY OF SOUTH PADRE ISLAND PARKS AND RECREATION MASTER PLAN</b> <b>2018-2026</b>				
DESCRIPTION	YEAR(S) TO BE IMPLEMENTED 1-8 YEARS	ESTIMATED COST (\$)	RESPONSIBLE PARTY	POSSIBLE FUNDING SOURCES
Indoor Recreation Facility that Would Have Flexible Courts For Pickleball, Badminton, Shuffle Board and Other Activities Requiring Protection From Our Strong Winds & Other Weather Elements. Consider Adaptive Repurposing of Existing Buildings/ Properties.	2018-2026	Staff Function Unknown Future Costs	Planning & Parks Department	Operating Budget, Grant Funding, Unknown Future Commitments

8

# City Facilities Master Plan



# Introduction

The City of South Padre Island has several buildings where City-related business is conducted daily. It is critical to their longevity and productivity to inventory them, assess their level of effectiveness and address maintenance needs. Additionally, planning for future growth is imperative.

South Padre Island is one of the most corrosive environments in the world. In addition to periodic tropical events, the daily high-saline environment is very caustic to most materials, including buildings. Prior to 2017, the City's building stock was aging and suffering from deferred maintenance and lack of future budgeting. To address the deferred maintenance and budgeting problems, the City hired a consultant in 2017 to perform a Reserve Study for the municipal buildings. These Reserve Studies will guide the City into the future with facilities needing attention and the funds needed to replace/repair those facilities. In addition, the City Council saw the need for an identified funding source from the general fund and raised the ad valorem tax rate by one cent with those funds dedicated to facilities maintenance.

Facilities are an integral part of a municipality's daily functions and are a significant investment of the taxpayers of the City. Being proactive instead of reactive about the maintenance of the facilities is critical to keeping up with demand. Having an accurate record of all systems within a facility can help with maintaining a parts and materials inventory, assist with warranties, budgeting, support staffing schedules and can help with matching fixtures or paint colors or tile.

Planning for current and future space needs is an important step in the planning process. A new facility should not be planned to fill only the current space needs, as growth is imminent and additional space will be needed. Additionally, as the community expands through annexation, it could result in needing ancillary locations to meet response time demands.

Ensuring the most current technology is used in the facility planning process can make the space more efficient and user-friendly. HVAC Systems can be programmed to shut down or operate at a lower frequency during non-business hours; access to certain sensitive areas can be permitted to certain individuals and key facility components can be tied to a remote monitoring system where they can be operated off-site during non-working hours.

In addition, security of those building users has become more important than ever in our current culture. Many facilities are designed to make accesses more secure, requiring credentials to enter. Ballistic-proof materials are being used more in common gathering areas and increased visibility has become more necessary to prevent an active shooter scenario. Parking areas are being constructed at a greater distance from buildings and vehicle intrusion prevention techniques are being planned to prevent vehicles from driving into buildings.



Current facilities owned by the City of South Padre Island include:

- Municipal Complex/Police Department
- Community Center
- Fire Station
- Convention Centre
- Visitors Center
- Multi-Modal (under construction)

# Municipal Complex



## 4601 Padre Boulevard

Built in 2007/2008, the Municipal Complex is 31,975 square feet, has two stories, 84 parking spaces, and houses the City Manager's Office, Administrative Services, Public Works, Environmental Health, Information Technology, Planning, Police, and Finance Departments. In addition to those departments, it also is home to the Municipal Court and Jail. It was designed by Rike, Ogden Figueroa, Alex (ROFA) Architects and built by Terry Ray Construction. Tax Anticipation Notes were issued in the amount of \$6,550,000 of which \$1.6 million has been retired. The remaining \$4,950,000 is being paid back annually in the amount of \$370,000 with the final payment scheduled for 2025.

A preventative maintenance plan is in place for this building and the Fire Station with dedicated funding through the General Fund through 2041. A one cent increase in the ad valorem tax rate was approved in 2017 to fund this plan.

# Community Center



## 4501 Padre Boulevard

Originally built in April 1978 to house City Hall and the Police Department, this building has been recently converted into a Community Center and storage facility for City records at a cost of approximately \$370,000. The Community Center portion of the building is 4,107 square feet and has a large gathering room, a smaller room, a serving kitchen, restrooms, office space and 37 parking spaces. It rests on the same campus as the Municipal Complex.

The records storage area is comprised of 1,767 square feet and is partitioned off to separate each City departments' storage needs.

When Hurricane Dolly hit South Padre Island on July 23, 2008, the roof of the existing Fire Station was torn off, rendering the building useless. As a temporary measure, the Fire Department staff moved into this building and called it home until the new Fire Station #1 on West Retama was completed in 2012.



# Fire Station #1



## 106 West Retama

Built in 2011/12, Fire Station #1 is 20,349 square feet, three stories and houses the City's Fire Department, which includes Emergency Medical Services. It was designed by Brown, Reynolds, Watford (BRW) Architects and built by Peacock General Contractors at an overall cost of \$4,195,000. Because the previous Fire Station was severely damaged during Hurricane Dolly, a grant was obtained from the Disaster Division of the Texas General Land Office in the amount of \$1,095,000 to assist with building a new facility. The remaining funds needed came from an issuance of Tax Anticipation Notes in the amount of \$3.8 million that is being paid back annually in the amount of \$293,000 with a final payment scheduled for 2031. The first floor is primarily comprised of bays wherein vehicles and equipment are stored. There are also storage areas, offices, restrooms and a gymnasium. The second floor is a secure area housing the firefighters' nine dormitory rooms, a kitchen and day room. The third floor encompasses administrative offices and a training room.

National standards recommend fire stations are positioned to cover a five-mile radius. Fire Station #1 is located 2.5 miles from the northern City limit boundary and three miles from the southern boundary, allowing for years of future growth.

# Convention Centre



## 7355 Padre Boulevard

Constructed in 1992, the South Padre Island Convention Centre comprises 45,856 square feet. It was designed by architects Loschky, Marquardt and Nesholm and built by Spaw Glass/Cahaba General Contractors at a cost of roughly \$10 million. It has exhibition space of 22,500 square feet and meeting space of 9,000 square feet spaced throughout seven meeting rooms with an auditorium (theater) area of more than 2,600 square feet. It holds a limited catering kitchen and has loading docks at the rear of the building.

A significant remodeling of the building began in 2014 at a cost of \$2.9 million, paid for with excess reserve funds. Some components of the remodel included: a concrete “pony wall” was added around the entire perimeter fortifying the exterior walls; the leaking skylights in the lobby were replaced with roofing and the entire building was coated with elastomeric paint for waterproofing.

After the exterior renovation, the interior was entirely re-painted, new “air wall room dividers” were installed, new floor covering was provided throughout and the kitchen facility was upgraded. The facility sits on 30 acres leased to the City from Cameron County for a 50-year period beginning in 1990, with two 25 year extensions. Recent studies have indicated a need to expand the facility to result in 50,000 square feet of exhibition space and a 20,000 square foot ballroom. A venue tax was approved by the voters in 2016 that could be used to fund this proposed expansion.

# Visitors Center



## 321 Padre Boulevard

The Visitors Center is a branch of the Convention and Visitors Bureau and serves to welcome visitors to South Padre Island. It is located near the Queen Isabella Memorial Causeway and sits on approximately 1.2 acres of land. It has 4,591 square feet of space with a common area, restrooms and office space. A major renovation/expansion is planned in the near future to incorporate the latest technology for tourism as well as to create an independent destination.

# Bicycle/Pedestrian Facilities

## Citywide

The City has strived to increase the mobility of Island residents and visitors for many reasons. First, walking, jogging and bicycling are wonderful forms of exercise thus contributing to the overall health and well-being of the community. Being outdoors in the fresh air, in a clean and safe environment, adds to positive mental health as well. Second, during peak seasons South Padre Island experiences traffic and parking challenges. Building the infrastructure necessary to make walking and bicycling more conducive to everyone reduces the number of cars on our roads. Building safe and protected bicycle lanes encourages bicycling enthusiasts to use those lanes, sharing them with walkers and joggers.

In 2015/16, Gulf Boulevard was improved to include a 10' shared use path on the east side that is protected by a series of delineators to strongly discourage vehicles from encroaching on the protected area. The path extends the entire length of Gulf Boulevard, a distance of roughly 2.5 miles.

Padre Boulevard is also known as Park Road 100 and is owned and controlled by the Texas Department of Transportation. In 2017, six-foot wide concrete sidewalks, all handicapped accessible, were installed on both sides of the entire length of Padre Boulevard, a distance of 5.5 miles, for a total of eleven miles of a safe and accessible walking trails.



Additionally the City began construction in 2019 of additional two miles of sidewalks from the Convention Centre up to the northern City limit boundary. There are two delineated wetland areas within this construction boundary that required the construction of raised boardwalks to span the protected areas. This project also included adding medians from Dolphin Street to the Convention Centre.



# Transit Multi-Modal Facility



## 321 Padre Boulevard

This multi-year construction project began in 2013 with a grant application to the Federal Transit Administration and the Texas Department of Transportation to construct a modern facility in which to accommodate transit riders to beautiful South Padre Island. The basic function of the building is to be a “transfer station” between different modes of transportation. It serves as a point of transfer between Island Metro’s three different routes, enabling riders to wait for their transfers in a comfortable setting. Those riders will have access to bicycle rental companies, taxi services, charter bus services and being able to obtain information about the various amenities South Padre Island has to offer.

The Multi-Modal Facility houses the South Padre Island bus system, Island Metro and the City’s Shoreline Department in addition to classroom space occupied by the University of Texas Rio Grande Valley Coastal Studies Lab. Lease space is being made available to Island businesses wanting to expand their opportunities with Metro riders.

The entire facility sits on property owned by the Texas Department of Transportation and is leased to the City for a thirty-year period with extension options.

The first phase was built in 2015 and included a “Park and Ride” parking lot that accommodates up to 125 vehicles. The entire project was designed by Gignac Architects and phase one was built by Spaw Glass Contractors at a cost of \$1.6 million. Visitors driving to South Padre Island via personal vehicle can park their cars in the parking lot and take alternate transportation to their destination, thus reducing the number of cars and traffic.



The second phase includes the actual building that comprises 11,772 square feet broken down into a common area, ten offices, reception area, a training room, conference room, restrooms and a break room for the transit drivers. A \$4.5 million grant, known by its acronym “TIGER” (Transportation Investment Generating Economic Recovery) was obtained in 2014 to fund the construction of the building.

It is a two story facility that will be Silver LEED (Leadership in Energy and Environmental Design) Certified. It was also designed by Gignac Architects and is being built by Noble Texas Builders.

Due to its prime location, the architectural style has been carefully vetted to make sure it’s attractive and functional. Visitors entering the Island via the Queen Isabella Memorial Causeway have a full view of the beautiful structure and its welcoming tropical landscaping.

At the northern tip of the property, a welcome sign is planned in addition to the beginning of South Padre Island’s Trail System, the Trail Head. Visitors and residents alike can leave their cars in the parking lot and begin venturing out through the system of trails, either afoot or on a bicycle. Wayfinding Signage will direct visitors to the various amenities the Island has to offer such as the beach, the bay, kayaking trails, boat ramps, parks, birding venues, and many other points of interest.

# Future Facilities

- Crew and Equipment Building

Provide a new building in the current City Hall property that would include a larger well organized building that would house Public Works, Fleet and other support departments. This building would be large enough to store all the fleet vehicles and serve as a warehouse and house all personnel including a break room.

- Parking Structure

Creation of a parking facility serving the basic function of parking vehicles as well as designed to incorporate multi-use features including availability for residential and/or commercial development. The structure would facilitate visitors and/or residents’ transition to and from their vehicles. Users of the facility need access to the beach benefiting local business and increase use of public transportation. The facility could also be a pick-up location for the City’s free transportation system - Island Metro.

9

# Shoreline Master Plan



# Executive Summary

This master plan sets an ambitious path toward improving the community and visitor experience as it relates to the shoreline, creating a more resilient coastline and preserving and protecting the Island's natural resources.

## Education

### Introduction

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According to Texas Association for Environmental Education, Texans have fewer direct experiences in the natural world today; therefore, safe and enjoyable indoor and outdoor experiences focused on our environmental resources are increasingly important for all citizens. An excellent setting for environmental education is the natural environment. Learning experiences within the natural environment can cater to all ages and backgrounds, be focused on culture and recreation and range from general awareness to action (TAEE 2013).

Two international documents, the Belgrade Charter and the Tbilisi Declaration, provide environmental education definitions and practices that remain the foundation for today's environmental education programs. The Belgrade Charter provided an initial goal statement for environmental education that was adopted during a 1976 United Nations conference (TAEE 2013):

*The goal of environmental education is to develop a world population that is aware of and concerned about the environment and its associated problems, as well as the knowledge, skills, attitudes, motivations and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones (UNESCO 1978).*

Two years later, at the world's first intergovernmental conference on environmental education, the Tbilisi Declaration articulated the goals for environmental education (TAEE 2013):

- Foster clear awareness of, and concern about, economic, social, political, and ecological interdependence in urban and rural areas;
- Provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment; and
- Create new patterns of behavior of individuals, groups, and society as a whole towards the environment.

Environmental education helps individuals obtain the knowledge and skills necessary to make responsible environmental decisions and take responsible actions to protect natural resources (TAEE 2013). Ultimately, the goal of environmental education is to aid individuals in understanding how people and societies are broadly related to one another and to natural systems. This increased awareness then guides people to take collective action toward addressing environmental challenges, as well as individual stewardship actions.

The City and the neighboring community offer a range of environmental education providers that create opportunities for citizens to connect with the natural world in a variety of different settings and experiences. This chapter is intended to provide guidance for the collective environmental educational programs that exist on and near SPI and to identify ways to celebrate, support and sustain these existing environmental education programs. The City and other educational groups are working to provide residents, visitors and future generations multiple opportunities to interact and engage with SPI's natural resources. These efforts include supporting resilient education facilities that are stable and can withstand environmental pressures, as well as promoting programs that are adaptable to change. Currently, there are no formal collaboration or communication channels between all of the entities offering educational opportunities. These programs would be stronger and able to adapt to community needs if there was a forum for promoting, celebrating and a cross-pollination of programs. The key to a resilient environmental education program on SPI is the ability to connect people and providers so that information, resources and expertise can be easily shared.

A general overview of the existing SPI environmental education opportunities is provided in the Appendix. It introduces environmental education on and near SPI and demonstrates how the environmental education community provides learning opportunities for diverse audiences.

This section includes a summary of the City's broad environmental education goals to challenge and unite the environmental education community to realize a greater vision and cross-pollination to enrich the environmental education opportunities. These goals include, but are not limited to, the following:

- Increasing public participation in environmental education opportunities;
- Increasing the diversity of environmental education audiences, providers and programs;
- Encouraging collaboration and communication among interested parties;
- Supporting opportunities for educators to participate in professional development; and
- Establishing funding for environmental education within the City and evaluating the success of the environmental education programs.

Following the summary, each goal is described individually; the goals are mutually supportive and not listed in any specific order. Each goal is accompanied by several strategies and suggested actions to support their obtainment. The amount of effort required per strategy will vary; some are already being accomplished while others will require innovation and greater resources. The list of strategies is not exhaustive, but rather represents suggestions for accomplishing each goal.

# Existing Environmental Education Opportunities

The City offers environmental education opportunities at multiple venues, serving millions of visitors and residents alike. These include formal and non-formal education venues, such as the SPI Birding and Nature Center, Sea Turtle, Inc., the Native Plant Center and The University of Texas Rio Grande Valley Coastal Studies Laboratory. The overall goal of environmental education is to provide inclusive opportunities for all ages and abilities. The following indicates the existing learning opportunities available through environmental education and highlights the broad scope of the environmental education resources on SPI. This listing does not detail all of the existing local, regional, or statewide environmental education efforts, but rather is meant to convey the diversity of environmental education opportunities that are already available. This information can be used to identify potential partnerships and opportunities for collaboration, highlight underutilized resources and suggest funding strategies, with the ultimate goal of supporting and sustaining existing opportunities.

## Types of Environmental Education

Generally, environmental education opportunities are referred to as formal or non-formal; however, there may be overlap between these categories. The following sections provide information about each of these education designations.

### *Formal Education*

Formal education refers to educational opportunities that occur in formal settings, such as an ongoing classroom or program and are generally guided by a curriculum framework. These opportunities are sometimes based on education standards and often participation is mandatory. Examples of formal settings include:

- Early Childhood Education (pre-Kindergarten [pre-K]);
- Kindergarten through Grade 12 Public and Private Schools;
- Homeschooling;
- Post-Secondary Education (i.e. colleges, universities, public and private technical schools, certification programs);
- Courses/Seminars for Credit, Certification, or Licensure.

Within formal settings, environmental education can be experienced in a variety of ways that can include innovative and experiential education outside the classroom; however, these opportunities generally use more traditional approaches that include lectures and classroom activities.



### Formal Education Opportunities

Formal education opportunities on SPI can be found at The University of Texas Rio Grande Valley SPI campus (Figure 1-1). The University of Texas Rio Grande Valley operates the Coastal Studies Laboratory, a facility of the School of Earth, Environmental and Marine Sciences. The School of Earth, Environment and Marine Sciences offers degree programs in environmental science, marine biology, ocean, coastal and earth sciences and agricultural, environmental and sustainability sciences, in addition to a curriculum geared toward a teaching certification (UTRGV n.d.). At the Coastal Studies Laboratory, students can participate in continuing education programs, which include leading marine science educational programs for visiting school groups (i.e. Ridley Floating Classroom) and in seminar series (UTRGV n.d.). Additionally, the Coastal Studies Laboratory offers a two-day professional development workshop for teachers focused on environmental education in the pre-K through Grade 12 environment (UTRGV n.d.).



**Figure 1-1** Existing Formal Education Resources within the City of South Padre Island (Source: Texas Orthoimagery Program (TOP) 2015 50cm NC\CIR Orthoimagery)

While there are no public or private pre-K or pre-K through Grade 12 institutions located on the Island, the City provides several homeschool offerings. In the fall of 2018, the SPI marketing team attended a three day National Homeschooling Conference as part of a larger effort to bring non-seasonal educators to the Island. The City exhibited alongside 250 other destinations and third-party homeschool vendors, collaborating with parents and educators and introducing them to SPI’s robust natural environment. The City’s exhibit highlighted SPI’s nature trails, Birding Center, Sea Turtle, Inc. and numerous, year-round sea life tours. The City has since established a permanent landing page on [www.sopadre.com](http://www.sopadre.com) dedicated to the familiarization and homeschool offerings which South Padre Island boasts (M. Flores, pers. communication, 2018).



**Figure 1-2** Existing Formal Education Resources within the City of Port Isabel (Orthoimagery Program (TOP) 2015 50cm NC\CIR Orthoimagery)

Within the neighboring City of Port Isabel, Texas, there are several institutions that offer formal education settings. These include primarily public and private pre-K and pre-K through Grade 12 schools (Figure 1-2):

- Port Isabel Junior High and High School
- Garriga Elementary School

- Derry Elementary School
- Little Learners Academy
- Bay Area Christian Academy

## *Non-Formal Education*

Non-formal environmental education opportunities are generally described as voluntary and can occur anywhere people are interested in learning. Providers of non-formal environmental education often work for a wide variety of organizations such as:

- Private, non-profit organizations and education centers
- Governmental agencies
- Private organizations
- Businesses
- Foundations
- Religious or spiritual organizations

Non-formal environmental education opportunities can last from just a few minutes to several days in duration and include:

- Visitor sessions
- Interactive exhibits
- Guided tours, walks, programs
- Guided field trips (indoor or outdoor)
- Special events and festivals
- Family learning
- Overnight camps

## *Non-Formal Education Opportunities*

SPI has several non-formal settings located within or adjacent to the City that offer environmental education opportunities geared toward a variety of audiences, including residents, youth groups, post-secondary groups, naturalist and birding societies, visitors and retired and/or senior citizens. These opportunities include programmed (guided bird walks, field trips, etc.) and non-programmed (interpretative signage, wayfinding signs, brochures, online sources, etc.) resources, many of which are government-sponsored or are sponsored by non-profit organizations (Table 1-1). Non-formal education resources can be found at these locations on SPI (Figure 1-3):

- SPI Birding and Nature Center
- SPI Visitors Center
- The Native Plant Center and Island Arboretum
- Sea Turtle, Inc.

- Boy Scouts of America: Laguna Station Sea Base
- University of Texas Rio Grande Valley Coastal Studies Lab
- Laguna Madre Nature Trail

**Table 1-1: Environmental Education Opportunities Offered at SPI’s Non-formal Education Resources**

Non-Formal Environmental Education Resources	Description	Environmental Education Opportunities							
		Interactive Exhibits	Field Trips/Pre-K through 12 Grade	Guided Tours	Lectures/ Classes	Interpretative Signage	Recreation Trails	Internships	Online Resources
SPI Birding and Nature Center	SPI Birding and Nature Center is a World Birding Center situated on 7 acres near the SPI Convention Centre. Habitats include dune meadows, salt marsh and intertidal flats, which are essential for migratory birds. The center offers 3,300 linear feet of boardwalks, five bird blinds and an observation tower and deck (World Birding Center, 2010).	X	X	X	X	X	X	X	X
SPI Visitors Center	The SPI Visitors Center provides information to ensure that visitors make the most of their visit to the Island. Professional staff provides visitor guides, city maps and information on local attractions (City of South Padre Island 2018g).					X			X
The Native Plant Center and Island Arboretum	The Native Plant Center & Island Arboretum is a non-profit community project that enhances eco-tourism and conservation on SPI. The Center features an outdoor garden with native plant exhibits unique to SPI. (SPI Chamber of Commerce 2018)	X			X	X			X
Sea Turtle, Inc.	Sea Turtle, Inc. is a sea turtle education, research, rescue and rehabilitation facility located on SPI. In addition to rescuing, rehabilitating and releasing sea turtles, Sea Turtle, Inc. educates the public and assists with conservation efforts for all marine turtle species. (Sea Turtle, Inc. 2018)	X	X	X	X	X		X	X
Boy Scouts of America: Laguna Station Sea Base	Operated by the Rio Grande Council, Laguna Station is a 2017 nationally accredited Boy Scouts of America adventure camp that provides Scouting programs for ages 6 to 20. Programs include camping, educational activities and outdoor experiences. The camp is also available for use by a variety of organizations, including religious, civic groups and professional groups. (Rio Grande Council, Boy Scouts of America 2014)				X		X		X
University of Texas Rio Grande Valley Coastal Studies Laboratory	Established in 1973, the CSL is dedicated to providing educational opportunities, enhancing research, engaging in public service and providing community outreach related to coastal and marine concerns in the Gulf (UTRGV n.d.)	X	X	X	X				X
Laguna Madre Nature Trail	Located on the north end of SPI, in close proximity to the SPI Convention Centre, the Laguna Madre Nature Trail is a 1,500-foot boardwalk that crosses four acres of marshland. This trail is ideal for bird watching and hiking. (City of South Padre Island 2018e)					X	X		

The City also hosts several community events that provide environmental education opportunities and promote environmental awareness. These include the Winter Outdoor Wildlife Expo, SPI Sandcastle Days, RecycleLand, HalloWings, the Arroyo Colorado Audubon Society Spring Migration Field Trip, the State of Texas General Land Office (GLO) Adopt-A-Beach cleanups and various beach monitoring programs and recycling events. Two faith-based organizations exist on SPI that provide informal settings for environmental outreach. Additionally, the City utilizes social media and a community forum to distribute environmental information and encourage participation in community-wide events.





**Figure 1-3** Existing Non-Formal Education Resources within the City of South Padre Island (Source: Texas Orthoimagery Program (TOP) 2015 50cm NC\CIR Orthoimagery)



Within the City of Port Isabel, existing non-formal environmental education resources can be found at the SPI Dolphin Research and Sealife Nature Center, Port Isabel Lighthouse State Historical Park, Port Isabel Public Library and Port Isabel Historical Museum (Figure 1-4). Several faith-based organizations also provide a non-formal setting for educational outreach.



**Figure 1-4** Existing Non-Formal Education Resources within the City of Port Isabel (Source: Texas Orthoimagery Program (TOP) 2015 50cm NC\CIR Orthoimagery)

## Environmental Education

The City provides the public with opportunities to better understand and form a deeper connection with the world around them. This process conveys the economic, environmental and cultural benefits that SPI’s natural resources offer and reinforces the need to protect the Island’s unique assets and habitats. It is important to stress that it is not necessary to be a member of an organization or formal program to participate or support environmental education opportunities or to advance environmental education opportunities within the City. Individuals or groups that share information about what they learn are useful tools for advancing this plan. Similarly, individuals and groups that financially support projects and programs make critical contributions to protect SPI’s natural resources. Further, those that make

environmentally responsible choices and take environmentally responsible actions act as influential role models for the larger community and help drive the City toward the larger goal.

## A Plan for the Future

The City seeks to embrace, support and integrate environmental education into everyday experiences so that residents and visitors alike can learn about the environment and their relationship to it from a time they are young, or from their first visit to the Island, and continue that relationship throughout their life. Individuals should have the opportunity to explore an array of issues directly and indirectly related to SPI's natural resources. Educational programs and facilities should provide individuals with the knowledge and skills to be effective stewards, allowing them to take action that will effectively improve and preserve the quality and abundance of the Island's natural resources for future generations. The City's vision includes providing environmental experiences at home, school and in recreational settings by utilizing existing local, regional and statewide resources and recognizing areas for expansion. It also includes promoting and supporting robust educational facilities and programs that are adaptable to change. Overall, these efforts should increase resident and visitor stewardship, resulting in a greater personal connection to SPI and an island that is stable and resistant to decline from human and environmental pressures. This section identifies five broad, interrelated goals for advancing environmental education in the City and indicates several important strategies for meeting each goal. All of these goals are mutually supportive and are not listed in any specific order of importance:

**Goal 1: Public Engagement**—Increase public participation in environmental education opportunities.

**Goal 2: Diversity**—Increase the diversity of environmental education audiences, providers and programs.

**Goal 3: Collaboration**—Encourage collaboration and partnerships among environmental education providers in formal and non-formal settings.

**Goal 4: Professional Development**—Support opportunities that develop and elevate the knowledge and skills of all stakeholders in environmental education.

**Goal 5: Assessment and Support**—Strengthen the City's ability to provide sustainable, quality environmental education programs.

### Goal 1: Public Engagement

*Increase public participation in environmental education opportunities.*

**Strategy 1.1:** Improve public access to quality environmental education materials, resources and facilities.

**Actions:**

- Develop a searchable online directory of environmental education resources that target a broad audience, including formal and non-formal educators, parents, students and the general public.
- Expand the existing web-based shoreline landing page. The page should document the work of environmental organizations, the University of Texas Rio Grande Valley, published journal articles and other scientific research to foster the exchange of ideas and make research readily available. Provide an online listing of environmental education professional development, internship and grant opportunities.
- Develop the proposed Dune Garden adjacent to the parking area for the La Copa beach access point. The Dune Garden would consist of a dune feature that has native dune plantings, a walk through and walk around component plus educational signage. This highly visible and accessible feature can serve as an important education opportunity to learn how dunes function as part of the beach system as well as the importance of their preservation.

**Strategy 1.2:** Increase public use of environmental education centers.

**Actions:**

- Provide public space that supports educational opportunities. On the bayside, access is lacking; however, the Convention Centre site provides an ideal space to gather large groups and explore the bay either in non-motorized vessels or by wading and casting seine nets. However, to support use by large groups, restrooms outside of the Convention Centre and spray showers are required. Similarly, while two restroom locations exist on the beachside, activities such as beach cleanups are typically geographically limited to these two locations so that participants have access to facilities. To provide increased educational opportunities, additional facilities are needed.
- Provide information to pre-K through post-secondary groups and homeschool programs on how they can collaborate with environmental education centers to meet curriculum standards.
- Encourage communication between environmental education centers on and off the Island so they can identify opportunities to coordinate programs to maximize benefits to centers and customers. This should include coordination with the City on community events (i.e. music festivals, farmer's markets, art festivals/walks, fitness events, etc.).
- Assist with marketing and promotion of environmental education center events, workshops, programs, etc. Produce a guide (online and printed version) to all the environmental education centers in and around the City and market to the general public, as well as formal educators.

**Strategy 1.3:** Increase awareness of environmental education events and promote regional and statewide opportunities.

**Actions:**

- The City should have one staff member that is responsible for acting as an active education liaison, facilitating cross-collaboration of ideas and activities between education providers. While not all providers are located on the Island, the City can serve as a hub for eco-tourism and education opportunities in the area. This education liaison would also be responsible for coordinating research activities within the City limits, archiving any research completed on the Island and within the larger eco-region on the City's website and connecting researchers with potential volunteers to support data collection activities.
- Become a media source for environmental education by using social media platforms and online community forums, as well as newsletters and brochures, to target a variety of audiences. Outreach should continue to regularly celebrate the work already being accomplished, thereby raising awareness and visibility of existing offerings, research and volunteer events. An example of this is the existing Anti-Litter Mid-Year Celebration.
- Distribute environmental education marketing materials to SPI's Visitor Center and surrounding establishments (i.e. Schlitterbahn Waterpark and Beach Resort).

## Goal 2: Diversity

*Increase the diversity of environmental education audiences, providers and programs.*

**Strategy 2.1:** Increase and broaden the diversity of environmental education audiences.

**Actions:**

- Support environmental education for both residents and visitor groups, by focusing on target audiences. Engaging in educational outreach serves residents and tourists. Such programming builds strong and meaningful connections to South Padre Island, enhancing the experience of both groups. The 2010 census notes that citizens over the age of 50 represent 50.4% of the population, while only 3.7% are of school age (5 to 19 years old). With a median age of 60, adult education activities would best serve the existing population, as well as visiting winter Texans (United States Census Bureau 2018). School-age activities would support visitors from the larger surrounding area and tourists, therefore activities geared at school aged groups that occur during summer and school breaks may be more effective at engaging younger populations. The Sea Turtle Kids Camp, consisting of three-day Camp sessions held throughout the summer by Sea Turtle Inc, is a good example of such programming. Each week's session repeats throughout the summer, making the short program accessible to both residents and families who are on an extended stay.
- Encourage environmental education providers to participate in training opportunities that address the different needs of targeted audiences. The Texas Association for Environmental

Education leads an annual conference, which was last held on SPI in 2000. Hosting such events raises awareness of the educational opportunities on the Island and in the region. CVB should continue to seek out events that draw the target audience and support City goals.

**Strategy 2.2:** Increase and broaden the diversity of environmental education providers.

**Actions:**

- Identify and support programs that recruit diverse audiences to environmental education career options (i.e. career fairs, recruiting bilingual environmental education providers, etc.). Provide this information to environmental educators and the public through the City’s website.
- Develop partnerships with organizations and post-secondary groups in and around the City to promote diversity in the field. As an example, Sea Turtle Inc. has a Volunteer Coordinator/Education Assistant staff member who could work with a City education liaison to post volunteer programs on a City website, promote special events and market volunteer opportunities.

**Strategy 2.3:** Increase and broaden the diversity of environmental education experiences.

**Actions:**

- Encourage and promote programs that take interdisciplinary approaches to environmental education. Infuse environmental education into other public programming, such as the arts, health, recreation, tourism, cultural/heritage, etc.
- Increase the number of internships/apprenticeship opportunities in the environmental education field for high school and college students. As mentioned in Strategy 1.3, a City education liaison could facilitate connecting students with opportunities and programs.
- Install educational signage on the beach and bay to provide visitors more information on SPI’s unique habitats and systems (i.e. mangroves, beach nourishment, trash and turtles, dunes, oysters, etc.).
- Draw more attention to SPI’s bayside environmental resources by providing and promoting bayside educational opportunities. This could include the establishment of a kayak trail that offers interpretative signage, wayfinding and a waterway connection to Boy Scouts of America Camp Perry located near Rio Hondo, Texas.
  - Would need to create guidelines for establishing a kayak trail that covered trail management, trail “right-of-ways”, funding, etc. Through partnerships with a variety of organizations, Texas Parks and Wildlife maintains nine coastal paddling trails within the State that offer paddling opportunities for all skill levels. The Seadrift Paddling Trail, recently opened in June 2018, provides river and bay paddling, making it a great trail for the City to reference in their own design of a paddling trail that offers coastal and inland paddling opportunities. The Texas



Parks and Wildlife “Future Trails” website (<https://tpwd.texas.gov/fishboat/boat/paddlingtrails/future/>) offers more information on funding opportunities as well as desirable paddling trail characteristics.

## Goal 3: Collaboration

*Encourage collaboration and partnerships among environmental education providers in formal and non-formal settings.*

**Strategy 3.1:** Promote increased communication and coordination among environmental education educators.

### Actions:

- As part of Strategy 1.3, an education liaison for the City would:
  - Assist in setting up summer learning camps and weekly lectures;
  - Host and coordinate a City landing page for educational opportunities and current and past research;
  - Facilitate communication between the City and those within the public that are interested in education and educational programming;
  - Promote an understanding between formal and non-formal educators on the issues that are relevant to both groups;
  - Encourage the integration of environmental education into the formal education system (pre-K through post-secondary schools);
  - Review opportunities for City facilities to host non-profit groups and/or research institutions; and
  - Promote events that are the result of collaborations and recognize and award successful partnerships.
- Support participation in the Texas Association for Environmental Education as a vehicle for collaboration. The Texas Association for Environmental Education is a professional organization that provides educational resources, networking opportunities and certification programs for environmental educators. The association’s Advisory Committee coordinates with state agencies and works with environmental education providers at universities and within industry, museums and nature centers. The City should encourage local environmental educators to utilize the Texas Association for Environmental Education resources and to participate in their certification process, which

aims to enhance the ability of educators and organizations to provide quality programs and resources (TAAE 2013).

**Strategy 3.2:** Strengthen and re-invigorate environmental educators and environmental education programs in and around the City.

**Actions:**

- Work with local educators to develop curriculum at multiple grade levels that can be used in classrooms that ties into local ecology and environmental issues. A City education liaison could act as a connection between student and teachers and organizations with programs, field events for hands-on learning and university researchers seeking volunteers and/or willing to share their work and experiences.
- Increase communication between designated leadership about the importance of the environmental education to the community and the value of environmental education programs.
- Encourage Island resident participation in education organizations such as the Rio Grande Valley Chapter of the Texas Master Naturalist.
- Host or sponsor an annual environmental educator awards banquet.
- Encourage participation and partnerships in regional or statewide formal and non-formal environmental education opportunities.

## Goal 4: Professional Development

*Support opportunities that develop and elevate the knowledge and skills of all stakeholders in environmental education.*

**Strategy 4.1:** Encourage participation in professional development and training programs for formal educators and non-formal educators.

**Actions:**

- Encourage partnerships and exchange programs between formal and non-formal environmental education providers.
- Help formal and non-formal educators find professional development opportunities.
- Encourage active involvement in local, regional, state, or national environmental education professional associations.
- Endorse and promote existing training that meets the needs of the environmental education community.

- Disseminate recent research on environmental education that demonstrates the value of environmental education to the community.

## Goal 5: Assessment and Support

*Strengthen the City's ability to provide sustainable, quality environmental education programs.*

**Strategy 5.1:** Evaluate the overall success of each goal and identify areas for ongoing improvement.

**Actions:**

- Establish or assign a City education liaison responsible for continuously evaluating the progress of the implementation of the education strategies and actions. The City education liaison should provide regular progress reports.
- Identify adaptive management techniques that can be used to update the implementation of the educational strategies and actions.

**Strategy 5.2:** Acquire and maintain funding and support for environmental education.

**Actions:**

- Identify local, regional, state and federal government programs that support environmental education or could support environmental education resources (i.e. SPI's proposed Beach User Fee Program, EPA Environmental Education Grants and Environmental Research and Education Foundation Grants).
- Partner with new public, private and non-profit entities and stakeholders.
- Develop guidelines for educational and wayfinding signage that reinforces the City brand.
- Strengthen existing relationships with funders and support groups.
- Continue to grow volunteer base and utilize volunteer groups.

## Conclusion

This chapter is intended to serve as a source of information and inspiration for supporting, implementing and sustaining environmental education resources within the City. Attaining a level of awareness and action, no matter how small, can make a positive impact on environmental education in and around the City. Key actions that will directly enhance environmental education associated with the shoreline are:

1. **Educational Liaison:** There are a number of entities on SPI and in the region promoting and/or providing educational opportunities, including the Parents of Port Isabel Schools, Boy Scouts of America, The University of Texas Rio Grande, The Convention & Visitors

Bureau and Laguna Atascosa National Wildlife Refuge. The City should have one staff member that is responsible for acting as an active education liaison, ensuring events are posted to the City’s calendar and facilitating cross-collaboration of ideas and activities. While not all providers are located on the Island, the City can serve as a hub for eco-tourism and education opportunities in the area. To advance environmental education efforts, the City could host an annual forum for local and regional environmental educators, thereby developing networking and collaboration opportunities. This education liaison would also be responsible for coordinating research activities within the City limits and archiving any research completed on the Island and within the larger eco-region on the City’s website, thereby making the work of scientists more visible and readily available to the public. The education liaison could also connect researchers with potential volunteers to support data collection activities.

- 2. Create a Forum:** Expand the education activities landing page on [www.sopadre.com](http://www.sopadre.com) to promote local education providers and programs not listed currently. This should be a forum to connect residents and visitors to a range of educational activities such as Boy Scout events, University led research, summer programming, homeschooling co-op classes and adult learning opportunities. It is recommended that the City’s education liaison above have ownership of this forum to ensure consistent messaging.
- 3. Provide Facilities:** Group activities, particularly for older and younger age groups, require access to bathroom facilities. Currently, only two beach access points have restroom facilities and there are no similar public facilities at bayside access points. More advanced programs may require classroom space, storage space for field equipment and laboratory equipment. Such facilities should be co-located together. At a minimum, any restroom facilities should include storage space, to facilitate the limited needs of existing programs.

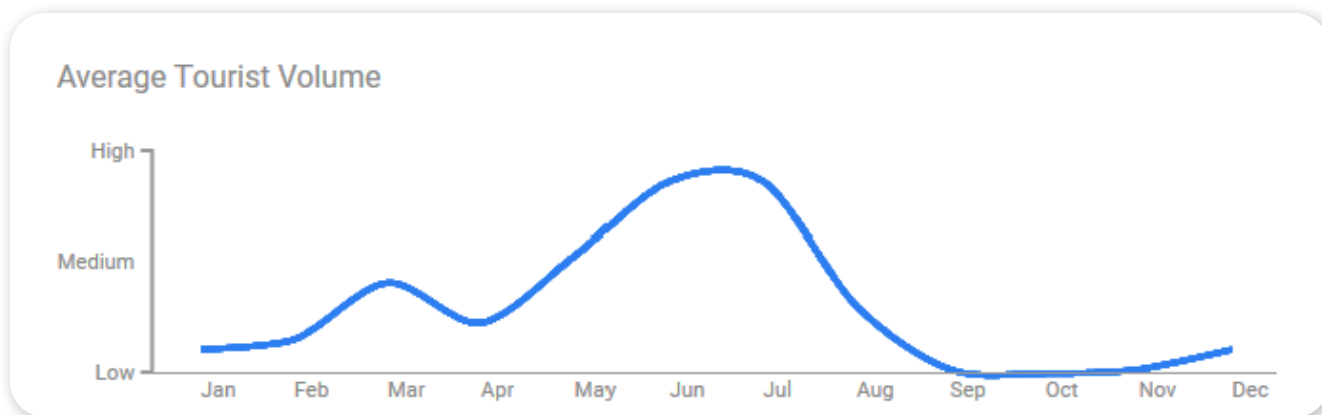
# Tourism

## Introduction

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SPI is a premier tourist destination in Texas, offering a variety of beachside and bayside activities for visitors of all ages and backgrounds. Located at the southern tip of the barrier Island, visitors to the City can immerse themselves in the outdoors, riding waves at City and County beaches, fishing with local guides, building sandcastles, or birding at the SPI Birding and Nature Center. Additionally, the City hosts many local events that offer unique opportunities for outdoor recreation and relaxation.

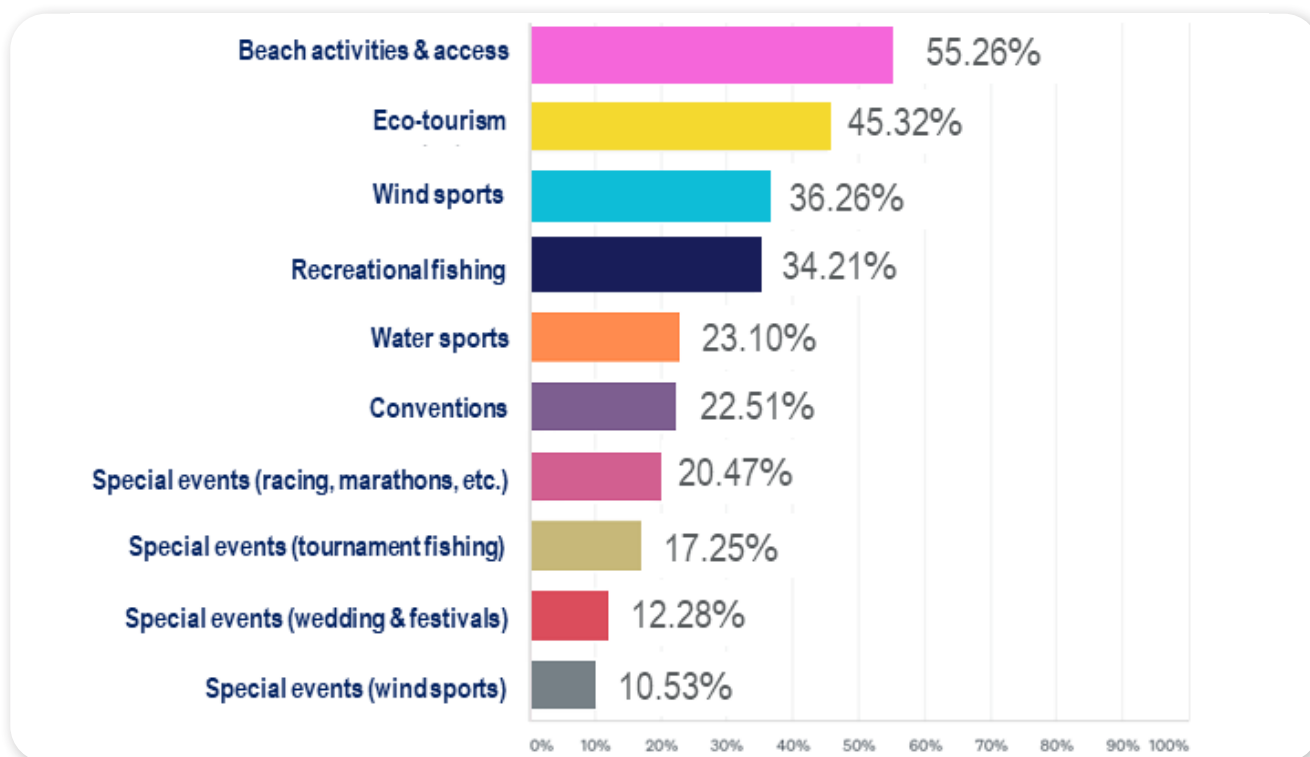
Domestic visitors to SPI are primarily from Texas, followed by Oklahoma, Minnesota, Missouri and Wisconsin. International visitors are primarily from Mexico and then Canada, the UK, Germany and Switzerland (Arrivalist 2018). Seasonal disparities in terms of economic activity indicate that there are periods of peak visitation on SPI (Aaron 2016). On average, tourism begins to increase in November with the arrival of winter Texans, followed by a small peak February through April, primarily due to spring break tourists and a much larger peak in the summer months of June and July (Figure 2-1; U.S. News and World



**Figure 2-1** Popular Times to Visit South Padre Island (Source: U.S. News and World Report 2018)  
 Note: Tourist volume is estimated based on in-market destination search query interest from Google and on [www.travel.usnews.com](http://www.travel.usnews.com) in 2015-2016.

Report 2018). To move SPI toward more of a year-round destination, SPI must attract more off-peak month visitors (Aaron 2016). To achieve this, communities in and around SPI need to continue to invest in tourism and visitor experience infrastructure.

Throughout April 2018, a public survey was distributed by the City to gather feedback on a wide range of topics, including tourism (Shoreline Master Plan Appendix B). Survey respondents (primarily SPI residents) indicated that tourism is the most important factor for SPI’s growth and success, followed by public access to water, conservation and education (City of South Padre Island 2018c). The survey also asked respondents to select the tourism activities that the City should focus on maintaining or



**Figure 2-2** Tourism Activities the City Should Focus on Maintaining or Expanding Per the South Padre Island Master Plan Survey Results (City of South Padre Island 2018c)



expanding to ensure a resilient economy in the future (Figure 2-2). Beach activities and access (55.26%), followed closely by eco-tourism (45.32%), wind sports (36.26%) and recreational fishing (34.21%) are the activities the public would like to see the City prioritize (City of South Padre Island 2018c).

This section is intended to guide the investments within SPI to improve the overall shoreline and eco-tourism experience. In association with bay and beach activities, tourism activities identified by the public as priorities will be the driving factors central to this investment guidance. A general introduction to the long-term vision for tourism is provided in the Appendix. It also discusses the role of local tourism-oriented entities and existing tourism projects.

This section includes a summary of SPI's broad tourism goals provided to enhance the area's tourism industry, including:

- Providing visitors with desirable activities and amenities;
- Ensuring adequate access to activities and amenities;
- Maintaining a strong tourism marketing and group sales approach; and
- Sustaining and establishing new funding and support for tourism infrastructure.

Following the summary, each goal is described individually; the goals are mutually supportive and not listed in any specific order. Each goal is accompanied by several strategies and suggested actions to support their obtainment. The amount of effort required per strategy will vary; some are already being accomplished while others will require innovation and greater resources. The list of strategies is not exhaustive, but rather represents suggestions for accomplishing each goal.

## Tourism Today

### Collaboration

The City has multiple entities working together toward achieving similar tourism goals. The Economic Development Corporation, the SPI Convention and Visitors Bureau and the Chamber of Commerce endorse projects and programs that have an overall emphasis on improving the City's economy. One goal is to guide tourism investment strategies that build on SPI's strengths, capitalize on the natural environment and support environmental stewardship of SPI and the surrounding communities. This includes promoting a thriving workforce, which is also critical to the economy. Tourism works to achieve this through the creation and generation of jobs, increased spending in the local community and the diversification of the market. The ultimate goal is to promote the City as a premier domestic and international tourism destination by supporting business efforts that economically, environmentally and culturally enhance the area. Even in cooperation with one another, the Economic Development Corporation, Convention and Visitors Bureau and the Chamber of Commerce cannot accomplish all of SPI's tourism goals and strategies; however, they may serve as advocates for various projects. As an action plan moves

forward, the lead agency or organization must work in concert with these entities to develop and identify additional strategies, detailed implementation plans and funding sources to achieve each strategy and realize the overall goal.

## Existing Projects

Through the collaboration of many partners, including the Texas Parks and Wildlife Department, Rio Grande Valley Communities, the U.S. Fish and Wildlife Service and the City, a number of undertakings have already been made to improve the visitor experience on SPI and market the Island as a destination for outdoor recreation. Large tourism-generating projects to date include Sea Turtle Inc., the SPI Birding and Nature Center, the Native Plant Center and the Rio Grande Valley Reef Project. The SPI Birding and Nature Center offers a variety of indoor and outdoor activities for first-time visitors to expert birders and, as a recognized World Birding Center, SPI Birding and Nature Center has strengthened SPI's marketing as a premier birding destination. The facility offers bay-front boardwalks, birding tours, a nature center with interactive exhibits and a gift shop. Visitors to the SPI Birding and Nature Center can also utilize a five-story tower offering spectacular views of Laguna Madre, beaches and dunes of SPI, the Gulf of Mexico and the SPI skyline. (SPI Birding and Nature Center 2015). The Rio Grande Valley Reef Project is a 1,600-acre artificial reef located 13 miles north of the City in 65 to 70 feet of water. The project is a partnership between the Texas Parks & Wildlife Department and the Coastal Conservation Association to support the growth of juvenile red snapper (*Lutjanus campechanus*) as well as larger pelagic fish, which has increased recreational fishing in the area (Friends of RGV Reef 2018, CCA 2018).

Additional tourism generating amenities include Isla Blanca County Park, Sea Turtle, Inc. and Schlitterbahn Beach Resort and Waterpark. The City also hosts dozens of shoreline based sport events including the South Padre Island Sand Crab Run and the Texas International Fishing Tournament, Texas' largest saltwater fishing tournament that draws thousands of spectators to SPI (Tour Texas n.d.). In 2017, 39 events were directly funded by the City through the Conventions and Visitors Advisory Board, including shoreline based events such as the Lighted Boat Parade, Sandcastle Days and musical performances at the Holiday Sand Castle Village exhibit. Additionally, increased access to visitor information has been made possible via the SPI Visitors Center and the SPI Visitor Guide. The City's Convention and Visitors Bureau purchases and ships approximately 18,000 visitor guides for national distribution every year (M. Flores, pers. communication, 2018). Additionally, more than \$2.7 million annually are spent with a national marketing firm to market SPI. New technologies have been employed to measure the effectiveness of these efforts.

This Plan is intended to build on these successes and refine SPI's tourism goals to meet the changing needs and expectations of visitors to SPI. The City must find ways to distinguish SPI from competing for niche markets and continue to promote SPI as a tourist destination for outdoor enthusiasts seeking adventure and relaxation in a beautiful natural environment. The primary goal of this plan is to leverage the available natural resources in and around SPI as an economic development strategy.

# A Plan for the Future

The City wants a visit to SPI to be seen as an integral part of living in and visiting southern Texas and the greater Gulf Coast. To achieve this goal, the City must engage target visitor audiences with a variety of shoreline and eco-tourism based attractions unique to SPI and continue to support projects that market SPI as a world-class destination.

This section identifies four broad, interrelated goals to grow the area's economy, while simultaneously promoting priority tourism activities (i.e. beach activities and access, ecotourism, windsurfing/kiteboarding and recreational fishing), as identified by the public via the SPI Master Plan Survey (City of South Padre Island 2018c). Several important strategies for meeting each goal are provided. Goals are mutually supportive and are not listed in any specific order of importance:

**Goal 1: Visitor Activities and Amenities**—Provide desirable activities, in-destination shoreline and eco-tourism based attractions and facilities.

**Goal 2: Accessibility**—Provide a variety of transportation improvements getting to SPI as well as options in and around the City.

**Goal 3: Leisure Marketing and Group Sales**—Establish a highly measurable, digital leisure marketing platform and a robust group sales approach to attract diversified visitor base throughout the year to SPI.

**Goal 4: Funding**—Maintain current funding and identify regional, national, or international resources for tourism development and marketing.

## Goal 1: Visitor Activities and Amenities

*Provide desirable activities, in-destination shoreline and eco-tourism based attractions and facilities.*

**Strategy 1.1:** Promote ecotourism projects that highlight the unique nature of the Island.

### Actions:

- Establish a network of trails and preserved land that affords access to wildlife corridors and provides sufficient space for recreation.
  - This could include the establishment of a new kayak trail; planning efforts would need to consider kayak/boat launch locations, restroom facilities and how those may influence natural resources, as well as the feasibility of the project. Larger tracts should be acquired to add a diversity of habitat types and wildlife viewing opportunities, including the area to the south of the Causeway. This wetland, as

well as those adjacent to The Birding and Nature Center, would be ideal areas to include in a kayaking trail. Opportunities for wildlife observations would be highest in areas with mangroves, additionally, kayakers would be protected from faster moving motorized vessels.

- This network could also be land-based by adding to the existing bicycle system a route primarily along Laguna Madre; connecting visitors with wildlife viewing opportunities from Laguna Madre Nature Trail and The Birding and Nature Center to the north, the native plant area between West Sheeps Head Street and West Pompano Street and ending at the viewing platform along Padre Boulevard, south of the Queen Isabella Causeway. Vacant land with existing wetlands and mangroves could be acquired to augment this network as well. With the population expected to continue to grow, the City could create a wetland mitigation bank now and sell the credits to future developers, thereby preserving high quality existing wetlands, which help maintain wildlife populations on SPI and draw eco-tourists and supporting future development. Allowing the natural environment to weave into the fabric of the Island will strengthen the image of SPI as a community that can balance tourism and growth while providing areas for nature to co-exist.
- “Voluntourism” is the combination of volunteering, tourism and traveling, making it an important part of a well-rounded eco-tourism program. The City would not have to host events but could facilitate opportunities and help market volunteer programs. Popular programs in other beach communities often center on nesting sea turtles, trail construction and festival event support.
- Provide the means to be green. Fishing is a large draw to the area; however, this Island does not have a sewage pump-out facility for boats. Providing access to a pump-out facility improves not only local water quality and user experience, but has the potential to drive business if the pump-out has other amenities associated with it. Within the City limits, a pump station near the entertainment district would serve to draw people to a central location and provide marina facilities and proximity to restaurants and bars.
- Encourage and support partnerships between existing environmental education organizations (i.e. SPI Birding and Nature Center, Sea Turtle, Inc., etc.) and businesses (i.e. hotels, Schlitterbahn Waterpark and Beach Resort, etc.). These partnerships should offer visitors opportunities for “hands-on” experiences and active participation, as well as inform visitors of available activities.

**Strategy 1.2:** Develop bayside open space and vacant lots.

**Actions:**

- Identify open space and vacant lots and assess for acquisition and potential development to support public access through boat ramps, restroom facilities and parking. Suggested improvements include:
  - Improvements to Palm Street boat ramp and acquiring property on Corral to support a boat ramp through additional parking, facilities (such as fish cleaning stations), a

parking lot for fishing tournament weigh-ins and/or additional ramp and dockage. A Texas RESTORE grant was awarded, but funds are still pending to implement improvements at this location.

- Addition of public boat ramp on West Marlin Street.
- Consider property access that would provide more non-motorized watersport access and recreation for users and consider parking requirements for vehicles and trailers.
  - The Convention Centre site is ideal for silent watersport activities such as windsurfing, kiteboarding and kayaking.
  - Allowing separation of motorized and non-motorized vessels will improve the user experience by reducing congestion at access points and improve safety during loading and unloading.

**Strategy 1.3:** Support recreational fishing in and around SPI.

**Actions:**

- Maintain boating access in Tompkins Channel through routine dredging. Develop a long-term maintenance plan that addresses monitoring, dredging needs, project timing and funding sources.
- Partner with the Friends of Rio Grande Valley Reef for recreational access to the artificial reef located 13 miles northeast of the SPI Jetties. Identify ways to diversify artificial reef funding. Seek to remove the old Queen Isabella Causeway and place materials as part of the reef.
- Explore the establishment of large boat slips that could be used for offshore fishing boats, pleasure boats, winter stays, etc. This would require identification of property owners and potential improvements/deepening to Tompkins Channel as well as establish permitting needs. There is potential to enhance boat slips in the central portion of the island, as well as expanding upon facilities in the vicinity of the Palm Street boat ramp. These areas could provide larger boat slips as well as pump-out stations. Dredging and permitting would be necessary, particularly considering potential seagrass impacts if deepening is pursued; however, it may be feasible to tie into the proposed existing channel extension and associated mitigation.

**Strategy 1.4:** Ensure that future demands are met through the creation or expansion of existing facilities/services.

**Actions:**

- Identify facilities for redevelopment, specifically in the entertainment district of SPI. A market feasibility study conducted in 2010 for the Padre Boulevard Initiative indicated the projected population of SPI would increase by approximately 40 percent from 2018 to 2030 (TXP, Inc. 2010). This recommendation aligns with the goals of the SPI Comprehensive Plan and the Padre Boulevard and Entertainment District Plan and will help the Island achieve its overall goal of continued development of attractions for both tourists and residents (TXP, Inc. 2010;



SPI 2015). During community interviews, residents specifically identified the entertainment district as an area to expand access to the bay with additional public parking and a public boat launch. In particular, the expansion of infrastructure that supports tournament fishing, outside of residential areas, is desired to dissipate congestion at the existing launch points and avoid parking conflicts with residents.

- Add user amenities to existing trail systems and beach access points, such as restrooms, water fountains, bike racks and trail signage.
- Consider constructing or expanding facilities that promote tourism (i.e. butterfly pavilion, Convention Centre expansion, sporting facilities). New facilities should sustain and maintain the cost of operations through additional programs and amenities (i.e. restaurant, gift shop, snack bar, etc.). Studies should be completed for each potential new construction or existing expansion project to fully understand how said facilities would compete with existing facilities in the surrounding region. Efforts to capitalize on eco-tourism should also be included.
- Expand the existing SPI Convention Centre; the expansion plan must demonstrate to the public that the expansion is needed, will be efficiently utilized and will provide economic benefits to the community. This will allow for enhanced eco-tourism events and educational forums.
- Establish annual re-appraisal of existing parks, facilities and services within the City.

## Goal 2: Accessibility

*Provide a variety of transportation improvements for getting to SPI as well as options in and around the City.*

**Strategy 2.1:** Provide a variety of transportation improvements to increase accessibility for all activities and amenities.

### Actions:

- Maintain boating access in Tompkins Channel by performing routine dredging of the shallow-water channel. The City should also explore the expansion of Tompkins Channel (i.e. widening and/or extending further north), which would require environmental impact assessments and mitigation plans. Mitigation of seagrass beds is limited because a healthy community already exists. Regulatory authorities would need to be close partners to identify potential mitigation strategies that include mitigation alternatives such as conservation or restoration of alternative habitat types. Extension of Tompkins Channel would also impact existing buried power cables that connect to the Island from across the Laguna Madre near the Convention Centre. The utility provider AEP would need to perform a study to determine the required elevation to lower the cables, associated costs for the project and anticipated timelines. The lowering of the cables may also impact additional seagrass areas that would need to be mitigated.

- Support and advocate for the Texas Department of Transportation's SPI Second Access Project. Considerations should include the economic and environmental impacts of construction, health and safety benefits of a second access/exit route and the impact on tourism, including the added environmental pressures associated with increased tourism.

**Strategy 2.2:** Ensure SPI's destinations and facilities are distributed equitably through the City.

**Actions:**

- Identify opportunities to balance the amount and types of parkland, open space, trails and access by focusing on new recreational/tourism development in areas that are currently underserved.
- Ensure there is ease of access to recreational areas with careful planning of parking facilities and public transit stops.
- Continue to work with developers to identify opportunities for new park and open space facilities in new regions of the City based on the City of SPI's Parks and Open Space Master Plan.
- Enhance walkability between trails, fountains, exercise kiosks, parks and bay/beach shoreline facilities.

## Goal 3: Funding

*Ensure an adequate level of financing for tourism development and marketing.*

**Strategy 3.1:** Diversify funding resources for tourism infrastructure and enhancements.

**Actions:**

- Identify new regional, state, national, or international resources for tourism development and marketing (i.e. Texas RESTORE grants for restoration/preservation projects that would enhance eco-tourism opportunities).
- Pursue joint funding of projects with regional, state, national, or international agencies.

## Conclusion

Tourism is SPI's primary economic driver and will continue to be for years to come. This chapter is intended to guide tourism investments based on the Economic Development Corporation's previous successful tourism initiatives and the public's responses to the SPI Master Plan Survey. Strengthening the City's economic vitality through the preservation and enhancement of SPI's existing natural and cultural conditions will help the community continue to build a sturdy foundation for tourism that can be expanded in the future. Key actions that will directly enhance tourism associated with the shoreline are:

- 1. Enhance Beach Access Facilities:** Tourists come to SPI first and foremost for the beach experience. The City has done an excellent job of improving beach access points. This work should continue so that users have convenient access to the beach. However, restrooms and shower/foot washing stations are limited and need to be expanded to facilitate a positive experience for all users.
- 2. Enhance Bayside Access and Facilities:** Bayside activities, particularly fishing and wind sports, are a large secondary draw to the Island. Public access, parking, restrooms and facilities are significantly lacking. Opportunities for land acquisition should be explored, particularly clustering around the entertainment district for motorized vessel ramps and north of the Convention Centre for non-motorized access. Other acquisitions for wind-sport oriented parks and access should also be pursued. A cost vs. benefits analysis that incorporates impacts to residents (including traffic impacts, restrooms and parking) should be considered in any new access development.
- 3. Diversify tourism opportunities:** Develop eco-tourism and other local events during the low-tourist or shoulder seasons. These efforts should include opportunities with Space tourism, cruise lines, trail expansion, Birding and Nature Center interactive exhibits and nature based filming. Addition projects such as dismantling sections of the old Queen Isabella Causeway and using the material to expand the Rio Grande Valley Reef could promote increased offshore tourism.
- 4. Establish Guidelines to Preserve the City's Brand:** SPI's brand is inherently linked with the shoreline, particularly the beach and spring break. The City, EDC and CVB all work to strengthen the SPI brand and diversify tourism, however, this work should be directed by a set of guidelines and priorities that is clear to the public and helps prioritize investments with the greatest potential benefit. These guidelines should identify SPI's core business values, marketing strategies for the SPI visitor audience and ways to remain committed to SPI's overall business culture/heritage. For example, several desired improvements to beach-side access were noted in the public survey, namely additional restrooms and spray showers. By establishing clear guidelines, including a decision matrix, proposed projects could be evaluated against each other and the projects that rank highest in supporting the City's brand would move forward ahead of other lower-ranking projects.

# Conservation

## Introduction

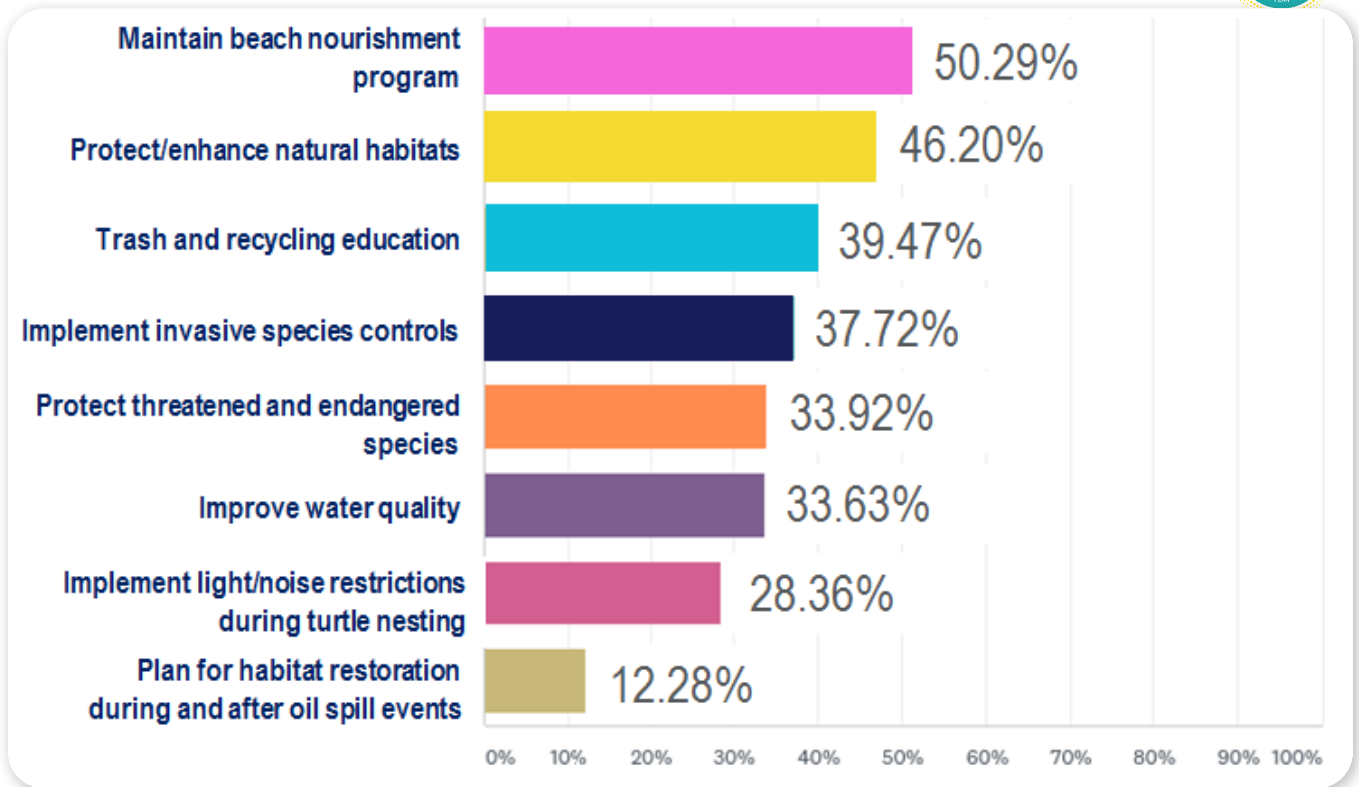
SPI's wealth of natural resources has made the City a premier destination for vacationing and living. Miles of shoreline and abundant opportunities for watersports, ecotourism and beach activities attract approximately 4.5 million visitors to the City per year (Seatrade Cruise News 2018). The visitor population, in addition to the City's current 5,000 inhabitants, results in increasing pressure on the City's ecological assets (City of South Padre 2013). Maintaining the health and viability of these resources is central to the long-term sustainability of the economy, the environment and livability of SPI; therefore, careful planning for future land use is necessary to sustain the quality of life that visitors and residents currently enjoy and wildlife will require.

The interconnectedness of the Island's habitats, species and people is undeniable; therefore, conservation of the natural resources within SPI must be a priority for the City. By investing in projects that enhance and protect the natural features, resources and functions, the City invests in its future.

The number one priority for the City is undeniably beach nourishment. As per state requirements, the City has adopted a Dune Protection, Beach Nourishment, and Access Plan as well as an Erosion Response Plan. The primary component of these plans is establishing coastal resiliency via beach nourishment and dune protection and enhancement. The City regularly works with the USACE and the GLO on a biennial basis and has implemented strict dune protection regulations. Information on the City's recent operations is located in the Appendix.

During April 2018, a public survey was distributed by the City to gather feedback on a variety of topics, including conservation. The survey asked respondents, the majority of whom reside on SPI, to select conservation activities that the City should focus on maintaining or expanding in the future (Figure 3-1). Maintaining the beach nourishment program (50.29%) was closely followed by the protection/enhancement of natural habitats (46.20%). Additionally, the survey revealed strong support for bayside conservation efforts, including improvements to existing infrastructure to reduce flooding (53.51%) and preservation of existing mangroves and wetlands (49.12%) (Figure 3-2; City of South Padre Island 2018c).

As indicated by the results of the City-wide survey, preservation, protection and/or restoration of the natural environment, natural ecosystems, vegetation and wildlife should be the focus of conservation efforts in the next five to ten years to support the long-term future of SPI. This section is intended to guide these efforts. A general introduction to the City's existing conservation efforts is provided in the Appendix. It describes the City's resources in more detail and discusses the actions the City is currently taking to protect SPI's unique assets per the City's 2008 Comprehensive Plan which is currently being updated.



**Figure 3-1** Conservation Activities the City Should Focus on Maintaining or Expanding (Source: City of South Padre Island 2018c)



**Figure 3-2** Conservation Activities the City Should Prioritize on the Bayside to Increase Public Utilization (Source: City of South Padre Island 2018c)



This section includes a summary of the City’s broad conservation goals to protect resources and mitigate the effects of various types of human-induced and natural disturbances in the future. Goals generally include:

- Protecting, preserving and enhancing critical ecosystems;
- Participation in resiliency projects (i.e. beach nourishment) and identification of new resiliency opportunities (i.e. flood protection);
- Bayside conservation and infrastructure improvements to increase public utilization; and
- Enhancement of community conservation programs.

Following the summary, each goal is described individually; goals are mutually supportive and not listed in specific order. Each goal is accompanied by several strategies and suggested actions. The amount of effort required per strategy will vary; some are already being accomplished while others will require innovation (i.e. research, the establishment of a committee to initiate the work, etc.). The list of strategies is not exhaustive, but rather represents suggestions for accomplishing a goal.

## Conservation Today

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### Resources

SPI is endowed with an abundance of natural features and scenic areas. Clean air, water and land offer key opportunities for visitors and residents to experience the natural environment. Such unique opportunities are the primary reason why SPI is revered as a premier location for vacationing and living and also the reason why SPI’s resources must be enhanced and protected.

### *Natural Resources*

The City is located within Cameron County, Texas on the southern tip of Padre Island, the world’s largest barrier island. Padre Island has 70 miles of undeveloped shoreline and ranges in width from one-half to three miles. It is bordered on the east by the Gulf and the west by the Laguna Madre Bay, one of only two hypersaline (i.e. containing significant concentrations of salt at higher levels than ocean water) lagoons in North America and also one of the most productive estuarine systems. A number of aquatic and terrestrial ecosystems exist on the barrier island, including dunes and beaches, ponds and wetlands and estuaries (Diamond et al. 2017).

Padre Island’s ecosystems provide a critical resource for several resident and migrating species. Padre Island National Seashore, located approximately 30 miles north of the City, contains tens-of-thousands of acres of pristine wetlands and 29 rookery islands. A number of surveys and studies, dating back to 1891, have been conducted on Padre Island, including Padre Island National Seashore and north and south Padre Island, as well as surrounding areas including Mustang Island and Laguna Atascosa National Wildlife Refuge (Figure 3-3). Data has been collected on

vegetation, with a majority of research focused on aquatic vegetation (i.e. seagrass beds) and mammals, herpetofauna (i.e. turtles, lizards, snakes, etc.) and birds. Studies focused on a variety of topics including, but not limited to, abundance, food sources and availability, species diversity, reproduction, the effect of human activity and natural disturbances and habitat use. Although there have been no large-scale fish surveys, Texas Parks and Wildlife has monitored finfish in the area for an extended period of time and species are well documented through commercial and recreational fishing (Cooper et al. 2005).

Studies indicate that SPI and surrounding areas are dynamic and rich in biodiversity. The region is characterized by its hypersaline lagoon system, vast seagrass meadows, wide tidal mud flats, a large overwintering bird population and great fishery productivity. While urban development will bring the greatest predictable changes to SPI, tropical storms and hurricanes have the potential to bring large changes to the region, including flooding, Island breaches spanning from Gulf to the bay and morphological shoreline changes (Griffith et al. 2007, Cooper et al. 2005, Del Angel 2011).

The Laguna Madre is one of five hypersaline lagoons worldwide and is known for shallow, clear water and vast seagrass meadows (Smith et. al 2013). Oysters (*Crassostrea virginica*) are not commercially harvested because of hypersalinity and the blue crab (*Callinectes sapidus*) harvest is small compared to regions to the north; however, pink shrimp (*Penaeus duorarum*) make up an important part of the commercial harvest. Sport fishing for species such as red drum (*Sciaenips ocellatus*), black drum (*Pogonias cromis*) and spotted seatrout (*Cynoscion nebulosus*) is increasing (Griffith et al. 2007).

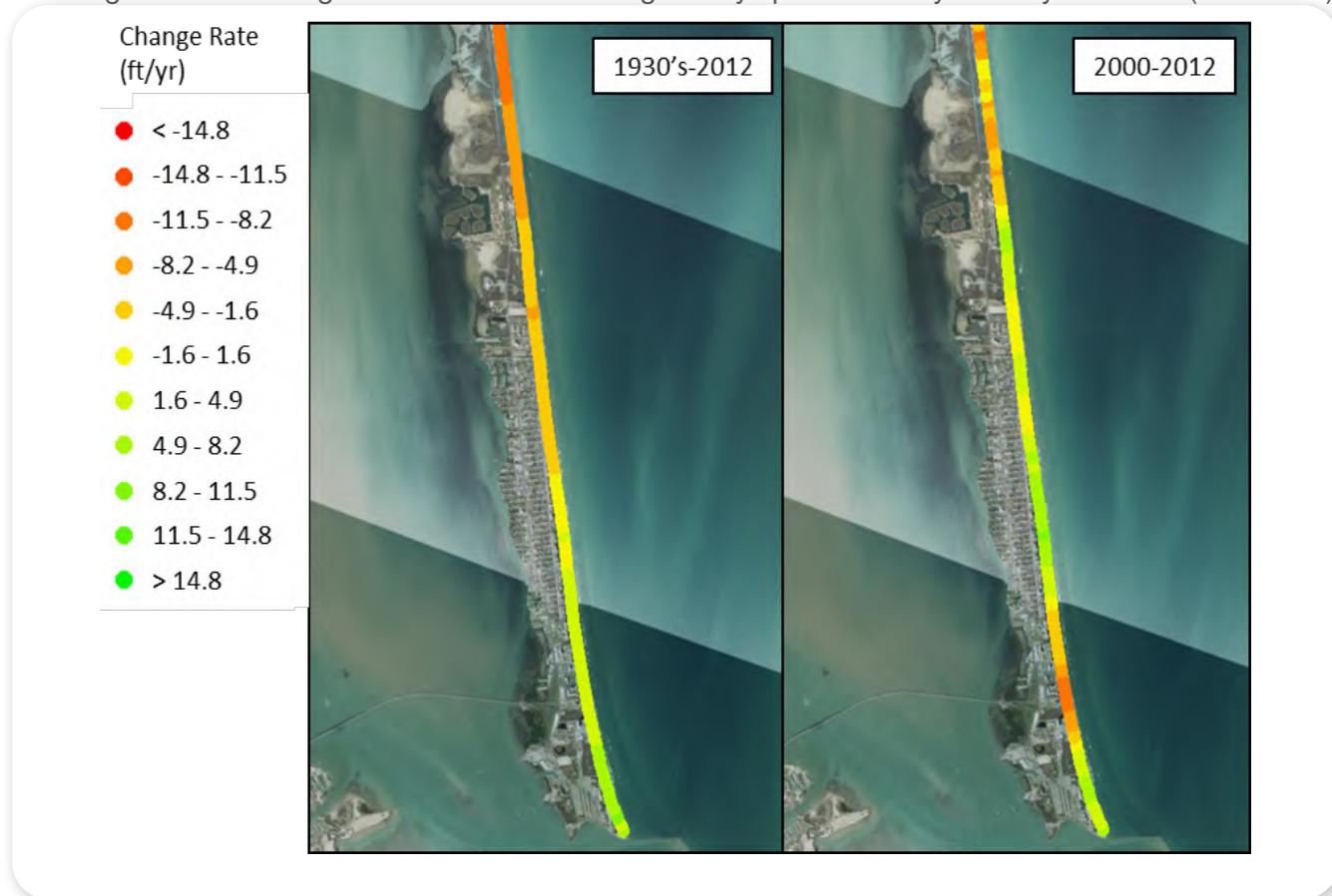
Padre Island also supports many animals, with the Island's largest native mammal being the coyote (*Canis latrans*). Padre Island National Seashore has documented over 350 species of birds and many reptiles, including five species of sea turtle: the leatherback (*Dermochelys coriacea*), green (*Chelonia mydas*), Kemp's ridley (*Lepidochelys kempii*), hawksbill (*Eretmochelys imbricate*) and loggerhead (*Caretta caretta*) (Griffith et al. 2007).



**Figure 3-3** Location and Extent of Natural Resource Surveys and Studies on Padre Island and in Surrounding Areas (Source: Texas Orthoimagery Program (TOP) 2015 50cm NC\CIR Orthoimagery)

Fishing resources offshore of SPI have been enhanced through the introduction of the 1,600 acre Rio Grande Valley Reef project at South Padre Island. This artificial reef complex is located 13 miles north of the City in 65 to 70 feet of water and includes partnerships with Texas Parks & Wildlife Department and the Coastal Conservation Association. Work on the reef is ongoing and includes the placement of reef pyramids and low relief structures to support the growth of juvenile red snapper (*Lutjanus campechanus*), as well as sunken boats and higher reefs for larger pelagic fish (Friends of RGV Reef 2018, CCA 2018).

The beaches on South Padre Island are low, fine-grained beaches with median grain sizes ranging between 0.18 and 0.21 mm (Kraus, et. al 1996, HDR 2010). The shoreline along all of South Padre Island has been erosional over the long-term, except in the vicinity of Isla Blanca Park and the north jetty at Brazos Santiago Pass. The Texas Bureau of Economic Geology has calculated shoreline change rates for the Island based on historic topographic surveys, aerial photographs and LIDAR (Light Detection and Ranging) surveys. The most recent shoreline change calculations consider data from the 1930's through 2012 (Figure 3-4) and show the long-term trends of erosion on average of -2 up to -5 ft/yr for the middle to northern shoreline sections. These calculations have resulted in the northern portion of the City being described as a critical erosion area by the GLO (GLO 2014). Figure 3-4 also shows the more recent era from 2000-2012, which includes the multiple beach nourishment and nearshore berm projects performed by USACE, GLO and the City. The 2000-2012 data show the shoreline along the northern section of the City has shifted from erosional to accretional/stable over the 12 year period, which agrees with findings from annual monitoring surveys performed by the City and GLO (HDR 2017).



**Figure 3-4** Shoreline Change Rates Calculated by the Bureau of Economic Geology (BEG 2018)



This change indicates the importance of the beach nourishment program that has added sand to the beach system, which offsets ongoing erosional forces and has been a significant contributor to beach stability and dune growth.

The dune system along the Island varies between the undeveloped shoreline north of the City and the developed section within the City limits. Northern Island dunes are typically largely unvegetated transverse dunes that consist of a mobile sand supply that not only encroaches on to Park Road 100 but also into the lagoon shoreline to create extensive tidal flats. This section does contain foredunes that are 12-20 feet high, but there are large numbers of overwash areas from storm impacts. The southern section of the island within the City limits consists of sections of dune that are typically 6 to 13-foot high fronting seawalls/bulkheads (Del Angel 2011). The dunes in the City are not continuous and have breaks at several properties in addition to 156 breaks/cuts for pedestrian access in the dune system. The large open areas will reduce storm protection for landward properties. The permanent footpaths across dunes can result in low elevation points where flood waters can intrude or wind erosion can focus, compromising an otherwise continuous stretch of dune height and volume (Elko et. al. 2016).

## Existing Conservation Efforts

The interconnectedness of the Island's habitats, species and people is undeniable; therefore, conservation of natural resources within SPI must be a priority for the City. By investing in projects that enhance natural features and functions and protect natural resources, the City invests in its future. In 2008, the City released a Comprehensive Plan that highlights goals for both land use and parks and resources. The new 2018 Shoreline Master Plan provides a roadmap for conservation in the City to improve the overall functionality of the City's natural systems and ensure visitors and residents benefit from what the Island offers. Goals, objectives, policies and strategies for land use and parks and resources are presented in the Plan.

### *Recent Operations*

Per state requirements, the City has adopted a Dune Protection, Beach Nourishment and Access Plan as well as an Erosion Response Plan (ERP) that addresses beach and dune management. One of the primary components of these plans is establishing coastal resiliency via beach nourishment and dune protection and enhancement. The City participates in beach nourishment projects with USACE and GLO on a biennial basis and has implemented strict dune protection ordinances. More recently, the City has developed management strategies for Sargassum species (*Sargassum* spp.) on the beach that includes limiting raking/removal and when removed, placement within the upper beach to preserve and enhance the natural cycle of the beach and dune systems. Dune enhancement activities by the City also include dune planting events by staff and volunteers to reinforce dune areas and fill vegetation gaps to create a more comprehensive dune field. Additionally, the City is identifying land for potential acquisition and collaborating with stakeholders and organizations to accomplish resource management goals.



## Beach Nourishment

Beach nourishment provides:

- **Storm Protection**—Protecting residences, hotels and businesses from wave energy during storm events;
- **Sand Source for Dunes**—Wind-blown sand is the primary contributor to dune growth, which serves as a sand reserve for the beach in storm conditions;
- **Habitat Restoration**—Providing healthy systems that numerous species (i.e. Kemp Ridley sea turtles [*Lepidochelys kempii*] and Piping Plovers [*Charadrius melodus*]) use as a place to live, feed and nest and;
- **Economic Stimulation**—Drawing visitors to the shoreline that support local economies.

Beach erosion was identified as a problem along the approximately five miles of City beachfront (Town of South Padre Island 2005). The federal government has partially funded dredging and beach nourishment projects, in cooperation with the City and the State of Texas GLO, since 1997 (CBI 2018). This partnership has resulted in the Beneficial Use of Dredge Material (BUDM) project that has been shown to restore and protect the quality and function of SPI's beaches, dunes and adjacent areas, by adding sand to the system and widening the beaches. These projects generally coincide with maintenance dredging of the Brownsville Ship Channel, a federal navigation channel. The timing of BUDM projects is limited, as they must be conducted outside turtle nesting season, which means construction only between October and mid-March. In addition, the schedule is dictated by the Federal government, as the project is overseen by the U.S. Army Corps of Engineers (City of South Padre Island 2018d).

These efforts have slowed shoreline erosion and created a relatively stable beach system, particularly along the southern and middle section of the City. As described in Section 3.2.1.1, analysis of annual beach profile monitoring report surveys show the City shoreline has been typically stable from 1995 (prior to implementation of U.S. Army Corps of Engineers beach projects) through 2016 (HDR 2017). It should also be noted that the period between 2005 and 2008, when no beach nourishment occurred and the shoreline was impacted by storm waves and tides from Hurricanes Katrina, Rita, Dolly and Ike, experienced significant erosion to the beach and dune system. Currently, the City is working with GLO and professional coastal engineering firms to research long-term projects to address beach erosion. One consultant helped identify a large sand source 20 miles offshore that could be used if the City needs to rebuild after a major storm event (City of South Padre Island 2010). The City also recently updated their U.S. Army Corps of Engineers beach nourishment permit to include a new nearshore berm placement area offshore of the northern part of the City's beach. The purpose of this new nearshore placement area is to provide sand to the lower portion of the beach profile and to help develop a protective submerged berm, similar to what has been created along the middle portion of the City shoreline. To further review the movement of sand placed in the new nearshore placement area up to the beach, the City is working with a separate consultant to track tracer particles from the berm area to the beach profile. All of these studies and survey results have served as the basis for a five-year placement plan developed by the City to guide placement of sand along the beach or within the nearshore from BUDM projects.

## *Dune Protection*

In addition to the protection afforded by the beach, vegetated sand dunes absorb wave energy, block storm surge and act as a sand reservoir, thereby reducing damage to infrastructure (Pries et al. 2008). As a result, stabilized vegetated dunes offer storm protection that is cost-efficient and effective for upland infrastructure protection (NRC 2014). The Dune Ridge Construction section of Chapter 22 of the City's Code of Ordinances recognizes the importance of dunes and proposes to construct a continuous dune ridge along the entire length of the City shoreline.

After significant damages to the beach and particularly the dunes following Hurricanes Dolly and Ike in 2008, the City took additional steps to enhance existing dunes and develop new dune areas. In 2008, the City collaborated with Surfrider Foundation and the University of Texas Brownsville to create a Dune Vegetation Harvest, which collected natural dune vegetation and propagated it in the University of Texas Brownsville greenhouse for future plantings. After planting a few thousand plants in 2009 and 2010, the City developed an aggressive planting schedule with the goal of planting 8,000 to 10,000 plants per event (City of South Padre Island 2010). Between 2012 and 2014, volunteers planted approximately 180,000 indigenous plants at various planting events sponsored by the SPI Dune Restoration Volunteer Program (GLO 2015). Native plant species include Bitter Panicum (*Panicum amarum*) and Sea oats (*Uniola paniculata*). These steps have helped enhance existing dunes along the southern shoreline of the City and expand dune footprint limits on the northern City shoreline.

## *Storm Protection*

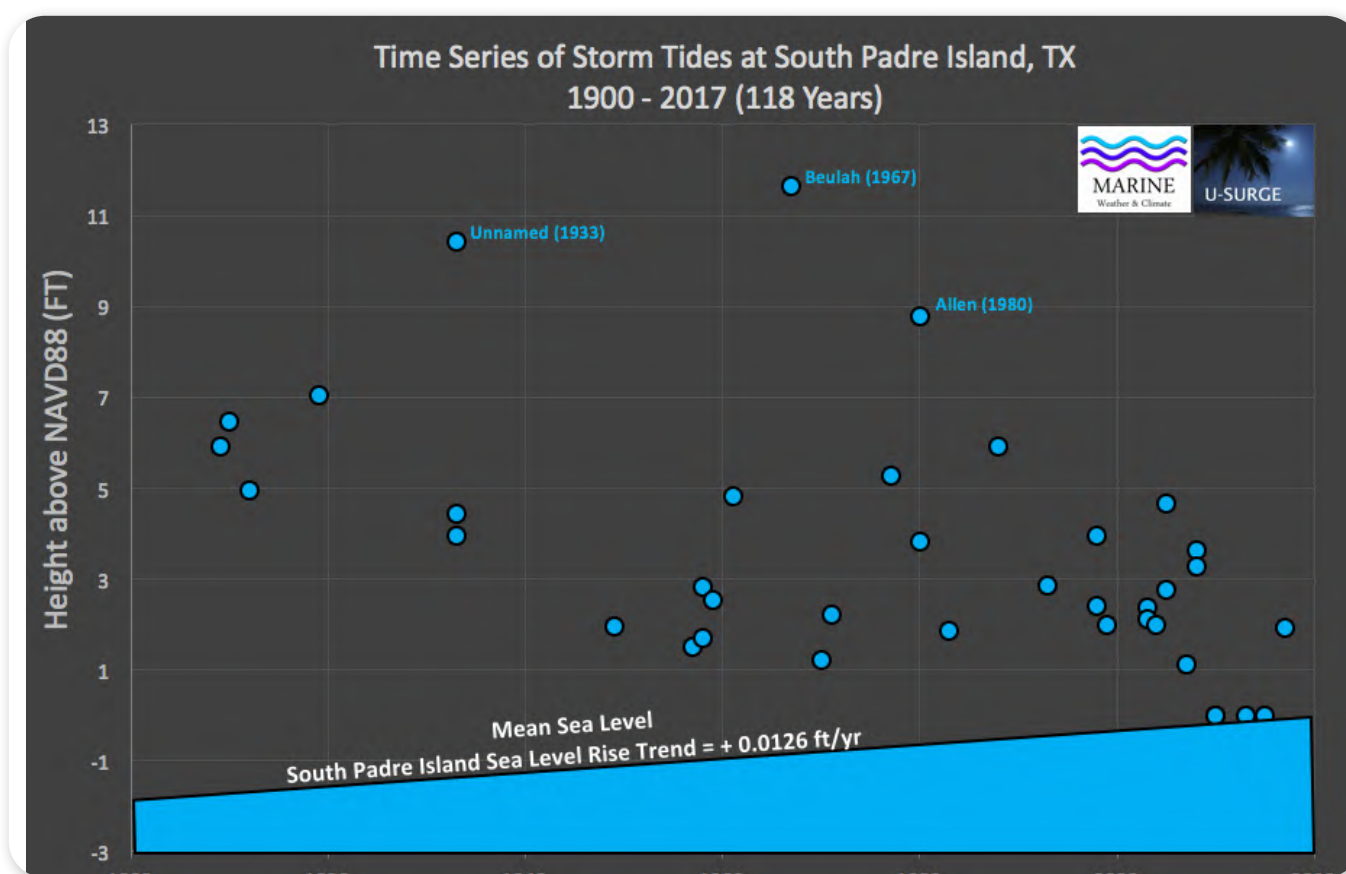
Development of a continuous dune system is one component of storm protection and the existing dunes, which reach +16 feet North American Vertical Datum (NAVD) in some areas, will help limit surge and wave impacts to Gulf-front properties. However, focusing only on beachside protections leaves the bayside vulnerable to flooding during storm events. Increased storm frequency (Figure 3-5), combined with SPI's maximum elevation of  $\pm 9$  feet NAVD of 1988 (NAVD88), landward of the dune field, makes SPI susceptible to flooding (USGS 2016). Currently, the City seeks to establish a continuous dune system with a minimum elevation of +10 feet; however, hurricanes in 1933 and 1967 resulted in water levels above this height (Figure 3-5). Hurricane and tropical storm events are not the only concern, minor storms and king high tides result in more frequent localized flooding. Regionally nuisance flooding is on the rise, with a 547 percent increase reported in Port Isabel since the 1960s (Houston Chronicle, 2016).

## *Natural Cycles*

The City is committed to protecting species that play a critical role in the natural cycle of the beach and dune system. For example, Sargassum species, a type of brown seaweed found on SPI, abate beach erosion by trapping and keeping sand in place and allowing dunes to re-vegetate and strengthen by adding nutrients to the system that are used by dune vegetation. Historically, seaweed was removed from beaches by raking or grooming; however, with current knowledge, the City only removes seaweed that washes up in significant amounts and even then, the City strategically locates it at the base of the dunes for possible relocation at a later time to assist with dune restoration (City of South Padre Island 2018b).

### Acquisition

The City has started to assess vacant lots for potential acquisition. Several available lots are located on either side of Queen Isabella Causeway, the only road connecting SPI to the mainland. These lots currently contain mangroves and offer visitors a first impression of the Island. How these lots are developed will impact the first impression of visitors for years to come. There are additional lots on both beach and bayside that may offer opportunities for parking, public access, or wetland conservation. SPI will only continue to develop and as time passes the opportunities for acquisition of key buildable properties that may enhance resident or visitor experience by providing restrooms, access, or parking, will be reduced. Properties with existing wetlands will be more difficult to develop due to federal and state regulations; therefore, they will likely be available for purchase for a longer period of time.



**Figure 3-5** Maximum Recorded Water Levels during Storm Tide Events (Source: U-Surge, 2015)

Lots to the north outside the City limits are being evaluated as part of the SPI Second Access Project, a Cameron County Regional Mobility Authority project, in partnership with the Texas Department of Transportation and the Federal Highway Administration, which is proposing a second access point to and from SPI in the north (TxDOT 2017). The second access route would potentially improve safety, increase mobility and encourage economic development, including tourism, in the area.

## Resource Management

In 2008, the City created a new staff position of Coastal Resources Manager that has since evolved into the current Shoreline Department, with associated Director, to help centralize and coordinate City operations related to protection, enhancement and regulation of beach and dune issues. To further involve the community in shoreline management, the Shoreline Task Force was created, which is a combination of the Beach & Dunes Task Force and the Bay Area Task Force developed under earlier management plans. The Shoreline Task Force is responsible for beach maintenance activities, including dune mitigation and beach nourishment projects. These staff and community positions are an important driver in the success of resource management.

The City cooperates and coordinates with many stakeholders and organizations to accomplish resource management goals. The City has created the Parks and Keep SPI Beautiful Committee, which makes recommendations to the City regarding enhancing the beauty and overall appearance of the City and maintaining a community park system for the enjoyment of residents and visitors (City of South Padre Island 2018f). These committees are instrumental in organizing various community programs and activities, such as beach cleanup events and Earth Day festivities. Additionally, several volunteer events have taken place over the last decade in partnership with the local branch of the University of Texas, South Texas Surfriders, Texas Master Naturalist and interested community members, resulting in the planting of over 20,000 plants at 10 different gaps in the dune line (City of South Padre Island 2018b).

## Regional Operations

In 2007, the Nature Conservancy donated its 1,500-acre SPI Preserve to the U.S. Fish and Wildlife Service for inclusion in the Laguna Atascosa National Wildlife Refuge. This preserved land was added to the wildlife refuge to ensure that the critical wildlife habitat, which provides resources for 17 species listed as endangered or threatened, is adequately protected (The Nature Conservancy 2018). The preservation of this land ensures that SPI will continue to be a haven for wildlife, which the City can support in its own conservation and eco-tourism efforts.

# A Plan for the Future

This chapter is intended to be included in the City's Comprehensive Plan and build upon the City's existing conservation efforts. This section identifies four broad, interrelated conservation goals that will protect and enhance SPI's resources while simultaneously ensuring residents, business owners and future generations benefit from these resources. These goals also take into account the priority conservation activities identified by the public via the SPI Master Plan Survey (City of South Padre Island 2018c) and encourage the City to take a holistic approach toward shoreline conservation efforts. Several important strategies for meeting each goal are provided. Goals are mutually supportive and are not listed in any specific order of importance.

**Goal 1: Protect, preserve and enhance critical ecosystems**—Ensure that natural resource management strategies protect, preserve and enhance nature reserve areas, sensitive lands and valuable open space in an effort to prevent degradation and increase ecosystem function.

**Goal 2: Participate in resiliency projects**—Improve SPI livability by improving the resiliency of the region’s ecosystems and infrastructure.

**Goal 3: Invest in bayside conservation to increase public utilization**—Preserve critical habitat and improve infrastructure to ensure economic needs and opportunities are enjoyed by the public and future generations.

**Goal 4: Enhance community programs and encourage community participation**—Support and encourage community programs that take measures to conserve and/or promote conservation of SPI’s resources.

## Goal 1: Protect, preserve and enhance critical ecosystems

*Ensure that natural resource management strategies protect, preserve and enhance nature reserve areas, sensitive lands and valuable open space in an effort to prevent degradation and increase ecosystem function.*

**Strategy 1.1:** Protect beaches and dunes from degradation, as they are the first line of defense against natural processes such as storms and flooding.

### Actions:

- Continue participation in beach nourishment projects, in partnership with the Texas GLO and USACE, as a way to preserve and restore the beach in eroding areas. Work with USACE to utilize the City’s beach nourishment permit to allow beach placement during sea turtle nesting season (with required monitoring protocols) so that opportunities to place sand on the beach aren’t missed.
- Continue research on sand movement within the system to review the efficacy of nearshore berms. Increased understanding of sand transport can also help improve beach nourishment projects, making them more effective and reducing inefficient use of funding and resources.
- Review the City’s Erosion Response Plan based on current conditions and revise as needed. The City should review how well the plan is being implemented and whether it is successful via monitoring. Monitoring should include observations at key sites (i.e. public access points) and assessment of seasonal weather activity and human-induced effects on beaches/sand dunes.



- Review and revise Chapter 22 of the Code of Ordinances for the City of SPI as it relates to alteration of the dune ridge. The City will currently allow lowering or alteration of dune topography if the proposed plan meets certain criteria, which includes demonstrating that the proposed plan provides equal or better protection than the existing dune system. The code may want to consider a minimum level of protection provided by all dune systems that would be determined by the methodology described in Strategy 2.1, Action bullet 3 below. The code should also include a procedure to evaluate the comparison of storm protection benefits. USACE uses the cross-shore modeling program SBEACH developed by their Engineer Research Development Center’s Coastal Hydraulic Center to analyze storm impacts, beach and dune erosion (USACE 2018). Another modeling application is XBeach, which is an open source model by the Delft University of Technology in the Netherlands that was developed in partnership with USACE to evaluate wave propagation, sediment transport and changes to beaches and dunes during storms (Deltares 2018). Updated protection levels and analysis procedures can help maintain the balance between storm protection and homeowner views.
- Promote variable elevation dunes within the overall continuous system. The lack of diversity of topography and vegetation in engineered dunes in developed areas may limit their ability to provide the full suite of benefits provided by natural (i.e. geomorphologically and ecologically dynamic) dunes (Elko et. al. 2016).

**Strategy 1.2:** Enhance, restore and protect seagrass.

**Actions:**

- The seagrass beds within the Laguna Madre are a unique ecological resource with, “...26 of the 31 species of fish identified from Gulf of Mexico estuaries as having ecological, commercial, or recreational value have been found...” in the bay (Port Isabel EDC 2018). This resource is equally important to other species including shorebirds and the redhead duck population. However, between 1975 and 1994 a 63-percent decline in the vegetative biomass was seen; Ducks Unlimited de México and the University of Tamaulipas are currently partnering to evaluate the status of the seagrass beds (Ducks Unlimited 2018). The health of this system is key to maintaining the economic health of SPI and the region. While predominately outside of the City limits, SPI should take a leadership role within the community of monitoring water quality and working with regional leaders to ensure this valuable resource is maintained. Tourism, particularly birding, dolphin viewing and fishing, depends on maintaining a healthy bay.

**Strategy 1.3:** Enhance, restore, create and protect wetlands and mangroves, critical habitat for a variety of wildlife including the aquatic bay community and migratory birds.

### Actions:

- Existing wetlands and mangroves will be under increasing pressure with the anticipated growth within the City and region. SPI should inventory the extent of existing wetlands and mangroves adjacent to the Laguna Madre and complete a functional assessment of those over one acre. SPI then can prioritize lots that can be conserved, preserved or enhanced for either a targeted species (i.e. shorebirds) or recreational/educational opportunities, such as nature trails, boardwalks or viewing platforms. Larger lots that are contiguous with existing City property or natural areas should be prioritized over smaller lots that are isolated from existing wetlands or mangroves.

### Strategy 1.4: Coordinate and collaborate.

#### Actions:

- Coordinate with Cameron County and the State of Texas to preserve sand dunes, wetlands and mangroves and ensure future developments avoid any negative impacts to these critical habitats.
- Collaborate with environmental education providers to encourage education programs that promote conservation and management of these critical habitats. Educational programs should include opportunities for outdoor classroom activities.
- Continue to lead the region in conservation and education efforts by enhancing existing programs and implementing new programs. The City should consider hosting community events/workshops that highlight the City's expertise and leadership in the conservation and education fields and collaborating with Cameron County and the State of Texas officials/programs/organizations to achieve regional conservation and education goals.
  - One focus should be on trash and its impacts on the region and its wildlife. Particular emphasis should be placed on plastics, including bags and straws.
- Pursue funding from a variety of local, state, regional and national programs:
  - GOMESA (Gulf of Mexico Energy Security Act) funding (state and county grants).
  - RESTORE Act funding.
  - National Oceanic and Atmospheric Administration (NOAA) Programs and Grants.
  - GLO Coastal Erosion Planning and Response Act and Coastal Management Program.
  - Proposed Beach User Fees.
  - Coastal and Estuarine Land Conservation Program.

## Goal 2: Participate in Resiliency Projects

*Improve SPI livability by improving the resiliency of the region's ecosystems and infrastructure.*

**Strategy 2.1:** Reduce flood risk due to coastal storms and sea level rise.

### Actions:

- Complete a vulnerability study and assessment to understand how storm surge and flooding would impact SPI's properties and infrastructure for the City as a whole.
- Continue participation in beach nourishment projects in partnership with the Texas General Land Office and the U.S. Army Corps of Engineers.
- Invest in a storm model that takes into account the existing dune system and bayside bulkheads, to identify vulnerabilities. Once vulnerabilities are identified, short-term and long-term projects should be developed that work toward creating a City that withstands minor events and recovers from major storms more quickly.
  - The height, volume and width of the dune system should be validated to ensure sufficient absorption of storm surge and wave energy to protect structures. It is recommended that the City follow a design process similar to that used by the U.S. Army Corps of Engineers when developing shore protection projects. FEMA and the U.S. Army Corps of Engineers recognize that every coast has differing topographies, geologies, and protection requirements, which is why they provide analysis guidance rather than specific beach and dune dimensions. The U.S. Army Corps of Engineers design methodology includes the establishment of a design storm scenario (typically 1% return interval or 100-year storm), associated water levels and wave conditions to determine the level of protection to be provided by the beach and dune system (USACE 1997). These design factors are then compared to anticipated project costs to review the level of protection versus expense, which may result in the need to revise the level of protection criteria. The assessments can then be utilized to update or verify the guidelines originally developed by Morton 25 years ago that are included within Chapter 22. It is also recommended that the design assessment consider future changes in sea level to account for long-term management.
  - Projects may include floodgates on drainage structures, minimum height requirements for bulkheads, installation of flood protection such as stop gates for boat access ramps or emergency vehicle access points, pump stations and/or changes to building codes.
- Establish a management plan that addresses flood risk for dunes, wetlands and mangroves.
- Pursue funding from a variety of local, state, regional and national programs.

**Strategy 2.2:** Develop and implement new resiliency and adaptation projects.

**Actions:**

- Identify resilient sites for coastal conservation (i.e. mangrove and wetlands preservation, restoration and creation as a way to mitigate flooding impacts).
- Establish living shorelines on bayside where practical to reduce impacts of flooding and sea level rise. The guidance should address public access, boat ramp locations and parking, etc. According to NOAA, living shorelines can allow the shoreline to migrate inland with sea level rise and coastal erosion; therefore, they may be a better alternative for preserving shoreline access compared to hard stabilization structures, which can erode shore-ward of the structure (NOAA 2015). The intent should be to build living shorelines where it is practical and feasible; natural resources should be conserved and recreational opportunities should be enhanced as part of these projects. The City might consider using a hybrid approach that combines living shorelines and hard stabilization structures (OSTP 2015).
- Review climate resiliency studies that detail designing infrastructure for flood risk. Incorporate flood risk designs into new buildings within the flood zone in an effort to withstand a coastal flooding event.
- Establish a crisis response/disaster resiliency plan that details a whole community approach to an emergency event (i.e. oil spills, natural disasters, etc.).

## Goal 3: Invest in bayside conservation to increase public utilization

*Improve infrastructure and preserve critical habitat to ensure economic needs and opportunities are enjoyed by the public and future generations.*

**Strategy 3.1:** Preserve SPI's bayside.

**Actions:**

- Take a holistic approach to improve bayside resiliency by identifying the different challenges faced by the bayside, including public access, ecosystem protection, projected increases in water level due to climate change and better stormwater flow control.
- Complete a vulnerability study and assessment to understand how storm surge and flooding would influence SPI's bayside infrastructure. Suggest reviewing the entire City system and what would happen during various types of storm events.
- Invest in bulkhead improvements. This should include identifying existing problem-areas and future areas of concern and establishing the appropriate elevation of the bulkhead. Opportunities for stormwater flow control should be considered (i.e. stop gates).

- The City could hold a bayside resiliency/bulkhead design challenge, seeking concepts that would mitigate rising water levels and stormwater overflow. Invite the public to view concepts and provide input. This effort would need to incorporate any storm surge modeling to ensure designs include protective measures and do not create more vulnerability.
- Revise Chapter 22 of the Code of Ordinances for the City of SPI to address bayside protection, erosion and access. Chapter 22 should detail the roles of the Shoreline Task Force in implementing bayside protections.

**Strategy 3.2:** Invest in the development of bayside open space and vacant lots.

**Actions:**

- Identify open space and vacant lots and assess for acquisition and potential development. This could include business development in the entertainment district of SPI.
  - Incorporate flood risk designs into new buildings within the flood zone in an effort to withstand a coastal flooding event.
- Establish living shoreline guidance for bayside infrastructure development and improvements. The guidance should address public access, boat ramp locations and parking, etc. and how those may impact conservation efforts.
- Coordinate with the County and other stakeholders to increase boat access on bayside, while simultaneously avoiding any negative impacts on critical habitats or water quality.

**Strategy 3.3:** Maintain and preserve bayside mangroves and wetlands habitat.

**Actions:**

- Identify open space and vacant lots and assess for preservation or restoration.
- Design mangrove and wetland habitat preserve to provide eco-tourism opportunities (i.e. kayak trail, boardwalks, etc.), as well as long-term resiliency to flooding from storm surge and sea level rise.
  - Identify state or local coastal construction codes for building adjacent to mangrove stands.
  - Consider offsets for development within mangrove stands.

## Goal 4: Enhance community programs and encourage community participation

*Support and encourage community programs that take measures to conserve and/or promote conservation of SPI's resources.*



**Strategy 4.1:** Maintain and strengthen current funding resources for community conservation programs.

**Actions:**

- Strengthen existing relationships with funders and supporters.
  - The Coastal Management Program (CMP) provides funding opportunities for community conservation projects.
  - Coordinate with Cameron County regarding opportunities to use County direct funds from GOMESA (Gulf of Mexico Energy Security Act). The GLO is also allocated GOMESA funds that could be used for community programs.
  - RESTORE Act funding has several pots of funds that can be used for various types of projects from conservation to enhancing tourism and public access.
- Provide information and expertise to existing conservation programs.

**Strategy 4.2:** Support collaboration and communication.

**Actions:**

- Provide networking opportunities for conservation organizations, committees and task forces such as forums or meetings, to share ideas, resources, best practices, etc.
- Create greater collaboration and communication opportunities between vested parties, including business owners, the chamber of commerce, the visitor's bureau, to align goals and identify issues that may influence conservation activities.

**Strategy 4.3:** Encourage community participation in local conservation programs.

**Actions:**

- Promote conservation events via social media to boost participation numbers.
- Model conservation programs after similar, successful programs found in neighboring coastal communities (i.e. Coastal Bend Bays & Estuaries Program, Galveston Bay Foundation).
- Establish beach and bay ambassadors to improve on the City's existing Code Enforcement Department and Anti-Litter Beach Program duties. Currently, the City's programs educate beachgoers about City littering policies and ensure compliance with laws related to littering on the public beach within the City limits. To enhance outreach and to increase awareness around the impacts of littering, many coastal cities have had success with citizen and student volunteers who perform the role as beach and bay ambassadors.

# Conclusion

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Beach nourishment and protection of natural habitats and ecosystems receive wide public support. In addition, bayside conservation activities, including flooding protection and mangrove and wetland preservation are popular and will be important resiliency measures as sea levels change. The City has already implemented several strategies to preserve critical ecosystems (i.e. SPI Dune Restoration Volunteer Program, Anti-Litter Beach Program, etc.) and should continue doing so, while also assessing new opportunities for preservation, restoration, resiliency and recreation. As indicated above, conservation efforts within SPI and the surrounding areas are complex, with many features and multiple stakeholders and partners. Therefore, collaboration and flexibility are essential to ensure SPI's resources are protected and enhanced while simultaneously providing benefits to residents, business owners and future generations. Key action items that will directly enhance conservation efforts associated with the shoreline include:

1. **Storm Resiliency:** In the coming decades, rising sea levels will pose a serious threat to the integrity and vitality of SPI's businesses and neighborhoods. To protect infrastructure, it will be necessary to improve flood and storm resiliency. SPI is currently completing a Drainage Master Plan to minimize the potential for flooding. The City should build upon the Drainage Master Plan by performing a study to review storm surge and wave modeling for the Island. Planning can then be completed to:
  - a. Implement protections that limit impacts, such as floodgates, bayside resiliency projects and continuous dune system management;
  - b. Improve resistance to impacts, including updating building codes and creating a bayside shoreline guidance document;
  - c. Prepare for post-event recovery, including tourism marketing to limit the duration of economic impacts.
  
2. **Updates to Building Codes:** SPI has experienced multiple storm events, including hurricanes in 1933, 1936, 1967 (Beulah), 1980 (Allen), and 2008 (Dolly). More flood risk reduction is recommended for the City based on wave height (U-Surge 2015), past storms and the projected sea level rise in 2020. The City should strengthen their building codes for increased resiliency from flooding, particularly along the beachfront side of Padre Boulevard. The coastal city of Galveston, Texas has promoted a freeboard requirement that requires elevation of a building's lowest floor above the required flood elevations by a small additional height, typically one to three feet (City of Galveston 2011). Currently, the FEMA Flood Zone VE ends at the City bulkhead. Though not required, it is recommended that building requirements, especially along the beachfront side of Padre Boulevard, should meet or exceed the building requirements of FEMA Flood Zone in an effort to increase resiliency. The benefit of updating building codes to increase resiliency against

flooding includes faster storm recovery and far fewer structures that sustain damage. Those structures that are not damaged even though flooding occurred are less likely to have steep declines in property value. The City should work with the Development Standards Review Task Force to review guidance that could include occupiable first floor elevations located above a projected base flood elevation, location of electrical panels and HVAC equipment above base flood elevation and flood vents. The City should also encourage builders to implement the Insurance Institute for Business and Home Safety FORTIFIED Home Program voluntary building standards to help strengthen homes against storm impacts. Recent events (i.e. Hurricane Katrina) indicate that hurricane-impacted areas show long-term reductions in tourism; therefore, the more resilient to flooding the City can be, the more confident it can be in preserving tourism.

- 3. Revision of Chapter 22 of the Code of Ordinances for the City:** In SPI, the offshore water depth is deeper than other areas along the Gulf Coast in Texas. The depth does reduce storm surge levels; however, it also increases wave height (U-Surge, 2015). Dunes are the primary protection from wave energy and are a key component to storm protection. Prior to the current dune ordinance, the beach directly abutted the seawall, leaving residences and businesses exposed to potential storm damage. Chapter 22 references a report by Robert Morton from the Texas Bureau of Economic Geology that was developed in 1993 and describes proposed dune features that should survive most large storms. This guideline, prior to the establishment of a significant dune system on SPI, has since resulted in the successful establishment of a dune system for much of the beach. However, the ordinance was developed under conditions that no longer exist and prior to the majority of current research on climate change and sea-level rise. Now that a dune system is present, the City should review the ordinance based on the current conditions and research. The proposed review should incorporate updated storm surge estimates, wave impacts and performance of dunes of varying dimensions to maximize shoreline protection, as well as, incorporating additional benefits. The ordinance should also update dune maintenance and access construction guidelines, including dune topping and the distance between walkovers and dune crest (or maximum/minimum walkover deck elevation). Finally, Chapter 22 currently contains no guidance on bayside access. An update to this ordinance should be comprehensive of both bay and beach shorelines; addressing bayside access and protections.
- 4. Beach / Bay Ambassadors:** The health and cleanliness of the beach and bay are what will continue to draw people to SPI. Currently, the City's Environmental Health Department and Anti-Litter Beach Program educate beachgoers about City littering policies and ensure compliance with laws related to littering on the public beach within the City limits. To enhance educational outreach and to increase awareness around the impacts of littering, many coastal cities have had success with citizen and student volunteers who perform the role as beach and bay ambassadors.

Duties of ambassadors could include regularly scheduled beach and bay walks to provide information to visitors and the community on the history of the Island and environmental outreach, such as the impacts of litter, the unique importance of Sargassum, the importance of seagrass beds, etc. Beach and bay ambassadors could also patrol the beaches to provide one-on-one interactions with visitors, remind users of fines associated with glass and litter, monofilament recycling programs and coordinate and oversee social events that raise awareness about litter policies and the importance of respecting and protecting the beach and bay natural resources. The recommendation is for the City to expand their litter control efforts to include an ambassadors program that is citizen and school-oriented, thereby creating a more community-based, volunteer-driven approach to educational outreach regarding beach policies and shoreline protection.

# Public Access

## Introduction

Public access to Texas Gulf Coast Beaches, “... is not just the law, it is a constitutional right” (GLO 2015). Under the Texas Open Beaches Act, the Texas General Land Commissioner protects the public’s free and unrestricted right to access Texas beaches, commonly referred to as the “wet beach,” from the water to the line of mean high tide. Dry sandy areas that extend from the “wet beach” to the natural line of vegetation, which may shift due to the wind as well as wave and tidal actions caused by storms and hurricanes, are generally privately owned but may be subject to public beach easement (GLO 2015).

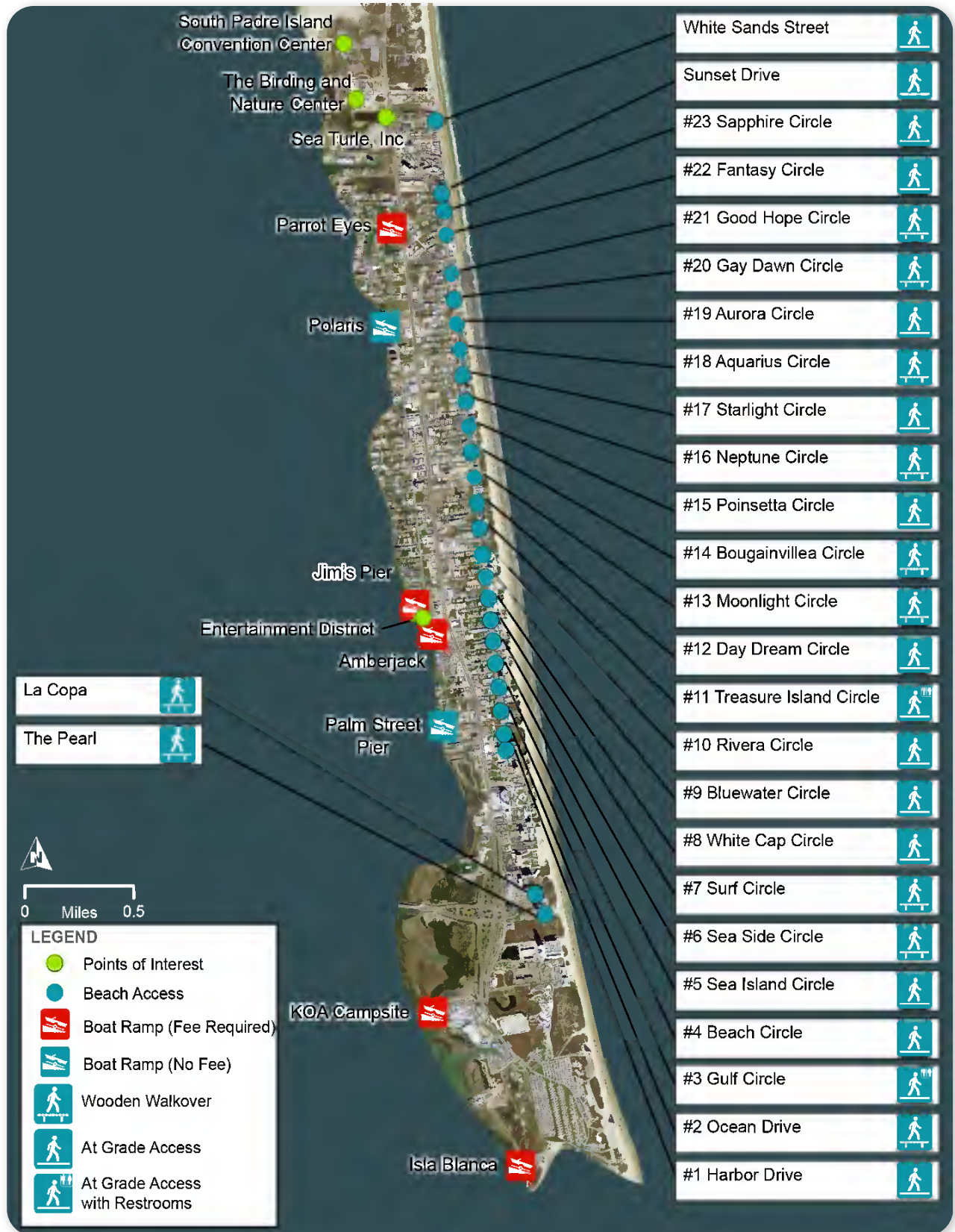
The City is dedicated to providing the public access to the beach. Currently, there are 25 City public beach accesses along Gulf Boulevard, which provide access to the beach via natural trails, concrete drives that support emergency vehicles, at-grade beach mats, or wooden walkovers. Each access is unique and provides various levels of amenities, including parking, Americans with Disabilities Act bathrooms, spray showers and drinking water. There are three additional public beach access points on Padre Boulevard; White Sands Street, the Pearl Beach Access and the La Copa Beach Access. The City also provides access to the bay via two free public boat ramps; one located on West Polaris Drive and one located on West Palm Street. There are also three paid locations, one located at Parrot Eyes Restaurant and Watersports-Bar and Marina, one at Amberjack’s and one located at Jim’s Pier on Swordfish Street (Figure 4-1). An additional fee based boat ramp is located within the County’s Isla Blanca Park. Several bay street endings provide views of the bay, with some providing additional access to the water (City of South Padre Island 2018a). Outside of the City limits paid access and parking are available to the north at County owned access points and to the south at Isla Blanca Park and the Kampgrounds of America (KOA).

In April 2018, a public survey was distributed by the City to gather feedback on a variety of topics, including public access (Shoreline Master Plan Appendix B). Survey respondents (primarily SPI residents) indicated that public access to water, both beach and bayside, is the second most important factor for SPI's growth and success, following tourism (City of South Padre Island 2018c). When considering improvements to existing or new beach access points, survey respondents indicated that providing accessibility for all capabilities was an important consideration. According to the survey, wooden walkovers (59.36%) are favored over ground-level beach access mats (28.65%) to accommodate wheelchair and accessibility for people with disabilities (Figure 4-2). Additionally, survey results revealed that restroom facilities (72.22%), wash stations (i.e. foot spray and shower) (64.33%) and additional parking (50.88%) are key amenities that would enhance the beach experience (Figure 4-3). Survey results also identified additional motorized and non-motorized boat access on the bay as a need (Figure 4-4) (City of South Padre Island 2018c).

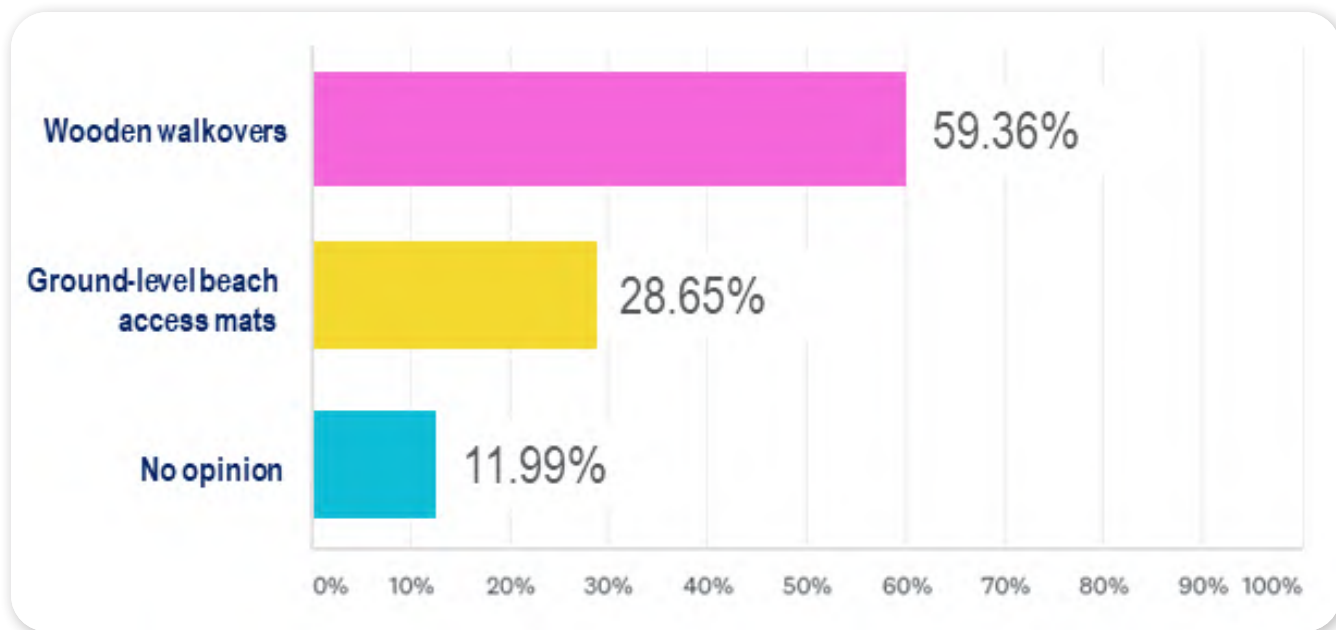
On June 19, 2018, a Comprehensive Plan Open House was conducted. During this meeting, citizens were specifically asked about their preferences regarding access types and restroom facilities. The previous survey results were further confirmed, with 37 people (77.1%) preferring walk-overs versus 11 residents (22.9%) preferring at-grade access mats. When asked about bathroom location options for beach access cul-de-sacs, 33 people (80.5%) preferred permanent restroom facilities versus 4 people (9.7%) for temporary restroom facilities. Sixteen people (48.5%) preferred a permanent restroom facility at the Historic Building Line, 9 people (27.3%) preferred a permanent facility located at Gulf Boulevard and 8 people (24.2%) preferred a permanent facility at mid-Cul-De-Sac. Sapphire Circle had the most support as a public beach access restroom location, followed by an equal number of votes for Pearl, White Cap Circle, Gay Dawn Circle, Good Hope Circle and White Sands Circle.

As part of public access, the City must also consider beach and dune protection. The growth of the City and increasing development and recreational use on SPI can impact the stability of the dune environment, which acts as a defense against destructive forces of wind and waves. Additionally, construction and heavy recreational use of the beaches can contribute to fragmentation of the beach/dune system and deterioration of the dunes (GLO 2015). The Texas Coastal Resiliency Master Plan, dated March 2017 and developed by the State of Texas General Land Office and the City's Erosion Response Plan recommend SPI establish a connected dune system to reduce potential property damage during storm events. Survey results reveal that the majority of SPI respondents (72.22%) are supportive of establishing a connected dune system on SPI (Figure 4-5) (City of South Padre Island 2018c). There is no variation on these results even when considering people who live on the beach and whose views would be impacted (City of South Padre Island 2018c). Dunes exist on SPI; however, they do not continue across every property due to on-grade footpaths and property owner actions. Emergency vehicle access points also create low points in the dune system that may be vulnerable during storm events. Vehicle access points may need to incorporate flood controls that can be put in place prior to an event to limit wave damage and potential washout (i.e. drive-overs).

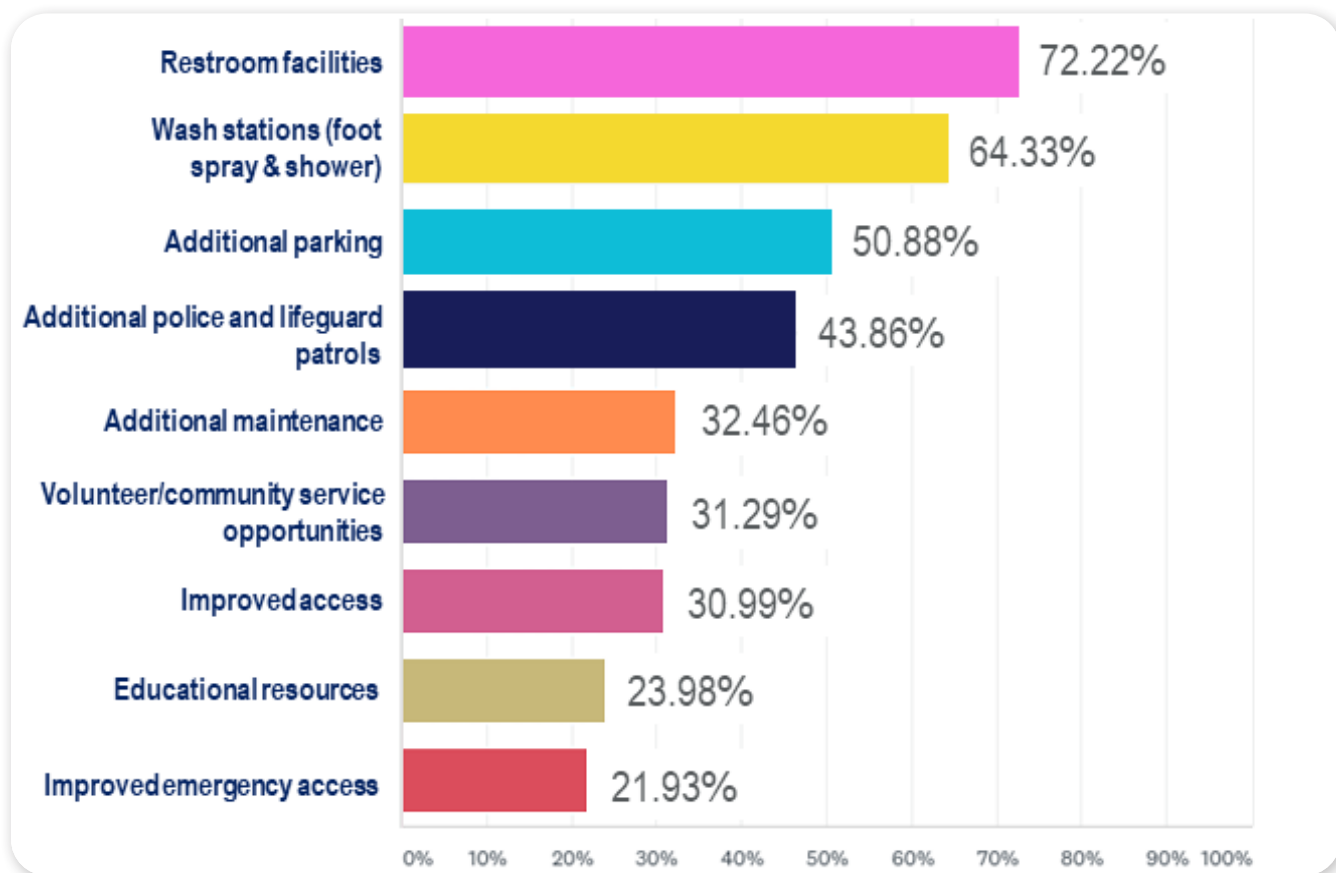




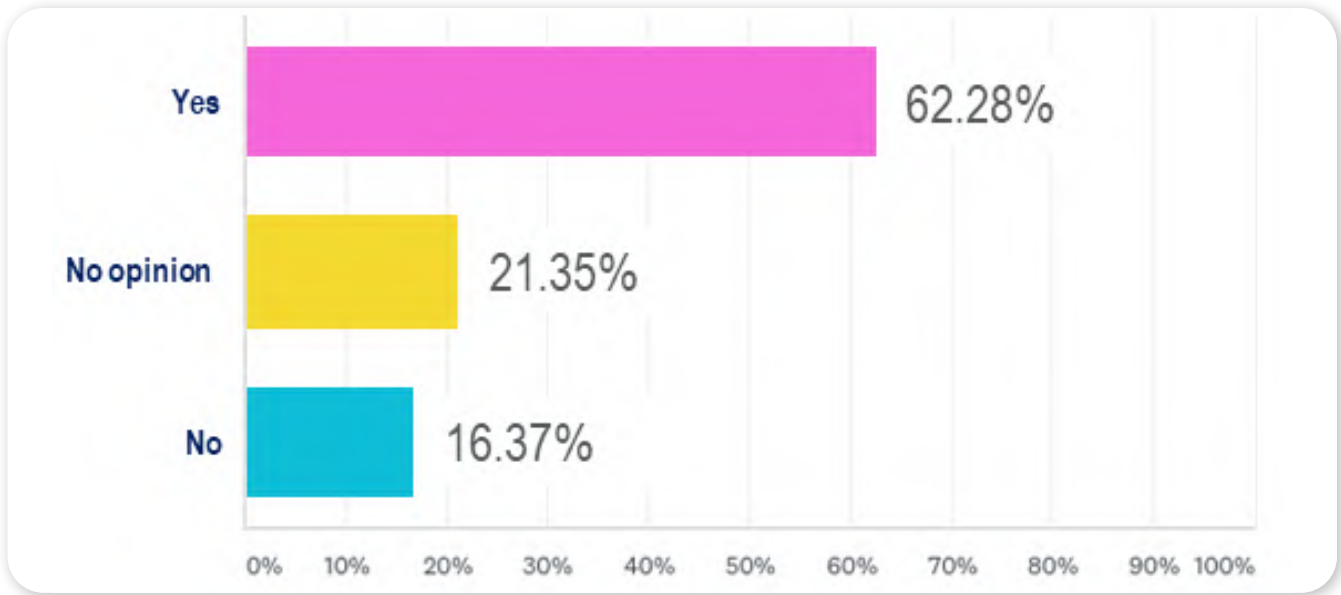
**Figure 4-1** Public Access and Boat Ramp Locations within the City of South Padre Island (Source: Texas Orthoimagery Program (TOP) 2015 50cm NC\CIR Orthoimagery)



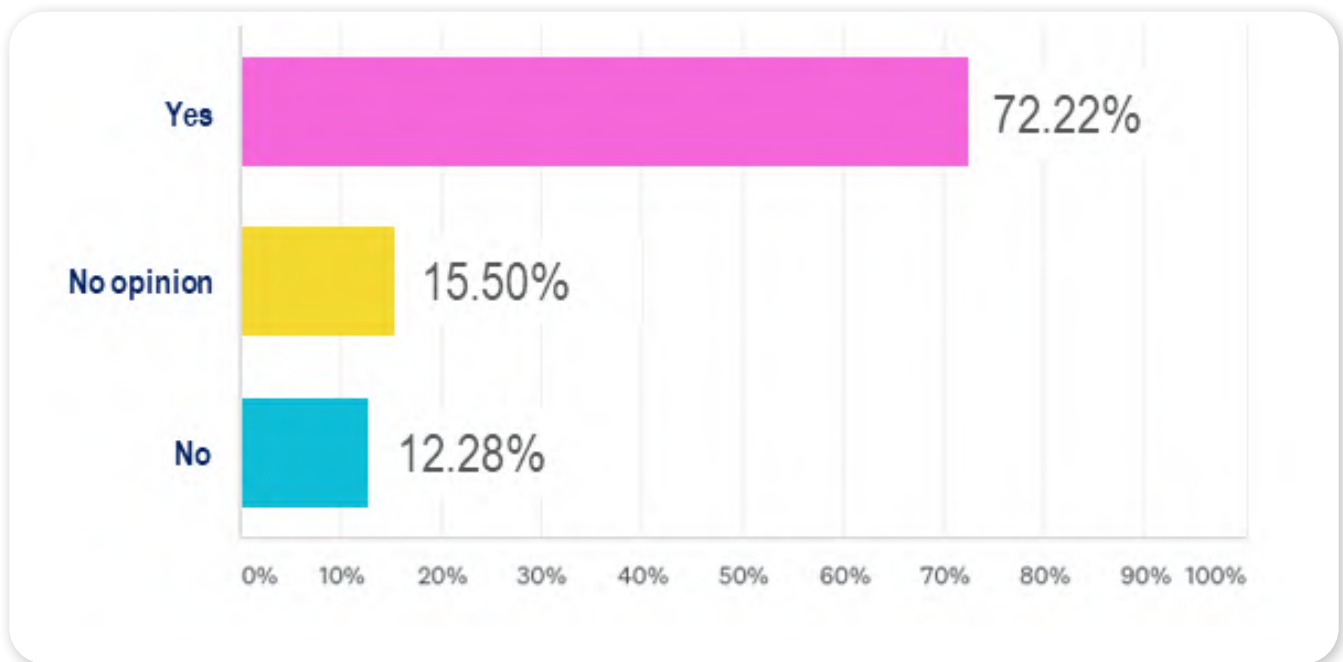
**Figure 4-2** Types of Beach Access the City Should Consider When Improving Existing or New Beach Access Points per the South Padre Island Master Plan Survey Results (City of South Padre Island 2018c)



**Figure 4-3** Types of Amenities That Would Improve the Beach User Experience per the South Padre Island Master Plan Survey Results (City of South Padre Island 2018c)



**Figure 4-4** SPI Master Plan Survey Respondents Opinions on Additional Motorized and Non-Motorized Boat Access on the Bayside (City of South Padre Island 2018c)



**Figure 4-5** SPI Master Plan Survey Respondents Opinions on Establishing a Continuous Dune System on SPI (City of South Padre Island 2018c)

This section is intended to guide improvements to existing or new beach and bayside access points; access needs identified by the public as priority will be central to these recommendations. A general introduction to the City’s current public access policies is provided in the Appendix. It touches on how beaches and sand dunes enhance the coastal resilience of SPI. This topic is further discussed in the Conservation Chapter of this Master Plan.

Included in this section is a summary of SPI's broad public access goals provided to improve accessibility to the water on both the beach and bay side of the Island, while simultaneously protecting the Island's resilient natural barriers (i.e. beach, sand dunes, etc.). Goals generally include:

- Improvements to existing or new public access points;
- Ensuring that improvements to existing or new public access points prioritize coastal resiliency; and
- Sustaining and establishing funding and support for public access infrastructure.

Following the summary, each goal is described individually; goals are mutually supportive and not listed in specific order. Each goal is accompanied by several strategies and suggested actions for implementation. The amount of effort required per strategy will vary; some are already being accomplished while others will require innovation. The list of strategies is not exhaustive, but rather represents suggestions for accomplishing a goal.

## Public Access Today

Per state requirements, the City has adopted a Dune Protection, Beach Nourishment and Access Plan that addresses beach and dune management. Primary components of the plan include beach access and coastal resiliency via beach nourishment and dune protection and enhancement. Beach management generally addresses enhancing and preserving public access, which, in the past, has included parking improvements, signage and additional beach access via dune walkovers and ground-level beach access mats. DMAIC, which stands for Define, Measure, Analyze, Improve and Control, is an extensive analysis tool used by the City to address various components of public access, including, primarily, parking. The DMAIC tool has allowed the City to implement important strategies to ensure parking availability is in compliance with state public beach access regulations.

As mentioned above, the City maintains 28 public beach access points providing access to the Gulf. There are also two free public boat launches on the bayside, located on West Polaris Drive and Palm Street, as well as several bay street endings that provide views of the bay and, occasionally, access to the water. Of the 28 public beach access points, 23 provide over 400 parking spaces with 27 of those being handicap spaces. These beach access points all have a walk-over, stairs, or ground-level beach access with mats or concrete and offer varying amenities, including restrooms, showers, or handicap accessibility. For example, Beach Access #20, also called Gay Dawn Circle Beach Access, is wheelchair accessible, but does not have public restrooms; however, public restrooms and showers are located at Beach Access #3 and #11. Every public City beach access point has signage set up with flags to inform beachgoers of any potential risks (i.e. rip currents, dangerous marine life) in the water. The SPI Beach Patrol monitors conditions and changes the flags as needed. In addition to parking spaces at beach access points, the City provides parking all along Gulf Boulevard and at the Multimodal Facility, among others. At present, there are over 1600 public beach access parking spaces.

With the current amenities available, some beach access points are heavily used, while others are less frequented. This plan is intended to build on the City’s existing public access policies and refine public access goals to meet the changing needs and expectations of SPI residents and visitors. The City must find strategies to improve public access in ways that enhance the user experience while simultaneously preserving and protecting vital natural resources for future generations.

## A Plan for the Future

In considering improvements to existing or new public access locations, the City must enhance the utilization of access points while prioritizing beach and dune protection, particularly in areas experiencing shoreline erosion and increasing development.

This section identifies three broad, interrelated goals to address the City’s public access, while simultaneously promoting priority public access needs, as identified through results of the SPI Master Plan Survey (City of South Padre Island 2018c). Several important strategies for meeting each goal are provided. Goals are mutually supportive and are not listed in any specific order.

**Goal 1: Public Access Points**—Improve existing or create new beach and bayside public access points.

**Goal 2: Coastal Resiliency**—Support public access improvements and infrastructure that enhance SPI’s coastal resiliency.

**Goal 3: Funding**—Maintain current funding and identify regional, national, or international resources for public access infrastructure.

### Goal 1: Public Access Points

*Improve existing or create new beach and bayside public access points.*

**Strategy 1.1:** Enhance waterfront access on the Gulf.

**Actions:**

- Continue to improve beach access points, particularly with ADA, wooden walkovers and restroom facilities, as identified as a preference by residents surveyed. Wooden walkovers across dunes are recommended to prevent vegetation damage and weakening of the dunes by heavy pedestrian traffic (Morton 1993). Damage to dunes from pedestrian traffic will be avoided with the use of elevated walkovers that are placed near access roads, parking and public facilities (GLO 2015). When storm surge and waves impact a coastline, the lowest areas are the most susceptible as water will seek the lowest elevation. As seen in Ocean and Monmouth Counties in New Jersey, “the access ways where elevations were lowered to allow grade-on access with the berm [dune] became easily-available conduits, for Hurricane Sandy’s storm waters and damages of structures adjacent to them were extensive” (Barone et



al. 2014). Pathways that lower the elevation of the dune compared to adjacent areas will create a pathway for dune breach and overwash (Barone et al. 2014). As a result, state agencies that oversee dune protection, such as the Texas GLO, Florida Department of Environmental Protection, South Carolina Department of Health and Environmental Control and the North Carolina Department of Environmental Quality, typically recommend dune walkovers with sufficient elevations above the dune to allow sand migration to promote a continuous dune field for shoreline protection. Providing walkovers is likely to increase public awareness of the importance of dunes and the sensitivity of the ecosystem (GLO 2015). In situations where walkovers are not possible, such as areas of minimal dune development, sparse vegetation, or low foot traffic, a preferable alternative for storm protection, would include angling entrances at least 45 degrees with respect to the shoreline or incorporating a feature that would deflect surge away from the access way (New Jersey Sea Grant n.d.).

- Encourage property owners and residents to tie beach access points in with existing walkovers as described in the City's Erosion Response Plan.
- Establish additional emergency waterfront access points to facilitate emergency response and reduce response time. These could be designated existing waterfront access locations or newly created access points. Vehicular access should be carefully considered and designed to limit the potential for overwash and washout. Flood controls may need to be incorporated into vehicular access points so that egress can be closed and secured prior to a storm event.
- Increase parking facilities. The City investigated vertical parking in the past; however, multi-level parking facilities are exponentially more expensive than at-grade parking. The City should continue to maximize at-grade parking, including the purchase of vacant lots to support visitors. Parking expansion should focus on access points with existing restroom facilities, or where new facilities are proposed, as these access points are frequently visited and are in high demand. In 2018, the City met the GLO parking requirements (i.e. one public off-beach parking space for every 15 linear feet of beach that is closed to vehicular traffic) and may implement parking fees that can be used to support shoreline improvements and maintenance.

### Strategy 1.2: Enhance waterfront access on the Gulf.

#### Actions:

- Increase the number of public boat launch sites. This is especially important in drawing tournament/recreational fishing to the Island. The City should work with tournament organizers to have events operate from multiple launch points, to reduce traffic conflicts, increase public safety at ramps during loading/unloading and dissipate parking congestion.
- Create boat and equipment storage locations.
- Provide sewage pump-out facilities for boat holding tanks.

- Provide improvements (i.e. drainage, maintenance) at bayside access points, specifically existing piers, public lots and boat ramps (i.e. Palm Street Pier, Jim’s Pier, Polaris, etc.).
- Support additional motorized and non-motorized boat access. This should include increasing the number of public boat launch sites and regular maintenance/improvements to existing access areas. Motorized and non-motorized boat access points should be separate facilities:
  - Motorized boat access points: locate primarily in the entertainment district of SPI to avoid disturbance, parking conflicts and over-use in residential areas.
  - Non-motorized boat access points: located at the northern end of City limits, near Laguna Madre Nature Trail and Convention Centre where ample parking facilities already exist.
  - Designate specific watersport event areas that are away from residential areas.
- Establish emergency waterfront access points. These could be designated existing waterfront access locations or newly created access points.
- Increase parking facilities. Consider potential north side parking and bayside street widening that could be funded by public-private partnerships.

**Strategy 1.3:** Enhance Beach Access

**Actions:**

- Add user amenities (i.e. restroom facilities, wash stations, water fountains, bike racks, trail signage, lighting, etc.) to make beach accesses more user-friendly and to help evenly distribute use of facilities throughout the Island.
  - Add viewing areas/platforms to beach access points that provide views of the Gulf to accommodate people with disabilities and aging populations who may not be able to walk on the beach itself.
- Provide accessibility for people with all capabilities (those who use wheelchairs, have sight impairments, or have difficulty walking on loose sand, etc.). Ground-level beach access mats, concrete vehicular access and wooden walkovers all have the potential to provide access to meet Americans with Disabilities Act guidelines.
- Based on public survey and open-house results wooden walkovers are the access typology preferred by residents, over ground-level beach access mats. As discussed under Strategy 1.1, wooden walkovers across dunes are recommended to prevent vegetation damage and weakening of the dunes by heavy pedestrian traffic (Morton, 1993). Walkovers allow dunes to naturally vegetate and migrate under them, when elevated to the correct height, to support shoreline protection and formation of continuous dune systems. Walkovers should be designed to maintain or support a continuous dune line. See Public Access Strategy 1.1 for further discussion.

## Goal 2: Coastal Resiliency

*Support public access improvements and infrastructure that enhance SPI's coastal resiliency.*

**Strategy 2.1:** Promote public access strategies that support beach and dune protection.

### Actions:

- Reduce erosion and storm damage to coastal properties through the use of properly designed access structures. Access structures should allow for natural movement of sand and sediment.
- Establish beach access in strategic locations along the coastline to prevent future overwash areas.
- Define and maintain pedestrian access in specified locations through the installation of elevated structures (i.e. wooden walkovers). Elevated structures define and designate access more clearly than ground-level access, thereby reducing the number of pedestrian trails and walkways through the dunes.
- Rebuild or build access points in ways that minimize impacts to the dune system. This should include considerations for the size (i.e. width) of boardwalks/walkways/stairways, elevation, shading impacts on plants, orientation to avoid damaging wind or waves, runoff reduction, sectional/adjustable/temporary design elements, the timing of construction, materials and maintenance.
- Per the ERP, GLO rules require that the City specify the target dune elevation for its dune protection and enhancement program (City of South Padre Island 2012). The City seeks to establish a continuous dune system with a minimum 10-foot elevation and 60-foot base depth. In accreting areas and areas where beach nourishment has created and can sustain a beach width of 200 feet, the City's goal is to establish the dunes with a minimum base depth of 100 feet (City of South Padre Island 2012).
  - The City should review and revise dune management ordinances, specifically in regards to dune height and width based on current conditions (i.e. City of SPI Code of Ordinances Chapter 22 – Dune Protection, Beach Nourishment and Access Plan Implementing Provisions). Dune height and width should be established based on scientific literature and data regarding storm surge and flooding on SPI. The original dune guidelines developed by Morton in 1993 were based on conditions and assessment methodologies at the time. Over the past 25 years, there is a new understanding of storm surge estimates, changes in sea level and numerical modeling methodologies to predict storm impacts to beaches and dunes. Federal Emergency Management Agency (FEMA) mapping procedures consider 540 square feet/linear foot above the 100-year still water elevation an indicator of whether a dune will be overwashed in a storm or just experience retreat (FEMA 2011). An assessment of existing dune heights and volumes above the 100-year still water elevation was performed using the 2016 beach monitoring survey performed for the City and the GLO. Results indicate that the only dunes with more than the 540 square feet/linear



**Figure 4-6** Existing Dune Height Exceeding 100 year Storm Surge Elevation of +9.3 ft NAVD (Source: Texas Orthoimagery Program (TOP) 2015 50cm NC\CIR Orthoimagery)



foot guidance are located in Isla Blanca Park. However, there are areas with dune heights above the 100-year still water elevation (Figure 4-6). We recommend the City review the updated storm and sea level scenarios along with the current condition of dunes to determine the level of protection, damage reduction and risk acceptable to upland infrastructure. Methodologies for performing the level of protection assessment are discussed in Strategy 2.1 of Chapter 3 – Conservation.

### Strategy 2.2: Inform the Public.

#### Actions:

- Engage with community tasks forces, boards and volunteer groups to discuss and find a balance between access, conservation and homeowner priorities. The planning process and public survey for the Plan have shown that the Island is well known for active community participation in shoreline projects and policies. This high level of engagement can be an asset to long-term planning.
- Install signage that reiterates the importance of beach nourishment and healthy dune systems. This should include information on the importance of vegetation and dune and bank stability to discourage trampling of vegetation.

## Goal 3: Funding

*Maintain current funding and identify regional, national, or international resources for public access infrastructure.*

**Strategy 3.1:** Maintain and strengthen current funding resources for public access infrastructure and improvements.

#### Actions:

- Strengthen existing relationships with funders and supporters such as the GLO Coastal Erosion Planning and Response Act program and the Coastal Management Program.
- Continue investigation of SPI Beach User Fee Program and if adopted utilize funds for public access improvements and maintenance.

**Strategy 3.2:** Diversify funding resources for public access infrastructure and improvements.

#### Actions:

- Identify new regional, state, national, or international resources for public access.
  - Texas Parks and Wildlife Department Boating Access Grants. Activities the grants will fund include new boat ramps, land acquisition, restrooms, parking facilities and signage.
  - RESTORE Act funds. It is understood that the City has applied for funding from this program, but there are multiple avenues within this funding source that could address access issues. In addition, funds will be dispersed over a 15 year period so additional opportunities may arise.
  - NOAA Coastal Resilience Grants Program - a new grant program, administered by the National Fish and Wildlife Foundation, in partnership with NOAA, protects coastal



communities from storms and flooding impacts by funding projects that restore and strengthen protective natural systems.

- Work with the County to establish a regional public access plan. GOMESA funds are beginning to be distributed to coastal counties and could be a source for cooperative plans. The GLO is also a recipient of GOMESA funds and could be a partner on access projects. Funds will be provided to Texas and counties on an annual basis.

## Conclusion

Visitors and residents of the City expect public access to the water on both the beach and bay side of the Island. While there are several unique opportunities for access to the extensive shorelines of the Gulf Coast and the bay, the City must prioritize improvements to existing and new public access points that combine storm protection, habitat restoration and visitor amenities to support tourism. These include opportunities that enhance the public's utilization of the beach and the bay (i.e. restrooms, wash stations, additional parking, increased boat access, etc.) and preserve and protect the natural resources of SPI for future generations. Key actions that will directly enhance public access associated with the shoreline are:

- 1. Enhance Existing Beach Access Points With Restrooms, Wash Stations and Additional Parking:** The results of a public survey conducted in April 2018 and direct conversation with citizens at a Comprehensive Plan Open House held in June 2018 reveal strong community support for the addition of permanent restroom facilities over temporary restroom facilities at beach access points. By enhancing existing beach access points and creating new ones with amenities such as restrooms, wash stations and parking facilities, the City can help alleviate over-use at current beach access points that offer more user-friendly amenities and improve the overall beach user experience.
- 2. Increase Boat Access on the Bayside:** Public boat access is currently limited within the City, with only two free public boat access ramps and three fee based ramps on the bayside. The City needs to create and/or expand boat access and associated parking, primarily in the entertainment district to draw more tourists to the area and reduce use at the residentially located boat access point.
- 3. Separate Motorized and Non-Motorized Boat Access Points:** The City should separate motorized boat access points from non-motorized boat access to improve the bayside user experience, public safety and avoid over-use and/or habitat degradation at one particular boat access point. Motorized boat access is recommended in the entertainment district, while non-motorized boat access is recommended on the northern end of the Island, in close proximity to the Laguna Madre Nature Trail, the Convention Centre and the SPI Birding and Nature Center, where parking facilities and amenities already exist.
- 4. Protect the Continuous Dune System:** The City has an opportunity to make beach access points user-friendly for all abilities, including access points that provide accessibility for people with disabilities as well as the aging demographic. The results of a public survey

conducted in April 2018 and direct conversation with citizens at a Comprehensive Plan Open House held in June 2018 reveal strong community support for dune walk-overs versus at-grade access mats, which will protect and promote the vital dune system that is important for coastal resiliency. Dune walkovers provide additional protection to a continuous dune system, which in turn provides shoreline protection to upland properties. However, the City may need to implement a variety of access options due to existing and future conditions along the Gulf shoreline. As a result, adjustments to orientation or implementation should be reviewed and included within City codes to provide the most protection to the dune system.

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# STORM DRAINAGE MASTER PLAN



# Introduction and General Overview

The City had its first Comprehensive Storm Drainage Master Plan completed in April 1983. The plan consisted of an area of approximately 1,200 acres of both residential and commercial developments and established a baseline for drainage criteria and provided three alternatives in addressing the drainage concerns at the time and established a guide to implement proposed improvements, priorities and associated costs.

Subsequent on June 6, 2018, The City authorized Phase 1 update to the Storm Drain Master Plan. This is intended to be a planning tool, and the recommendations provided shall be subject to additional engineering prior to design. The limit of the study area consisted of approximately 335 acres of both residential and commercial developments and a detailed study near the Suites at Sunchase. Inventory data collection was done as part of this phase to determine the City's assets. As part of this report was to obtain additional elevation information to finalize the analysis.

On October 13, 2020 Phase 1b, Storm Drain Master Plan was completed. This report analysis Phase 1 identified Drainage Area no. 123 comprised of 3.42 acres to determine deficiencies in the existing drainage system and providing criteria for proposed residential and commercial developments.

## Purpose

The goal of the study is to minimize the limits and duration of flooding and improve vehicular and public safety during storm events. Public responses and overall concerns of the community help steer future development and alleviate drainage issues and flooding. Ultimately the study will provide priority locations and associated costs to improve the drainage system through the City.

## Site Conditions

The City's low-lying topography causes a limited change in elevation and limited head or pressure for gravity flow storm drain systems. Another challenge of the site conditions is tidal impacts on the conventional storm drain system. The City storm drain system is at risk for additional debris collected in pipes due to backwater effects and wave action. The entire City is also within the FEMA 100-year floodplain and is statistically likely to flood. Padre Boulevard is the most represented area in the



community’s drainage concerns and complaints and is TxDOT maintained roadway, which causes funding and design limitations. The City would benefit from a holistic, comprehensive drainage approach or solution. Improvements along problematic areas will help alleviate the drainage issues, and full system analysis would greatly improve the stormwater drainage network.

# Recommendations

As these studies have shown, conventional stormwater drainage systems are limited. Therefore a combination of conventional drainage pipe system upgrades, inlet upgrades, inline backflow preventers, detention and low impact development such as wetlands, vegetative strips, rain gradens etc.

The City has between 2018 and 2020 started to install inline backflow preventers to determine their efficiency and has seen a benefit of the installation. As of November 3, 2021, City Council approved the funding to install these backflow preventers for all the outfalls. In addition, Laguna Boulevard Street and Drainage Improvement project includes upgrade of pipe sizes across most of the street intersections to improve drainage flow across from Padre Boulevard to the Bay and included some areas of low impacted development.

# Continuing Studies and Implementations

The City has been working on the most efficient options to address the flooding issues within the City. The Texas Water Development Board in conjunction with other state agencies (such as FEMA - Flood Risk Rating 2.0) is currently working on a flood mapping within our area that would provide Base Level Engineering modeling. “Base Level Engineering (BLE) is an efficient modeling and mapping approach that aims to provide technically credible flood hazard data at various geographic scales such as community, county, watershed, and/or state level. This data is meant to complement the current effective Flood Insurance Rate Map (FIRM) data, but not replace it.”

In an effort not to duplicate these efforts, the City has contacted the US Army Corps of Engineers to finalize Phase 2 of the City’s Storm Drainage Master Plan. Currently the US Army Corps of Engineers and the City is discuss the scope of the project in more detail and determining the Cost Sharing Agreement. Once this is completed the strudy will commenced, it is estimated to be completed early 2023.



As an added measure, as of mid-2021, the City is a member of the FloodWise Communities that will also help with this endeavor. FloodWise Communities, a “National Academy of Sciences Gulf Research Program project, is designed specifically to support communities interested in beginning or enhancing existing climate adaptation, hazard mitigation, or stormwater management plans with a fundamental step: “**the vulnerability assessment.**” This assessment is estimated to be finalized by mid 2022.

Maintenance is an important factor to maintain and insuring the storm drainage system is working properly. The City had dedicated funding on an annual basis to perform drain cleaning and repairs. As opportunities arise the system is upgrade. As part of the Padre Boulevard Median, Sidewalk and Boardwalk project, the City was able to upgrade four storm drain inlets, improving the storm drain conveyance capacity.



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# Implementation



# Introduction

In order to achieve the vision set forth in a given comprehensive plan, a city must take the necessary step between planning and implementation. Generally, after a significant amount of time has been spent convening stakeholders, studying the city, and drafting plans for the future, the community focuses on the implementation of shared goals into reality. As part of The Island Way planning process, the community developed a Vision Statement and Plan Goals to form a foundation for the succeeding efforts that would follow their formation. The Vision Statement focuses on the island's unique assets and opportunities while Plan Goals set a direction for the many topics that the comprehensive plan addresses.

Implementation begins with the Plan Goals, which are themselves divided into Actions: concrete steps for public policy that are attainable and measurable. In the Implementation Matrix at the end of this chapter, a list of Actions is delineated alongside their corresponding Plan Goals, which are categorized by topic. In addition to this information, the implementation matrix delegates responsibility to City departments, funding resources, and individual staff members. The Implementation Matrix also provides a projected timeline and cost estimates for each Action.

# Implementation Tools

The City has many tools at its disposal to ensure the implementation of this plan. These tools include studies and process evaluations, creating new regulations or standards, forming programs or partnerships in concert with local entities, permitting and tracking business activities, obtaining federal funding for qualified projects, and convening stakeholders to accomplish mutual objectives.

The formation of partnerships, in particular, will be an important tool for plan implementation. The following entities will serve as key partners for the City of South Padre Island as it looks forward to the completion of these Plan Goals and Actions by the year 2050:

- American Electric Power
- Cameron County
- Laguna Madre Water District
- Lower Rio Grande Valley Development Council
- Point Isabel Independent School District
- Port Isabel Economic Development Corporation
- South Padre Island Convention and Visitors Bureau
- South Padre Island Economic Development Corporation
- Texas Department of Transportation
- Texas General Land Office
- U.S. Army Corps of Engineers
- University of Texas - Rio Grande Valley



# Goals and Actions

The Plan Goals and Actions of this comprehensive plan outline the path forward for administrators and decisionmakers in the City and its orbit. They are meant to produce actionable steps toward the shared vision for the Island’s future. Each was vetted by the community and refined by the planning team to better reflect intent and feasibility. Each Plan Goal may contain one or more Actions, along with recommendations for assigned city staff, funding sources, timing, and other, potential resources. Actions may only be indirectly related to a Plan Goal, but their impact has been determined to be important enough to warrant inclusion in both this comprehensive plan and the matrix below.

# Implementation Matrix

The Implementation Matrix below offers a look into the public policy that will be necessary to support this plan over the coming decades. The matrix should be seen as a living document that may be revisited and updated periodically by City Council, staff, and the community at large. Regular updates will offer a check on aspirational goals that may need to be adjusted over time to reflect changing realities. This matrix is built based on the current, on-the-ground scenario in South Padre Island as it exists today. A legend is provided below:

Responsible Parties			
Abbreviation	Organization/Agency	Abbreviation	Organization/Agency
CC	City Council	UTRGV	University of Texas—Rio Grande Valley
DSRTF	Development Standards Review Task Force	COC	Chamber of Commerce
EH	Environmental Health Services	EDC	Economic Development Corporation
P&Z	Planning and Zoning	PD	Police Department
PIO	Public Information Officer	PKSPI	Parks and Keep SPI Beautiful Committee / Parks Manager
PWD	Public Works	SBA-EDO	Small Business Admin. Economic Development Office

Other Terms			
Abbreviation	Term	Abbreviation	Term
BID	Business Improvement District	CIP	Capital Improvements Program
PID	Public Improvement District	TIRZ	Tax Increment Reinvestment Zone

Projected Cost	
Abbreviation	Definition
\$	A project or action which can be completed at a relatively low cost usually because a large part of the work will be done by the City using Staff resources
\$\$	Projects or actions such as planning, engineering or urban design studies costing up to approximately \$150,000
\$\$\$	Projects or actions such as land acquisition or construction which may involve costs between \$150,000 and \$1 million
\$\$\$\$	Major projects or actions with approximate costs of more than \$1 million

Timeline			
Abbreviation	Definition	Abbreviation	Definition
S-t	Short-term; 0-2 years	M-t	Mid-term; 2-5 years
L-t	Long-term; more than 5 years	N&O	Now & Ongoing



Land Use							
Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<b>LU.A</b> Land uses should harmonize so as not to detract from the enjoyment and value of surrounding properties.	Preserve the conformity and integrity of existing development.	Regulate enhancements per form-based code. Possible architectural review committee.	CC, P&Z, PD, DSRTF, others	Planning Director	General Fund, Current Staff Time	\$	N&O
<b>LU.B</b> Land uses should concentrate similar uses and densities. Where a mix of uses is the intended use, the physical appearance should be cohesive and coordinated.	Provide increased buffering between zoning districts. Evaluate ordinances.	Provide for increased buffering between zoning districts. Continue to evaluate ordinances.	PD, P&Z, CC, DSRTF	Planning Director	General Fund, Current Staff Time	\$	N&O
<b>LU.C</b> Commercial and residential development should encourage a pedestrian- and bike-friendly experience.	Allow increased flexibility while also establishing improved minimum standards.	Potential architectural review CCrd.	PD, P&Z, CC, DSRTF	Planning Director	General Fund, Current Staff Time	\$	M-t, N & O
	Enhance the standards and appearance of public rights-of-way and properties.	Work with TxDOT to aid in Padre Boulevard appearance enhancement.	PWD, CC, COC	Public Works Director	TxDOT, Federal Funding	\$\$	M-t, N & O
<b>LU.D</b> Development zoning patterns should provide for suitable transitions and buffering between land uses and densities.	Streamline the review and permitting process.	Online permitting and tracking software. Evaluate policies.	PWD, P&Z, CC, others	Planning Director	General Fund, Current Staff Time	\$	M-t, N & O
<b>LU.E</b> To preserve views and enhance values in the northern ETJ, development should favor dense, high-rise buildings in the inland center of the Island and mid-rise and low-rise structures towards the Bay and Gulf shores.	Collaborate with neighbors and property owners prior to altering present land uses in a zoning district.	Notification of potential land use changes, developments, etc. prior to formal process.	PD, P&Z, CC	Planning Director	General Fund, Current Staff Time	\$	M-t, N & O
<b>LU.F</b> The development or redevelopment of infill lots should consider a similar scale and density as that of surrounding properties within a zone.	Provide for reuse and redevelopment of older and under-utilized structures.	Evaluate zoning ordinance for flexibility and discourage burdensome processes.	PD, P&Z, CC, EDC	Planning Director	General Fund, Current Staff Time	\$	M-t
<b>LU.G</b> High-density housing development should be concentrated where roadway and utility infrastructure and off-street parking can support it.	Establish and enforce landscaping requirements.	Notify property owners and developers of violations.	PD, CC	Planning Director	General Fund, Current Staff Time	\$	N & O
<b>LU.H</b> Development should favor districts over strip centers.	Develop and implement a "Main Street" enhancement program for Padre Boulevard.	Apply for grant-funded façade improvement programs	CC, EDC, COC, EDC	City Manager	State or Federal Funding	\$\$	S-t
	Encourage imaginative and "unique" subdivision designs.	Evaluate subdivision ordinance.	PD, P&Z, CC	Planning Director	General Fund, Current Staff Time	\$	N & O



Land Use							
Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<b>LU.I</b> Small-scale neighborhood retail and service facilities should be located at the edge of neighborhoods and busy intersections.	Improve the quality and appearance of new development.	Possibly establish review committee or new considerations for existing committees.	PBRC, P&Z, CC	City Manager	Staff and Committee Time, Possible Consultant Help	\$\$	N & O
<b>LU.J</b> Development should preserve and enhance the physical environment and natural features of the Island. Nature reserve areas, greenbelts, and open areas should be set aside for preservation and recreation and leveraged as buffering areas.	Protect sensitive lands and conserve natural resources.	Establish strict zoning requirements around dune protection area.	PD, PWD	Planning Director	Staff and Committee Time, Possible Consultant Help	\$\$	M-t
	Accumulate land to facilitate the building of additional public tourist attractions such as: parks, Bayfront access, facilities with educational exhibits, an amphitheater, performing arts theater, historical museum and public boat ramps.	Establish program for this.	EDC, CC	Public Works Director	Capital Improvements Funding	\$\$\$	N & O
<b>LU.K</b> Public beaches, Bayfront shores, and ecological health should be proactively preserved and protected.	Use incentives and bonuses to encourage enhancements, preservation, and open space.	Consider the appropriate use of TIRZ, PID, or BID funds	PD, CC	Planning Director	Special Funding (e.g., TIRZ, PID, BID)	\$\$\$	M-t
<b>LU.L</b> Zoning should be flexible enough to allow for building alternatives that provide open space and views.	Encourage "Green" development and enhancement (e.g., energy, waste handling, renewable resources).	Establish green building program.	PWD, Major Developers, CC	City Manager	General Fund, Current Staff Time	\$	M-t





## Business, Economy, and Tourism

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline		
<b>EC.A</b> Sustain and Increase Business Including Educational Opportunities	SPI-EDC, PWD SBA-EDO, and SPI-CVB should be provide support and training to existing and new business, strengthen relationships with universities and use research an analytics programs to promote the economy of South Padre Island especially during off-peak months.	Increase utilization of the SBA's Small Business Development Center at UTRGV.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term		
		Create "How to do Business on SPI" feature on website.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Short Term		
		Continue Sand Dollars for Success.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term		
		Address seasonality issue with CVB.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Long Term		
		Strengthen relationship with universities - Marine Biology/ research, coastal studies.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Long Term		
		Establish a framework and protocol to identify and prioritize economic development projects, and business opportunities with high development value to South Padre Island.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Short Term		
		Expand the business mentoring programs South Padre Island Economic Development Corporation offers to include professional training.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term		
		Expand the research and analytics program.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Short Term		
		<b>EC.B</b> Take strategic actions to actively recruit new businesses that result in a stronger business environment	Strengthen the economy of South Padre Island through data analytics to strategically recruit businesses.	Conduct Retail Gap Analysis.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term
				Enhance online presence.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Short Term
Develop strategic approach for recruiting businesses.	SPI-EDC,			SPI-EDC	Grants, Current Staff Time	\$	Short Term		



## Business, Economy, and Tourism

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<b>EC.C</b> Enhance and grow entrepreneurship	Provide the support in the form of an arts incubator, a business incubator, and the technical training and incentive informations needed to develop organic SPI businesses	Establish shared workplace.	UTRGV SBA- EDO	SPI-EDC	Grants, Current Staff Time	\$	Short Term
		Establish an arts incubator.	SPI- EDC,	SPI-EDC	Grants, Current Staff Time	\$	<b>Complete</b>
		Establish an innovation center and business incubator	UTRGV SBA- EDO	SPI-EDC	Grants, Current Staff Time	\$	Mid Term
		Develop a list and guidelines of all available incentives and advertise available grants and business opportunities.	SPI- EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term
		Improve and strengthen existing business areas by encouraging agglomeration of similar businesses.	UTRGV SBA- EDO	SPI-EDC	Grants, Current Staff Time	\$	Long Term
		Continue support for the Kauffman Entrepreneurship Class.	SPI- EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term
		Initiate a Business Mentoring Program for existing businesses.	UTRGV SBA- EDO	SPI-EDC	Grants, Current Staff Time	\$	Short Term
<b>EC.D</b> Grow eco-tourism	South Padre Island’s Birding and Nature Center along with the other natural resources available should be leverages to promote the Island as a premier eco-tourism destination.	Assist Birding Center to build capacity to be self-sustaining.	SPI- EDC,	SPI-EDC	Grants, Current Staff Time	\$	Long Term
		Support CVB efforts in development of marketing and assets for eco-tourism.	UTRGV SBA- EDO	SPI-EDC	Grants, Current Staff Time	\$	Long Term



## Business, Economy, and Tourism

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
		Look for opportunities to partner on the Padre Trails System / Wayfinding Project.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Long Term
		Support development of the RGV Reef - Artificial Reef Project.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Short Term
		Join international birding and ecotourism associations.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term
		Establishing bike and kayak trails, and developing a cycling, kayaking, and walking app in the nature and wildlife refuge.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Mid Term
		Building an aquarium or butterfly pavilion in collaboration with the Brownsville zoo.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Long Term
		Continue planting of habitat for birding and butterflies.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Long Term
		Develop and native plants center.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term
<b>EC.E</b> Improve destination	Explore the different alternatives available including the feasibility of a cruise ship port of call and water taxi project for SpaceX launches to improve the Island as a destination	Water taxi project for SpaceX launches.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Long Term
		Analysis of Cruise Ship Port of Call.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	<b>Complete</b>
		Support efforts to do a comparative study to improve destination.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Short Term
<b>EC.F</b> Grow event tourism and convention tourism	Capitalize on the Island's Convention Centre to expand and grow event and convention tourism.	Support CVB efforts in development of marketing and assets for event tourism and convention tourism.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term
		Expand the Convention Centre to allow for larger groups.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Mid Term
		Airlift	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Mid Term
<b>EC.G</b> Grow business tourism	Explore the possibility of partnering with business and trade association in the region including Matamoros to develop business tourism	Hold leadership, visionary, strategic planning, team building corporate retreats here- partner with the CVB.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Mid Term



## Business, Economy, and Tourism

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
		Develop business tourism by entering into a strategic partnership with industrial trade associations including Matamoros maquila association.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term
		Develop a corporate retreat destination marketing plan.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Mid Term
		Develop strategies to take advantage of development at the Port of Brownsville.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term
		Develop strategies to take advantage of development of LNG projects.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term
		Develop strategies to take advantage of development of SpaceX.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Short Term
<b>EC.H</b> Support regional efforts for business development	Support regional economic development efforts and position the Island to capture some of the spillover from increased regional business activity.	Be proactive and check status and facilitate progress when possible and assess how we prepare for them when they happen: SpaceX.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term
		Promote the construction of a second causeway.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term
		Port of Brownsville Projects LNG and Steel Mill.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term
		One MPO for the region- Consolidating the two we have and adding the Laguna Madre Area to the MPO.	UTRGV SBA-EDO	SPI-EDC	Grants, Current Staff Time	\$	Short Term
		South Padre Island deep water Marina.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Mid Term
<b>EC.I</b> Diversify SPI visitor base	Continue the efforts to diversify SPI visitor base by establishing new events and activities related to SpaceX launches and establishing an annual film festival among others.	Develop SPI as a film location in coordination with the Governor's office.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term
		Develop a plan and strategies to take advantage of SpaceX-viewing facilities, observatory/planetarium, night sky ordinances, etc.).	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Mid Term
		Establish an annual Film festival.	SPI-EDC,	SPI-EDC	Grants, Current Staff Time	\$	Long Term



## Business, Economy, and Tourism

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
		Promote the establishment of periodic arts events.	UTRGV SBA- EDO	SPI-EDC	Grants, Current Staff Time	\$	Short Term
<b>EC.J</b> Improve broadband/internet access and speed.	Explore founding sources to improve the Island's broadband and internet connectivity	Identify and apply for EDA and USDA grants for infrastructure improvement.	SPI- EDC,	SPI-EDC	Grants, Current Staff Time	\$	Short Term
<b>EC.K</b> Maintain and support the highest skilled and most dynamic sales and marketing team.	SPICVB will meet the highest standards of accreditation and performance (research driven ROI) with measurable results as a research-based DMO.	Operate the SPICVB as a creative and supportive work environment based on core values.	SPI- CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term
		Maintain competitive wage and benefits structure to retain the highest qualified team possible.	SPI- CVB,	SPI-CVB	Grants, Current Staff Time	\$	Mid Term
		Achieve and maintain accreditation with Destinations International.	SPI- CVB,	SPI-CVB	Grants, Current Staff Time	\$	Long Term
		Support all team members in continued education online and at industry conferences and certification programs offered through TTIA, Destinations International, US Travel Association, Travel and Tourism Research Association, National Association of Sports Councils, vendors.	SPI- CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term
<b>EC.L</b> Develop Promote a new active-lifestyle brand based on the market research.	SPI requires a brand that sets it apart as unique from other beach destinations while capturing the active outdoors vacation/getaway experience. The new brand will serve as a foundation for all marketing, sales and public relations as well as future destination development.	Drive increased visitation during slower months of the year to become a year-round destination. Nine priority months (in rank order): August, April, May, September, October, November, February, January, December.	SPI- CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term
		Marketing targeted to lifestyle segments: a) Active couples; b) Singles; c) Friends; d) Families with kids; e) Empty Nesters; f) Outdoors enthusiasts (fishing, sailing, birding, paddling, etc.).	SPI- CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term
		Geographic targeting: a) Texas population centers: Houston, Rio Grande Valley, Austin, San Antonio, DFW; b) Oklahoma cities; c) MX-Monterrey region. FLY Markets: DFW, Denver, Kansas City, Chicago, Minneapolis, and St Louis.	SPI- CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term





## Business, Economy, and Tourism

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
		Group sales to drive weekdays and off-season weekends: meetings & conferences, sports, competitions, weddings, reunions, festivals & events, etc.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term
		Public Relations targeted at core drive and fly markets featuring the active beach lifestyle brand.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Mid Term
<b>EC.M</b> Maintain/expand a comprehensive research/ tracking program to guide all decisions	Track KPIs (Key Performance Indicators) for all programs with ROI reported at all SPICVB CVA Board meetings. Quarterly reports to City Council.	Lodging Market Metrics – overnight visitors drive 3 -4 times the spending of day-trippers and lodging taxes fund the program of work. Track all aspects of the overnight market. Tax Revenue Reports, STR, VRMIntel,	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term
		Annual Economic Impact of Visitors- annual report of statistics to show the impact of visitor spending.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term
		Visitor Profile Research – every other year to track.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term
		Digital Analytics – track effectiveness of the website and e-marketing through Google Analytics, conversion surveys.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term
		Social Media Analytics – monitor followers and engagement on social media platforms including Facebook, Twitter, Instagram.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term
		Big Data – Adara aggregates data from lodging, airlines, rental cars, etc. to provide visitor analytics.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term
		Attribution Analytics – Arrivalist to determine the conversion of those who visit the website and arrive in the destination.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term
		Brand Image & Awareness of SPI – online surveys and focus groups conducted as needed in core feeder markets to determine image and awareness of the destination and its brand.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term



## Business, Economy, and Tourism

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<b>EC.N</b> All plans, marketing, activities, events must be on-brand	Deliver on the active beach lifestyle experience. Use research to guide all efforts and focus on those attributes that set SPI apart as a unique experience unlike other beach destinations. SPI must be unique and offer experiences that are worth the travel time/expense in order to compete with other coastal destinations.	Deliver on the active beach lifestyle experience. Use research to guide all efforts and focus on those attributes that set SPI apart as a unique experience unlike other beach destinations. SPI must be unique and offer experiences that are worth the travel time/expense in order to compete with other coastal destinations.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Short Term
<b>EC.O</b> Landscape and beautify Padre Boulevard as “the Main Street”	Create an island atmosphere with attractive pedestrian and bicycle walkways and crosswalks. Padre Boulevard is the primary traffic artery on island and as such is often the first and last impression of South Padre Island. Padre Boulevard must visually deliver an attractive image of a unique and scenic coastal island. Connect Padre Boulevard to Gulf and Laguna Boulevards with attractive pedestrian/bike trails/lanes. Pedestrian and bike paths assist visitors in getting out of the cars and engaging in the active outdoors lifestyle of the island.	Create an island atmosphere with attractive pedestrian and bicycle walkways and crosswalks. Padre Boulevard is the primary traffic artery on island and as such is often the first and last impression of South Padre Island. Padre Boulevard must visually deliver an attractive image of a unique and scenic coastal island. Connect Padre Boulevard to Gulf and Laguna Boulevards with attractive pedestrian/bike trails/lanes. Pedestrian and bike paths assist visitors in getting out of the cars and engaging in the active outdoors lifestyle of the island.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Long Term
<b>EC.P</b> Create a town center(s)	Create a village-style town square with gathering places where citizens and visitors come together to celebrate the active outdoors lifestyle of South Padre Island. Create unique island atmosphere that delivers on the brand where the gathering places are outdoor town “living rooms” for families and friends. Convert green spaces to support activities like bocci ball, volleyball, croquet, putting greens, horse-shoes, shuffle board, badminton, and small-scale entertainment.	Create village-style town square with gathering places where citizens and visitors come together to celebrate the active outdoors lifestyle of South Padre Island. Create unique island atmosphere that delivers on the brand where the gathering places are outdoor town “living rooms” for families and friends. Convert green spaces to support activities like bocci ball, volleyball, croquet, putting greens, horse-shoes, shuffle board, badminton, and small-scale entertainment.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Long Term
<b>EC.Q</b> All plans, marketing, activities, events must be on-brand	Deliver on the active beach lifestyle experience.	Deliver on the active beach lifestyle experience.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Long Term
<b>EC.R</b> Encourage and support unique coastal dining, shopping and entertainment that set SPI apart from other beach destinations.	Encourage and support unique coastal dining, shopping and entertainment that set SPI apart from other beach destinations. The island currently has ample outdoor activities to deliver on an active outdoors brand.	Unique Activities & experiences - SPI has an opportunity to expand indoor activities that fit within the brand and drive year-round visitation. The newly expanded Sea Turtle Inc. is a perfect example of an indoor activity based on an outdoor experience.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Long Term



## Business, Economy, and Tourism

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
		Unique Dining – keep it local featuring fresh seafood and Texas beef offered in charming coastal settings. Add entertainment and activities where possible.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Long Term
		Unique Shopping – most travel research identifies shopping as a top visitor activity and it is typically one of the top categories of discretionary visitor spending. Shopping is usually one of the top rainy day activities in coastal destinations. Encourage retail that offers unique and local shopping experiences and merchandise that will drive higher visitor spending and satisfaction.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Long Term
		Unique Entertainment – something fun every night of the year focused on entertainment and activities for all demographics. Develop green spaces into activity parks.	SPI-CVB,	SPI-CVB	Grants, Current Staff Time	\$	Long Term



Mobility							
Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<b>M.A</b> Reconstruct city streets	The thoroughfare network forms one of the most visible and permanent elements of the community. These improvements are intended to not only provide improved vehicular connectivity as the City grows, but also provide increased options for alternative modes of transportation and enhance the community's image through quality and cohesive street design.	Use the Street Improvement Plan Spreadsheet to determine which streets are next in line to be reconstructed and how much that reconstruction could potentially cost.	CC, PWD	Public Works Director	The City will develop a financial plan based on debt pledged with property taxes to sustain a long-term street reconstruction plan.	\$\$\$\$	N&O
<b>M.B</b> Maintain city streets	It is imperative to create and sustain a system that balances local and regional priorities and existing and future conditions to steer the community towards its vision for the future.	Use the Street Improvement Plan Spreadsheet to determine which streets are next in line to be maintained and how much that maintenance could potentially cost.	CC, PWD	Public Works Director	If available, operation expenses should be allocated on an annual basis to enhance the existing infrastructure.	\$\$\$\$	N&O
<b>M.C</b> Monitor pavement condition annually	The monitoring of pavement condition annually will provide the City with information that is imperative to their Street Improvement Plan Spreadsheet tool, which helps determine the prioritization of streets to be reconstructed and streets to be maintained.	Collect pavement condition information such as surface distress type and degree of surface distress each year along every City street segment	PWD	Public Works Director	Current Staff Time	\$	N&O
<b>M.D</b> Update street improvement plan spreadsheet annually	This tool allows the City to determine which streets are next in line to receive funding to be reconstructed or to be maintained.	Update pavement conditions, latest development, pavement profile, driveway information, and traffic data for each street segment	PWD	Public Works Director	Current Staff Time	\$	N&O
<b>M.E</b> Construct new side streets	The CiB12:H16 to be constructed in the future as development occurs on the northern portion of the island to provide increased connectivity. These future streets will be designated as either a minor collector or a local street.	Preserve right-of-way for future streets, construct future streets as development occurs on the northern portion of the island	CC, P&Z, PWD	Public Works Director	The City will develop a financial plan based on debt pledged with property taxes.	\$\$\$\$	M-t



## Parks

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<b>PR.A</b> Increase facility usage	Parks are vitally important to establish and maintain a quality of life within a community. Increased utilization of park facilities and programs will aid in ensuring the health of families and further contribute to the economic and environmental well-being of the community and region.	Improve infrastructure such as lighting, walking trails, shade structures and amenities. Promote programs and Community Center activities for all ages. Identify community interests and programs. Grant and potential CIP's.	CC, P&Z, PKSPI and others.	Parks Manager, Planning Director	General Fund, Grants & Current Staff Time	Varied	N&O
		Lighting for parks - complete lighting for Tompkins Park.	P&Z, PKSPI, CC	Planning Director	Texas Parks and Wildlife Grant, Matching Funds	\$\$	M-t
		Disc golf courses - promote availability and conduct workshops.	PKSPI	Parks Manager	General Fund & Current Staff Time	\$	N&O
		Assess shade at parks; develop plan to increase shaded areas, secure funding to implement.	P&Z, PKSPI, PWD	Planning Director	General Fund & Current Staff Time	\$	S-t
		Increase the number of picnic tables available.	PKSPI	Parks Manager	General Fund	\$	M-t
		Mark off soccer or flag football fields.	PKSPI, PWD	Parks Manager	General Fund & Current Staff Time	\$	S-t
		Tompkins Park walking path and exercise station alternatives.	P&Z, PKSPI, CC	Planning Director	Texas Parks and Wildlife Grant, Matching Funds	\$\$	Complete
		Provide year-round community center activities.	PKSPI	Parks Manager	General Fund, Current Staff Time	\$	N&O
		Assess community interests in vegetable gardens.	PKSPI, PIO	Parks Manager	General Fund, Current Staff Time	\$	Complete
		<b>PR.B</b> Enhance natural resources	Enhanced natural resource management will provide a gathering place to be physically active, socialize and connect with the natural world. Enhancing natural resources will protect and preserve environmentally sensitive areas promoting environmental sustainability and healthy ecosystems that can be enjoyed by residents and visitors.	Identify and utilize natural vegetation and species to preserve the natural environment.	P&Z, PKSPI, PWD	Parks Manager	General Fund, Current Staff Time
Monarch migration path - identify where new butterfly friendly plantings can go, plant and maintain	P&Z, PKSPI, PWD			Parks Manager	General Fund, Current Staff Time	\$	N&O
Bird migration path - green the City and educate residents on the importance of trees, flowers, feeders. Host citizen events to clear out bush and debris.	P&Z, PKSPI, PWD			Parks Manager	General Fund, Current Staff Time	\$	N&O
As much as possible, utilize drought tolerant plants to absorb pollutants and prevent erosion.	P&Z, PKSPI, PWD			Parks Manager	General Fund, Current Staff Time	\$	N&O



## Parks

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<b>PR.C</b> Provide safe and well-maintained facilities	Development of a park system and facilities that provide a safe environment will contribute to a positive user experience. Well maintained facilities will improve safety while addressing aesthetic and functional standards associated with the park system. Safe and well maintained park facilities will reduce long term replacement costs/needs.	Evaluate and renovate parks as necessary while improving infrastructure to meet future demand. Develop standard operating features and maintenance plans.	PIO, EH, PKSPI	Parks Manager	General Fund, Current Staff Time	\$	N&O
		Reduce trash by holding events throughout the year that involve residents and tourists.	PIO, EH, PKSPI	Parks Manager	General Fund, Current Staff Time	\$	N&O
		Renovate and maintain existing parks as necessary.	PKSPI, PWD	Parks Manager	General Fund, Current Staff Time	\$	N&O
		Provide lighting at Tompkins Park	P&Z, PKSPI, CC	Planning Director	Texas Parks and Wildlife Grant, Matching Funds	\$\$	M-t
		Develop standard operating procedures for parks maintenance	PKSPI, PWD	Parks Manager	General Fund, Current Staff Time	\$	S-t
<b>PR.D</b> Build new facilities	Provide new amenities associated with a Community Park System on the Island. The construction of new facilities and amenities will contribute to a diverse park system that can meet the demands of a diverse resident and visitor population.	Develop a preventive maintenance & replacement plan for buildings and equipment	PKSPI, PWD	Parks Manager	General Fund, Current Staff Time	\$	S-t
		Completion of Tompkins Park including the construction of a recreation trail, skate park and amenities. Completion of water sports venue and recreational trail. Future indoor recreation facilities.	P&Z, PKSPI, PWD, CC and others.	Planning Director	General Fund, Grants, Private Funds, Current Staff Time	\$\$\$\$	L-t
		Complete Tompkins Park Phase II (skate park, walking trail, shade structures)	P&Z, PKSPI, CC	Planning Director	Texas Parks and Wildlife Grant, Matching Funds	\$\$\$	M-t
		Work with partners to develop a non-motorized water sports venue	P&Z, PKSPI	Parks Manager	General Fund, Current Staff Time	\$	S-t
		Skate park - secure funding, obtain bids, build and advertise.	P&Z, PKSPI	Planning Director	General Fund, Current Staff Time	\$	<b>Complete</b>
		Dog park	P&Z, PKSPI	Planning Director	General Fund, Current Staff Time	\$	N&O
		Indoor recreation facility	P&Z, PKSPI	Planning Director	General Fund, Current Staff Time	\$	N&O



## Transit

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<b>T.A</b> Provide, safe, efficient movement of people	Transit plays an important role for elderly populations, people with limited incomes, and individuals with disabilities. Public Transportation contributes to a healthier environment by improving air quality and reducing oil consumption, and through better land-use policies. it also helps to expand business development and work opportunities.	Improve service and passenger amenities.	Transit	Transit Director	Grants & Current Staff Time	Varied	N&O
		Add stops every 2 blocks, new shelters, amenities	Transit	Transit Supervisor, Transit Manager	Grants & Staff Time	\$60,000	S-t
		Improve on-time performance	Transit	Transit Supervisor	Current Staff Time	N/A	N&O
		Route realignment, rolling stops, no flag down	Transit	Transit Director	Current Staff Time	\$	S-t
		Outreach	Transit	Transit Manager	Current Staff Time	\$	N&O
		Diversify funding, advertising, lease space	Transit	Transit Director	Grants, Advertising, Leasing Space	\$	N&O
<b>T.B</b> Provide quality, professional transportation system to public	Public transportation provides people with mobility and access to employment, community resources, medical care, and recreational opportunities. Public transportation helps communities expand business opportunities, reduce sprawl, and create a sense of community through transit-oriented development. And in times of emergency, public transportation is critical to safe and efficient evacuation.	Employee Training	Transit	Transit Supervisor, Transit Manager	Grants, Advertising, Leasing Space, & Current Staff Time	\$\$	N&O
		Hold Monthly One-On-Ones	Transit	Transit Director, Transit Supervisor	Current Staff Time	\$	N&O



## Drainage

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<b>D.A</b> Drainage Improvements for City Storm Drain System	Many of the City’s streets are in need of drainage improvements to alleviate existing and future flooding concerns. These improvements are intended to minimize the limits and duration of flooding and improve vehicular and public safety during storm events. Improvements along problematic areas will help alleviate the drainage issues.	Use the Storm Drainage Master Plan and Drainage Problem Areas Map to determine which streets are next in line for drainage improvements and how much those improvements could potentially cost.	CC, PWD	Public Works Director	The City will develop a financial plan based on debt pledged with property taxes to sustain a long-term street drainage improvements plan.	\$\$\$\$	N&O
<b>D.B</b> Maintain City Storm Drain System	It is imperative to regularly clean out and properly maintain the existing storm drain system to keep the systems clear of debris and allow for maximum storage capacity. As debris and trash accumulates, it obstructs the flow of water into the inlet. Proper maintenance and inspection may be performed for erosion and sediment control and clogging of outfalls.	Use the Storm Drainage Master Plan and Preliminary Storm Drain Map to determine storm drain structures to be maintained and how much that maintenance could potentially cost.	CC, PWD	Public Works Director	Current Staff Time. If available, operation expenses should be allocated on an annual basis to enhance the existing infrastructure.	\$	N&O
<b>D.C</b> Phase 2 Detailed Analysis of Storm Drain System	Phase 1 of the Storm Drainage Master Plan update was performed for the City as a planning tool to assess existing conditions and problem areas and to prioritize areas for future capital improvements for the City’s storm drain system. A full system detailed analysis and engineering design of the recommendations provided in Phase 1 would greatly improve the storm drain network.	Perform detailed hydraulic analysis, engineering design, and further prioritization of design recommendations for capital improvement projects.	CC, PWD	Public Works Director	The City will develop a financial plan based on debt pledged with property taxes to approve scope and fee for Phase 2 of the Storm Drainage Master Plan update.	\$\$	N&O
<b>D.D</b> Update Preliminary Storm Drain Map and Storm Drain System Inventory Annually	This tool allows the City to determine which storm drain systems are next in line to receive funding for drainage improvements. This tool also allows the City to maintain an ongoing inventory and Storm Drain Map demonstrating drainage improvements and additional storm drain structures.	Update storm drain structure conditions, latest development, any improvements, and/or elevations for storm drain system.	PWD	Public Works Director	Current Staff Time	\$	N&O
<b>D.E</b> Flow Control Devices and Additional Storage Design	The City anticipates additional storm drainage improvements to be constructed to alleviate existing and future flooding concerns. These alternatives should be considered to account for the relatively flat topography of the City, high observed water levels, and inadequate storage in the existing storm drain system.	Identify areas to install flow control devices and areas in need of additional storm drain storage. The flow control devices may be recommended in conjunction with the existing storm drain system or proposed drainage improvements to control flow conditions and prevent backflow overloading in the system. Stormwater runoff storage may be provided through the use of structural stormwater controls and/or non-structural features and landscaped areas.	CC, PWD	Public Works Director	The City will develop a financial plan based on debt pledged with property taxes.	\$\$\$\$	N&O



## Shoreline

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<b>SL.A</b> Improved access to quality environmental education materials, resources and facilities should increase public engagement in environmental education opportunities and increase public use of education centers.	Increased public engagement in environmental education establishes a greater sense of community and should result in an increased public awareness and protection of the Island's unique resources.	<p>Provide a searchable online directory.</p> <p>Expand the existing web-based landing page.</p> <p>Provide facilities that support educational opportunities, especially for large groups and younger or older groups (i.e. spaces with restrooms, spray showers, etc.).</p> <p>Strategically locate facilities throughout the City (i.e. beach side and bay side).</p> <p>Encourage collaboration and communication between educational organizations, centers, and providers.</p>				\$-\$\$\$	
<b>SL.B</b> Increase community awareness of environmental education events and promote regional and statewide opportunities.	Increase awareness of education events and opportunities should increase public engagement in environmental education.	<p>Assist with marketing and promotion of environmental education center events, workshops, etc.</p> <p>Establish an active educational liaison that would ensure events are posted to the City's calendar, would facilitate cross-collaboration of ideas and activities and would be responsible for coordinating research activities and archiving any research completed on the Island and within the larger eco-region, thereby making the work of scientists more visible and readily available.</p> <p>Host events (i.e. Texas Association for Environmental Education Annual Conference) that will raise awareness of the educational opportunities on the Island.</p>				\$	
<b>SL.C</b> Educational opportunities within the City should increase and broaden the diversity of environmental education audiences.	Greater educational outreach should provide opportunities for residents and visitors of all ages, backgrounds, abilities, etc. and should draw more attention to the importance of protecting the Island's environmental resources.	<p>Increase the diversity of educational providers.</p> <p>Increase the diversity of environmental education experiences.</p> <p>Encourage environmental education providers participate in training opportunities that address the different needs of targeted audiences.</p> <p>Identify and support programs that recruit diverse audiences to environmental education career options.</p> <p>Develop partnerships with organizations and post-secondary groups in and around the City to promote diversity in the field (i.e. Sea Turtle, Inc. Volunteer Coordinator/Education Assistant could work with a City Liaison).</p> <p>Infuse environmental education into other public programming (i.e. arts, health, recreation, tourism, cultural/heritage, etc.)</p> <p>Increase the number of internships/apprenticeship opportunities in the environmental education field for high school and college students.</p> <p>Install educational signage on the beach and bay to provide visitors more information on SPI's unique habitats and systems.</p> <p>Draw more attention to SPI's bayside environmental resources by providing and promoting bayside education opportunities (i.e. establish a kayak trail).</p>				\$-\$\$	
<b>SL.D</b> Promote increased communication and coordination among environmental education providers.	Increased communication and collaboration among environmental education providers allows providers to draw support from one another and should make the City's environmental educational program more effective and successful.	<p>Establish an educational liaison for the City.</p> <p>Support environmental education providers participation in the Texas Association for Environmental Education.</p> <p>Seek out events (i.e. Texas Association for Environmental Education Annual Conference) that will support City goals.</p> <p>Encourage partnerships and exchange programs between formal and non-formal environmental education providers.</p>				\$	



## Shoreline

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<b>SL.E</b> Strengthen and re-invigorate environmental education providers and programs in and around the City.	Supporting opportunities that develop and elevate the knowledge and skills of all stakeholders in environmental education should offer a form of professional and personal support among educators.	Encourage local educators to develop curriculum that ties into local ecology and environmental issues. Increase communication between designated leadership about the importance of environmental education to the community and the value of environmental education programs. Encourage Island resident participation in education organizations (i.e. Rio Grande Valley Chapter of the Texas Master Naturalist). Help formal and non-formal educators find professional development opportunities. Encourage active involvement in local, regional, state, or national environmental education professional associations. Host or sponsor an annual environmental educator awards banquet.				\$	
<b>SL.F</b> Acquire and maintain funding and support for environmental education.	Continued and increased funding and support should strengthen the City's ability to provide sustainable, quality environmental education programs.	Identify local, regional, state and federal government programs that support environmental education or could support environmental education resources (i.e. SPI's proposed Beach User Fee Program, EPA Environmental Education Grants and Environmental Research and Education Foundation Grants). Partner with new public, private and non-profit entities and stakeholders. Develop guidelines for educational and wayfinding signage that reinforces the City brand. Strengthen existing relationships with funders and support groups. Continue to grow volunteer base/utilize volunteer groups.				\$	
<b>SL.G</b> Ecotourism projects should highlight the unique natural resources of the Island.	Promoting well-rounded eco-tourism projects should provide an opportunity for the City to combine volunteering, tourism, and traveling and strengthen the image of SPI as a community that balances tourism and growth while providing areas for nature to co-exist.	Establish a network of trails and preserved land that affords access to wildlife corridors and provides sufficient space for recreation (i.e. kayak trail, add to existing bicycle route). Facilitate volunteer opportunities and help market volunteer programs (i.e. programs centered on nesting sea turtles, trail construction and festival event support). Provide the means to be green. Provide a sewage pump-out facility for boats near the entertainment district, thereby improving not only local water quality and user experience, but also the potential to drive business if the pump-out has other amenities associated with it. Encourage and support partnerships between existing environmental education organizations (i.e. SPI Birding and Nature Center, Sea Turtle, Inc., etc.) and businesses (i.e. hotels, Schlitterbahn Waterpark and Beach Resort, etc.) that offer visitors opportunities for "hands-on" experiences and active participation, as well as inform visitors of available activities.				\$-\$\$\$	
<b>SL.H</b> Develop bayside open space and vacant lots.	Development of bayside open space and vacant lots will support public access and utilization of the bay and increase tourism opportunities on the bayside.	Identify open space and vacant lots and assess for acquisition and potential development to support public access through boat ramps, restroom facilities and parking. Consider property access that would provide more non-motorized watersport access and recreation for users and consider parking requirements for vehicles and trailers.				\$\$	
<b>SL.I</b> Support recreational fishing in and around SPI.	Enhancing recreational fishing opportunities in and around the Island should increase tourism.	Maintain boating access in Tompkins Channel through routine dredging. Develop a long-term maintenance plan that addresses monitoring, dredging needs, project timing and funding sources. Partner with the Friends of Rio Grande Valley Reef for recreational access to the artificial reef 13 miles northeast of the SPI Jetties. Identify ways to diversify artificial reef funding. Explore the establishment of large boat slips that could be used for offshore fishing boats, pleasure boats, winter stays, etc.				\$\$-\$\$\$	





## Shoreline

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<b>SL.J</b> The creation or expansion of existing facilities/services should ensure that future tourism/residential demands are met.	The creation or expansion of existing facilities/services should help the Island achieve its overall goal of continued development of attractions for both tourists and residents.	Identify facilities for redevelopment, specifically in the entertainment district of SPI (i.e. public parking, public boat launch, expand infrastructure that supports tournament fishing). Add user amenities to existing trail systems and beach access points, such as restrooms, water fountains, bike racks and trail signage. Consider constructing or expanding facilities that promote tourism (i.e. butterfly pavilion) and that sustain and maintain the cost of operations through additional programs and amenities. Expand the existing SPI Convention Centre. Establish annual re-appraisal of existing parks, facilities and services within the City.				\$\$-\$\$\$	
<b>SL.K</b> Diversify tourism opportunities in an effort to attract a more diverse visitor audience throughout the year.	Diversification of tourism opportunities will establish SPI as a year-round tourist destination.	Schedule annual high-participatory, local events during the low-tourist or shoulder seasons, that support the SPI brand (i.e. concerts, festivals, Pirate Days, Sandcastle Days, etc.). Promote non-beach activities. The EDC, CVB and the Chamber of Commerce should collaborate to encourage diversification of restaurants and shops. This is especially important for drawing in Mexican Nationalist Tourism. Connect with the local population (i.e. Rio Grande Valley communities) to encourage day or overnight trips. Promote SPI as a tourist destination for SpaceX events, such as launches and night sky events. Update and restructure the SPI Birding and Nature Center interactive exhibits to offer new opportunities to visitors and make connections across different skill sets. Establish and market the Island as a location for filming by making it accessible, providing for police coordination, road closures, etc. a simple process.				\$-\$\$\$	
<b>SL.L</b> Provide improvements to transportation to increase accessibility to activities and amenities.	Transportation improvements should make SPI, as well as options in and around the City, more accessible.	Maintain boating access in Tompkins Channel through routine dredging. Explore expansion of the Tomkins Channel (i.e. widening and/or extending further north). Consider support of Texas Department of Transportation's SPI Second Access Project.				\$\$\$	
<b>SL.M</b> Ensure SPI's destinations and facilities are distributed equitably through the City.	Equitable distribution of tourism opportunities should help accelerate growth and promote economic development and ensure almost all tourists and residents have equal opportunities.	Balance the amount and types of parkland, open space, trails, access by focusing new recreational/tourism development in areas that are currently underserved. Ensure there is ease of access to recreational areas with careful planning of parking facilities and public transit stops. Continue to work with developers to identify opportunities for new park and open space facilities in new regions of the City based on the City of SPI's Parks and Open Space Master Plan.				\$\$-\$\$\$	
<b>SL.N</b> Establish a highly measurable, digital leisure marketing platform and robust group sales approach.	A marketing platform and sales approach that better understands SPI visitors by demographic, originating region, HHI, etc. should help the City enhance the visitor experience by connecting visitors to SPI's top activities, destinations, and facilities, thereby attracting a diversified visitor base throughout the year to SPI.	Utilize the 2018 Young Strategies, Inc. Visitor Survey profiles to best understand visitors by demographic, originating region, HHI, etc. Create greater collaboration and communication opportunities between vested parties, including business owners, the Chamber of Commerce, the CVB and the EDC, to align goals and identify issues that may affect tourism, niche markets (such as Eco-tourism), and business growth. Enhance collaboration with regional partners to promote the Island in the ever expanding Rio Grande Valley market to capture day visitations, particularly during off-peak season. Enhance visitor experience by connecting visitors to SPI's top activities, destinations and facilities. Implementation user-friendly technology, information sharing (i.e. displays in nature centers, brochures, etc.) and invest in tourism amenities (i.e. bike racks, trail signage, restrooms and water fountains). Establish a training program (i.e. Island Ambassador Program/ Internship) for the service industry that focuses on a culture of hospitality in an effort to improve the visitor experience and encourage repeat visitation.				\$-\$\$	



## Shoreline

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<p><b>SL.O</b> Maintain, strengthen and diversify current funding resources for tourism infrastructure and enhancements.</p>	<p>An adequate level of financing for tourism infrastructure and enhancements should ensure funding for acquisition, development and maintenance is maintained at a level necessary to support the City's future growth.</p>	<p>Strengthen existing relationships with funders and supporters.            Explore opportunities and encourage the Birding and Nature Center to continue to strive to be economically self-sustaining by expanding existing revenue-generating offerings and services, including special events such as ticketed sunset food and beverage tastings.            Provide information and expertise to existing tourism-generating facilities/businesses.            Diversify funding resources for tourism infrastructure and enhancements by identifying new regional, state, national, or international resources for tourism development and marketing and pursuing opportunities for joint funding of projects with regional, state, national or international agencies.</p>					
<p><b>SL.P</b> Protect beaches and sand dunes from degradation, as they are the first line of defense against natural processes such as storms and flooding.</p>	<p>Natural resource management strategies that protect and preserve beaches and dunes should ensure that the full suite of benefits (i.e. flood and storm protection) is provided by these natural systems.</p>	<p>Continue participation in beach nourishment projects, in partnership with the Texas GLO and USACE, as a way to preserve and restore the beach in eroding areas.            Continue research on sand movement within the system to review efficacy of nearshore berms.            Review the City's Erosion Response Plan based on current conditions and revise as needed.            Review and revise Chapter 22 of the Code of Ordinances for the City of SPI as it relates to alteration of the dune ridge.            Promote variable elevation dunes within the overall continuous system.</p>					
<p><b>SL.Q</b> Ecological resources (i.e. seagrass, wetlands and mangroves) that provide critical habitat for a variety of wildlife should be enhanced, restored and protected.</p>	<p>The health of these systems (i.e. seagrass, wetlands and mangroves) are key to maintaining the economic health of SPI and the region.</p>	<p>Monitoring water quality and working with regional leaders to ensure seagrass beds are maintained.            Inventory the extent of existing wetlands and mangroves adjacent to the Laguna Madre and complete a functional assessment of those over one acre.            Prioritize lots that can be conserved, preserved or enhanced for either a targeted species (i.e. shorebirds) or recreational/educational opportunities, such as nature trails, boardwalks or viewing platforms.            The City code should be updated to include practices and development standards that preserve wetland and mangroves.</p>				\$\$	
<p><b>SL.R</b> Coordinate and collaborate with local, state, regional and national programs to preserve critical habitats and resources (i.e. dunes, seagrass, wetlands, mangroves).</p>	<p>Increased coordination and collaboration should help the City acquire the funding and support necessary to achieve the City's conservation goals.</p>	<p>Coordinate with Cameron County and the State of Texas to preserve sand dunes, wetlands and mangroves and ensure future developments avoid any negative impacts these critical habitats.            Collaborate with environmental education providers to encourage education programs that promote conservation and management of these critical habitats.            Enhance existing programs and implement new programs in conservation and education.            Pursue funding from a variety of local, state, regional and national programs (i.e. GOMESA, RESTORE Act funding, NOAA, GLO, proposed Beach User Fees, Coastal and Estuarine Land Conservation Program).</p>				\$\$-\$	
<p><b>SL.S</b> Reduce flood risk due to coastal storms and sea level rise.</p>	<p>Participation in projects that will reduce flood risk should increase the City's ability to withstand a coastal flooding event, thereby improving SPI's livability.</p>	<p>Complete a vulnerability study and assessment to understand how storm surge and flooding would impact SPI's properties and infrastructure for the City as a whole.            Continue participation in beach nourishment projects in partnership with the Texas GLO and the U.S. Army Corps of Engineers.            Invest in a storm model that takes into account the existing dune system and bayside bulkheads, to identify vulnerabilities. Once vulnerabilities are identified, short-term and long-term projects should be developed that work toward creating a City that withstands minor events and recovers from major storms more quickly.            Establish a management plan that addresses flood risk for dunes, wetlands and mangroves.            Pursue funding from a variety of local, state, regional and national programs.</p>				\$\$	



## Shoreline

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<p><b>SL.T</b> Develop and implement new resiliency and adaptation projects.</p>	<p>Participation in projects that improve the resiliency of the region's ecosystems and infrastructure improve SPI's livability.</p>	<p>Identify resilient sites for coastal conservation (i.e. mangrove and wetlands preservation, restoration and creation as a way to mitigate flooding impacts).                      Establish living shorelines on bayside where practical to reduce impacts of flooding and sea level rise. The guidance should address public access, boat ramp locations and parking, etc.                      Review climate resiliency studies that detail designing infrastructure for flood risk.                      Establish a crisis response/disaster resiliency plan that details a whole community approach to an emergency event (i.e. oil spills, natural disasters, etc.).</p>				<p>\$\$</p>	
<p><b>SL.U</b> Investment in the development of bayside open space and vacant lots should help preserve the bayside.</p>	<p>Improving infrastructure and preserving critical habitat should ensure economic needs and opportunities are enjoyed by the public and future generations.</p>	<p>"Take a holistic approach to improve bayside resiliency by identifying the different challenges faced by the bayside, including public access, ecosystem protection, projected increases in water level due to climate change and better stormwater flow control. Complete a vulnerability study and assessment to understand how storm surge and flooding would influence SPI's bayside infrastructure.                      Invest in bulkhead improvements.                      Revise Chapter 22 of the Code of Ordinances for the City of SPI to address bayside protection, erosion and access.                      Identify open space and vacant lots and assess for acquisition and potential development.                      Establish living shoreline guidance for bayside infrastructure development and improvements.                      Identify open space and vacant lots and assess for preservation or restoration.                      Design mangrove and wetland habitat preserve to provide eco-tourism opportunities (i.e. kayak trail, boardwalks, etc.), as well as long-term resiliency to flooding from storm surge and sea level rise. Coordinate with the County and other stakeholders to increase boat access on bayside, while simultaneously avoiding any negative impacts on critical habitats or water quality."</p>				<p>\$\$-\$\$\$\$</p>	
<p><b>SL.V</b> Updates to Form Base Code</p>	<p>Updates to Form Base Code should increase resiliency from flooding, particularly along the beachfront side of Padre Boulevard, result in faster storm recovery and far fewer structures that sustain damage, thereby, preserving tourism.</p>	<p>Building requirements, especially along the beachfront side of Padre Boulevard, should meet or exceed the building requirements of FEMA Flood Zone VE in an effort to increase resiliency.</p>				<p>\$</p>	
<p><b>SL.W</b> Maintain and strengthen current funding resources for community conservation programs.</p>	<p>Continued and increased funding and support should strengthen the City's ability to conserve SPI's resources.</p>	<p>"The Coastal Management Program (CMP) provides funding opportunities for community conservation projects. Coordinate with Cameron County regarding opportunities to use County direct funds from GOMESA (Gulf of Mexico Energy Security Act). The GLO is also allocated GOMESA funds that could be used for community programs.                      RESTORE Act funding has several pots of funds that can be used for various types of projects from conservation to enhancing tourism and public access."</p>				<p>\$</p>	

## Shoreline

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<b>SL.X</b> Support collaboration and communication among conservation organizations and encourage community participation in local conservation programs.	Increased outreach and awareness should create more effective and efficient conservation programs.	<p>"Provide networking opportunities for conservation organizations, committees and task forces such as forums or meetings, to share ideas, resources, best practices, etc.</p> <p>Create greater collaboration and communication opportunities between vested parties, including business owners, the Chamber of Commerce, CVB and EDC, to align goals and identify issues that may influence conservation activities.</p> <p>Promote conservation events via social media to boost participation numbers.</p> <p>Model conservation programs after similar, successful programs found in neighboring coastal communities (i.e. Coastal Bend Bays &amp; Estuaries Program, Galveston Bay Foundation).</p> <p>Establish beach and bay ambassadors to improve on the City's existing Code Enforcement Department and Anti-Litter Beach Program duties."</p>				\$	
<b>SL.Y</b> Enhance waterfront access on the Gulf.	Enhancing public access on the Gulf should maximize coastal access for all persons and increase opportunities for all persons to enjoy the ecological and recreational value of coastal resources.	<p>"Continue to improve beach access points, particularly with wooden walkovers and restroom facilities, as identified as a preference by residents surveyed.</p> <p>Establish additional emergency waterfront access points to facilitate emergency response and reduce response time.</p> <p>Continue to maximize at-grade parking, including the purchase of vacant lots to support visitors. Parking expansion should focus on access points with existing restroom facilities, or where new facilities are proposed, as these access points are frequently visited and are in high demand. "</p>				\$\$\$-\$\$\$\$	
<b>SL.Z</b> Enhance waterfront access on the bayside.	Enhancing public access on the bayside should maximize bayside access for all persons and increase opportunities for all persons to enjoy the ecological and recreational value of bayside resources.	<p>"Increase the number of public boat launch sites.</p> <p>Create boat and equipment storage locations.</p> <p>Provide sewage pump-out facilities for boat holding tanks.</p> <p>Provide improvements (i.e. drainage, maintenance) at bayside access points, specifically existing piers, public lots and boat ramps (i.e. Palm Street Pier, Jim's Pier, Polaris, etc.).</p> <p>Support additional motorized and non-motorized boat access.</p> <p>Establish emergency waterfront access points (i.e. existing waterfront access locations or newly created access points).</p> <p>Increase parking facilities (i.e. north side parking and bayside street widening) that could be funded by public-private partnerships."</p>				\$\$\$	
<b>SL.AA</b> Enhance beach access.	Enhancements should make beach accesses more user-friendly and should help evenly distribute use of facilities throughout the Island.	<p>"Add user amenities to beach access points (i.e. restroom facilities, wash stations, water fountains, bike racks, trail signage, lighting, etc.) to make beach accesses more user-friendly and to help evenly distribute use of facilities throughout the Island.</p> <p>Provide accessibility for people with all capabilities (those who use wheelchairs, have sight impairments, or have difficulty walking on loose sand, etc.).</p> <p>"</p>				\$\$\$-\$\$\$\$	
<b>SL.BB</b> Promote public access strategies that support beach and dune protection.	These public access improvements and infrastructure should enhance SPI's coastal resiliency.	<p>"Reduce erosion and storm damage to coastal properties through the use of properly designed access structures (i.e. structures that allow for natural movement of sand and sediment).</p> <p>Establish beach access in strategic locations along the coastline to prevent future overwash areas.</p> <p>Define and maintain pedestrian access in specified locations through the installation of elevated structures (i.e. wooden walkovers).</p> <p>Rebuild or build access points in ways that minimize impacts to the dune system.</p> <p>The City should review and revise dune management ordinances, specifically in regards to dune height and width based on current conditions (i.e. City of SPI Code of Ordinances Chapter 22 – Dune Protection, Beach Nourishment and Access Plan Implementing Provisions). "</p>				\$\$\$-\$\$\$\$	



## Shoreline

Plan Goals	Justification	How	Who	City Staff Assigned	Potential Resources	Projected Costs	Timeline
<b>SL.CC</b> Inform the public on the importance of local coastal resiliency.	Active community participation and a high level of engagement in shoreline projects and policies should be an asset to long-term planning.	"Engage with community tasks forces, boards and volunteer groups to discuss and find a balance between access, conservation and homeowner priorities. Install signage that reiterates the importance of beach nourishment and healthy dune systems. "				\$-\$\$	
<b>SL.DD</b> Maintain, strengthen and diversify current funding resources for public access infrastructure and improvements.	Continued and increased funding and support should strengthen the City's ability to improve and provide public access infrastructure.	"Strengthen existing relationships with funders and supporters. (i.e. GLO Coastal Erosion Planning and Response Act program and Coastal Management Program). Continue investigation of SPI Beach User Fee Program and if adopted utilize funds for public access improvements and maintenance. Identify new regional, state, national, or international resources for public access (i.e. Texas Parks and Wildlife Dept. Boating Access Grants, RESTORE Act funds, NOAA Coastal Resilience Grants Program). Work with the County to establish a regional public access plan with the County (i.e. GOMESA funds). "				\$	





*The Island Way*

SOUTH PADRE ISLAND, TX



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