

TRAILS 03





Smith Harbor with Proposed Improvements (Port Lavaca Downtown Waterfront Master Plan)

INTRODUCTION

Movement and connectivity are key elements of a community's overall quality of life. Linking together parks, schools, neighborhoods, and other key destinations through strategic connectivity investments allows residents to more easily and safely access the world outside of their front doors. Chapter 3 explores how an expanded trail network and improved pedestrian/bicycle infrastructure can transform Port Lavaca into a multimodal, accessible, and active community.

Multi-use trails and greenways are essential components of outdoor recreation infrastructure, providing exercise opportunities, alternative transportation options, and access to natural spaces. This chapter considers trails located within City parks as well as those functioning more like sidewalks outside of parks. It also considers a range of trail types, including those for walking, running, biking, and paddling.

FEEDBACK THEMES

- » There is a growing community of runners in Port Lavaca, which has led to heightened interest in off-street / wooded trails
- » Trails connecting parks, neighborhoods, and other community amenities are highly desired
- » Long standing community interest in paddle trails
- » Residents and guests are delighted by existing piers, nature trails, and boardwalks
- » Residents appreciate the growing sidewalk connectivity, which has potentially added to community interest in additional trail development
- » Trail maintenance and storm/flood resilience is a top priority for City Staff

GUIDING PRINCIPLES



QUALITY OF LIFE: ENHANCE THE QUALITY OF LIFE FOR ALL CURRENT AND FUTURE RESIDENTS BY PROVIDING EXCEPTIONAL RECREATIONAL OPPORTUNITIES AND GREEN SPACES.

- » Trails that enable both active and passive recreation
- » Trails that compliment and showcase the natural beauty of Port Lavaca
- » Trails that are comfortable to use year-round



ENVIRONMENTAL CONSERVATION: PRESERVE AND PROTECT THE NATURAL LANDSCAPE AND BUILD COMMUNITY RESILIENCE.

- » Trails that protect natural areas by directing foot traffic away from sensitive habitats and reducing erosion
- » Trails and linear parks that preserve floodplains and wetlands while allowing for active living opportunities
- » Trails that encourage responsible stewardship of sensitive coastal and ecological areas



EQUITABLE ACCESS: EXPAND ACCESS, CONNECTIVITY, AND ACCESSIBILITY THROUGH MULTI-MODAL INFRASTRUCTURE.

- » Every resident within a 10-minute walk of an off-street trail
- » Accessibility and amenities for all ages and abilities
- » A trail system that feels and is safe
- » Continue to explore options to build trails in utility and railroad easements



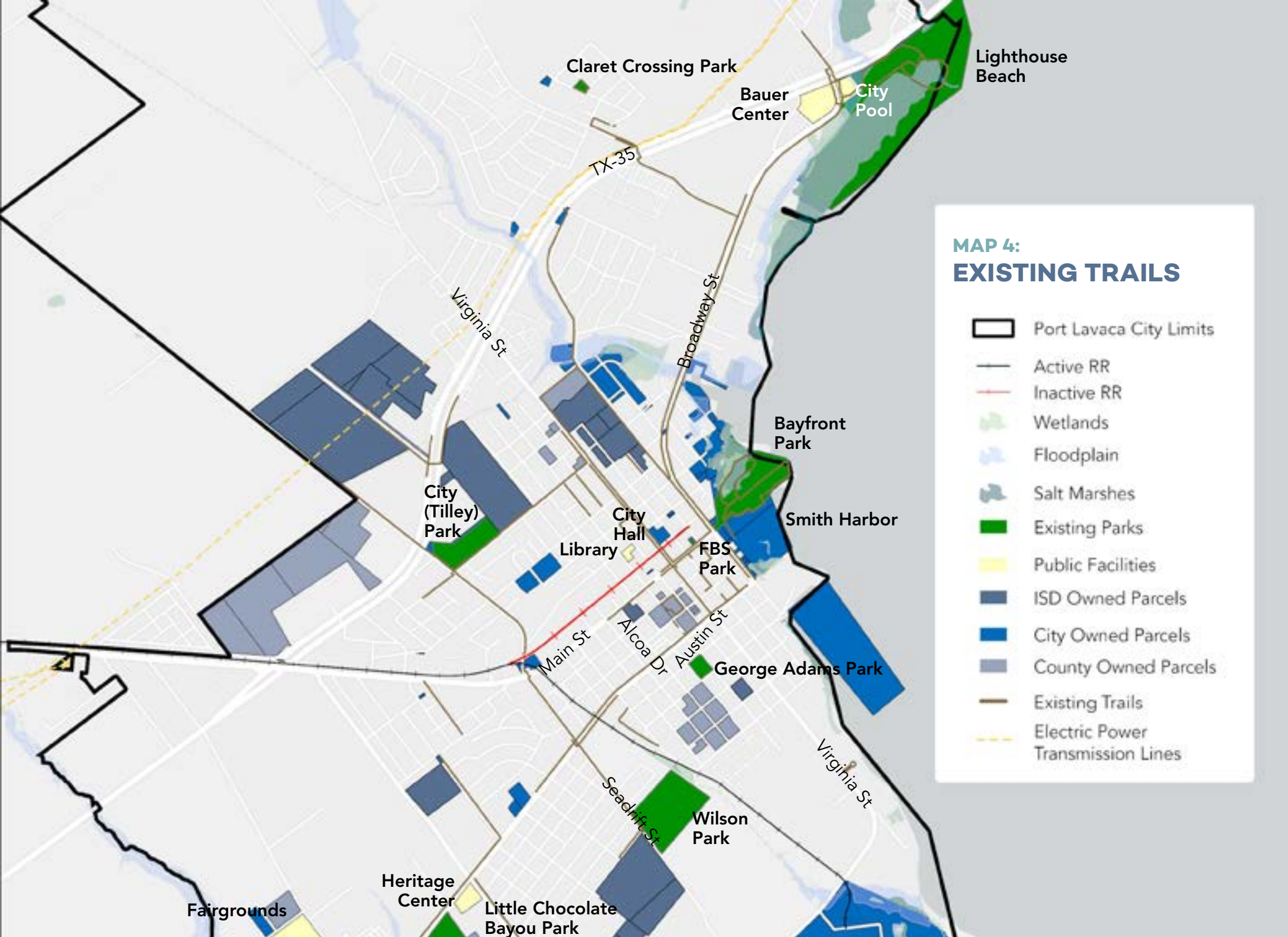
ECONOMIC VITALITY: ENCOURAGE ECONOMIC GROWTH THROUGH RECREATIONAL TOURISM, PUBLIC-PRIVATE PARTNERSHIPS, AND INNOVATIVE FUNDING STRATEGIES.

- » Consider park vendors and private rental shops as part of a larger trail ecosystem
- » Tap into the booming Heritage Trails market planning at the County level



COMMUNITY EMPOWERMENT: STRENGTHEN COMMUNITY IDENTITY AND VITALITY THROUGH HIGH-QUALITY PARK PROGRAMMING AND SPECIAL EVENTS.

- » Trail and amenity development process guided by community input
- » Understand which groups use certain trail types and why



TRAIL TYPOLOGIES

ACTIVITY TYPE

Trails come in a variety of types, shapes, and sizes, each designated to meet different community needs. Understanding their typologies help cities provide accessible recreation, support social interaction, and conserve natural resources for residents and visitors alike.



NATURE TRAILS

- » Width: 4' - 6' unmowed path or aggregate surface.
- » Uses: walking, hiking, mountain biking, etc.
- » Experience: natural trail
- » Cost/Environmental Impact: minimal. Uses existing vegetation and open space
- » Some trails may be limited by use type (hiking OR biking)



COMMUNITY PATHS

- » Width: 6' - 10' paved surface
- » Uses: Multi-use designation
- » Experience: Unique environments and landscape treatments along its length
- » Cost/Environmental Impact: high due to amount of hardscape and adjacency to roadway
- » Highly efficient at moving residents to/from key amenity areas and special nodes.



NEIGHBORHOOD PATHS

- » Width: 6' - 8' usually paved surface, gravel in some cases.
- » Uses: walking, hiking, biking, etc.
- » Experience: links neighborhoods to community pathways and greenways
- » Cost/Environmental Impact: medium. Utilizes land set aside for open space.
- » Location, surface, and landscape design should tie with the development zone of which it is a part.



SIGNATURE GREENWAY

- » Width: 12' - 15' paved surface
- » Uses: ultimate multi-modal use designation
- » Experience: regional connector between major community elements with signature wayfinding and landscape features.
- » Cost/Environmental Impact: high due to level of investment required to construct and maintain.

EXISTING INVENTORY

LIGHTHOUSE BEACH

NATURE TRAIL: Distance

PURPOSE:

- » Provide a designated path for recreation and environmental education while protecting ecosystems from trampling

PLANNED IMPROVEMENTS:

»



BAYFRONT PENINSULA

COMMUNITY PATH: Distance

PURPOSE:

- » Provide safe spaces for outdoor recreation
- » Serve as alternative, non-motorized transportation networks connecting neighborhoods to schools, jobs, and parks

PLANNED IMPROVEMENTS:

- » Shared-use path connecting to Fulton Street (2027)



Commons- Overall Map



Commons- Perspective View with Proposed Improvements

WILSON PARK

NEIGHBORHOOD PATH: Distance

PURPOSE:

»

PLANNED IMPROVEMENTS:

- » Sidewalk (2028)
- » Perimeter trail (TBD)

LITTLE CHOCOLATE BAYOU PARK

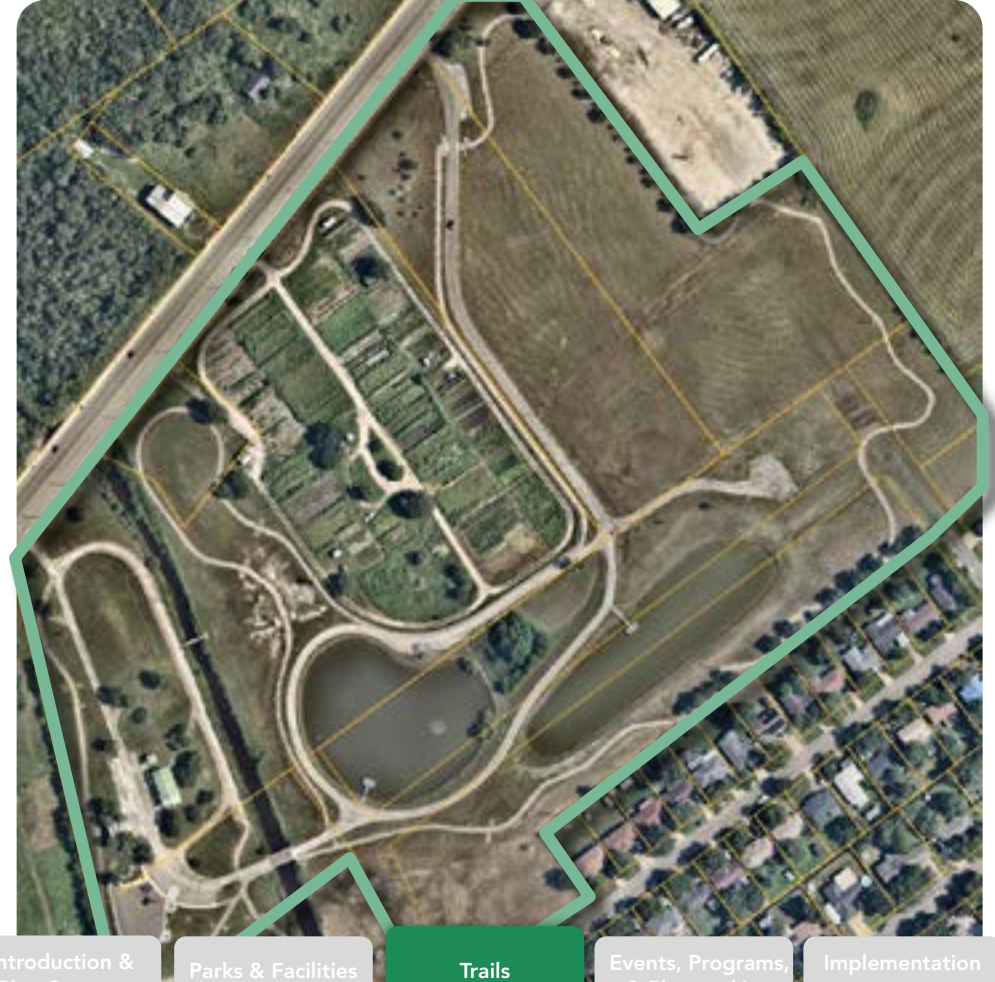
NEIGHBORHOOD PATH: Distance

PURPOSE:

»

PLANNED IMPROVEMENTS:

- » N/A (County)



PLANNED TRAILS

SMITH HARBOR

NATURE TRAIL/COMMUNITY PATH: TBD

PURPOSE:

- » Provide a designated path for recreation and environmental education while protecting ecosystems from trampling
- » Serve as alternative, non-motorized transportation networks connecting neighborhoods to schools, jobs, and parks

PLANNED IMPROVEMENTS:

- » Public access boardwalk (2026)
- » Lowland trails
- » 10' boardwalk along seawall



Smith Harbor Overall Map



Smith Harbor- Perspective View- Existing Conditions



Smith Harbor- Perspective View with Proposed Improvements

NEIGHBORHOOD TRAILS & LINKAGES

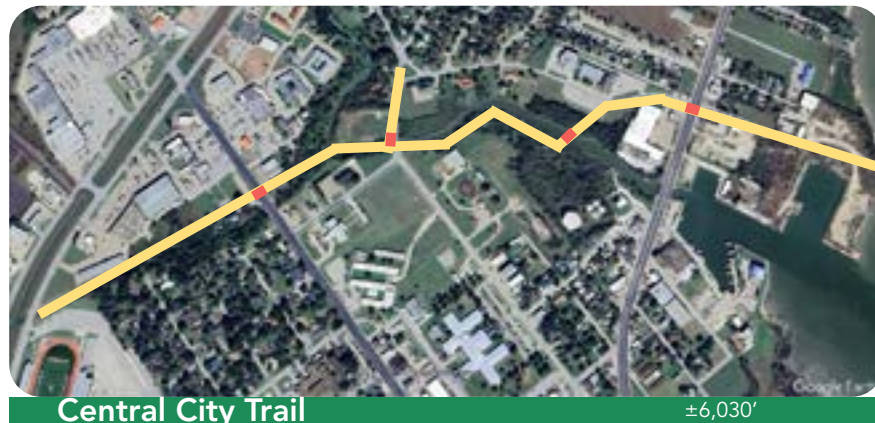
There are a number of locations in Port Lavaca where relatively minor trail projects can have an oversized impact for the local community. Six park sites were selected as case studies to illustrate the role of local trail-park linkages.

The impacts of these projects include:

- » Connect neighborhoods directly to adjacent parks
- » Introduce trails in currently underserved areas
- » Reroute bike and pedestrian traffic away from high-volume roadways

Legend:

-  Conceptual Alignment
-  Planned Trail
-  Barrier (highway, floodplain, or railroad)



SECTION STRATEGIES

NEIGHBORHOOD TRAILS & LINKAGES

- » Consult with Union Pacific about constructing pedestrian bridges over their active tracks at key locations
- » Continue to coordinate with Union Pacific about acquiring the unused portion of tracks leading into Downtown and express interest in acquiring the southern spur should the opportunity arise
- » Consult with TXDOT about constructing pedestrian bridges over SH 35 at key locations
- » Consult with TXDOT about developing off-street trails within the ROW of SH 35
- » Identify and map the locations of all undeveloped City-owned properties, floodplains, and utility easements - relative to parks, schools, and neighborhoods - to determine possible additional trail linkages
- » Budget for ±3.6 miles of local linkages annually



TRAIL CROSS SECTIONS

Typical trail cross sections have been developed to offer local agencies guidance for project development and trail design. These cross sections can serve as the basis for discussions with property owners, project engineers, landscape architects, and other stakeholders to develop a shared understanding of typical trail design elements. Additional trail design resources should be referenced in preliminary and final design phases.



COMMUNITY PATH

KEY CONSIDERATIONS FOR LOCAL TRAILS

Building trails entails key considerations like user needs, environmental impact, sustainability, site specifics, and community/social factors.

DESIGN & LAYOUT

- » User-Centered: Define users to set width (8-14 ft), sight lines (400 ft), and features.
- » Access: Plan parking, access points, trail heads or location markers, and facilities.
- » Drainage: Use grade reversals, dips, and ensure the outside edge is lower for water flow.
- » Terrain: Use cross-slopes, avoid ridge tops, dry washes can be good, and use natural features to guide layout.
- » Loops: Create loops and avoid dead-ends for better user flow.
- » Safety: Design intersections carefully, ensure clear vertical clearance

ENVIRONMENT & SITE

- » Soil: Locate on stable, well-draining soil; avoid deep loam, clay.
- » Habitat: Minimize disruption, avoid fragmentation, and use quiet tools.
- » Water Crossings: Carefully select and design to prevent erosion.
- » Control Points: Use natural features like viewpoints, rock outcrops, or existing paths to guide the trail.
- » Dedication of adjacent development areas to conservation easements when bordering floodplains.

SUSTAINABILITY & MAINTENANCE

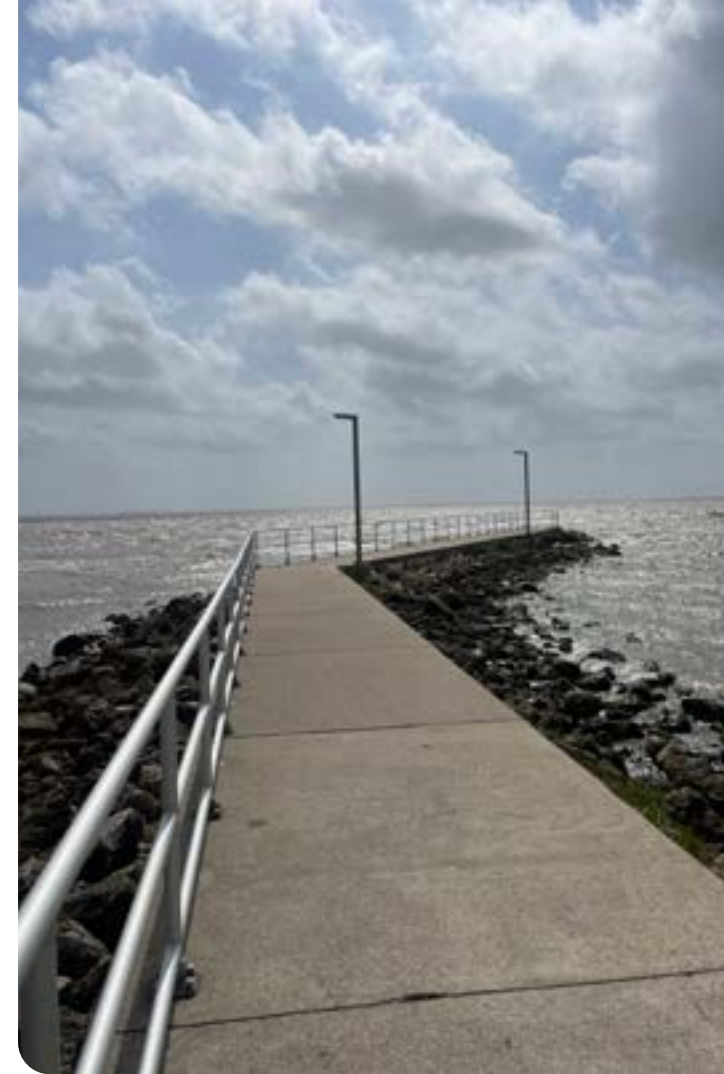
- » Build to Last: Use full bench construction on slopes, avoid water bars (use grade reversals instead).
- » Materials: Choose surfaces (rock, natural materials) for user satisfaction, accessibility, cost, and maintenance.
- » Management: Plan for maintenance capacity, user management (directional, dogs), and restoration of closed trails.



IN-PARK TRAIL



OFF-STREET TRAIL/GREENWAY



TRAIL MATERIAL CONSIDERATIONS

	Asphalt	Boardwalk	Re-Adapted Roads	Crushed Gravel	Natural Surface	Concrete
Cost Range	\$200 / linear foot	\$100 / square foot	\$0	\$50 / square foot	\$5 / square foot	\$35 / square foot
Ideal Conditions	Highly durable - High traffic, high use trails. Trails part of a multi-modal transportation network	Environmentally sensitive areas	Parks or natural areas where existing roads are converted to trails	Rail-to-trails, urban to rural trails, long-distance trails with lower grades (Can be built to meet ADA accessibility) guidelines	Natural areas, or open space patchwork in urban areas	Internal circulation, heavy use, areas prone to flooding, and greenway connectors

PADDLE TRAILS

Paddle Trails in and around Port Lavaca have been discussed and researched dating back to the 2012 Calhoun County Texas Shoreline Access Plan. In the time since, concerns about water chopiness has slowed significant advancement. With the anticipated completion of the offshore breakwater projects, Port Lavaca is again in a position to move forward with the development of paddle trails.

The City can prepare for the development of paddle trails by reviewing Texas Parks and Wildlife's desirable characteristics:

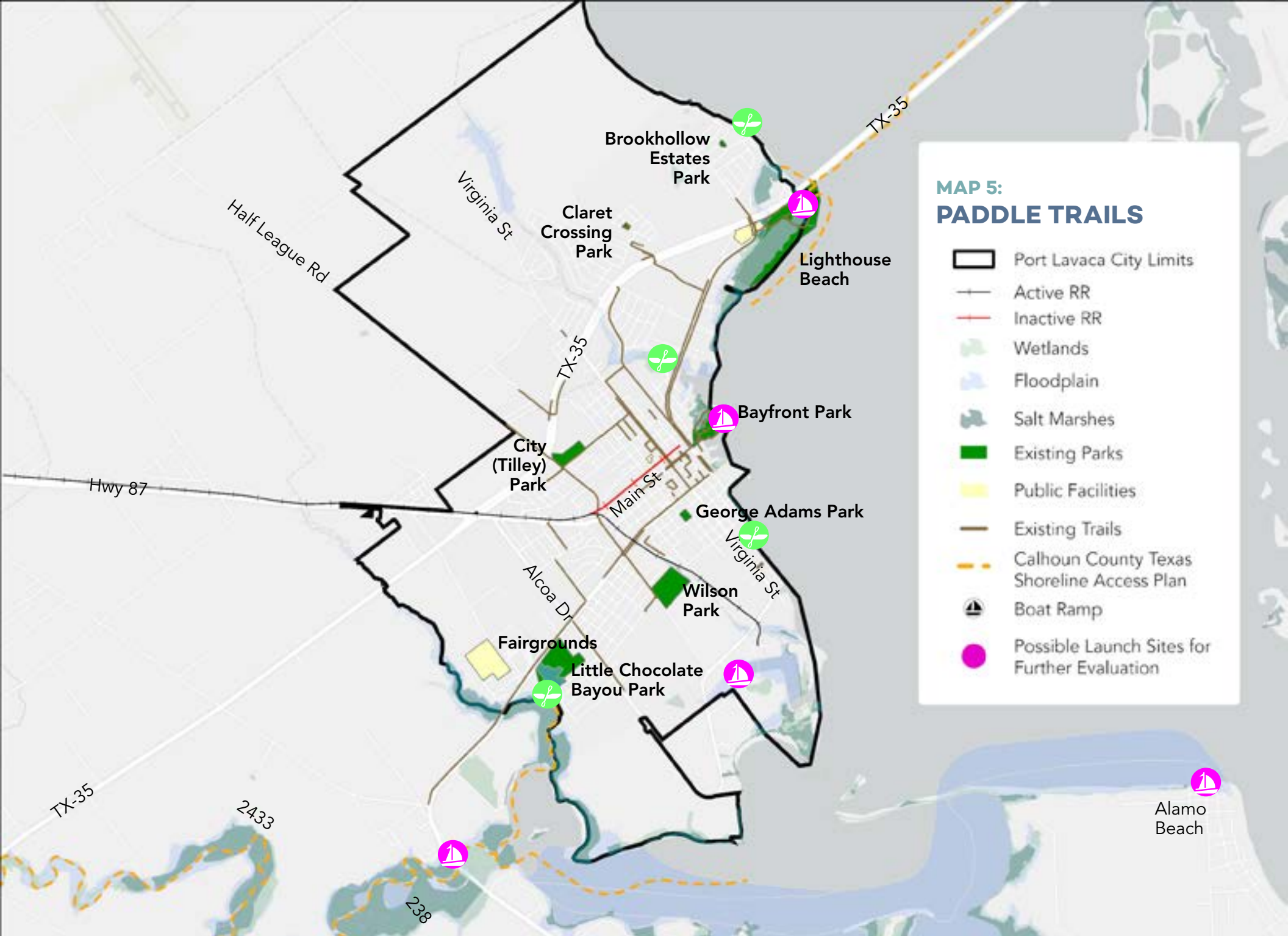
- » Public access must be a minimum of four paddling miles to a maximum of twelve paddling miles for each segment on linear trails; ponds, lakes and bays may be shorter
- » Presence of natural or historical attractions such as rapids, mature trees, wildlife diversity, historic sites, etc.
- » Adequate water quality, river flows or water depth (seasonal flows acceptable)
- » Local partners to maintain put-in/take-outs
- » Canoe and kayak rentals from local sources (optional but helpful)
- » Designated parking
- » TPT marker signage and kiosk

KAYAK LAUNCHES

A kayak launch is a designated structure, like a ramp or floating platform, designed for safely and easily getting kayaks, canoes, and paddle boards into and out of the water, featuring stable surfaces, guide rails, or rollers to help paddlers board without getting wet or risking falls, making it ideal for beginners or varied water levels.



Kayak launch



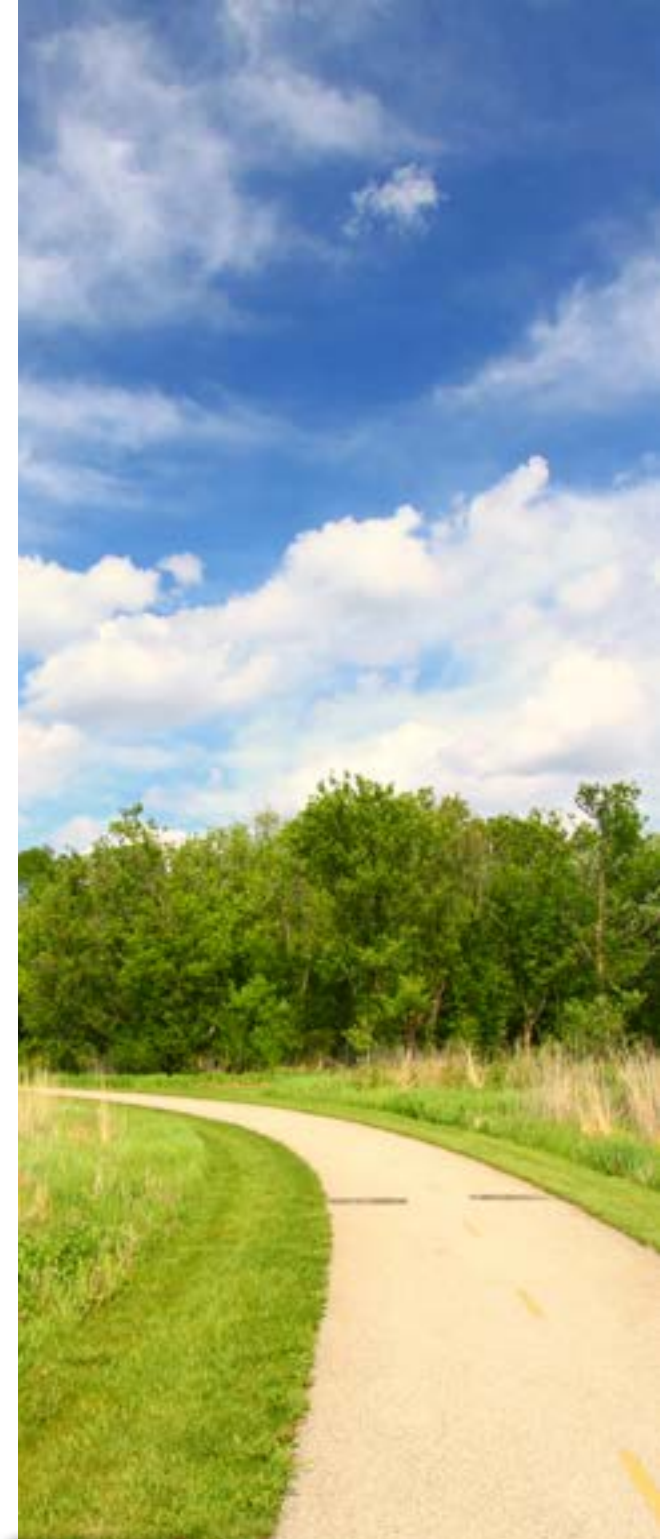
REGIONAL TRAILS

Regional trails are public, shared-use paths that connect communities, counties, and other jurisdictions, providing recreational and transportation corridors between cities, parks, and open spaces. Regional trails serve both recreational and transportation needs, providing opportunities for exercise, leisure, and non-motorized commuting.

Regional trails are designed to be physically separate from vehicle traffic and are accessible to a variety of users. Trails can range from paved, multi-use paths to natural surface trails and help complete a larger, interconnected network of greenways.

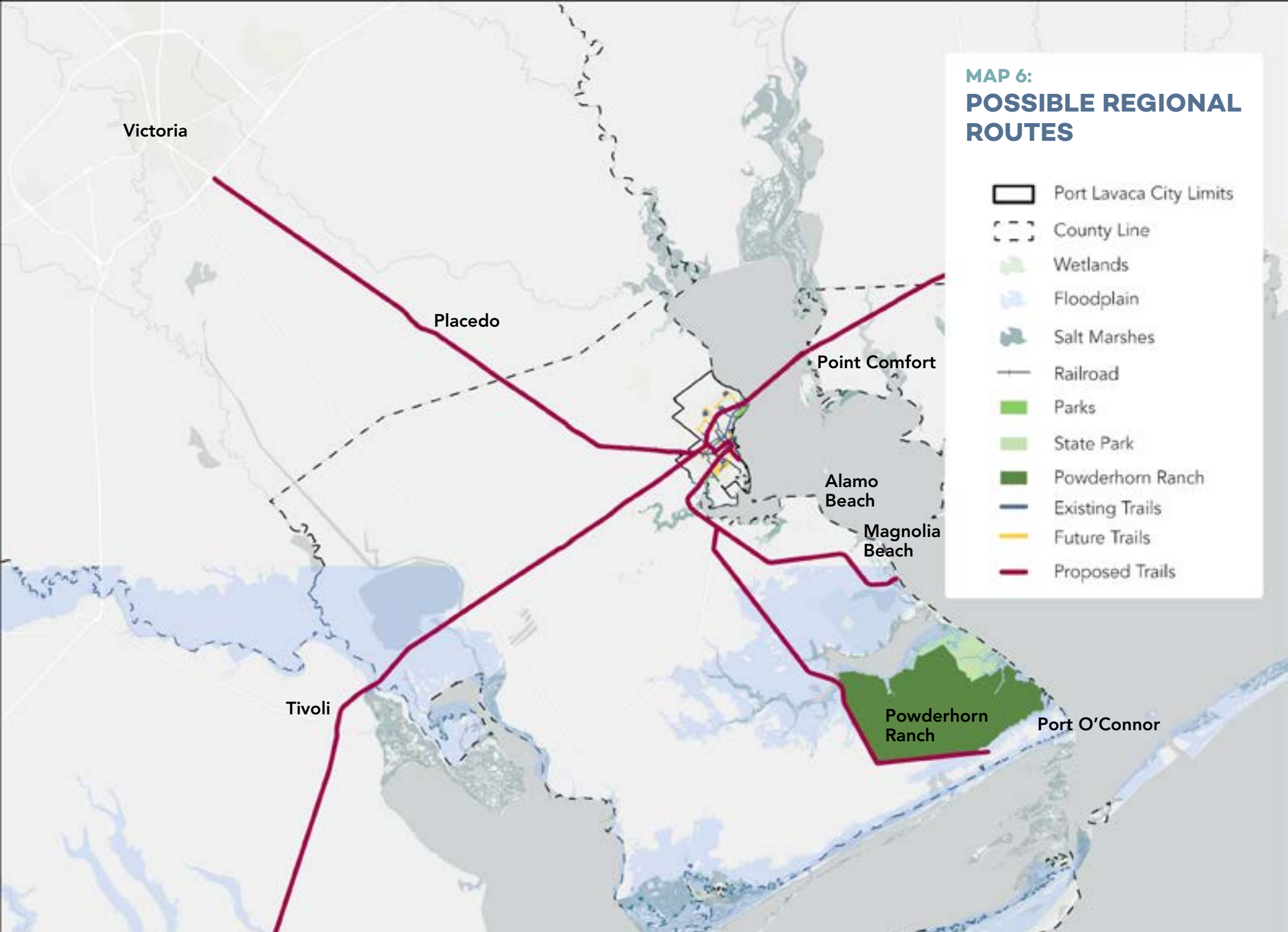
Characteristics of regional trails include:

- » Geographic scope: They extend beyond local neighborhoods to link entire cities or regions
- » Shared use: They are multi-use paths designed for pedestrians, cyclists, and sometimes equestrians
- » Separation from traffic: They are typically physically separated from vehicle traffic, offering a safer and more pleasant experience. In some cases, they connect segments of off-road paths with on-road bikeways or sidewalks.
- » Connectivity: They serve as major arteries in a larger network, connecting local trails, parks, preserves, and other destinations.



MAP 6: POSSIBLE REGIONAL ROUTES

-  Port Lavaca City Limits
-  County Line
-  Wetlands
-  Floodplain
-  Salt Marshes
-  Railroad
-  Parks
-  State Park
-  Powderhorn Ranch
-  Existing Trails
-  Future Trails
-  Proposed Trails



TEXAS HERITAGE TRAIL PROGRAM

The Texas Heritage Trails Program (THTP) is the Texas Historical Commission's (THC) award-winning heritage tourism initiative. This economic development initiative spans across 28 counties and promotes Texas' historic and cultural resources.

These successful local preservation efforts, combined with statewide marketing of heritage regions as tourism destinations, increase visitation to cultural and historic sites, and bring more dollars to Texas communities.

This, in turn, supports the THC's mission to protect and preserve the state's historic and prehistoric resources for the use, education, economic benefit, and enjoyment of present and future generations. Each heritage region works to forge local tourism partnerships and support the region's attractions by developing its own unique blend of programs and promotions.



According to program data from the Texas Historical Commission:

- » 10.5% of all travel in Texas is heritage-related
- » \$33.5 billion of travel-related spending was generated just within the Texas Independence Trail Region in 2024
- » \$3.1 billion state and local taxes were generated from travel spending in the region
- » Over 220,000 jobs are supported by tourism spending within the region, with \$11.5 billion in travel-related earnings

SECTION STRATEGIES

PADDLE TRAILS

- » Formally express interest in the Texas Paddling Trails program via Texas Parks and Wildlife's Nature Tourism Program
- » Apply for the Texas Paddling Trails Program Community Application for Assistance
- » Upon completion of the breakwater project, commission a study to determine the experience level for a shoreline paddle trail along previous identified alignments
- » Identify City- and partner-owned waterfront sites that could host paddle-focused amenities
- » Budget for the purchase, installation, and maintenance of one kayak launch annually, beginning with existing public boat ramps and shoreline access sites

REGIONAL TRAILS

- » Establish a working group through the local Council of Governments or form a standalone group to explore the feasibility of a regional trail system from Victoria to Port Lavaca to Powderhorn State Park and Port O'Connor
- » In addition to partner communities, coordinate with TXDOT, Union Pacific, and utility providers to study easement opportunities for off-street trails
- » Submit historic sites and community events to Texas Time Travel, part of the Texas Historical Commission, to be featured online and on the organization's trip planning app
- » Coordinate with Calhoun County and TXDOT's Support Services Division to install signage along key roadways leading to Port Lavaca
- » Coordinate with the City of Port O'Connor and Texas Parks and Wildlife to bring the City and Powderhorn State Park into the existing trail network
- » Identify floodplains, wetlands, easements, and distressed properties adjacent to existing pocket parks that could be used to expand park footprints

CHAPTER RECAP

Chapter 3 explores how an expanded trail network and improved pedestrian/bicycle infrastructure can transform Port Lavaca into a multimodal, accessible, and active community. This chapter considers trails located within City parks as well as those functioning more like sidewalks outside of parks. It also considers a range of trail types, including those for walking, running, biking, and paddling.

This chapter also establishes the nexus between trails, recreational tourism, and economic development. It also identifies the potential of a trail system to directly link Port Lavaca to Powderhorn State Park.

KEY TAKEAWAYS

COMMUNITY TRAILS

- » 3.6 miles of last-mile trail connections recommended
- » Considerations identified to codify trail specification into the Master Thoroughfare Plan

PADDLE TRAILS

- » Seven locations identified for pilot paddle trail program

REGIONAL TRAILS

- » Heritage Trail Program identified and recommended
- » 45-mile regional greenway recommended



Beachfront View

SUMMARY OF TRAIL STRATEGIES



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EQUITABLE ACCESS: EXPAND ACCESS, CONNECTIVITY, AND ACCESSIBILITY THROUGH MULTI-MODAL INFRASTRUCTURE.

- » Coordinate with Calhoun County and TXDOT's Support Services Division to install signage along key roadways leading to Port Lavaca Accessibility and amenities for all ages and abilities
- » Coordinate with the of Port O'Connor and Texas

Parks and Wildlife to bring the City and Powderhorn State Park into the existing trail network

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