



HOUSTON-GALVESTON AREA COUNCIL
NORTHERN BRAZORIA COUNTY | PEARLAND
SUBREGIONAL PLANNING INITIATIVE



EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

STUDY AREA

The SPI study area is located in Northern Brazoria County and includes four major jurisdictions:

- Brazoria County (northern portion)
- City of Pearland
- City of Alvin
- City of Manvel

STUDY PURPOSE

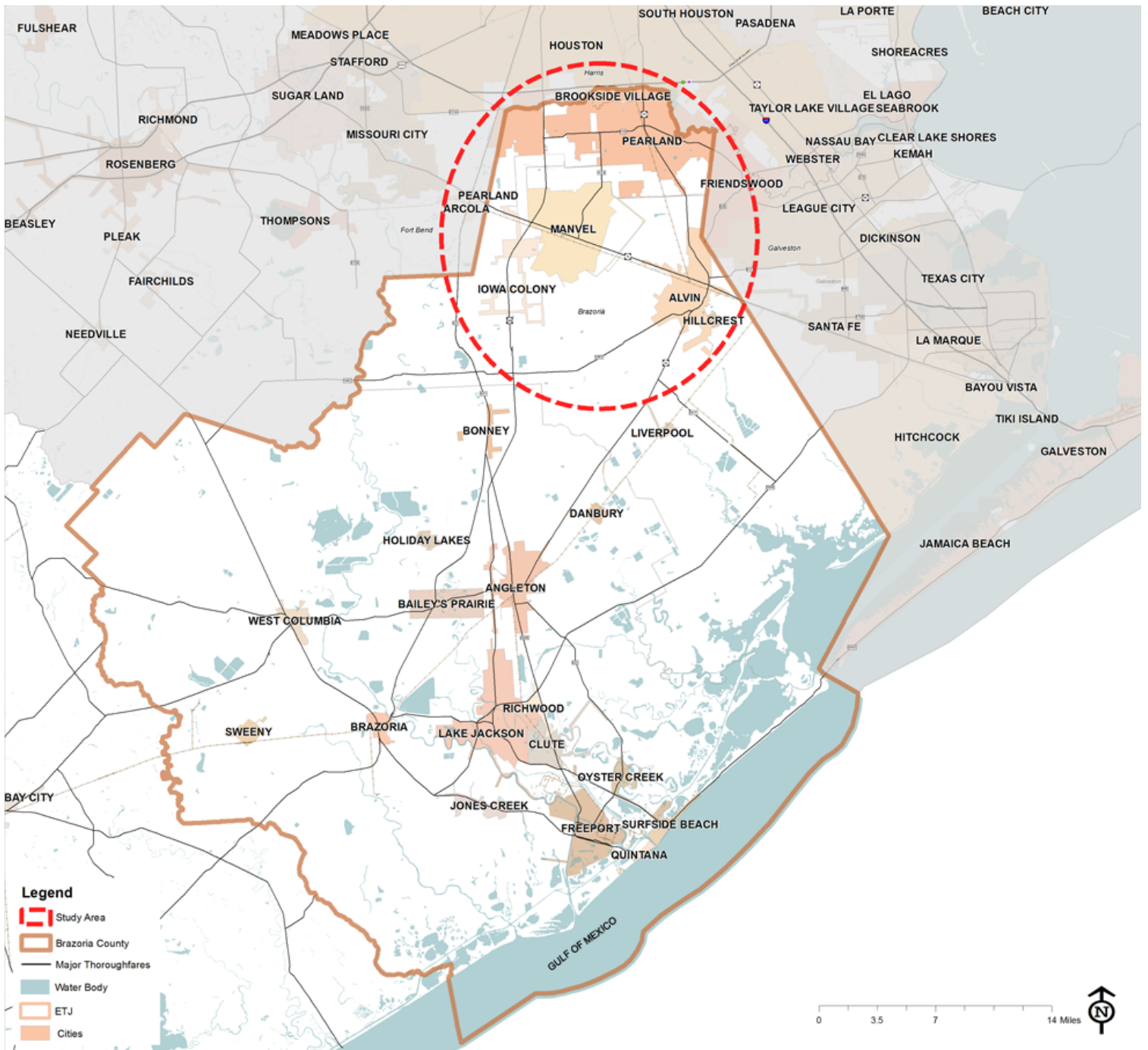
In recent years, needs in the region have far outweighed available federal funds for transportation projects; therefore, jurisdictions with alternative means to fund projects locally are at an advantage for project implementation. The SPI program was created by TPC to identify future strategic investments that can help stretch limited funding further. The SPI process focuses on innovative strategies including the coordination of transportation and land use and locally driven actions that support regional and sub-regional goals. Projects and strategies identified through the SPI are intended to both “feed” the regional pipeline for inclusion in the RTP if they are appropriate for federal-aid funding, and help local governments think strategically about alternative solutions or projects that they can implement on their own.

Funded by a partnership between H-GAC, Brazoria County, the City of Pearland, the City of Alvin, the Greater 288 Partnership, and BayTran, the Northern Brazoria County/Pearland SPI investigated the existing land use and transportation conditions of northern Brazoria County and identified strategies that will best position the sub-region to maintain and improve mobility as its population and employment grows.

MEAN COMMUTE TIME IN MINUTES



NORTHERN BRAZORIA COUNTY / PEARLAND SPI STUDY AREA



WHY IS THE STUDY NEEDED?

The SPI was developed to address the following issues in Northern Brazoria/Pearland:

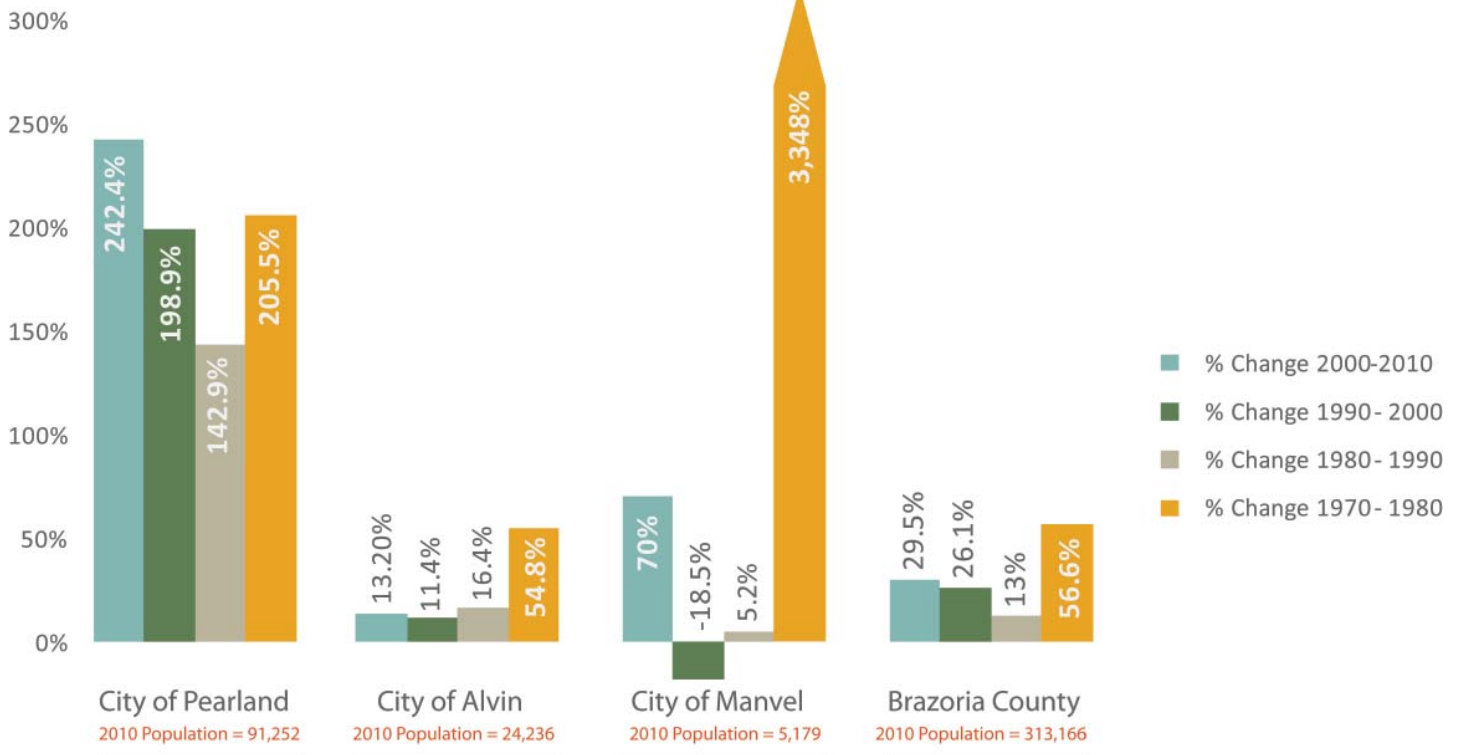
- Significant **population growth** in recent years
- Average mean **commute time** for major jurisdictions of almost **29 minutes**
- Increasing congestion
- Need for coordinated transportation investments
- Approximately **87%** of employed residents **commute outside of the study area** for work

COMMUNITY ENGAGEMENT

The greatest priority in the SPI planning process is to ensure that the plan reflects the needs and vision of the residents of the Northern Brazoria County/Pearland sub-region. Through a robust public outreach and stakeholder engagement process, the plan seeks to strengthen local capacity to sustain and implement the short and long-term goals of the plan. The public engagement process included:

- Four Stakeholder Advisory Committee (SAC) meetings
- Six sponsoring agency staff meetings
- One elected official workshop
- Two Public workshops

NORTHERN BRAZORIA COUNTY / PEARLAND SPI STUDY AREA



Through the planning process, resident and stakeholder participants developed the following vision statement and goals.

Vision Statement:

The residents of the region will have a high quality of life built on livable transportation and land use solutions that promote economic development; cultural diversity; community health and safety; preservation of natural resources, and fiscal prudence.

Goals

- Engage the public in the decision making process
- Provide a wide range of transportation choices
- Promote economic development throughout the sub-region
- Maintain fiscal prudence
- Strengthen community well-being and safety
- Preserve and enhance natural resources

- Protection of Downtown
- Preservation of community character
- Environmental impacts
- Transportation land use linkage
- Quantitative Criteria
 - Level of Service (LOS) score F
 - Fatal crash score
 - Total crash score

To assist in evaluating the long-term benefits of possible transportation investments, four different land use and transportation scenarios were developed. They included a mix of transportation and transit projects proposed by previous studies, findings from the technical analysis, public engagement, and consultation with the SAC. The roadway improvement projects included in the scenarios were identified in the 2035 RTP.

SCENARIO DEVELOPMENT & PROJECT EVALUATION

After an analysis of conditions and needs, several potential improvement projects were identified. These potential projects were evaluated based on an analysis of the following:

- How well they furthered the vision and goals
- Results of scenario evaluation
- Qualitative Criteria
 - Continuation of existing road widening projects
 - Municipality development
 - Connectivity
 - Construction design process
 - Parallel relief

The scenario results suggest that better linkage of transportation and land use decisions can positively impact the mobility of residents within the sub-region by:

- Reduced long term capital costs
- Multi-modal transportation options
- Reduced Vehicles Miles Traveled (VMT), Vehicles Hours Traveled (VHT), and VMT in congestion
- Increased opportunities for pedestrians
- Reduced level of environmental impact

By coordinating transportation investment options and land and use decision-making, northern Brazoria County stakeholders can encourage transit-supportive densities, reduce environmental impacts, and make a measurable dent in commute times.

SUMMARY OF RECOMMENDED PROJECTS

Ongoing efforts to engage stakeholders through interagency coordination and public outreach were keys to the success of the SPI planning process. The integration of land use and transportation solutions, discussion of priorities, and identification of potential future funding opportunities during the planning process culminated in the main findings of the plan. Recommended project and programs include:

- *Roadway improvements* - Intended to reduce congestion and improve connectivity throughout the SPI region
- *Land use policy strategies* - Intended to position for future improvements, particularly around identified 'Activity Centers'
- *Incremental transit improvements* - Intended to relieve congestion, enhance mobility to and from regional employment centers, provide transportation choice, and enhance economic development potential

- *Bicycle & pedestrian improvements* - Intended enhance livability and connect neighborhoods, parks, activity centers, and other major destinations
- Increased long-range transportation coordination among sub-regional partners
- Strategic status updates of certain transportation improvements

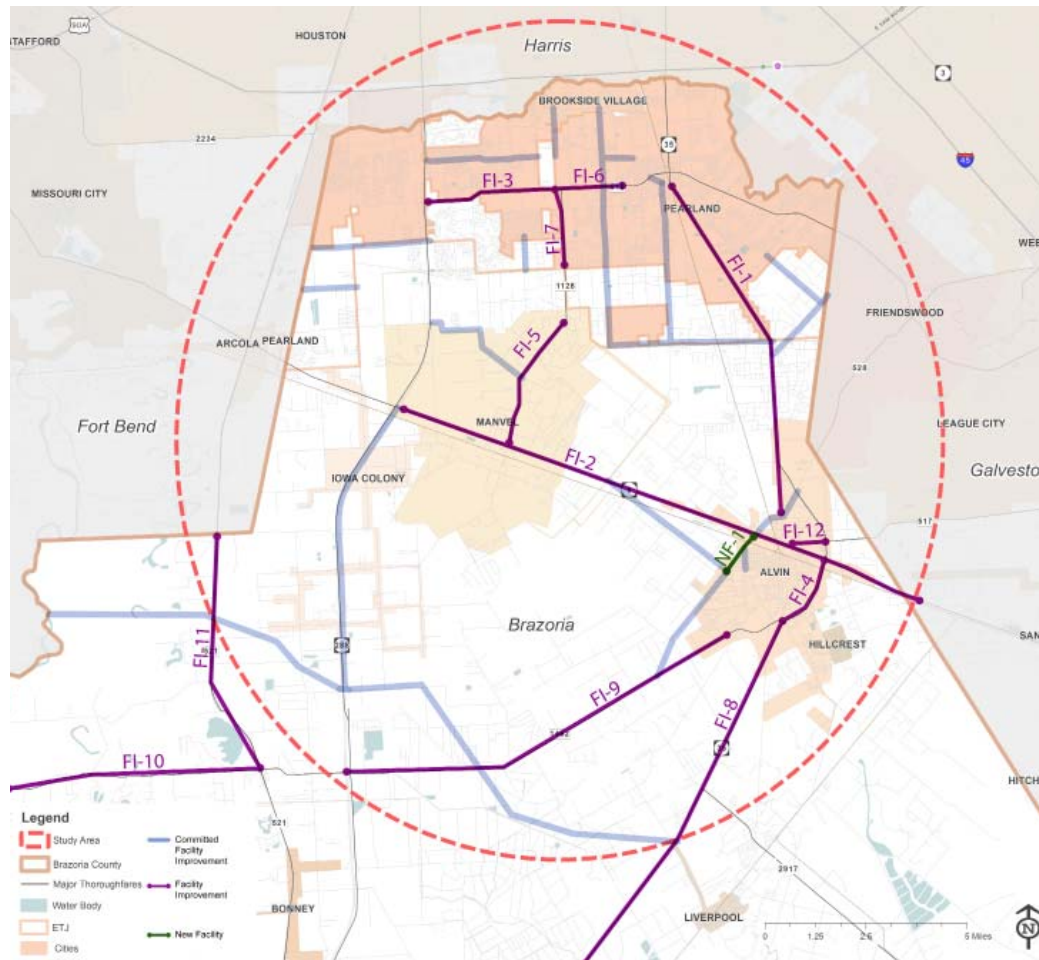
Each study recommendation is presented in a series of jurisdictional Implementation Workbooks. In the workbooks, the potential benefits achieved through the implementation of each recommendation are considered against the vision, goals, and objectives. The workbooks represent a strategic approach to implementation for each of the study's findings.

ROADWAY PROJECTS

Transportation system improvements identified during the SPI process include the advancement of currently unfunded projects shed during an update to the long-range plan in 2008. Through the SPI process, the value of these projects was tested through technical analysis and vetted through stakeholder and public engagement activities. The resulting list is recommended for adoption as priorities, and support achievement of the SPI vision by providing the following benefits:

- Congestion relief and improve travel-times along major thoroughfares
- Facilitate future implementation of transit
- Enhance mobility to and from regional employment centers
- Enhance future economic development potential
- Improve roadway safety
- Continue implementation activities in support of previous and ongoing planning efforts
- Support enhancement of hurricane evacuation facilities

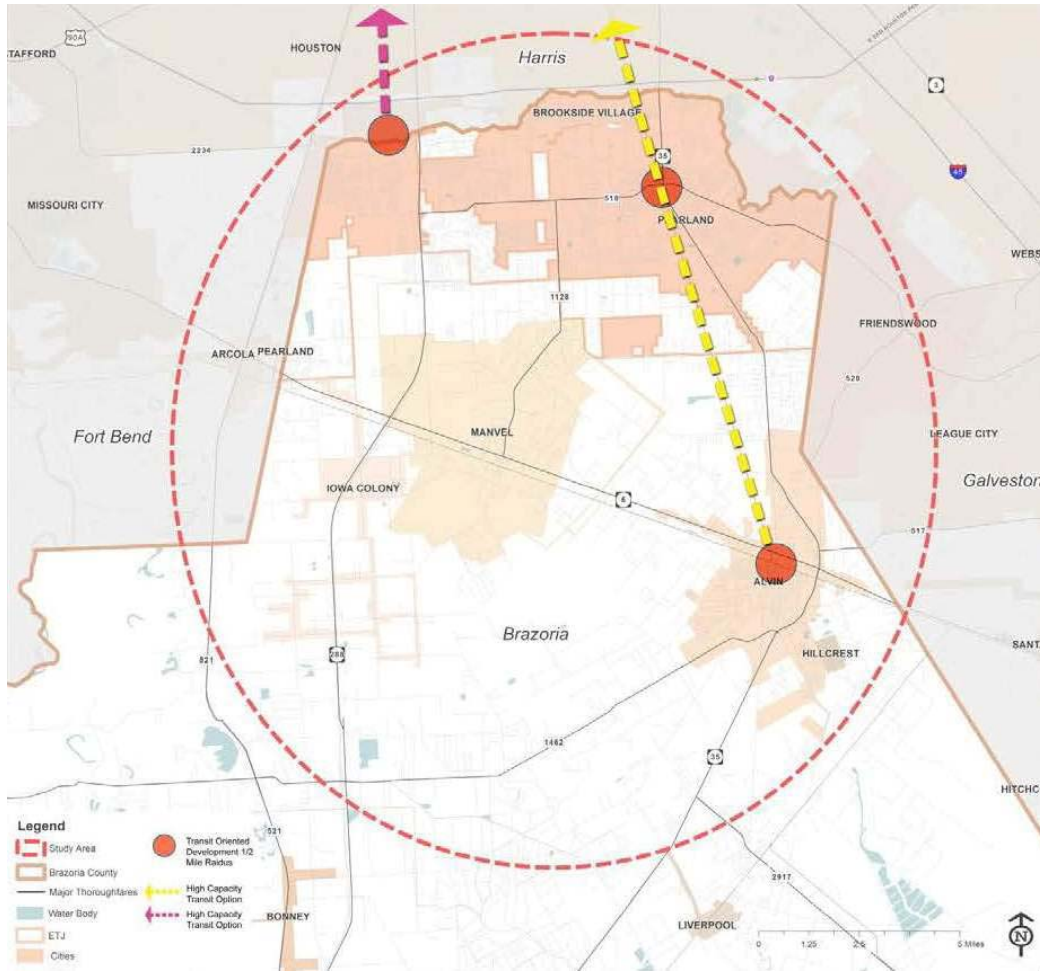
ROADWAY PROJECT RECOMMENDATIONS



"FI" = Facility Improvements "NF" = New Facilities
Semi-transparent lines represent currently planned future projects

Map ID	Roadway	From	To	Proposed Transportation Corridor Improvement Project
FI-1	SH 35	FM 518	S OF SH 6	Widen to 6-lane divided rural
FI-2	SH 6	SH 288	GALVESTON C/L	Widen to 6 & 8-lanes
FI-3	FM 518	SH 288	FM 865	Widen to 6-lane divided urban
FI-4	SH 35	SH 6	BS 35C SOUTH	4-lane tollway (most feasible toll alternative)
FI-5	FM 1128	SH 6	CR 100	Widen from 2 to 4 lanes w/bridges
FI-6	FM 518	FM 865	SH 35	Widen to 6-lane divided urban w/ flush median
FI-7	FM 1128	BROADWAY	BAILEY RD	Widen from 2 to 4-lanes divided curb and gutter
FI-8	SH 35	FM 2403	FM 523	Widen to 4-lane divided
FI-9	FM 1462	SH 288	SH 99	Widen from 2 to 4 lanes
FI-10	FM 1462	FORT BEND C/L	SUPER SPEEDWAY	Widen from 2 to 4-lanes
FI-11	FM 521	BRAZORIA/FORT BEND C/L	FM 1462	Widen 2 to 4-lanes
FI-12	FM 517	LP 409	SH 35	Widen to 4-lanes in sections
NF-1	FM 528	SH 35 BUSINESS	SH 6	Construct 2-lane urban undivided on new location with railroad grade separation (phase 1)

TRANSIT SYSTEM RECOMMENDATIONS



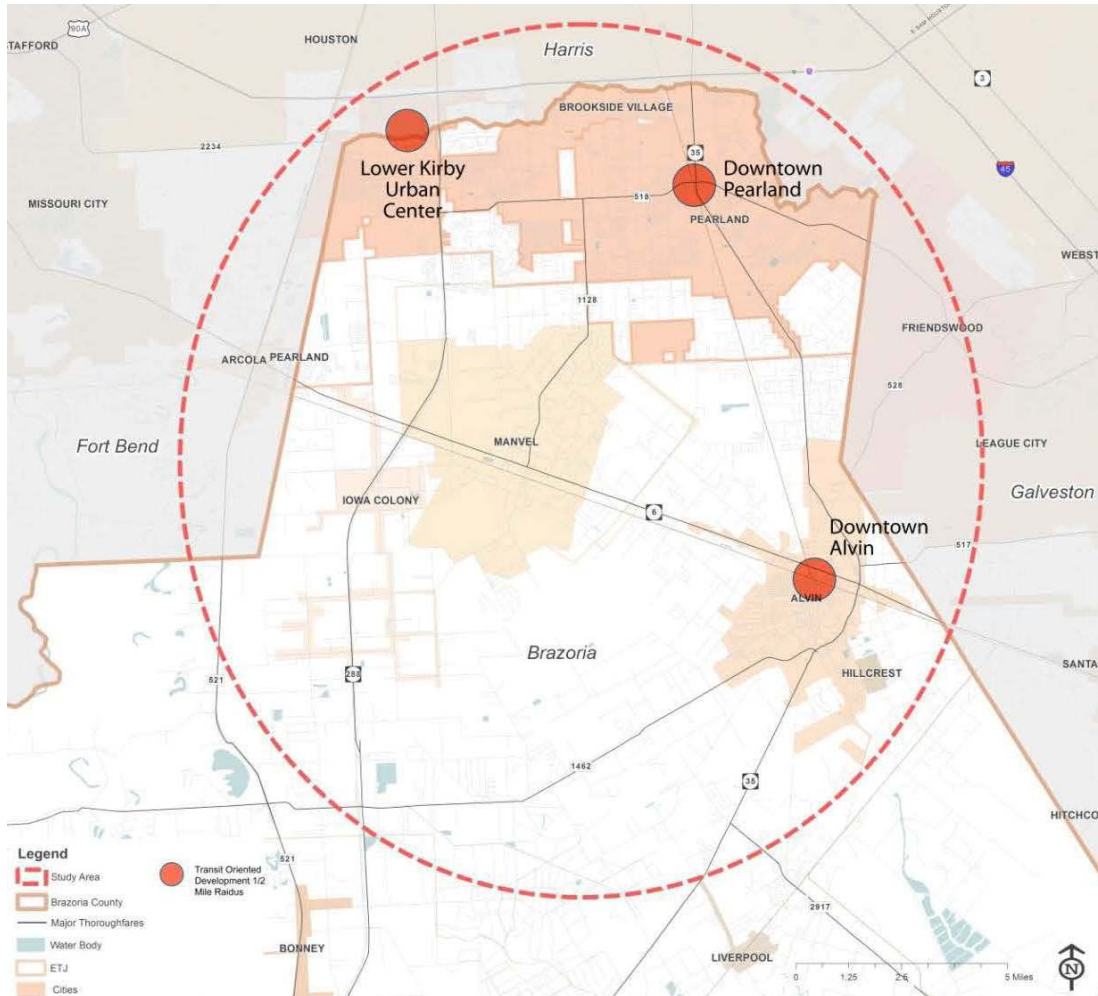
Recommended Transit System Improvements			
Location	From	To	Description
Kirby Drive	Lower Kirby Urban Center	Texas Medical Center	High-Capacity Transit along Kirby Drive
SH 35 / Railroad Right of Way	Downtown Alvin	Downtown Pearland, connecting to transit points north along Interstate 45.	High-Capacity Transit along SH 35 or within railroad right-of way from Downtown Alvin to Downtown Pearland

TRANSIT SYSTEM IMPROVEMENTS

A long term strategy to achieving a more sustainable land use and transportation vision for Northern Brazoria County / Pearland sub-regional Planning Initiative includes the implementation of transit. Map 02 illustrates the two potential transit opportunities identified through the SPI process. Benefits of the recommended transit project include:

- Relieve congestion and improve travel-times along major thoroughfares
- Enhance mobility to and from regional employment centers within the sub-region and to neighboring Counties
- Provide transportation choice
- Enhance future development potential
- Promote economic development
- Reduce Vehicle Miles Traveled

LAND USE RECOMMENDATIONS: FUTURE ACTIVITY CENTERS



LAND USE POLICY RECOMMENDATIONS & ACTIVITY CENTERS

As discussed in Section 4 – Scenario Development + Testing, three key focus areas emerged through the SPI process as having the potential to serve as future activity centers, where infrastructure investments can be targeted to increase economic development and attract residents. These three areas included the Lower Kirby Urban Center (formerly the Spectrum District), Downtown Pearland, and Downtown Alvin.

The plan also recommends a series of coordinated city land use policies intended to maximize future economic development in a manner that complements and enhances transportation investments.

These policies include the following:

- Coordinate major transportation investments with supportive land use policies
- Develop urban design guidelines to strengthen and retain community character
- Adopt mixed-use zoning districts where possible
- Adopt pedestrian and transit supportive districts to support transportation alternatives and emerging Activity Centers

BICYCLE AND PEDESTRIAN IMPROVEMENTS

Bicycle and pedestrian projects are integral to developing livable communities. The City of Pearland, Alvin, and Manvel have developed city-wide bicycle/pedestrian/trail master plans. In the future, these proposed bicycle and pedestrian corridors could connect to each other to form a regional bicycle and pedestrian networks.

This project proposes to develop a sub-regional bicycle/pedestrian plan through H-GACs Pedestrian and Bicyclist Special District Program that would accomplish the following in support of SPI goals:

- Integration of key bicycle/pedestrian projects into the Regional Transportation Plan (RTP).
- Supports multi-modal transportation options;
- Contributes to a reduction in congestion, capital infrastructure costs, and environmental across the sub-region

SUB-REGION BICYCLE & PEDESTRIAN PLAN

