## **Greater East End Management District**

## Pedestrian/Transit Access Plan

# **Executive Summary**

#### Federal Transit Administration

Livable Communities Initiative Project

#### Houston-Galveston Area Council

Livable Centers Project









Prepared for

## Greater East End Management District

Prepared by

The Goodman Corporation

December 2009

Greater East End Pedestrian/Transit Access Plan

# **Executive Summary**



The Greater East End Management District (GEEMD) has been working diligently for the past ten years to improve conditions in the East End sponsoring urban development, public art and design, mobility improvements, and a variety of successful efforts to improve the quality of life and opportunities for new development. This *Pedestrian-Transit Access Plan* is a result of that continuing effort. This plan focuses on a select set of highly used transit corridors and includes the corridor for METRO's future Light Rail Transit (LRT) service on Harrisburg, now under construction. This effort focuses on the integration of transit into the community functionally, physically, and esthetically, thereby extending the benefits of transit into the fabric of the East End and integrating the opportunities within the East End in a way that will support transit success in moving people efficiently and comfortably. This plan is an integral part of the GEEMD's vision for the future...a future that serves the residents and businesses already there and welcomes new development supportive of an improved quality of life on vacant or underutilized properties.

This plan is the result of two efforts. One effort contributing to this access plan involves the Livable Centers program of the Houston-Galveston Area Council (H-GAC), sponsored by H-GAC and GEEMD. Another effort contributing to this access plan is a GEEMD-sponsored project designed to create a pedestrian/transit access plan that includes the Harrisburg corridor and selected side streets in addition to achieving grantee status, a Letter of No Prejudice (LONP) and supporting the pursuit of the GEEMD funding efforts. *Figure ES.1* presents the areas of these two efforts and identifies the pedestrian/transit corridors recommended for improved access.

#### Objectives and Results

Objectives of this Pedestrian/Transit Access Plan include the following:

• Increased transit ridership will result from improvements in pedestrian access and safety. Improved pedestrian access and safety will be the result of the pedestrian treatments recommended here. The resulting increased transit ridership is determined through the use of methods recommended by several prestigious authorities including the Transit Coordination Research Program, Transportation Research Board (TRB), Institute of Transportation Engineers (ITE), and National Research Council (NRC), in association with Texas Transportation Institute (TTI). The application of these recommended methodologies to the selected East End transit corridors results in an estimated increase in ridership of 2,062 transit trips per day. Chapter 6 presents the methods, assumptions, and calculations of this ridership estimate.

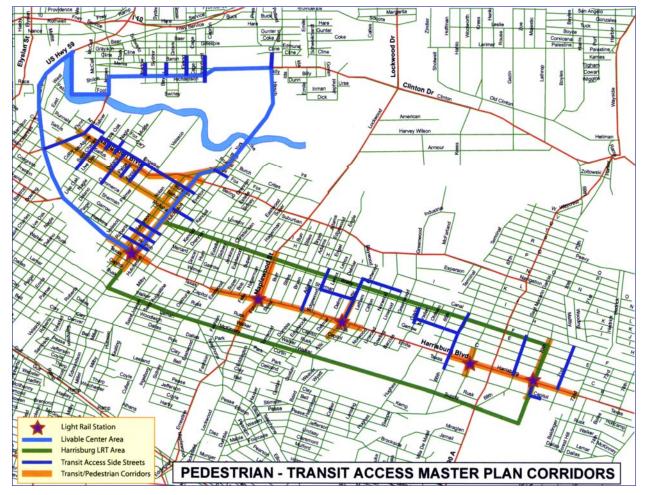


Figure ES.1 – Pedestrian/Transit Access Plan Corridors

• *Enhanced revitalization*. Publicly funded capital investments focused on improvements between the back of curb and property line have a positive impact on the value, appeal, and use of adjacent private property. When combined with advantages of an attractive location, such as the East End's proximity to downtown, these improvements will act as a stimulus to the continued redevelopment of the East End. The resulting anticipated mixed-use/infill development is presented in *Table ES.1*.

Table ES.1 – Combined Mixed-Use Program						
Area	Retail (Sq. Ft.)	Office/Services (Sq. Ft.)	Light Industry (Sq. Ft.)	Residential (Units) <sup>(1)</sup>		
Livable Centers	141,926	771,478	158,350	703		
Harrisburg LRT	857,531	338,575	225,717	2,503		
Total	999,457	1,110,053	384,067	3,206		
(1) Assumed average 1,500 sq. ft. each						

The total mixed-use program is estimated to be 2,493,577 square feet of retail, office/services, and light industry and 3,206 residential units made up of a mix of townhomes, apartments, and condominiums. Chapter 5 presents the methods, assumptions, and calculations of this mixed-use program.

- *Increased economic benefits*. The public economic benefits that will result from this mixed-use program are in the form of increased property and sales tax revenues. The total "real property added" value associated with the mixed-use program at buildout is over \$800 million. Income to the City, County, and a variety of agencies and departments will be realized through the property tax income created by this value. The City's share of the total property tax revenue at buildout for the recommended mixed-use program will be \$5,246,253 per year. The City's share of the annual sales tax at buildout will be \$1,998,914 in 2009 dollars. The City's share of the total annual value created by the implementation of the mixed-use/infill development at buildout will be \$7,245,167. Chapter 7 presents the methodology, assumptions, and calculations resulting in these economic benefits.
- Decreased cold starts and Vehicle-Miles Traveled (VMT) will result from the anticipated increase in transit ridership. According to H-GAC, the average automobile trip in the region is 8.6 miles in length. In addition to the reduction in VMT due to increased transit ridership, there will be additional reductions in VMT due to increased pedestrian activity associated with the mixed-use/infill revitalization program developed in this plan. The number of automobile trips, and therefore cold starts, anticipated to be reduced as a result of this plan total 960 in Year 1 and 3,708 in Year 20. Multiplying these reductions by 8.6 miles, the average length of the automobile trips replaced, results in a reduction in VMT of 8,254 in Year 1 and 31,890 in Year 20. Chapter 6 presents the methodology, assumptions, and calculation of these reduced VMT and cold starts results.
- **Reduced congestion** will result from a decreased dependence on the automobile due to the increased use of transit and added pedestrian opportunities. This is indicated by the significant reduction of VMT just presented.
- Reduced emissions will result from a decrease in automobile travel. Year 1 emission results total a daily reduction of 304,548 grams from the combined effects of the removal of 960 cold starts and 8,254 VMT. Year 20 emission results are significantly higher, due, in large part, to the continued buildout of the mixed-use/infill development programmed for both the Livable Centers corridors and the Harrisburg LRT corridors, resulting in a daily reduction of 1,176,318 grams of emissions due to the removal of 3,708 cold starts and 31,890 VMT. Chapter 7 presents the methodology, assumptions, and calculations of these emission reduction benefits.

#### Recommended Treatments

ITE's Recommended Practice, Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities report sets new design guidelines for pedestrian design. Context sensitivity includes urban design that ensures the comfort and safety of all users in a particular corridor, regardless of which mode of transportation they choose (i.e., automobile, bicycle, or walking). As shown in Figure ES.2, the area between the curb and the buildings has

several zones. These include areas for landscaping and/or street furniture, sidewalks, and setback zones between the edge of the public right-of-way and the façade of the building, which the property owner may use as they wish. Ideally, the sidewalk will be wide enough to ensure maximum comfort for pedestrians and for other amenities such as trees, benches, and pedestrian-oriented lighting. Adjustments can be made as needed, such as foregoing the planting strip in order to accommodate on-street parking. These design guidelines form the basis for the next phase in the implementation of this plan.

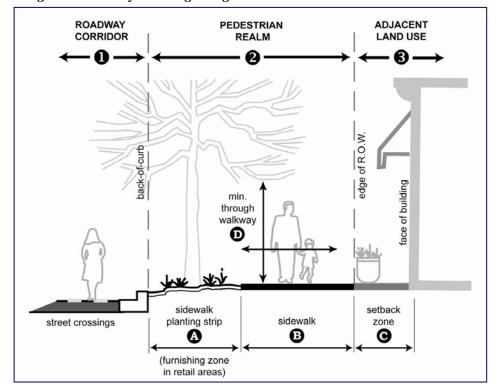
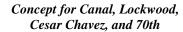


Figure ES.2 – Layout using Design Guidelines

The design treatments recommended in this plan include upgrading sidewalks to standard (including Americans with Disabilities Act [ADA] requirements), adding streetscape, landscape, pedestrian-oriented lighting, and other pedestrian amenities. Providing these pedestrian access improvements as a means to achieve the goals previously introduced is supported by a significant body of research. *Figure ES.2* presents the design themes that will give the design team an initial direction based on recommendations made by the Advisory Committee and the public during the Livable Centers phase of the development of this plan. City standards will be followed that address the width of sidewalks throughout Houston and along LRT corridors, in particular, and these standards have been incorporated into these recommendations.

## Design Theme Examples

Concept for Navigation and Harrisburg



Concept for York, Sampson, Altic, and 70th







#### Costs

The costs to implement the recommendations in this plan are summarized in *Table ES.2* for the corridors addressed in H-GAC's Livable Centers and in *Table ES.3* for the Harrisburg LRT corridors.

Table ES.2 – Livable Centers Corridors Pedestrian/Transit Access Improvements Cost Summary					
Corridor/Area	Base Cost	Total Cost*			
Navigation	\$1,519,332	\$1,975,132			
Canal	\$1,981,366	\$2,575,776			
Sampson	\$1,658,323	\$2,182,338			
York	\$2,590,943	\$3,368,226			
Side Streets	\$4,617,500	\$6,002,750			
Other Treatments	\$800,000	\$1,040,000			
Total	\$13,167,464	\$17,144,222			
* Includes contingencies, standard soft costs, and fees.					

Table ES.3 – Harrisburg LRT Corridors Pedestrian/Transit Access Improvements Cost Summary				
Corridor/Area	Base Cost	Total Cost*		
70 <sup>th</sup> Street	\$1,320,498	\$1,716,647		
Cesar Chavez	\$519,490	\$675,338		
Altic	\$507,835	\$660,186		
Lockwood	\$1,516,469	\$1,971,409		
Harrisburg	\$4,977,430	\$6,470,659		
Special Destinations	\$2,640,000	\$3,432,000		
Other Treatments	\$800,000	\$1,040,000		
Total	\$12,281,722	\$15,966,239		
*Including contingencies, standard soft costs, and fees.				

*Table ES.4* presents a summary of the combined costs for the recommendations in this plan showing a total cost of \$33 million.

Table ES.4 – Combined Pedestrian/Transit Access Improvements Costs Summary					
Corridor/Area	Base Cost	Total Cost*			
Livable Centers Corridors	\$13,167,464	\$17,144,222			
Harrisburg LRT Corridors	\$12,281,722	\$15,966,239			
Total	\$25,449,186	\$33,110,461			
*Including contingencies, standard soft costs, and fees.					

#### **Funding**

#### Capital Improvement Funding Strategies

Congestion Mitigation and Air Quality (CMAQ) Improvement Program – The purpose of the CMAQ improvement program is to fund transportation projects or programs that contribute to attainment or maintenance of the National Ambient Air Quality Standards (NAAQS) for ozone and carbon monoxide (CO).

**Community Development Block Grants (CDBG)** – CDBG has been the backbone of improvement efforts in many communities since 1974, providing a flexible source of annual grant funds for local governments nationwide.

FTA Section 5307 Urbanized Program – Capital and planning activities are eligible under the FTA Section 5307 Formula program at an 80% federal/20% local ratio. An example of capital expenditure would be the purchase of new transit vehicles or buses. Formula funds are utilized by Houston METRO for major rolling stock acquisition and capital construction, and likely would not be a leading funding alternative for the GEEMD Livable Centers Plan. However, if there were capital project elements of interest to both GEEMD and Houston METRO, FTA Section 5307 funds would be eligible for these. The Harrisburg LRT corridor could be such an application as a joint METRO/GEEMD project.

FTA Section 5309 Discretionary Program – FTA's Section 5309 Discretionary program provides funding on an 80% federal/20% local ratio to fund eligible transit capital needs, including pedestrian/transit access and streetscape improvements developed in accordance with LCI.

Federal Highway Administration (FHWA) Transportation and Community and System Preservation (TCSP) Program – FHWA's TCSP program provides funding for grants and research to investigate and address the relationship between transportation and community and system preservation.

*Transportation Enhancements (TE)* – The goal of TE is to encourage diverse modes of travel, increase the community benefits to transportation investment, strengthen partnerships between state and local governments, and promote citizen involvement in transportation decisions.

FHWA Surface Transportation Program (STP) – STP provides flexible funding that can be used by states and localities for projects on any federal-aid highway, including the National

Highway System, bridge projects on any public road, transit capital projects, and intracity and intercity bus terminals and facilities.

#### Local Share Match Funding Alternatives

Several alternatives can be used to assist GEEMD in meeting its local share funding requirements, as follows:

**GEEMD Assessment/General Funds** – GEEMD may choose to fund a portion of required local share match for the Livable Centers Plan within its own General Fund budget. For example, if a \$5 million capital program is desired, GEEMD could dedicate \$1 million of local share funds spread over a multi-year period.

City of Houston General Fund or Capital Bond Fund Contributions – GEEMD may also wish to seek financial support from municipalities to meet local share requirements. For example, if the City of Houston proposes a new sidewalk project within the district with 100% local funds, these improvements could constitute local share match.

**Land Value** – For capital projects such as transit terminals, the value of land donated to the project can satisfy local share requirements. Land donations to a project could come from a developer, or other governmental entities.

**Private Sector or Nonprofit Funds** – GEEMD may also be able to partner with the private sector, or another nonprofit to satisfy local share requirements, as mutually beneficial opportunities arise.

State Transportation Development Credits (TDC) – A state may use toll revenues that are generated and used by public, quasi-public, and private agencies to build, improve, or maintain highways, bridges, or tunnels that serve the public purpose of interstate commerce as credit toward the non-federal share requirement for any funds made available to carry out eligible Department of Transportation-related capital projects.

**Community Development Block Grants (CDBG)** – The CDBG program is the only federal funding program that can also be utilized as local match against other federal funds. Depending on state and local funding priorities, a portion of local share requirements could be funded through CDBG.

#### Current Funding Status

GEEMD has attained FTA Grantee Status that enables it to receive federal funds for projects in this plan. The *Livable Centers Corridors Plan* has received FTA approval in the form of an Environmental Clearance and an LONP. GEEMD has received a \$5 million commitment from H-GAC for stimulus funds to implement the pedestrian improvements on Navigation and segments of York and Sampson. Additional funding is being pursued from the sources listed above.

#### Next Steps

GEEMD will continue to support METRO's efforts to incorporate the recommended pedestrian-transit access improvements. Some of these elements, including sidewalk widths, landscaping and others, may not be achievable in the METRO design due to lack of right-of-way or other physical and functional needs of the LRT construction and operation. Therefore, the recommendations and related costs and benefits associated with Harrisburg Boulevard are best estimates at this time and future design decisions may require an update to this plan. In addition, new projects may be added from time to time and, therefore, this plan is a living document that will reflect the progress and expanding role that pedestrian/transit access can play throughout the district.

The scheduled improvements to be funded by the resources presented that will continue to be pursued for the Livable Centers and Harrisburg LRT corridors are presented in *Tables ES.5* and *ES.6*.

Phase	Description	Total Cost	Federal Funding Program	Federal Funding Share	Local Match	Local Share Source
1	Navigation, Sampson (part), York (part)	\$4,863,730	ARRA	100%	0%	n/a
2	Sampson, York (balance)	\$2,434,869	ARRA II	100%	0%	n/a
3	Canal	\$2,575,776	Sec. 5309 Discretionary or CMAQ	80%	20%	Local Share Cash or State TDC
4	Side Streets Part 1	\$3,001,375	STP-TCSP	80%	20%	Local Share Cash or State TDC
5	Side Streets Part 2	\$3,001,375	STP-TCSP	80%	20%	Local Share Cash or State TDC
6	Other Treatments	\$1,040,000	Sec. 5309 Discretionary or CMAQ	80%	20%	Local Share Cash or State TDC
	Total	\$16,917,125				

Table ES.6 – Phasing and Funding Plan for Harrisburg LRT Corridors Pedestrian/Transit Access Improvements

Phase	Description	Total Cost	Federal Funding Program	Federal Fundin g Share	Local Match	Local Share Source
1	Lockwood	\$1,971,409	Sec. 5309	80%	20%	Local Share Cash
1	Lockwood	Ψ1,7/1,407	Discretionary	0070	2070	Land Value City of
			or CMAQ			Houston State
			of CMAQ			TDC
2	Altic	\$660,186	STP-TCSP	80%	20%	Local Share Cash
	Cesar Chavez	\$675,338				City of Houston
						State TDC
3	70 <sup>th</sup> Street	\$1,716,647	Sec. 5309	80%	20%	Local Share Cash
			Discretionary			City of Houston
			or CMAQ			State TDC
4	Harrisburg *	\$6,470,659	STP-TCSP or	80%	20%	Local Share Cash
			Sec 5309			City of Houston
			Discretionary			State TDC
5	Special	\$3,432,000	STP-TCSP or	80%	20%	Local Share Cash
	Destinations		TxDOT TE			or State TDC
6	Other Treatments	\$1,040,000	Sec. 5309	80%	20%	Local Share Cash
			Discretionary			or State TDC
			or CMAQ			
	Total	\$15,966,239			-	

<sup>\*</sup>The recommendations and related costs and benefits associated with Harrisburg Boulevard are best estimates at this time and future design decisions may require an update to this plan.