

GREATER EAST END LIVABLE CENTERS MASTER PLAN



Prepared for:
THE GREATER EAST END MANAGEMENT DISTRICT
HOUSTON, TX



Draft: 28 February 2011

The East End Master Plan

The Greater East End Management District has embarked on an ambitious set of initiatives to redevelop the old Second Ward area of Houston into a sustainable, transit-oriented, walkable, compact and mixed-use urban neighborhood. This area was the focus of the first Livable Centers studies conducted by the Houston-Galveston Area Council. The area also stands to benefit from the construction of METRO's East End light rail line along Harrisburg Boulevard.

Community Engagement

The plan documented here is the result of an extensive public engagement process that involved community groups, area stakeholders and elected officials. As the first stage of the implementation process for the Livable Centers study, a vision and a list of priorities for future development were derived through a series of stakeholder meetings, public workshops, and a planning charrette held in December 2010 and February 2011.

Vision Statement

The Greater East End will be a vibrant, mixed-use, multicultural, and sustainable model for the redevelopment of a historic and strategically located Houston neighborhood. Building on existing assets and infilling with new development, the East End will enhance economic development and sustainable growth by improving streets, infrastructure, and incentivizing transit oriented commercial and residential development.

Navigation Boulevard will serve as the “Main Street” of the revitalized East End and be an active, green, pedestrian-oriented, and transit friendly boulevard that celebrates existing neighborhood culture and destinations, while allowing for future development to transform the surrounding neighborhood from industrial uses into a vibrant, mixed-use neighborhood.

Development Potential

The Master Plan for the East End considers the potential redevelopment of the traditional Second Ward neighborhood (loosely described as the area east of US-59 between Buffalo Bayou and Harrisburg, up to approximately Milby Street) as well as the largely industrial portion of the Fifth Ward that is just north of Buffalo Bayou. Together, this comprises approximately 616 acres of land. Previous studies have identified over 300 acres of vacant and underutilized or obsolete industrial land available for redevelopment. Much of this property is actively being assembled by developers. When developed at urban densities, this area has the potential to add over 1 billion dollars in new value to the City's tax base while creating a vibrant and sustainable urban neighborhood.

Implementation

The District has been able to leverage the light rail construction with a \$5 million AARA stimulus grant to implement streetscape and pedestrian/bicycle mobility improvements to three key corridors: Navigation Boulevard and York and Sampson Streets. The District is actively pursuing funding for a number of other neighborhood enhancement and improvement projects.



Figure 1: Greater East End Livable Centers Master Plan

The Planning Context

Houston's East End is poised for significant growth in the next few decades. If done properly, this growth could add substantially to the City of Houston's tax base, prosperity, and quality of life. Under current development trends and patterns, however, much of this growth could be diverted to suburban areas beyond the city limits.

Aside from its economic benefits, facilitating and promoting growth in the East End is a sustainable model of development:

- It makes use of existing infrastructure and existing vacant and underdeveloped property.
- It provides for a denser, transit-oriented, pedestrian-friendly, more integrated form of development that reduces vehicle miles traveled through internal trip capture and mobility options.
- It also reduces vehicle miles traveled by being inherently closer to downtown and other regional activity centers.

An overriding theme that emerged from the public engagement process was the importance of developing a long-range master plan to properly frame the context for individual projects and incremental steps, but most importantly, to avoid the drawbacks of haphazard and unplanned redevelopment that have occurred in other areas of the city.

The Master Plan study area comprises about 616 acres. The current estimated population is about 5,100 people. Current commercial uses are predominantly industrial and warehouse uses rather than neighborhood services such as retail.

Key Elements of the Master Plan

The momentum for redevelopment in the East End is driven by several factors:

1. The advantageous location very close to downtown, with good access to the freeway system.
2. There is a considerable inventory of vacant land, underdeveloped property, and obsolete industrial and warehouse uses.
3. There are several large developers actively assembling property in the area.
4. The general momentum of growth in the greater Houston area.

The Master Plan projects that this area will transition from an industrial/warehouse character to a mixed-use urban neighborhood with denser housing types served by a range of commercial services. The industrial area north of the bayou could be the focus of a significant office concentration. There will also be a certain concentration of destination uses such as museums and restaurants that have a broad attraction and will be centered along Navigation Boulevard. The denser infill types of construction reflect what would be feasible under current and projected property values. Eventual development is projected to include about 7,200 housing units of various types, and as much as 7 million square feet of various commercial uses. The overall net floor area ratio (a measure of development intensity) would be in the range of 1.0, or about 4 to 5 times what it is today. The net increase in taxable value would be in the range of \$1.2 billion, representing annual revenue to the City of about \$7.7 million in ad valorem tax alone.

Recommendations

A number of infrastructure improvements are necessary for this to occur. Most importantly, the existing street network has to be reinforced, that is, as many links and connections as possible need to be restored in order for the traffic to be properly distributed without causing congestion, and to allow Navigation Boulevard to function as a true “Main Street” rather than simply as a traffic conduit.

Specific recommendations are as follows:

- All future infrastructure improvement projects must consider all modes of transportation, including pedestrians, bicycles, and various forms of transit. This theme is being pursued in the ongoing design work for York and Sampson Streets and Navigation Boulevard.
- Navigation Boulevard should be reconfigured to serve as an urban Main Street, with features such as on-street parking and a high quality pedestrian realm that supports a wide range of street life. Its role as a vehicular thoroughfare has to be de-emphasized and traffic patterns distributed throughout the rest of the street network.
- This will require other network enhancements. Canal and Commerce Streets need to be improved to serve as primary east-west corridors.
- Additional opportunities to cross the railroad tracks should be pursued to improve connectivity to East Downtown and downtown proper.
- A trolley circulator route should be implemented to connect the Convention Center, Minute Maid Park, and Dynamo Stadium with the East End, with service along Navigation Boulevard and the potential Town Center development along Buffalo Bayou near Sampson and York.
- Additional connections to and across Buffalo Bayou will enhance infill development potential and provide feeders to the activity on Navigation Boulevard.
- Development guidelines and incentives should be adopted to promote pedestrian friendly mixed use development that is compatible with the scale and character of the Second Ward.

A. Planning Context

The greater Houston metropolitan area experiences population growth of approximately one million people every decade. While this is generally regarded as a sign of our economic strength, the implications of continued growth at this rate are sobering. With our prevailing development model of expanding ever outward into undeveloped land, each decade of growth requires an additional 300 square miles of open land to be developed – the Katy Prairie, the coastal wetlands, and the East Texas pine forests are likely to take the brunt of this growth. More roads have to be paved, freeways have to be widened, and, still, commutes will get longer and gasoline more expensive.

Is there a better way? While growth at the metropolitan edge will likely not be slowed substantially, there are significant opportunities for redeveloping existing areas near the downtown. Past experience has shown that there is strong demand for denser, more urban living, but the results so far have frequently been haphazard, uneven, and insensitive to existing community fabric and culture.

The East End is poised to be one of the next redevelopment centers. It is literally in the shadow of downtown, with a great deal of undeveloped and underdeveloped land. Industry is gradually moving out of the area and much of this property is being assembled by the development community. Smaller scale development is already in evidence in the area, and improvements and amenities such as the Harrisburg light rail line and the Dynamo Stadium are likely to make the area even more attractive.

As Houstonians know all too well, it is difficult to execute any sort of coordinated long-range master plan – yet this is precisely what must be done here. The crucial first step is to achieve

broad based community consensus on a master plan vision, a vision that preserves and reinforces existing community assets while allowing for significant development opportunities. Then, a series of public improvement initiatives that support the vision, combined with targeted incentives for private development, can help to guide growth in the appropriate direction. This Master Plan outlines such a long range development scenario.

B. Guiding Principles

The East End Master Plan is based on ten guiding principles that are discussed below and depicted in diagrammatic form on Figure 2. Although there are ten principles, they can be grouped into three general topic areas: those that deal with improvements to the street network and traffic pattern, those that promote sustainable development, and those that are concerned with neighborhood character.

Traffic and Street Pattern. While the East End Master Plan covers a wide area, it begins by establishing and reinforcing the boulevard that should serve as the area’s Main Street: Navigation Boulevard. (It should be noted that the Master Plan only considers that portion of Navigation west of York Street; more easterly stretches of Navigation may still want to function as a more conventional thoroughfare, at least for the foreseeable future.) Establishing the desired character will require a number of interventions to Navigation itself as well as the surrounding street network:

1. Area traffic patterns have to be adjusted and redistributed so that Navigation no longer functions as a through street, but accommodates slower, local traffic as well as a diverse mix of other functions.
2. Sampson and York are a key couplet of one-way streets that provide access from the heart of the neighborhood to Interstate 10 on the north and Interstate 45 to the south. They should serve as a means of diverting through traffic from Navigation onto alternative routes.

3. Sampson and York should also function as key pedestrian corridors, providing access to the light rail line on Harrisburg.
4. At the west end of Navigation, another north-south connection (to be established) could create a crucial link between Guadalupe Park and the proposed Dynamo stadium. This new connection will also help to strengthen the intermittent access across US 59 into the downtown.
5. In general, the existing street grid needs to be enhanced to distribute traffic, provide greater mobility options for pedestrians, bikes, and vehicles. Canal and Commerce Streets, in particular, have to be strengthened as east-west connectors

Enhancing the surrounding street network will liberate Navigation Boulevard from having to be a primary traffic route and allow it to evolve into a true place, the heart of the neighborhood.

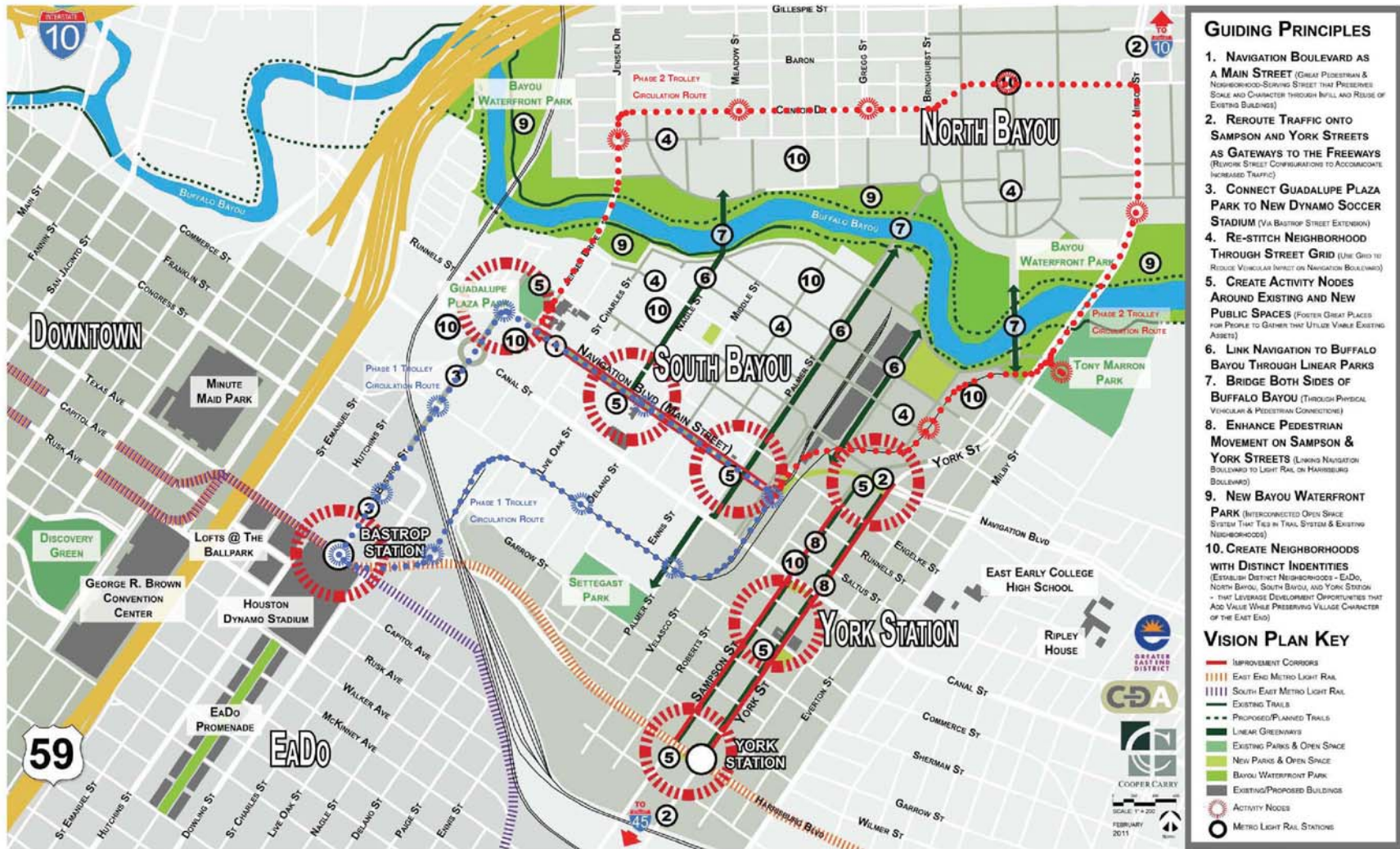


Figure 2: East End Master Plan Guiding Principles

Sustainable Development. Several other master Plan principles are intended to highlight and promote principles of sustainable development. This means not only “green” features, but also characteristics of development that are inherently denser, make more efficient use of resources, and reduce vehicular traffic through integration of uses and creating closer and more direct connections. Master Plan principles that help to enhance sustainable goals include:

6. Create activity nodes around existing and new uses. Several existing nodes are already evident. Proceeding from west to east:
 - a. Guadalupe Park and church, Talento Bilingue, and the close proximity to the Bayou provide a concentration of civic uses here.
 - b. The Ninfa’s block is a destination known to virtually all Houstonians, one that could anchor a restaurant and food based node.
 - c. The York/Sampson intersection, with excellent north-south access, is a natural location for a commercial Town Center, with a minor key in museum destinations.

7. Bridge the north and south sides of Buffalo Bayou. The Master Plan anticipates a total of three new bridges across the bayou. Two of them would be pedestrian/bicycle bridges, but one of them, at the extension of Palmer Street, is projected to be a vehicular connection. Interest in creating these connections was expressed by one of the major property owners with holdings on both sides of the bayou, so at least some of the new bridges have a high likelihood of being built. These bridges would be very helpful in creating additional activity on both sides of the bayou, as well as making the bayou itself more accessible as an amenity.

8. Link Navigation to Buffalo Bayou through linear parks. These linear parks would actually be “green streets,” that is, multi-modal routes that would create a strong connection between the bayou and Navigation Boulevard, to the mutual benefit of both. Navigation Boulevard would benefit from enhanced pedestrian traffic, and the residents of the neighborhood would gain better access to Navigation and the bayou.

9. Create a waterfront park along Buffalo Bayou. Buffalo Bayou presents a singular opportunity to create a signature natural and recreational amenity for the entire East End. The Buffalo Bayou Partnership and others have been instrumental in achieving such improvements in other reaches of the bayou, and this portion is also included in their master plan. The linear park also presents an opportunity for useful open space such as allotment gardens, orchards, local produce, as well as passive park space.

Neighborhood Character. Finally, it is a guiding principle of this Master Plan that development should be compatible with the character of the surrounding area. Too many times, extensive redevelopment in Houston is criticized for being insensitive, and out of scale with its surroundings. Providing for appropriate development character will enhance the neighborhood and the value of existing and new development alike.

In an area of this size, the development character will vary as the area varies. In fact, the study area is large enough to create several neighborhoods of distinctive scale and character. Loosely described, there are three primary neighborhood areas: the old industrial area north of Buffalo Bayou, the old Second Ward area south of the Bayou and centered on Navigation Boulevard, and the east downtown area. Of these three, the Second Ward area has the most history and character, and is the one where development should be more sensitive to respecting the existing fabric. For purposes of preparing development projections, these three primary neighborhoods were further subdivided into 9 sub-areas of differing uses and development intensity, as described in the next section.

While neighborhood character is important, it should also be emphasized that accommodating the magnitude of growth expected in the Houston region involves identifying appropriate opportunities for dense infill development. When done properly, density can be a positive attribute, indeed, it is a pre-requisite for concentrating activity and uses enough to create the lively, active, and mixed-use environments characteristic of pedestrian oriented city living. Here, the east downtown area and the north bayou industrial areas are opportunities for significant density, while the area around Navigation should strive to maintain the diverse and multi-cultural character of the existing neighborhood.

C. Development Program.

A model of the projected development at build-out was prepared to evaluate the potential impacts and benefits of the Master Plan. This analysis is presented in summary form on Table 1, which presents, in tabular form, the expected quantities and mix of development in the various different character areas.

The build-out projections begin by dividing the study area into 8 different sub-areas. These were determined primarily by identifying areas of differing character due to location, surrounding uses and amenities, existing conditions, and development potential. A brief description of each of the sub-areas follows. The numbering corresponds to the sub-areas as shown on Figure 3.

1. Sub-area 1 fronts on Jensen Drive, has convenient access to Interstate 10, and connects across Buffalo Bayou to the Second Ward and, eventually, downtown. This makes it a reasonable location for large format retail uses that would serve the neighborhoods on both sides of the bayou. This type of development is typically low-rise and relies primarily on surface parking, as indicated by the relatively low projections for floor area ratio.
2. Sub-area 2 is currently large parcels of old industrial property that are being (and largely have been) assembled by a relative few development interests. This makes it a prime candidate for high density redevelopment, predominantly residential in character, but with potential for some small scale neighborhood serving commercial uses at ground level. The model assumes mid to high rise

development in stepped form to maximize the southerly views over the bayou and toward downtown.

3. Sub-area 3 is centered on the old Kellogg Brown & Root property, which has several existing office towers in relatively good condition. Building on that core, this area could become a significant concentration of office and other commercial uses, perhaps focused on the clean-tech and next generation energy industries that would benefit from a location close to the port. This area is also large, assembled, and relatively unconstrained to redevelop at fairly high intensity.
4. Sub-area 4 moves to the south side of the bayou, but could have a close relationship to the commercial and office core on the north side, with an existing, and several proposed, bayou crossings. As the crossroads between Navigation Boulevard and the York/Sampson couplet, this would be the potential Town Center development, with a lively and diverse mix of uses that would include residential, commercial, and several civic and destination uses such as museums, parks, and other public attractions. The land use mix is fairly balanced between residential and commercial uses here, but in a low to mid-rise intensity.
5. Sub-area 5 centers on the “Main Street” Navigation corridor, and is intended to build on the existing scale and character of the neighborhood. This is projected to receive small to medium scale infill development compatible with the existing fabric. The Navigation corridor would infill with additional commercial, restaurant, and neighborhood serving uses, while the other areas would be predominantly residential in

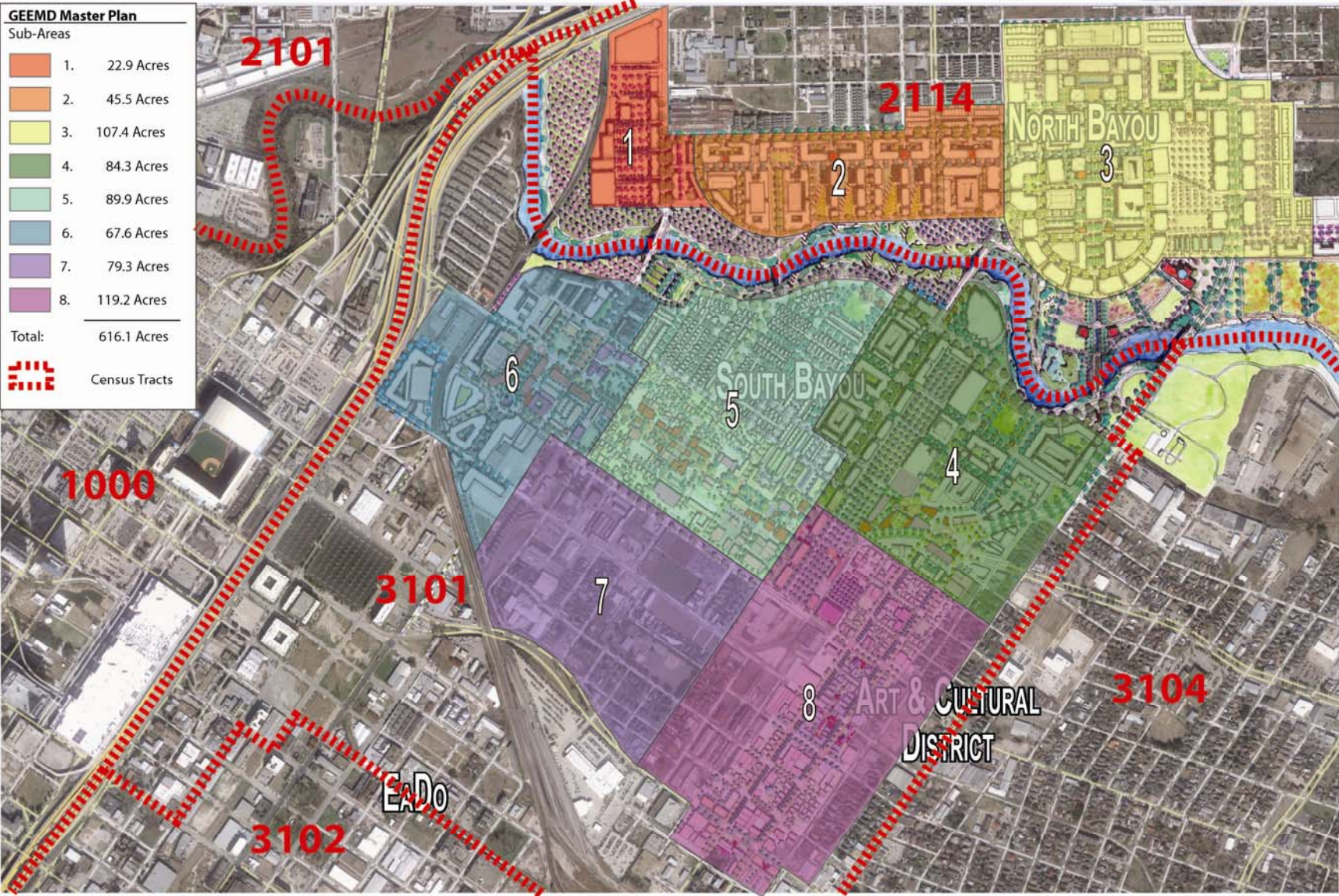


Figure 3: Sub-areas of the East End Master Plan

medium density forms such as townhomes, patio homes, and smaller multi-family building.

current tax rates, this would represent new annual revenue to the City of about \$ 7.7 million annually.

6. Sub-area 6 is another key mixed-use node, acting as a gateway/connector between several other areas, with a diverse range of uses, from civic and parkland to commercial along Jensen and Navigation. There are also several significant sized tracts that are projected to develop with mid-to high density housing.
7. Sub-area 7 is another infill area that would build on the existing character. Canal, Commerce, and Harrisburg are mostly lined with commercial and warehouse uses which could provide support and flex space for the surrounding area, small business incubators, and a build the East End’s employment base. There are also opportunities for infill housing in low to medium density forms.
8. Sub-area 8 is the centers on the York and Sampson corridors and encompasses the light rail station at Harrisburg and York. This is another predominantly infill area that could build on the area’s significant arts assets with warehouse and studio space, loft residential units, and a range of commercial uses. If a significant site could be assembled, the area near Harrisburg would be a candidate for high-density, transit-oriented mixed-use development.

As shown on Table 1, the eventual projected build-out of the East End would add a substantial amount of development to the City in a close-in, accessible, and sustainable form. The Master Plan presented here proposes between over 7,000 new housing units and about 7 million square feet of commercial space of various kinds, for a total assessed value of about \$1.2 billion. At

Table 1

Greater East End Management District
 Projected Development Model

No.	Sub-area Area (acres)	Prevailing Character	Net Area (SF)	Floor Area Ratio	Res/Comm Split	Residential Units	Residential Area (SF)	Commercial Area (SF)	Value
1	22.9	Large format retail, commercial	668,341	0.40	10 / 90	22	26,734	240,603	\$ 29,139,671
2	45.5	High density housing	1,327,927	1.50	90 / 10	1,494	1,792,701	199,189	\$ 128,144,917
3	107.4	Office, clean tech, some housing	3,134,490	1.20	30 / 70	940	1,128,417	2,632,972	\$ 277,088,958
4	84.3	Town Center, mixed use, destination	2,460,312	0.75	40 / 60	615	738,094	1,107,141	\$ 152,539,366
5	89.9	Neighborhood infill, mixed use	2,623,749	0.60	60 / 40	787	944,550	629,700	\$ 137,484,473
6	67.6	Mid to high density housing	1,972,920	1.10	90 / 10	1,628	1,953,190	217,021	\$ 150,139,175
7	79.3	Commercial infill, flex space	2,314,386	0.60	40 / 60	463	555,453	833,179	\$ 124,051,109
8	119.2	Infill housing and commercial, TOD	3,478,876	0.70	65 / 35	1,319	1,582,889	852,325	\$ 199,861,417
	<u>616.1</u>		<u>17,981,002</u>			<u>7,268</u>	<u>8,722,026</u>	<u>6,712,129</u>	<u>\$ 1,198,449,087</u>

Notes:

1. Net area is calculated as gross area x .67 to account for street right-of-way.
2. Floor Area Ratio is the ratio of gross occupiable area divided by net site area.
3. Value = (Net Area x \$20) + (Residential Area x \$50) + (Commercial Area x \$60) and is assumed to be average assessed value.
4. All dollar figures are in current dollars.

The Public Planning Process

In order to ensure that the elements of the East End Master Plan would reflect the goals and desires of the community, an extensive outreach effort was conducted. Ultimately, the success of the plan will depend on its concurrence with the community’s interests as well with the broader goals of the City of Houston and other public entities with an interest in the area.

The outreach involved a variety of methods. A broad overview is provided by a Steering Committee that meets periodically to review the overall course of the project. More detailed and focused discussions are held with a number of individuals and smaller groups to address particular issues and concerns. There are also several larger workshops and presentations that are open to the general public.

The Steering Committee

The Project Steering Committee is formed of representatives of all of the key public jurisdictions and community groups that have an interest in the area. Their task is to review the progress of the project at periodic intervals, provide advice and counsel as well as any coordination and liaison needed with their respective entities.

The Steering Committee for the East End Master Plan includes the following members:

D.V. Sonny Flores	GEEMD Board
Bolivar Fraga	GEEMD Board and Ripley House
Carlos Doroteo	Office of Councilmember Gonzales
Richard Smith	City of Houston Public Works

Amar Mohite	City of Houston Planning
Diana Ponce de Leon	City of Houston Planning
Renissa Garza Montalvo	City of Houston Parks
Roberto Trevino	METRO
Arianna Campos	Office of State Rep. Farrar
Gloria Moreno	Second Ward Superneighborhood
Frances Dyess	East End Chamber of Commerce
Matthew Lennon	Houston Arts Alliance
David Corpus	Banco Herencia

In general, the Steering Committee met prior to the larger public workshops. They reviewed the consultants work and provided an opportunity to fine-tune the materials for the public meetings.

The Steering Committee is also instrumental in identifying and defining issues that will need further coordination and support from entities such as the City of Houston, METRO, etc.

Stakeholder Meetings

Stakeholder meetings are focused discussions between members of the consultant team and various area stakeholders: individuals or small groups that have a particular interest in the area. Stakeholders include area residents, business owners, developers and other large property owners, as well as public officials. These meetings allow for in-depth discussions about the study area, and are usually centered on a topic relevant to the stakeholder, whether it is a residential developer, a group of restaurant owners, or people with an interest in parks and open space.

A series of stakeholder meetings was conducted on Thursday, 9 December through Saturday, 11 December. Additional follow up meeting were also held to continue the discussions or to pursue

particular initiatives. It is anticipated that several of these initiatives will develop into ongoing and recurring efforts.

Meetings were held with the following individuals and groups:

Yolanda Navarro-Black, longtime resident, business owner (Villa Arcos taqueria on Navigation) and community activist.

Canal Place Housing, a single room occupancy housing project developed by a local non-profit, New Hope Housing.

Neil Morgan, owner of Ninfa’s and retired developer. Ninfa’s is a Mexican restaurant on Navigation that is a Houston institution and a popular area destination.

Ernie Cockrell, Pinto Realty Partners, owners of a significant amount of vacant and old industrial property on both sides of Buffalo Bayou.

Renissa Garza-Montalvo, Senior Project Manager, City of Houston Parks Department.

Alan Atkinson, developer and owner of several significant parcels in the study area.

Karen Elsen, Fraga Pre-K school on York

Gloria Moreno, Jessica Hulsey, Jack Sheeks, representatives of the Second Ward Superneighborhood

Museums: Jesse Hernandez (WWII Museum,) John Kendall (Maritime Museum,) Phil Scheps (Railroad Museum.) All of these are actively pursuing facilities in the East End; some have already acquired a site.

City of Houston officials. Andy Icken, Chief Development Officer, Mark Loethen, Jeff Weatherford, Tom Davis, Traffic and Public Works.

York Street property owners. Most of these have established businesses, two have warehouse properties for personal collections, some are assembling property for redevelopment.

Urban Harvest, promotes local food production and distribution through farmers markets.

Juan Hernandez, owner of Dona Maria Restaurant on Navigation.

Yolanda Schaefer, manager of Merida Restaurant on Navigation.

These meetings generally lasted between forty-five minutes to one hour. The discussions covered general area wide issues as well as any specific concerns or questions.

Streets as Places Training Session

A key aspect of the Master Plan is the changing of perceptions about streets. Many of the existing regulations and standards governing street design are focused on maximizing their use for vehicular traffic.

A growing body of research, as well as actual completed projects in a number of other jurisdictions, is shifting the emphasis of street design to a more comprehensive and multi-use approach. Streets are designed not just for vehicle traffic, but to make it safer and more enjoyable for pedestrians, bicycles, and various

forms of transit. Complete streets and context sensitive solutions are two terms used to describe these new design approaches.

In order to help disseminate information and promote these design approaches, a one-day training workshop was held, designed specifically for transportation professionals. The session was attended by staff from the City of Houston Public Works Department, the Texas Department of Transportation, METRO, as well as several consultants.

Public Meetings and Workshops

There are also several public meetings that are open to anyone interested. These meetings are widely publicized and intended to allow anyone the opportunity to attend, become informed about the project, and offer their ideas and suggestions. These meetings are held at various stages of the project:

- An initial public meeting is held before the design process gets underway. This meeting is specifically intended to solicit ideas from the public. This is done through a series of interactive exercises designed to present issues and opportunities, promote discussion and generate

dialogue. The meeting begins with a presentation that sets the context and provided background information as well as food for thought. Then, the participants are split into smaller groups, with each group having a specific focus area to study. The groups make a visit to their particular area, note the conditions and potential, and then report back to the larger group.

- A follow up workshop is held about two months later. By this time, the design team has had a chance to review and consolidate the public workshop results, and develop some schematic concepts. The intent of this meeting is to present the ideas to the public and promote an interactive dialogue, note any concerns or areas that need revision.
- Another similar workshop is held once the design has advanced further along. By this time, the design direction is well established, and the meeting is an opportunity to confirm the concepts and present further detail for discussion.

The vision for the East End outlines a number of individual improvements and projects. Many of them are already underway, and have existing momentum and ongoing funding to continue. Coordinating these various efforts in pursuit of a common vision will be the key to achieving the Master Plan goals of a revitalized East End. The Greater East End Management District is already taking the lead in managing and coordinating these various activities.

The many individual projects and activities that will contribute to the improvement of the East End will be completed by both the public and the private sectors. This section will outline a number of the key initiatives, as well as define some of the areas that will require further effort, coordination, and funding.

A. Public Improvements

Public improvements will form the framework for growth and development. The Master Plan defines a number of improvements that will be required to enhance mobility, create the potential for private development, and facilitate quality, sustainable growth. The public improvements being planned and implemented can be grouped into several broad categories, as described below:

Streetscape Improvements

Streetscape improvements will further a number of the master plan goals simultaneously:

- Improving the overall street network and area mobility.

- Enhancing pedestrian and bicycle mobility, and providing better pedestrian access to transit.
- Making the area more attractive to private investment.
- Providing for on-street parking to add to the area wide parking supply and relieving the demands on private development.
- Providing public open space for the programming of community amenities such as street markets, outdoor dining, and public art.
- Generally improving the attractiveness and safety of the public realm.

The first stage of streetscape improvements has been funded by a stimulus grant and design work is underway. This project will provide improvements along the York and Sampson corridors, as well as an enhanced level of treatment along Navigation Boulevard.

A more detailed description of this first stage of improvements can be found later in this section of the Master Plan.

An enhanced level of streetscape amenities is also being provided in conjunction with the construction of the East Line of the METRO light rail transit system along Harrisburg Boulevard. The District has partnered with METRO to provide additional streetscape and sidewalk improvements, over and above the standard treatment being provided as part of METRO’s scope. Improvements being funded by the District include street trees set in decorative tree grates, brick paver accents around trees and curb ramps, and special accents intended to reinforce the “brand” of the East End as a special district. This includes cast bronze medallions set into the sidewalk near street intersections, cast

stone blocks identifying the names of streets, and brick paver patterns based on the GEEMD logo.

Transportation Alternatives

The more modes of transport are supported in an area, the greater the potential for a lively mix of uses and a variety of experiences for residents, business owners, and visitors alike.

Light Rail. The largest and most important of these alternative transportation projects is, of course, the previously mentioned East End light rail line, currently under construction along Harrisburg Boulevard. This will provide the East End with direct access to a regional transportation network, as well as direct access into downtown and the numerous visitor amenities on the east end of downtown, such as the Convention Center, the sports venues, and Discovery Green.

The east end rail line will terminate at the Magnolia transit center, and, consequently, will provide service traversing the entire Master Plan study area. A stop will be located near the York Street intersection, underscoring the importance of the York/Sampson pair in the pedestrian/bicycle circulation network.

Bike lanes and bike trails. The East End is already served by several bike routes. Some are dedicated bike trails, while most are integrated into existing streets as shared use lanes or bike routes. As part of the City’s upcoming overlay project on Sampson Street, GEEMD will be able to provide for re-striping of the pavement to designate a dedicated bike lane. Other bike routes should be considered to continue to strengthen the network. For example, the proposed redesign of the Navigation Boulevard

cross-section would accommodate a traffic lane wide enough to serve as a shared use lane with the ability for vehicles to safely pass bicycles.

Walkability improvements. Enhanced pedestrian amenities are integral to many of the streetscape improvements described elsewhere in the Master Plan. Wider sidewalks, curb ramps, additional landscaping and shade trees, pedestrian level lighting, and enhanced bus stops will all serve to create better and more functional pedestrian facilities. Additionally, the expected development of additional restaurants, museums, retail establishments, and, of course, housing, will provide attractive destinations for pedestrians.

Trolley Circulator. With the advent of a true light rail system, as well as the existing major attractions in East Downtown, the potential for a local circulator to connect the rail stops and the major destinations with the new Navigation “Main Street” is a natural. GEEMD was successful in obtaining funding to study the possibility of such a service, and the study will get underway shortly. Whether this system is rubber tire or on rails, how frequent, routing, etc., will all be considered in the scope of the study.

Public Space Programming

Functional and attractive streetscapes are a good start, but it takes actual street life and activities to make public spaces truly successful. The GEEMD has been instrumental in orchestrating and supporting the efforts of several area assets in creating an enhanced public realm:

- A number of groups interested in quality nutrition is addressing the lack of availability of fresh, quality foods in the area. The effort is a multi-pronged one, including production, preparation, packaging, and marketing. With the potential for creating a number of job opportunities, this is an economic development tool in addition to providing a community need.
- The enhanced pedestrian promenade along Navigation Boulevard would be a natural site for street markets. This would be an ideal site for the marketing of local food production noted above, and could also be used to improve the quality of festivals and events held by the Guadalupe Church.
- Several of the restaurants along Navigation Boulevard could benefit from enhanced opportunities for sidewalk café service.
- The provision of on-street parking is a convenience for area visitors, has a traffic calming effect on the vehicular flow, and supports the neighboring businesses.
- A number of opportunities for public art provide yet another way to animate the public spaces, while creating opportunities for area artists.

While many of the improvements listed above would be targeted along the Navigation pedestrian promenade, these strategies can

be applied virtually anywhere. For example, several existing businesses and uses along York and Sampson would benefit from such enhancements as better bus shelters, bike racks, and benches.

Wayfinding

A successful urban district must make it easy for people to find their way around. Directional signage should serve vehicular traffic as well as pedestrians and cyclists.

Besides the basic tasks of identifying destinations and directing people to them, a good wayfinding program can serve to enhance the image and “brand” of an area. Elements such as gateways can serve to announce a special district, while interpretive elements can provide information about points of interest, historic significance, and add educational or artistic interest.

Support for Private and Non-Profit Initiatives

GEEMD is actively assisting several groups that are already located in the study area, or looking to relocate to the area. Some of these groups offer the potential of creating visitor attractions that would enhance the value and character of the area.

Museums. Several museums are in various stages of development. The World War II museum has acquired a building and is in the process of building out their exhibit spaces. The Railroad Museum has also identified a site, as has the Maritime Museum. Several interests are also studying the potential for an antique car museum, drawing on several private collections already located in the area.

While the museums have, up to now, been operating independently and have selected sites in different portions of the study area, the opportunity exists for a cohesive “museum district” experience to become a feature of the East End. A thematic program, reinforced by wayfinding and common promotion and marketing, would help reinforce this concept. GEEMD was successful in receiving a grant to undertake such a study and has recently commenced the process.

Opportunities for the use of public space. The East End has several significant, but currently underutilized open and park spaces. Buffalo Bayou extends for several miles through the area. While there are ambitious, long range plans for its enhancement, the bayou remains rough and overlooked today. Guadalupe Park is also underused, suffering from a lack of connectivity to surrounding uses, as well as a relative lack of activity generators.

The Navigation Boulevard median forms a highly visible, continuous green space through the heart of the study area, but it is minimally landscaped and fairly passive. A key part of the Master Plan is to activate Navigation Boulevard as the neighborhood’s “Main Street,” and an enhanced median could be a key part of accomplishing that. Improving the median to accommodate activities that complement the uses on either side would create a pedestrian promenade that would allow for continuous activity along both sides of the street as well as along the center median.

The Master Plan proposes that the median zone could be widened along several blocks to allow for functions such as:

- Expanded outdoor serving areas for any of the nearby restaurants, or possibly even an independent vendor.
- A variety of open spaces that could be used for outdoor performance or passive recreation.
- These same open areas would also be available as areas for temporary stalls for a variety of street festival or farmers market uses.
- Several locations for focal attractions such as fountains, gateway features, or public art.

The enhanced median also functions as a key pedestrian connector, providing for a variety of pathways between the individual attractions along Navigation Boulevard as well as linking several bus stops.

Development incentives. The Master Plan, when implemented, will provide an enhanced public realm and level of amenities that will help to promote infill development in the area.

Additionally, GEEMD is pursuing the creation of a parking district that would allow for an area wide allocation and management of parking spaces. This would facilitate, for instance, the redevelopment of a smaller parcel without having to provide the full complement of required parking, as long as some other accommodation could be made. Part of this solution would also involve the provision of parking on public streets, especially along Navigation Boulevard, where the wide right-of-way allows for the potential for diagonal parking in several locations.

This area is also in the final stages of forming a Tax Increment Reinvestment Zone, which would be able to dedicate a stream of funding derived from future tax increments to assist in redevelopment efforts. Such funds are generally used for such projects as infrastructure and streetscape improvements,

enhanced landscaping, and assisting developers in providing a higher quality of amenities in the public realm adjacent to their developments.

Street Network and Infrastructure

A key principle of the Master Plan is to establish Navigation Boulevard as the “Main Street” of the East End. A proper Main Street would be lined with a lively mix of uses, building on the existing restaurant destinations to add other retail and neighborhood services, as well as thematic uses such as art galleries and studios. In general, buildings would be located at the front right-of-way line to promote interaction between the pedestrians and the uses. The right-of-way itself would have to support this mix of activities with wide, well-amenitized sidewalks, on-street parking, bicycle facilities, and a number of features of interest to pedestrians. While it should also accommodate vehicular traffic, the needs of vehicles have to be balanced with all of the other functions.

In the City of Houston’s current Major Thoroughfare Plan, Navigation Boulevard is classified as a principal thoroughfare. This designation, however, is primarily concerned with maintaining the roadway as a vehicular traffic route. It is also based on a hierarchical model of traffic flow that concentrates traffic onto a limited number of thoroughfares. Such a model is more appropriate for suburban areas, where the convention is to have a limited number of thoroughfares and collectors, with local streets that do not connect through.

An alternative to the thoroughfare model is the urban street network, where a closely spaced grid of streets allows for traffic to be dispersed among several parallel routes, rather than concentrated on to a single thoroughfare. This model is more appropriate for the East End, and for Navigation Boulevard in particular, due to several factors discussed below. It should be noted that the “Main Street” portion of Navigation Boulevard discussed here is that portion that runs between Jensen Drive and

York Street. Navigation Boulevard between York and Wayside still accommodates truck access to the port and other industrial facilities, and would not be affected by the changes contemplated in the Master Plan.

Navigation between Jensen and York does not behave like a typical suburban thoroughfare for a number of reasons:

1. It’s not really a logical through street. It has a shifted alignment on both ends, requiring a jog from another street (Franklin on the west; it returns to Harrisburg on the east) in order to get on Navigation. In fact, the overall length between these endpoints is only about 4 miles, less than the minimum criterion for a principal thoroughfare.
2. It has a constriction to two lanes as it shifts toward Franklin, passing under the railroad tracks.
3. It has on-street parallel parking on both sides. This is used sporadically, due to the light intensity of use currently along Navigation, but has noticeable peaks (Sundays near Guadalupe Church, for instance.) Ninfa’s uses a portion of their blockface for valet parking drop-off.
4. Many existing buildings have no setback along Navigation. This was, in fact, the norm for the historical development pattern along the street.

The existing Navigation configuration needs to be re-thought. Navigation is currently configured as a divided four lane roadway, with 18-foot wide curbside lanes that allow for parallel parking and a 30-foot wide central median. Recent traffic counts are less than 10,000 vehicles per day, and at no time does it experience anything approaching a congested condition.

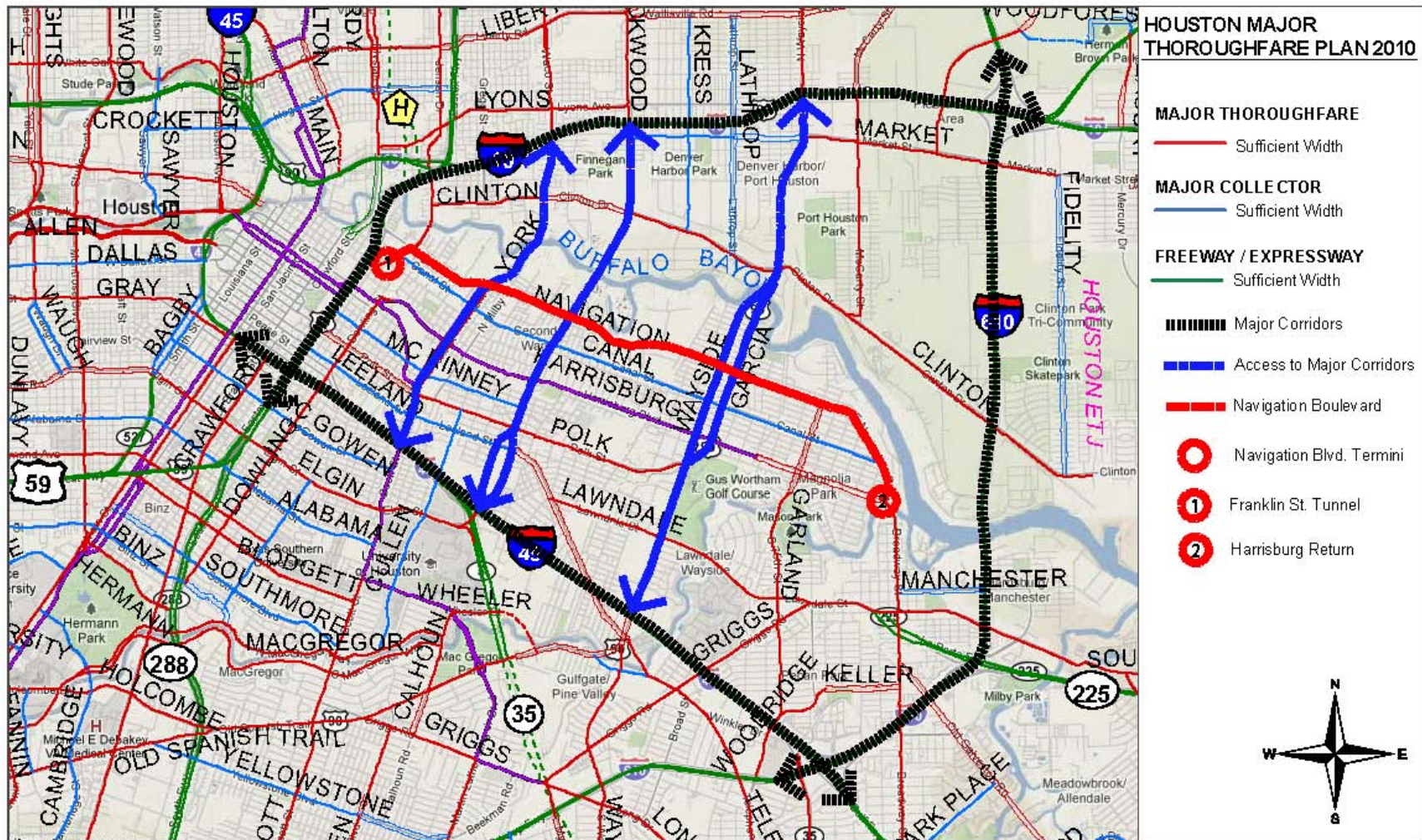


Figure 4: Portion of the Houston Major Thoroughfare Plan – East End

Although the current configuration is not unattractive, it could be much better. At thirty feet the median is wide, but not really wide enough to be usefully programmed. Similarly, the sidewalk zones are adequate but not overly generous for true, active urban life. The inordinately wide roadway encourages the light traffic to move much faster than necessary.

Ideally, the Navigation cross-section could be re-configured to widen the median to a truly occupiable dimension, or to maximized on-street parking to serve adjacent uses. While these would be different cross-sections, they could vary from block to block to respond to neighboring conditions, figures 5 & 6. In any case, maximizing the potential of Navigation for uses other than traffic movement would involve reducing the available capacity to something more in line with current traffic volumes. This, in turn, would be contingent on demonstrating that traffic circulation could be adequately accommodated elsewhere in the neighborhood.

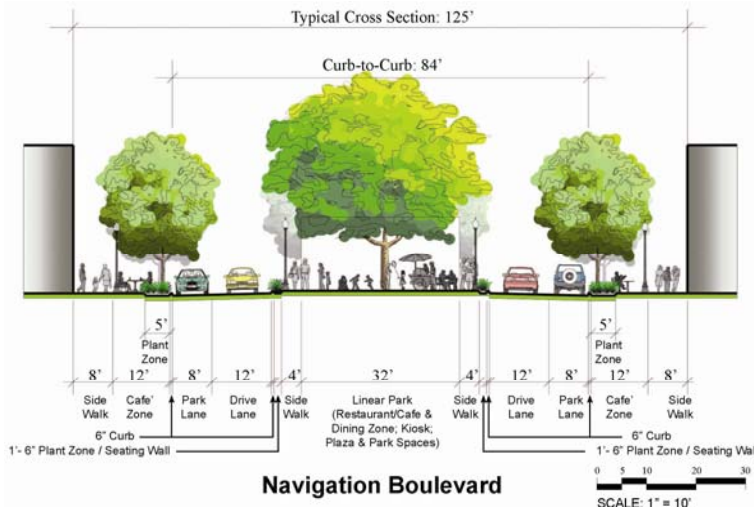


Figure 5: Proposed Navigation street section



Figure 6: Proposed improvements for Navigation Blvd

It's worth noting that with the ongoing construction of the light rail line, Harrisburg has been reduced from a four lane to two lane section. It was anticipated that this would cause some of the normal traffic volume on Harrisburg to divert to nearby parallel routes, particularly during construction. Navigation was identified as one possible alternate route. Anecdotally, there does not seem to have been any noticeable increase in traffic along Navigation. A review of the surrounding thoroughfare network points to some likely reasons:

- Harrisburg is a key access route into downtown. Anyone wanting to go downtown and diverting off Harrisburg is not likely to use Navigation, for the simple reason that it takes one too far north. Canal is actually less of a diversion, but even that is too far north (and also shows little evidence of increased traffic.) Also, both routes still have to go through the constriction under the railroad tracks. Most downtown traffic is likely to shift to the south, along Polk, for instance.
- For anyone trying to access the freeways, any of the north-south routes are more logical. York/Sampson, Lockwood, and Wayside/Macario Garcia are the preferred routes, avoiding Navigation altogether.

While there seems to be little reason to expect significant increases in traffic volume along Navigation in the short term, the magnitude of growth anticipated over the long term may suggest reserving additional capacity. This is the assumption made in the Major Thoroughfare Plan, which projects that Navigation Boulevard would eventually be widened to 6 lanes.

For reasons outlined above, Navigation is not a logical through street. Also, in an infill urbanized model of redevelopment, wide multi-lane thoroughfares are less appropriate than slower speed,

mixed-use and mixed-mode “complete streets,” to use the current terminology.

It bears mentioning that urban street networks should be analyzed as a whole, rather than street by street. Figures 7 and 8 show a diagrammatic comparison of the thoroughfare model and the network model for a prototypical square mile. In each case, the diagram represents a typical module that can be expanded in both directions.

The thoroughfare model represents the prototypical square mile as the area that occurs between principal thoroughfares, which are generally spaced at one mile intervals. Typically (though not always) there is a minor thoroughfare or collector occurring at half-mile intervals. In this diagram, the primary thoroughfares are assumed to be six-lane roads, and the collectors four lanes. There are, of course, a number of local streets occurring between these thoroughfares, but these do not really contribute to the through movement of traffic; in fact, they are usually deliberately designed to discourage through traffic. Thus, this square mile contains 2 miles of six-lane road and 2 miles of four-lane road for a total 20 lane miles of thoroughfare.

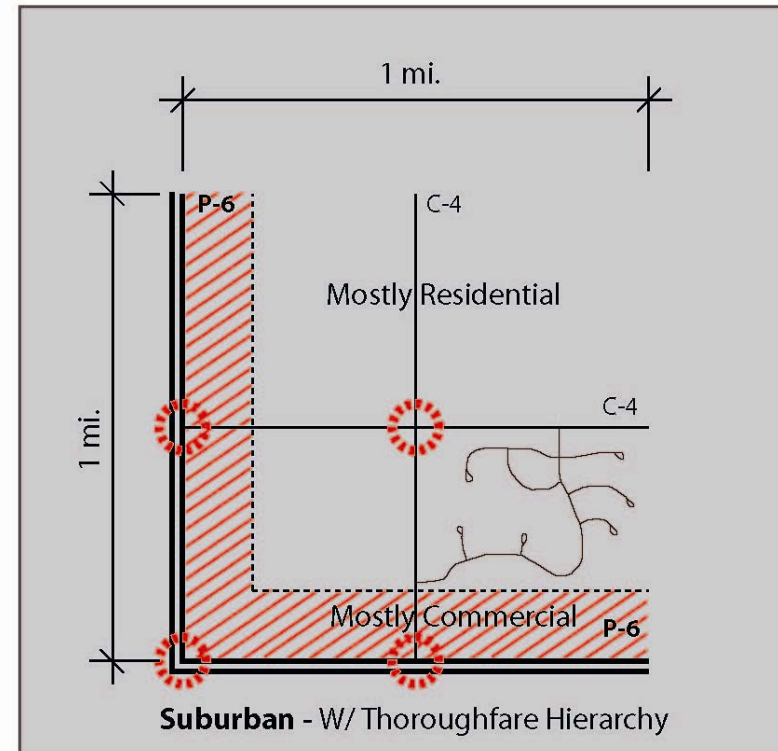


Figure 7: Thoroughfare street network model

The network model, by contrast, divides the prototypical square mile with a grid of streets spaced one tenth of a mile apart. (This is actually an unusually large block size; the downtown Houston grid, for instance, is calibrated at 16 blocks per mile.) The streets at half-mile intervals are assumed to be four lanes, all the rest are two-lane streets. This square mile contains 48 lane miles of through streets, more than double the thoroughfare model.

Aside from providing a greater density of useful streets, the network model has other advantages. Most of the streets will have relatively low traffic volumes, and will be more conducive to pedestrian or bicycle traffic. It provides for a larger choice of routes between any two points, in case, for instance, one wants to avoid an area of street construction, an accident, or a particularly problematic intersection. It can inherently allow for a greater density of development, which, in turn, reduces average distance between destinations, even to the point of making them walkable, if the uses are well integrated.

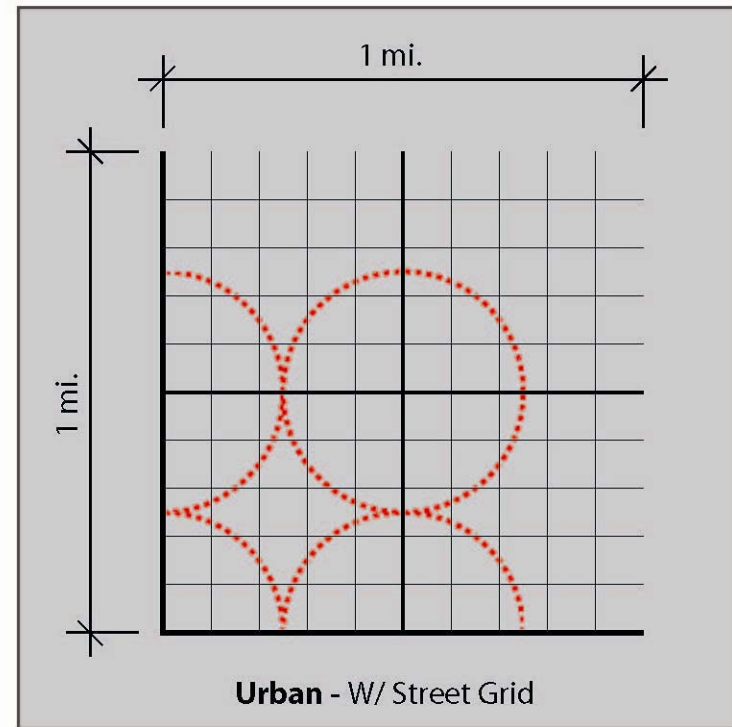


Figure 8: Urban street network model

The East End has a viable street network, but it has been compromised over time by various street closings, block aggregations, and re-alignments. Several at-grade railway crossings have been closed. Although it is an extension of the downtown street grid, major developments such as the Convention Center and the various sports venues have caused a number of the street links to be interrupted. A key focus of the East End Master Plan is to re-open and reinforce the grid

network as much as possible, both to facilitate the movement of traffic and to allow for denser redevelopment.

A comparison of the current street network with the proposed network at eventual build-out demonstrates the street and intersection improvement projects needed to realize the master plan. These are shown in Figures 9 and 10.

A list of specific improvement projects is as follows:

York and Sampson:	Pedestrian/Bike Improvements	Funded, in design
Navigation Boulevard:	Pedestrian/Bike Improvements	Funded, in design
York and Sampson:	Re-pave	Near term priority
Navigation Boulevard:	Odd block improvements	Near term priority
Navigation Boulevard:	Re-pave	Near term priority
Navigation Boulevard:	Wayfinding/Traffic Routing	Near term priority
Navigation/York/Sampson:	Intersection	Near term priority
Trolley Circulator:		Study funded
Bastrop Alignment and Rail Crossing:		Mid term priority
Canal Street Improvements and Roundabout:		Mid term priority
Commerce Street Improvements:		Mid term priority
Jensen/Navigation Intersection:		Mid term priority
Railroad Parallel Street:		Mid term priority
Palmer Street Rail Crossing:		Long term priority
Palmer Green Street and Bayou Bridge:		Long term priority
Neighborhood Street Grid Enhancements:		Public/private
Bayou Pedestrian Bridges:		Public/private



Figure 9: Existing East End street network



Figure 10: Proposed East End street network