Houston-Galveston Area Council

Livable Centers Study for Houston Downtown Management District & East Downtown Management District

Final Report

September 30, 2011

Houston-Galveston Area Council

Livable Centers Study for Houston Downtown Management District & East Downtown Management District

Morris Architects
project management
architectural design and planning

Clark Condon Associates, Inc.
planning and public realm design

CDS / Spillette
economics

Kimley-Horn and Associates, Inc.
traffic and transportation

Omega Engineers
civil

The Lentz Group
public engagement

The preparation of this document has been financed in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the Metropolitan Planning Program, Section 104(f) of Title 23, U.S. Code. The contents of this document do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

Downtown | EaDo
Livable Centers Study

Final Report
September 30, 2011

Study team contact:
Doug Childers, AIA
Principal, Urban Studio
MORRIS ARCHITECTS
1001 Fannin Street, Suite 300, Houston, TX 77002
Phone: 713.850.6644
doug.childers@morrisarchitects.com

Client contact:
Meredith Dang, AICP
Land Use Transportation Coordinator
HOUSTON-GALVESTON AREA COUNCIL
3555 Timmons, Suite 120, Houston, TX 77027
Phone: 713.993.2443
meredith.dang@h-gac.com

Table of Contents

Executive Summary 7

Executive Summary 8

Existing Conditions 13

Building Use 14
Public Realm Activity: Seasonal 16
Public Realm Activity: Daily 18
Parcel Land Ownership 20
Infrastructure: Storm Sewer 22
Infrastructure: Sanitary Sewer 24
Infrastructure: Water Supply 26
Locations and Use of Social Services 28
Market Conditions 30
Branding, Wayfinding and Identity 34
Pedestrian Access, Comfort and Safety: Street Trees and Shade 36
Pedestrian Access, Comfort and Safety: Sidewalks 38
Pedestrian Access, Comfort and Safety: Lighting 40
Open Space: Use, Functionality and Access - City Wide 42
Open Space: Use, Functionality and Access - Walking Distance 44
Open Space: Use, Functionality and Access - Public Parks 46
Open Space: Use, Functionality and Access - Plazas 48
Barriers 50
Bike Connectivity and Conditions 52
Transit Use 54
Automobile Safety and Traffic Flow 56
Parking 58
Existing Plans 60

Framework for the Future 63

Vision 64
Residential Vision 66
Dallas Corridor Vision 68
Capitol / Rusk Corridor Vision 70
EaDo Core Vision 72
Project Goals 74

Land Use Recommendations 77

KEY Land Use Recommendations 78
LU1 Target City Policy to increase residential development in and near downtown 80
LU2 Identify potential land for hotels near the GRB Convention Center 82
LU3 Require active ground floors on designated streets in the Study Area 84
LU3.1 Require active ground floors on Capitol, Rusk, Crawford and Avenida de las Americas in downtown 86
LU3.2 Require active ground floors on Polk and Dallas in downtown 88
LU3.3 Require active ground floors on St Emanuel, Polk, Capitol and Rusk in EaDo 90
LU4 Expand the GRB Convention Center 92
LU5 Improve Social Services 94
LU6 Ensure loading access zones for major venues 96
LU7 Designate public space for Dynamo events 98
LU8 Upgrade utilities in EaDo 100

Pedestrian Recommendations 103

KEY Pedestrian Recommendations 104
P1 Implement pedestrian wayfinding and identity program 106
P2 Improve pedestrian crossings at Chartres and under US-59 at Texas, Capitol and Rusk 108
P3 Improve pedestrian crossing at Chartres and under US-59 at Polk 110
P4 Implement pedestrian improvements along Capitol from Chartres to St Emanuel 112
P5 Implement pedestrian improvements along Rusk from Chartres to St Emanuel 114
P6 Implement pedestrian improvements along Dallas from Main to Avenida de las Americas 116
P7 Create a pedestrian plaza on Avenida de las Americas from Rusk to Polk 118
P8 Rebuild Polk from Avenida de las Americas to Dowling 122
P9 Rebuild St Emanuel from Commerce to Leeland 124
P10 Develop pedestrian realm design standards for EaDo 126
P11 Implement minimum pedestrian standards for the entire Study Area 129
P12 Create Bastrop Promenade 130
P13 Create a north-south linear park to connect light rail transit to the Bastrop Promenade 132

Bicycle Recommendations 135

KEY Bicycle Recommendations 136

B1 Implement bicycle wayfinding and identity program 138

B2 Enhance designated bike network 140

B3 Implement separated on-street bike path pilot project 142

B4 Study major east-west bike route across downtown 146

B5 Connect Union Station Hike & Bike Trail to Buffalo Bayou 148

B6 Provide pedestrian and bike linkage to East End through Harrisburg Underpass 152

B7 Rotate stop signs on Columbia Tap and Union Station Hike & Bike Trail 154

B8 Provide bike racks at transit and major destinations 156

Transit Recommendations 159

KEY Transit Recommendations 160

T1 Create circulator service from downtown to EaDo 162

T2 Reroute local bus service onto Polk and market overlapping routes as high frequency services 164

T3 Implement East End streetcar 166

Vehicular Traffic Recommendations 169

KEY Vehicular Traffic Recommendations 170

V1 Implement vehicular traffic wayfinding and identity program 172

V2 Convert Texas to 2-way configuration from Hamilton eastward 174

V3 Rebuild Dowling and convert Congress to 2-way configuration from La Branch to Dowling 176

V4 Reconfigure intersection at St Emanuel / Franklin / Navigation 178

V5 Provide metered on-street parking in EaDo 180

V6 Create new structured parking to provide shared parking for major venues 182

Appendix 185

Implementation Matrix 186

Record of Public Outreach 188

Stakeholder Advisory Committee (SAC) 190

Meetings 191

Previous, On-going and Proposed Projects 192

BASTROP

Executive Summary

Executive Summary

This study looks at an area of downtown Houston that has seen enormous investment of public funds over the last three decades. There are five major public venues that have been built in the downtown portion of the Study Area. A Major League Soccer stadium is also now under construction in East Downtown (EaDo). These large-scale projects have and will continue to have economic benefit to the City and the respective management districts. While these venues draw a lot of people for specific events, they have not by themselves resulted in a cohesive urban fabric in the surrounding neighborhood. Instead, they have in many ways functioned as islands of activity, disconnected from each other and the surrounding context. Moreover, they have acted as physical barriers within the urban fabric. Why haven't these huge investments lead to a more complete revitalization in downtown and surrounding areas? This study takes a comprehensive look at what is missing and what it will take to knit these big venues together with a broader range of economic and activity generators. It also looks at a range of solutions to enhance connectivity within the Study Area and to surrounding communities – especially between downtown and EaDo. Above all, this study identifies and addresses a central challenge: *how to provide housing options, close to downtown jobs for a diverse range of incomes and households.*

The Study Area comprises the equivalent of approximately 170 Houston city blocks bounded by Austin Street to the west, St. Charles Street to the east, Pease Street to the south and Commerce Street to the north. It contains five major public venues including Discovery Green, the GRB Convention Center, Toyota Center (Houston Rockets and Houston Aeros), the Hilton Americas Convention Center Hotel and Minute Maid Park (Houston Astros). A sixth venue, a new Major League Soccer stadium for the Houston Dynamo, is currently under construction in EaDo. The Downtown District within the Study Area is essentially defined by these large public venues. In addition, there are two office towers (5 Houston Center and Hess Tower) and a high-rise residential tower (One Park Place) at the western edge of the Study Area. On the east side of US-59, EaDo retains some of its historic scale and character with many smaller warehouse buildings throughout the District. However, EaDo is in transition. Recently constructed apartments and townhouses are mixing with new food and entertainment destinations, many of them occupying the old warehouses.

The two districts are very different. Yet, they face many common challenges, and ultimately they must be seen as part of a common urban fabric and economic center that function as an integrated whole. The vision and recommendations outlined in this study are ambitious and quite specific. They seek to improve the public realm and overcome physical barriers created by the major public venues, even as another major venue begins construction. The report also identifies building design guidelines to make specific streets and corridors more inviting to pedestrians and cyclists in a way that will support and link activities around major venues. Above all, the study makes a compelling case for policies that will encourage and support more residential development in both downtown and EaDo. Without significant expansion of housing options and the corresponding increase in economic / human activity, downtown and EaDo will remain fundamentally unchanged and a "livable center" largely unrealized.

Livable Centers do not exist without lots of people living in them. This Livable Centers Study has been commissioned and funded by the Houston-Galveston Area Council (H-GAC) and the Houston Downtown Management District. The East Downtown Management District has also been a collaborating sponsor of the project. The Livable Centers Program developed by H-GAC seeks to promote "walkable, mixed-use places that provide multimodal transportation options, improve environmental quality and promote economic development." The program goals emphasize the importance of compact and mixed-use development that is accessible and well-connected to surrounding communities. An explicit objective of the program is to reduce vehicle miles traveled in the region by promoting projects that locate jobs, housing, services and entertainment destinations close together, within walking distance of public transportation.

The Livable Centers Program is an ideal vehicle for this Study Area. Both downtown and EaDo already have walkable mixed-use places with good transportation, major activity centers and jobs nearby. Although, downtown and EaDo together have most of the pieces, physical barriers and discontinuous areas with vacant lots or unfriendly building facades often separate the various destinations. Moreover, residential areas are spotty and there is enormous risk that middle income, work force and more affordable housing options will become even more difficult as land prices escalate. H-GAC emphasizes the importance of identifying implementation projects that realize the general and project-specific goals. The elimination of real and perceived physical barriers in the Study Area and the realization of a critical mass of housing options, together, rise to the top of the priority list and will ensure the success of this Livable Center.

The report is structured into major sections that include an extensive analysis of "Existing Conditions;" "Framework for the Future" outlines major goals and a long term vision; project "Recommendations" identify specific projects in five different categories: land use (LU), pedestrian (P), bicycle (B), transit (T), and vehicular traffic (V). Lastly, the "Appendix" includes an Implementation Matrix, a bibliography of other relevant studies, and a report on the extensive public outreach effort undertaken for the project. The matrix is a key document that summarizes all of the projects and identifies entities responsible for implementation, potential funding strategies, regulatory approvals and proposed implementation time frames. The consultant team and client have sought to combine both long-term vision and pragmatism in the recommendations.

While there are specific recommendations associated with big projects identified in the study, many of the recommended projects are smaller and incremental. Over time, these will provide engagement opportunities for multiple stakeholder groups and institutions: design, development, financing and construction entities, business owners and operators of varying size. To achieve this end, public contractors should be encouraged to utilize Historically Underutilized Businesses, within the framework of their procurement policies, for these projects. The Implementation Matrix and this report as a whole should serve as a resource for all in that effort.

Existing Conditions

The Study Area comprises two unique Management Districts separated by an elevated freeway and several multi-block venues. Pedestrian and vehicular flow between the Districts is restricted by the GRB Convention Center, Minute Maid Park, Toyota Center and the Dynamo Stadium. Pedestrian and vehicular traffic is funneled onto only four east-west streets, two of which (Capitol St. and Rusk St) terminate at the new soccer stadium site in EaDo. Through traffic to the Greater East End is further impeded by freight rail tracks that run along the eastern edge of the Study Area. For pedestrians, moving between downtown and EaDo is intimidating. An unpleasant and uncomfortable pedestrian realm on Capitol, Rusk and Polk Streets compounds the limited access, where US-59 underpasses are poorly lit and lack appropriate pedestrian accommodations.

Meanwhile, there is a growing desire to promote connectivity and movement between the activity centers in downtown and EaDo. The major venues generate activity at different times of day throughout the year. EaDo is becoming a dining and entertainment destination, and visitors to the GRB Convention Center would like to walk to nearby restaurants in EaDo. The soccer stadium will drive major pedestrian activity between EaDo and downtown as fans look for affordable parking or walk to transportation. Moreover, current and future residents of EaDo would like to walk or bike to jobs downtown. The need and demand for better connections between downtown and EaDo is clear. Several recommendations focus on improving these connections for pedestrians, cyclists, transit riders and vehicles.

Land Use

The differences between downtown and EaDo are also apparent when one looks at property ownership and the types of buildings and land use in the two Districts. As discussed above, the downtown side of US-59 is defined by large public venues and the presence and intensity of the high-rise district just west of the Study Area. It also has higher land costs and greater overall density than EaDo. Property ownership is generally more consolidated, with fewer owners controlling larger parcels. This holds true for many vacant parcels, where a land holding strategy is clearly in play and one or more blocks are commonly owned by single entities. This is especially true in the area surrounding Discovery Green. The biggest landowners are public entities, though much of the public land is already developed or committed.

Land ownership in EaDo is more fragmented, and land use can be described as transitional. While evidence points to efforts to consolidate larger tracts, many blocks are still in the hands of multiple owners. With the exception of a few recent multi-family projects, the existing building stock consists of mostly one-and two-story buildings, built as warehouses or light industrial uses. Gradually, some of these buildings are being converted to other uses, including restaurants, entertainment, artists' studios and small businesses, with a retail and entertainment corridor emerging along St Emanuel Street. There are also plans for a major mixed-use and hotel project. A recent design competition envisioned the Bastrop Promenade surrounded by residential development, with this concept now being programmed by Sister Cities of Houston. The soccer stadium, opening in 2012, will undoubtedly have a big impact on EaDo in terms of event-driven activity. It has already received the attention of real estate investors, with sale prices for land having reached $50 / sf, and some as high as $70 / SF, in recent transactions. Increasing land prices are a positive sign that EaDo is catching on. However, price escalation also represents a central challenge.

As prices get above $50/sf, the viability of medium density housing for a range of downtown workers decreases. Land prices tend to outstrip market demand. In the absence of any development incentives or land use restrictions, landowners are often willing to wait for the next big project in lieu of developing what the market needs today. This has happened downtown. In spite of the fact that there are still large quantities of vacant land, only the highest residential or commercial rents can pay the cost of development on the higher price (greater than $100/SF) land. As a result, the urban fabric suffers while we wait for some use or market demand that can pay the higher price. The fine grain that should fill the gaps between the big destinations simply does not happen. The potential for this to become an issue in parts of EaDo is also apparent. More importantly, the challenge of getting a range of housing options developed in both downtown and EaDo is becoming more difficult. As the recommendations outline, housing for mixed income communities will not happen in the Study Area without policy changes, subsidies and/or more pro-active initiatives.

The recommendations related to land use in downtown and EaDo align with a range of project goals. The study team, sponsors and stakeholders generally agree that more housing in both downtown and EaDo is a critical path to a Livable Center in both Districts. Market research indicates that significant demand exists for housing in both downtown and EaDo. In downtown, the cost of land has made all but the highest end-product unfeasible. In EaDo, there is risk of a similar situation. Two approaches are proposed to address this in Land Use Recommendation 1 (LU1). The first tackles the demand side by seeking to make improvements in the public realm and neighborhood amenities, thereby increasing the amount that residents are willing to pay in a particular neighborhood. Discovery Green is a notable example of the impact a new park can have on development and consumer demand. The second tackles the supply side by offering subsidies or other incentives to developers. The benefits and limitations of project subsidies are discussed and more pro-active approaches are proposed to address the limitation of subsidies.

A parallel study undertaken for the GRB Convention Center has determined unequivocally that the Study Area needs more hotel rooms adjacent to the GRB, including another convention center hotel of similar size to the existing Hilton Americas-Houston Hotel. Recognizing its potential impact, we have incorporated this recommendation (LU2) into the study and included guidelines that will minimize negative impacts of a large hotel on the urban fabric. LU3 recommends policies to require active ground floors in key focus areas: the first is the general area targeted for the new hotel north of Discovery Green; the other is the burgeoning retail and entertainment district on St Emanuel Street in EaDo. As redevelopment occurs in both of these areas, the goal is to ensure that the public realm benefits from activity generated by new uses. Other recommendations address the eventual expansion zone of the GRB Convention Center (LU4), the prevalence of various social

services at the north end of EaDo (LU5), the impact and importance of loading zones for major venues (LU6), the area adjacent to the Dynamo Stadium (LU7), and the upgrading of underground utilities in EaDo (LU8).

Public Realm - Pedestrian and Bicycle

The discussion above highlights the barriers between downtown and EaDo and the impact of land price escalation on the urban fabric. The scope and scale of investment in the public realm is also a critical difference in the two Districts. Large public projects and the economic engine of downtown have resulted in major improvements of streets and streetscapes, sidewalks, lighting, signage and wayfinding and landscaping. Public and private investment resulted in the creation of Discovery Green, which lead to a transformation of the public realm around the GRB Convention Center and the Hilton Americas Hotel. In fact, most of the downtown side of the Study Area has undergone upgrades and improvements in recent years, resulting in good conditions. The exceptions are typically at the edges of the Study Area and in a few scattered locations where sidewalks are sub-par and shade trees are missing or in poor condition. Upgraded lighting is found throughout downtown and around major venues, contributing significantly to public safety and the sense of place around various venues.

EaDo is a different story. The public realm – streets, sidewalks, shade trees, lighting, signage – is sub-standard. With the exception of the streetscape around the Lofts at the Ballpark and the Minute Maid Park surface lots, the public realm is in poor condition. Missing sidewalks, curb-less streets, non-existent street trees and minimal street lighting are common. Missing street signs and ad-hoc parking and driveway conditions contribute to the sense of neglect and a neighborhood in need of public investment and improvements. With few exceptions, the conditions in EaDo contrast sharply with downtown. The benefits of downtown commercial activity are apparent in the public realm. In EaDo, public realm improvements are waiting for the projects and redevelopment that will pay the way. The Dynamo Stadium will have an impact on its immediate surroundings. Streets and sidewalks adjacent to the stadium will be improved, but the surrounding blocks will need much more.

The study envisions continuous connected networks for pedestrians and bicyclists. The overriding goal of both is to enhance connectivity within the Study Area and to surrounding communities and to support anticipated land use initiatives. There are 13 pedestrian-related recommendations and 8 bike-related recommendations that create these networks. Significant short-term projects include improvement to four underpasses at US-59 (P2 + P3), and a pedestrian plaza west of the Dynamo Stadium (P13). A larger pedestrian plaza is envisioned in front of the GRB Convention Center (P7) to enhance access to Discovery Green, as well as provide greater amenities and more staging and queuing space for large events; this will be accomplished by reducing lane count on Avenida de las Americas from existing eight lanes to four. The largest project proposed for EaDo is the Bastrop Promenade (P12),which has the potential to encourage redevelopment of the surrounding blocks. Recommended improvements on Capitol (P4) and Polk (P8) are proposed to improve connectivity and access between EaDo and downtown, particularly in conjunction with redevelopment along St Emanuel and the Dynamo Stadium. The rebuilding of St Emanuel Street between Commerce and Leeland (P9) is seen as an important catalyst to future investment and mixed-use development in the neighborhood.

EaDo has great access to major off-road bike trails. The Columbia Tap Trail connects to the Union Station Trail that touches the eastern edge of the Study Area, while the Buffalo Bayou Trail passes a few blocks north of the Study Area. Downtown and EaDo have the potential to be more effectively linked into a larger network of hike and bike trails. Recommendations B1-B8 identify various projects that will provide better signage, better connections between Discovery Green and major trails, new connections to the Buffalo Bayou Trail, enhancements to the existing on-street bike network and a pilot project that will see Houston's first on-street separated bike path. The improvements will ensure that downtown and EaDo become more connected to each other and to surrounding neighborhoods. Along with other recommended investments this will only strengthen the overall desirability and economic vitality of both neighborhoods.

Transit

Transit service in the Study Area, like many of the conditions, differs between downtown and EaDo. Downtown is well served by multiple bus routes, allowing people to move within downtown as well as to and from external destinations. EaDo has a total of four bus routes that pass through and connect to downtown and points east and south. Two new light rail lines that converge on Texas Avenue at the Dynamo Stadium will improve service for the north end of the Study Area, while providing efficient service to downtown, the Harrisburg Corridor and southeast to the University of Houston. The worst conditions in the Study Area are in the southeast quadrant in EaDo, which is served by two bus lines. Transit access into downtown from areas south of the stadium requires walking to the southern boundary at Leeland. Recommended improvements include combining and re-routing of existing bus routes to ensure higher frequency transit access in central EaDo (T2). To improve connections between the Convention District / Discovery Green and the activity centers in EaDo, the study recommends the creation of circulator service along St Emanuel and Avenida de las Americas (T1). To a large degree, this recommendation overcomes the barrier created by the GRB Convention Center. A final recommendation identifies streetcar service as a beneficial link between EaDo and the Greater East End (T3). This recommendation ties to planning efforts for Navigation Blvd, currently being conducted by the Greater East End Management District and has the potential to strengthen St Emanuel and Navigation Blvd as dining and entertainment corridors.

Transit service in downtown and EaDo is strong when compared to other parts of the City. The recommendations put forth are intended to reinforce the land use recommendations and to strengthen EaDo in particular, as a walkable, mixed-use, multi-modal destination. The goal is to make it easier to move between EaDo and downtown, so that residents and visitors will leave their cars in the garage.

Vehicular Traffic and Parking

The Study Area also lies at the nexus of major transportation infrastructure. US-59 bisects the Study Area and defines the boundary between downtown and EaDo. Interstate 10 and Interstate 45 pass within a few blocks and provide high capacity access to the general area. Freeway access to downtown is well marked and fairly direct. Access to and from EaDo is less convenient and less clear. Vehicular movement between EaDo and downtown, and between the Study Area and adjacent neighborhoods, suffers from the many barriers identified above: multi-block venues that terminate east-west streets and freight rail infrastructure that restricts vehicle movement at the northern and eastern boundaries of EaDo.

Traffic recommendations focus on improving connectivity and circulation through and around the Study Area and propose a comprehensive wayfinding system on both sides of US-59. Specifically, two recommendations aim to mitigate the funneling of east-west traffic by re-configuring portions of Texas and Congress Streets to two-way, V2 and V3 respectively.

Parking is an omnipresent issue in urban areas. Downtown and EaDo have lots of it. Dozens of blocks are dedicated to parking, both structured and surface. The GRB Convention Center will need more as it expands, and a new hotel will also create more demand. This will have to be structured parking, located and designed for minimal negative impact on the urban fabric. The study identifies a location for a future shared parking garage that can serve the Convention District. As the public realm improves and activity increases in EaDo, the current ad-hoc parking can be converted to revenue-producing metered parking. At present, EaDo does not have a parking problem; however, as land use intensity and density increase, structured parking will be needed in EaDo as well. EaDo should proactively evaluate and manage parking resources to optimize the use of shared parking strategies and minimize the impact of large garages on the urban fabric. As the connections between downtown and EaDo are improved with the implementation of various projects, the two Districts can function more as a single urban neighborhood. As a Livable Center more people will move around without having to use their car for every trip and parking can be shared over a broader area.

Conclusion

There is a tremendous opportunity in downtown and EaDo to create a Livable Center that will support existing venues and draw new residents, businesses, and visitors. The key to realizing that opportunity is a coordinated set of policies and projects that will encourage development, improve the public realm, and reconnect the area. This vision will not happen without the participation of multiple government agencies, investment by landowners and developers, and the active participation of stakeholders.

Priority Recommendations

The following list represents the priority recommendations as advanced by the consulting team, the client, and the co-sponsors to the Stakeholder Advisory Committee (SAC) on July 29, 2011, and at the Public Meeting on August 9, 2011.

Land Use Recommendations

- LU1 Target City Policy to increase residential development in and near downtown
- LU2 Identify potential land for hotels near the GRB Convention Center
- LU3 Require active ground floors on designated streets in the Study Area
- LU3.1 Require active ground floors on Capitol, Rusk, Crawford and Avenida de las Americas in downtown
- LU3.2 Require active ground floors on Polk and Dallas in downtown
- LU3.3 Require active ground floors on St Emanuel, Polk, Capitol and Rusk in EaDo
- LU5 Improve Social Services
- LU7 Designate public space for Dynamo events
- LU8 Upgrade utilities in EaDo

Pedestrian Recommendations

- P2 Improve pedestrian crossings at Chartres and under US-59 at Texas, Capitol and Rusk
- P3 Improve pedestrian crossing at Chartres and under US-59 at Polk
- P9 Rebuild St Emanuel from Commerce to Leeland
- P12 Create Bastrop Promenade
- P13 Create a north-south linear park to connect light rail transit to the Bastrop Promenade

Bicycle Recommendations

- B2 Enhance designated bike network
- B3 Implement separated on-street bike path pilot project
- B5 Connect Union Station Hike & Bike Trail to Buffalo Bayou

Transit Recommendations

- T1 Create circulator service from downtown to EaDo
- T2 Reroute local bus service onto Polk and market overlapping routes as high frequency services

Vehicular Traffic Recommendations

- V3 Rebuild Dowling and convert Congress to 2-way configuration from La Branch to Dowling

Existing Conditions

Building Use

The diverse mix of land uses in the Study Area is the result of three overlapping influences.

The first is a gradient between two extremes: the high rise office towers of the downtown core and the single family neighborhoods in the East Downtown (EaDo). This represents a dramatic variation in property values, from over $100 per square foot in downtown to under $30 in EaDo. This is most evident in residential uses: the west end of the Study Area includes high-rise residential at One Park Place; the center of the Study Area has mid-rise residential such as Lofts at the Ballpark, and the East End is dominated by townhouses.

The second is a historical transition. Before the 1950s, the area was dominated by railroads and associated industrial uses. Railroad freight terminals extended nearly to Main Street in what is now the Harris County District and nearly every street in EaDo contained railroad tracks serving warehouses and factories. Union Station offered 30 passenger trains a day to destinations like Chicago and Los Angeles; its associated yards and engine facilities occupied several city blocks. As the industrial economy shifted from small factories loading a few boxcars a week to large plants loading dozens of trucks a day and railroads to specialized in long-distance freight, the original industrial uses closed down or moved to more expansive locations. Some of the old warehouses and factories were vacated; others were taken over by restaurant wholesalers, bars, or artists.

The third is a dramatic concentration of venues for sports and special events. Of Houston's five major professional sports team, four (the Astros, Rockets, Aeros, and Dynamo) play or will play in the area. The GRB Convention Center is equally important as a visitor draw with both local and national events; it supports much of the downtown hotel market and adds to restaurant demand. Discovery Green draws visitors from all over Houston and provides outdoor space for downtown office workers, residents, and convention-goers. These major venues physically dominate the Study Area, with each facility covering several city blocks. These venues bring millions of spectators and visitors into the area and have defined it in the minds of Houstonians. However, without sufficient residential development, associated development has been limited to a handful of bars and hotels, and much of the land around these venues remains vacant.

These three major influences, countless individual projects, and traces of earlier land uses (such as the two old houses that remain from Quality Hill, once Houston's most upscale residential neighborhood) have lead to an uneven, disconnected urban fabric. Land uses shift from block to block, while vacant buildings and vacant lots create gaps between areas of activity. It is rare to find a critical mass of any single activity. This heterogeneity is one of the area's biggest challenges; it's also an opportunity. This is already a mixed-use area, with complementary uses that can bring activity at almost any time of day or year.

In this view of EaDo and the East End, industrial activity and active rail lines contrast with new townhouses and single family neighborhoods.

Map Existing Building Use

Public Realm Activity: Seasonal

One of the biggest strengths of the Study Area is programmed events that draw visitors year round.

The overlapping seasons of baseball, basketball, hockey, and soccer ensure that no month goes by without games. The GRB Convention Center hosts events throughout the year, including national and statewide conventions that attract out-of-town visitors as well as local expositions that attract people from across the region. Programming at Discovery Green also attracts crowds all year, but especially in the cooler months. Some of the park visitors are in the Study Area already – residents, office workers, convention-goers – while others come from across Houston just for the park. Together, these venues make the largest contribution to the year-around activity and volume of users within the Study Area. The activities allow community members and convention visitors opportunities for active and passive engagement in areas of the arts, entertainment, healthy living and sporting events.

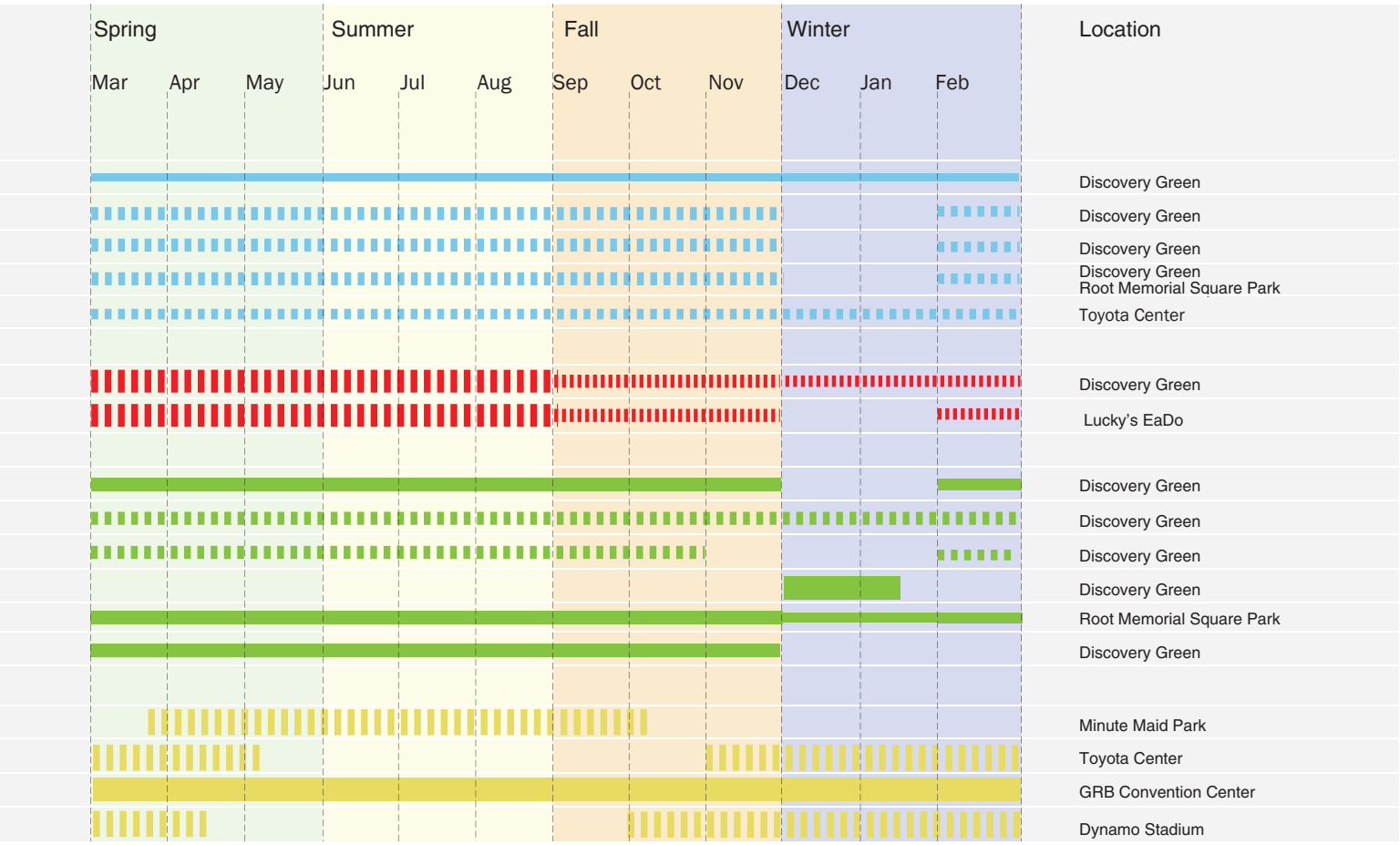
SOURCE
http://www.discoverygreen.com
http://www.nba.com/rockets/schedule
http://houston.astros.mlb.com/schedule
http://www.aeros.com/schedule

Event
Arts and Culture
Art Installations
Concerts in the Park
Outdoor Movies
Festivals
Concerts
Entertainment
Outdoor Dining/ Cafes
Outdoor Entertainment
Health and Environment
Fitness in the Park (Yoga, Zumba, Salsa...)
Recycling Saturdays
Market
Ice Skating
Recreational Basketball
Recreational Play (Horse shoes, croquette..)
Sport Events and Conventions
Baseball Games
Basketball Games
Conventions
Soccer Games (Opening April 2012)

Spring

Summer

Left Informal trail at Discovery Green | **Right** Interactive water feature at Discovery Green



Fall

Winter

Left Soccer game | **Right** Ice skating at Discovery Green

Public Realm Activity:
Daily

Activities in the Study Area draw visitors through the day as well as throughout the year. However, much of this activity is concentrated in particular areas, leaving other areas inactive for much of the day.

Morning is filled with rush hour traffic as people flood into the GRB Convention Center and office buildings in downtown.

Sporting events held in Minute Maid Park, the Toyota Center and soon the Dynamo Stadium (currently under construction) activate zones of the Study Area before and after the games, but remain vacant for a majority of the day. Restaurant venues are sporadic around the large complexes and Discovery Green.

Evening and night-time activity has migrated across US-59 where local sport bars and music venues have started to establish themselves in EaDo.

Lunch Activity

Morning / Afternoon Activity

ARTS AND CULTURE
ENTERTAINMENT
HEALTH AND ENVIRONMENT
SPORT EVENTS AND CONVENTIONS
DINING

NOT TO SCALE N

Evening Activity

Night Activity

Top Runners at Memorial Park | **Middle** Insperity Golf Experience at Discovery Green | **Bottom** The Toyota Center plaza during game day

Parcel Land Ownership

Land ownership across the Study Area has been one of the biggest obstacles to development. Ownership is fractured with many blocks in the hands of four or more owners. Much of the land is in the hands of speculative owners who may hold land for a decade or more before developing.

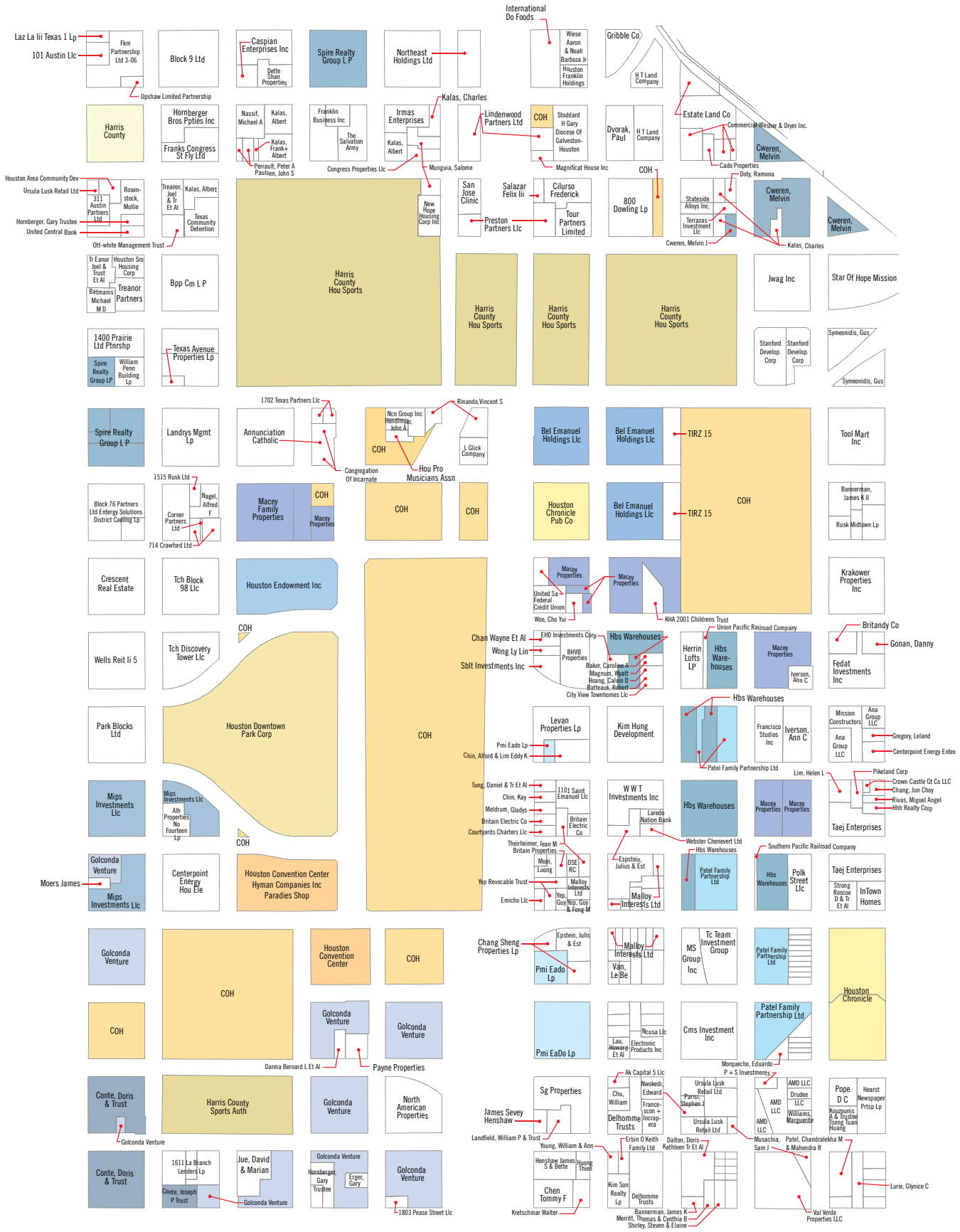
The single largest owners in the area are public: the Harris County-Houston Sport Authority, the City of Houston, city-affiliated corporations, Harris County and TXDot. This land is largely developed, but it includes vacant blocks north and south of the GRB Convention Center which are intended for Convention Center-related expansion. It also includes a six-block area that is occupied by Minute Maid Park parking lots which could be developed if structured parking is provided and the site is remediated. The city also has control of several areas of public right of way that do not have active streets, including Schrimp Street and Hutchins Street.

Institutions owning land in the area include Star of Hope, Annunciation Catholic Church, Incarnate Word Academy, the Salvation Army, and New Hope Housing. Like the public properties, these properties are generally developed.

The key to private development is property assembly. This has always been true in downtown; it is difficult to develop anything less than three quarters of a block with on-site structured parking. In the past, townhouse and strip retail development in EaDo has been possible on lots as small as a quarter block. However, as land values rise, denser, larger-scale development is required for developers to make an economic return, requiring larger parcels. Lofts at the Ballpark, for example, used a three-block area.

Significant private property assemblies include the following:

- Houston Endowment owns a large block on the north side of Discovery Green.
- HBS Warehouses owns multiple partial blocks around the proposed EaDo Promenade.
- The Hearst Corporation (and its subsidiary the Houston Chronicle Publishing Co.) owns a complete block between Capitol and Rusk east of US-59.
- PMI is assembling property in EaDo around Polk Street.
- Golconda Venture owns several blocks south of the GRB Convention Center.
- The Doris and Joseph Conte trusts have assembled property at the southwest corner of the Study Area.
- Macey Properties both in Downtown and EaDo.
- Patel Family Partnership Ltd.



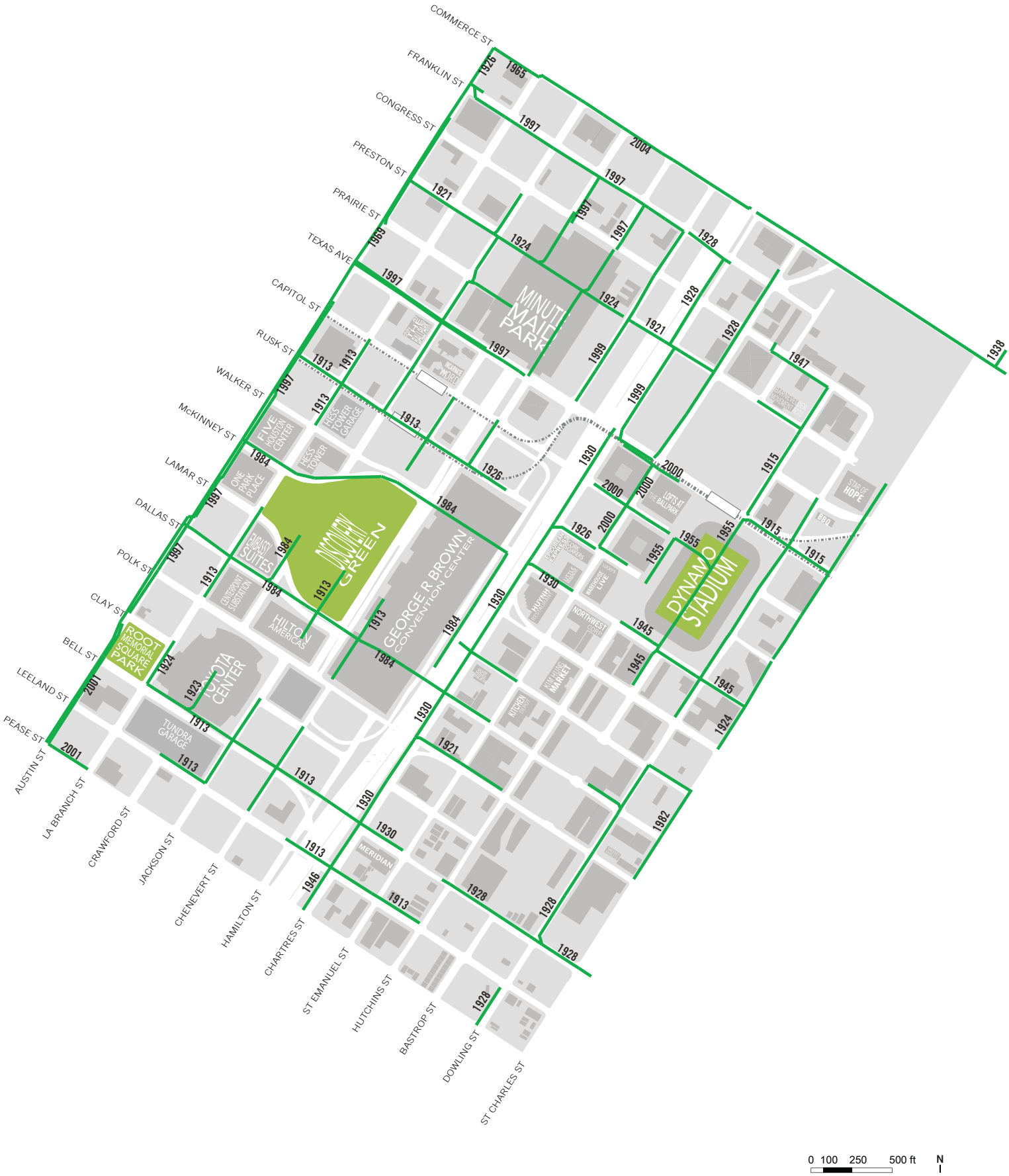
Map Land Ownership
(Land ownership not shown for less than 1/16th of a block)

Infrastructure: Storm Sewer

Much of the existing Study Area suffers from an infrastructure deficit: storm sewer lines are simply inadequate for the current needs and new development. In particular, the utilities in EaDo, built for low-density industrial development are inadequate.

Most of the Downtown | EaDo Study Area storm sewer system does not comply with current City of Houston criteria, which dictates that systems should convey the 2-year event with the hydraulic grade elevation below the gutter of the roadway. In some areas the storm sewer systems are close to 100 years old; in others they have been upgraded as part of street reconstruction projects. Various segments were designed and constructed in 1913, the 1920's, 1930, 1945, 1984, 1995 and the early 2000's.

A comprehensive infrastructure assessment was not performed as part of the Livable Centers Study. Information about the existing storm sewer infrastructure as presented in this report was obtained from City of Houston storm sewer construction plans, City of Houston GIMS site, City of Houston SWMP site, and City of Houston comprehensive Drainage Plan.



Map Existing Storm Sewer

Infrastructure: Sanitary Sewer

As is the case with the storm sewer lines, sanitary sewer lines are simply inadequate for the current needs and new development. In particular, the utilities in EaDo, built for low-density industrial development are inadequate.

The existing sanitary sewers vary dramatically in age and quality. Some of the Study Area sanitary sewer systems were designed and constructed around 1922, 1946, 1948, 1969, 1984, 1989, 1992 and as recent as 2002. Any construction over these sanitary sewers will need to be televised and inspected to ensure the integrity of the sewers.

A comprehensive infrastructure assessment was not performed as part of the Livable Centers Study. Information about the existing sanitary sewer infrastructure as presented in this report was obtained from City of Houston sanitary sewer construction plans, City of Houston GIMS site, City of Houston SWMP site, and City of Houston comprehensive Drainage Plan.

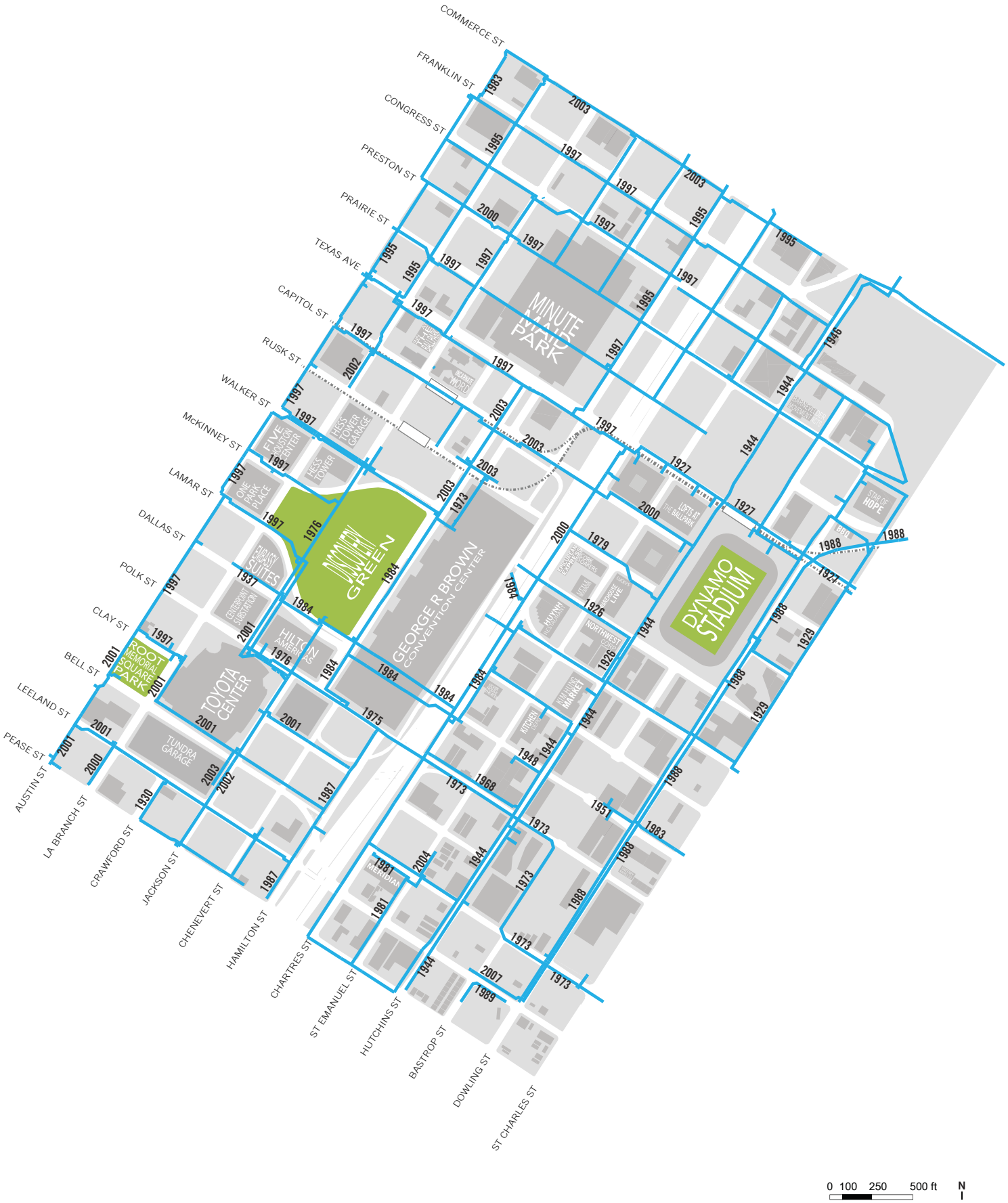
Map Existing Sanitary Sewer

Infrastructure: Water Supply

As is the case with the storm and sanitary sewer lines, water supply lines are simply inadequate for the current needs and new development. In particular, the utilities in EaDo, built for low-density industrial development are inadequate to support future development.

Existing water lines were designed and constructed around 1927, 1944, 1973, 1975, 1984, 1988, 1997, and as recently as 2003. Some blocks in EaDo are not served by any water lines, and denser development would require those lines that do exist to be upgraded.

A comprehensive infrastructure assessment was not performed as part of the Livable Centers Study. Information about the existing water supply infrastructure as presented in this report was obtained from City of Houston storm sewer construction plans, City of Houston GIMS site, City of Houston SWMP site, and City of Houston comprehensive Drainage Plan.



Map Existing Water Supply Lines

Locations and Use of Social Services

The northern end of the Study Area has a high concentration of social services, most of which serve regional needs. Their purposes and impacts vary dramatically.

Services provided include long-term housing, short-term housing, feeding, counseling, and training. The feeding services in particular have a high impact on the Study Area, drawing large numbers of homeless who congregate on sidewalks and vacant lots. This situation is ideal neither for the homeless, who spend their days in uncomfortable surroundings, nor for residents and visitors, who find the presence of the homeless intimidating. This situation is exacerbated by efforts in other areas (the Downtown core and Midtown) to discourage panhandling and by the lack of other activity in the northern zone of the Study Area. The long-term housing facilities, by contrast, go nearly unnoticed.

Social services located in the Study Area include:

- Diocesan Center (located beyond the northwestern corner of the Study Area), which includes The Dunn Outreach Center, that provides food, showers and laundry service for the homeless;
- Harris County Welfare Fraud;
- Magnificat House, serving lunch six days a week at the Loaves and Fishes soup kitchen. Because Magnificat House lacks sufficient interior space to hold all of their lunch patrons and because there is insufficient outdoor seating, there is overflow into neighboring properties;
- New Hope Housing, a single room occupancy apartment complex;
- Salvation Army, two locations, including the Houston headquarters and a transitional residential facility for women;
- Star of Hope, two locations, including one just beyond the Study Area;
- U.S. Veterans Service Center;
- Urban League (located just beyond the Study Area), providing counseling and training.

Map Existing Social Services

Market Conditions

With its proximity to downtown, the Study Area has a strong market demand for residential units. In addition, the GRB Convention Center drives demand for hotel uses. Current demand for retail is weak, but could be stimulated with more residential and hotel development. Office development is more likely to happen to the west, in proximity to the tunnel system and Main Street. The biggest limitation on residential development, though, is not demand but land values; the disparity between current rents and land values make it difficult for development to "pencil out."

Demographics

A Market Area was identified that would define the support and competition for the selected land uses. This Market Area was defined as zip codes 77002, 77003, and 77010, which cover downtown and East Downtown, plus portions of adjacent areas. Population and household estimates show that there has been considerable residential growth since 2000, with the Market Area adding over 5,000 residents and nearly 3,000 households. The Market Area is becoming more ethnically diverse, with the Hispanic population decreasing and other ethnicities increasing. The residents have a wide range of household incomes, with an estimated 1,754 households having earned over $50,000 in 2009.

Population and Household - Census Counts

	3 ZIPs * 2010	3 ZIPs * 2000	Change ** 2000-2010	Study Area 2010
Total population ***	27,777	22,560	**5,217**	2,421
% Anglo	30.5%	23.3%	61.5%	47.3%
% Black	33.4%	32.2%	**27.6%**	32.4%
% Hispanic	32.6%	42.5%	-5.6%	16.1%
% Asian / other	3.5%	2.0%	116.4%	4.3%
Total 18+	25,019	18,838	6,181	2,271
Total under 18	2,758	3,722	(964)	150
Households	7,294	4,348	2,946	992
Total housing units	5,570	5,360	**210**	1,235
Vacant housing units	1,724	1,012	712	243

* 77002, 77003, 77010
** For ethnicity change in absolute number, not share
*** Includes Group Quarters population (jails, SROs)

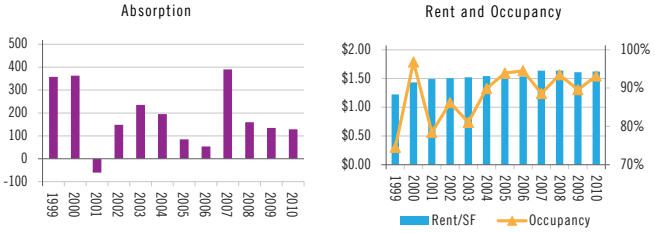
Residential

As would be deduced from the population and household growth data, the last 10 to 15 years have brought substantial new housing development to the three-zip Market Area. There are now nearly 4,700 multifamily units (rental and for sale) in the Market Area. New single family townhome development has also occurred, especially in EaDo and the Second Ward (just north of EaDo), with over 900 units in the Market Area. Another 121 townhomes are currently planned.

Apartments

Despite the recession, the apartment market is quite strong in the Market Area. Absorption has been positive since 2001, the year of the Enron collapse. Occupancies for the approximately 3,400 units in Class A apartment properties, which comprise essentially all new non-subsidized development, exceed 90%. Average rents per square foot exceed $1.50, which is near the top of the Houston market, exceeded only by the most luxurious properties. One such luxury property is One Park Place, on the western edge of the Study Area facing Discovery Green and the first new apartment high-rise tower built in the Market Area in over 40 years. Though its rents are very high at $2.42 per square foot, it has leased 87% of its units since opening in 2009. The Study Area contains a total of 814 units in four multifamily rental properties, all developed since 2000. Apart from One Park Place, the average rents per square foot in the Study Area are lower than the Market Area overall, ranging from $1.00 to $1.34.

Market Area Apartment Trends



For Sale Homes

Both townhomes and condominiums have been developed within the Market Area. The Study Area contains two new condominium projects, the Herrin Lofts and the Stanford Lofts. Prices within these projects vary from $130,000 to $495,000. Regarding townhomes, only 52 of the 928 Market Area units are located within the Study Area; most townhome development has occurred to the north or east / southeast. Two townhome projects are planned in the Study Area, totaling 22 units. Current sale prices for townhomes in the Study Area range from $180,000 to $350,000, with dominant pricing in the mid-$200s.

Outlook

Given H-GAC forecasts for regional residential growth allocated to Downtown and EaDo as compared to an analysis of actual housing growth since 2000, a projection of 350 additional units per year within the Study Area could be reasonably supported, provided that they can be feasibly developed at rental or sale prices that are acceptable to a wide share of the total market. Pricing, therefore, becomes the major constraint on residential development. Feasible pricing is affected by both land and construction costs.

- High-rise apartment development, dictated by the high land costs in parts of the Study Area such as near Discovery Green, is feasible as illustrated by the success of One Park Place. However, the segment of the market willing to pay such high rents is limited, so new development of this type will occur slowly and sporadically.
- Low-rise (wood frame / concrete podium of six or fewer stories) is expected to be the major residential development type in eastern and southern portions of the Study Area. However, Study Area rents have not risen high enough to make these projects feasible at current land asking prices. Continued public realm improvements and retail / entertainment development is needed to achieve the required rents.
- Substantial townhome development will likely continue from the southeastern edge of the Study Area toward the eastern edge of the EaDo Management District.
- Condominiums are not expected to constitute a significant portion of residential development in the Study Area, though high-rise condominium projects may become feasible on the western edge of the Study Area after further establishment of a luxury rental market there.

Right One Park Place | **Bottom** Lofts at the Ballpark

Non-Residential Uses

Office, hotel, and retail uses are also found in the Study Area and can be expected to play a role in its future growth.

Office

Class A office buildings in the Market Area have retained strong occupancy through the recession, although rents have softened.

The Study Area contains two Class A buildings on its western edge, 5 Houston Center and Hess Tower, both extensions of the Central Business District office core. Apart from these two buildings, the Study Area contains very little office space of any type; the largest building is 26,000 square feet. Because the new Hines office tower, BG Group Place, is still leasing up, and large blocks of space are possibly going to be available in other Class A buildings in the CBD, it is not anticipated that new office tower construction will occur soon in the Study Area. The focus for new office construction may shift back to the Main Street corridor when activity resumes. Any office development in the Study Area will likely be smaller buildings, possibly single-user or second / third story of mixed-use buildings, that rely on collateral demand from larger employers and institutions in the urban core. However, office development is not expected to be a major driver of Study Area land use.

Hotel

Because of the combined presence of the GRB Convention Center and the nearby CBD, hotel uses have a significant impact in the Study Area. Hotel properties include the Hilton Americas, the city's largest hotel, plus three others. The Embassy Suites opened in February, 2011.

Hotel performance in the three-zip Market Area is well below its 2007-08 peak, though a rebound began in 2010. Occupancy levels and average daily rates are still too low to justify near-term additions to supply for standard types of properties. However, hotel and meeting professionals are of the opinion that the construction of another convention hotel of 1,000 to 1,200 rooms would allow a major increase in convention demand currently constrained by available room blocks within downtown. Thus, there are at least two proposals for new convention hotels, one on sites controlled by Dan Nip in EaDo immediately across US-59 from the GRB Convention Center, and the other on one of two large blocks between the north end of Discovery Green and Minute Maid Park.

If at least one of these hotels is built and convention demand increased as theorized, additional hotel development may be feasible. This could take the form of moderately-size limited service properties in EaDo. First-class, full-service hotel development in the near to middle term would be expected to take place adjacent to the GRB Convention Center and the CBD office core. A thriving mixed-use district in EaDo may generate a boutique hotel in the long term.

Retail

Retail uses are having limited success in the Study Area. This is partly due to the presence of large amounts of retail space at the recently built Houston Pavilions just west of the Study Area, plus the interior mall at the Shops at Houston Center (on the Study Area's western edge) and other vacant retail space within the CBD. Little retail space exists in the downtown portion of the Study Area, but in EaDo there is over 200,000 square feet of multi-tenant space and another 179,000 square feet of single tenant space. Except for Vic & Anthony's Restaurant, all Study Area retail space was built before 1990.

Although the growth that has occurred is bringing more affluent households into the area, at present, the residential population in and around the Study Area is insufficient to support neighborhood level or comparison good retail by itself. Housing growth will have to continue for some time in the future to eventually altar these types of establishments. However, some destination-quality dining and entertainment establishments are present, particularly in EaDo, and they draw from a much larger market area. The upcoming Phoenicia Market at One Park Place will have a similar draw. While in competition with areas such as Washington Avenue, Midtown, and Montrose, further growth can be expected for these uses in EaDo. The construction of a second convention center hotel by Dan Nip may spur more of this growth to the south of the current core on St Emanuel, as would streetscape and parking improvements in the corridor. Larger scaled, chain retail will gravitate toward the existing Dallas Street corridor, mostly to the west of the Study Area.

Land Values

West of US-59, land values are considered to be generally at least $100 per square foot, and much higher in locations adjacent to the CBD office core. There have been few closed sales; thus determining the "true" value of land is difficult. However, the planned construction of the Dynamo Stadium has altered the landscape in terms of perceived property values east of US-59. In locations near the future stadium asking prices are $60 and above. Further south in EaDo, along St Emanuel, prices are perceived to be in the $50 to $60 range, although there are some asking prices above that level. Along Dowling and further east in EaDo, values drop to less than $40 per square foot.

The current land value market has a significant impact on the feasibility of different land uses and building types. West of US-59, the relatively high values require dense, mostly high-rise construction for all but commercial owner / users (example: Portfolio Associates construction of their own office on Pease). In EaDo, low-rise construction for multifamily and small office, with incidental retail, is possible on land priced under $65 per square foot, provided that obtainable rents are high enough. Values are too high in the Study Area, except perhaps at its far southeastern edge, to allow feasible for-sale townhome development at the sale prices obtainable today.

General Conclusions

- The main private sector land use drivers in the Study Area are anticipated to be multifamily rental and hotel. High-end, high-rise uses will continue to locate along the western edge of the Study Area, especially near Discovery Green and the Dallas Street corridor.
- The area north of Discovery Green, south of Minute Maid Park, has potential for housing on sites facing Discovery Green and hotels near the GRB Convention Center, but feasibility is hampered by relative remoteness from the office and retail core area. Development assistance from not-for-profit institutions or the public sector is likely necessary for projects to proceed in the near term.
- The Dynamo Stadium light rail station will have a limited impact on real estate development in EaDo overall unless improved street or shared-use path connections can be made on the west side of the stadium to access locations to the south. The area to the north of the stadium is negatively impacted by the social services present in the area, which deter development in the near term.
- Larger development sites and land values make the southeastern portion of the Study Area the most viable for multifamily residential development. However, significant public improvements such as the Bastrop Promenade and continued development of the St Emanuel dining / entertainment corridor are needed so that potential tenants would be willing to pay the higher rent levels needed to make such projects feasible.

Map Land for sale in and around the Study Area (prices shown in $ per SF)

Branding, Wayfinding and Identity

Existing branding and wayfinding is uneven across the Study Area. In downtown, a 10-year program of signage and street improvements has created unified street furniture and signage keyed around branded districts. In EaDo, no such effort has taken place; street furniture is nonexistent or localized and signage is limited to city standard traffic signs.

The downtown streetscape has a vocabulary of lights, signage and street furnishings. The signage incorporates clear graphics that illustrate directions to the District's main attractions. Key pedestrian maps are located along major streets and near destinations like sports venues and parks. The design of street lights and furniture varies between districts to reinforce district identity. In addition, parts of the Historic and Ballpark Districts are designed to be more pedestrian oriented with lower street lights, brick paving, and bulb-outs at key cross walks.

The Study Area includes portions of three downtown Districts (Ballpark, Convention, and Skyline) and is adjacent to four others (Historic, Retail, Harris County and Medical). In addition, Texas Avenue is branded across downtown with distinctive light fixtures and historic markers, relating to the architecture and scale of the area.

In some cases, private development has strengthened the public wayfinding and branding. The Lofts at the Ballpark, for example, have effectively extended the Ballpark District across US-59. In other cases, private signage – like that for parking lots – tends to diffuse the impact of the districts.

The east side of the Study Area outside the Downtown Management District is devoid of an overall wayfinding system and identity.

Downtown District Signage and Wayfinding

Top Private parking signage | **Middle** Ballpark District Furnishing | **Bottom** Historic District Identity

Pedestrian Access, Comfort and Safety: Street Trees and Shade

Street trees are key to strengthening connections and reinforcing wayfinding. Street trees also provide shade within the urban streetscape. With the hot and humid Houston climate, having shaded walks, seating areas, bus stops, train stops and street parking areas are key to creating a livable center.

However, street tree coverage through the Study Area is uneven. Generally, the Study Area can be divided into three categories.

Good: (Green) has few gaps in street tree planting and street trees provide a strong corridor along sidewalks and streets. In general, good conditions are associated with the Downtown District parks, the downtown core, and street improvements around Minute Maid Park and the Toyota Center.

Fair: (Yellow) has an overall framework of street trees that is sometimes interrupted with multiple driveways and other large gaps in street tree planting. This includes many of the fringes of the more developed areas of Downtown.

Poor: (Red) is under-developed and lacks street tree plantings. A few areas of new construction have incorporated street trees but the areas lack connection to the larger network of street tree plantings. This includes most of EaDo.

Existing Quercus Virginiana along Root Memorial Square Park

Map Existing Street Trees I Shading diagram

Pedestrian Access, Comfort and Safety: Sidewalks

The Study Area includes some of the best sidewalks in Houston, along with some of the worst. Where public improvement projects have taken place, sidewalks can be high quality and consistent for blocks at a time; elsewhere, they can vary dramatically from block to block, creating an inconsistent and disconnected network that discourages pedestrian activity.

The sidewalk diagram outlines three distinct categories for assessing sidewalk conditions.

Good: Sidewalks that meet ADA requirements and provide a flexible system facilitating movement and connectivity.

Fair: Sidewalks that meet ADA requirements but fall short of “good”, as they are one of the following; too narrow, not well-drained, not maintained, and / or disconnected from the greater district pedestrian circulation network.

Poor: This category includes sidewalks that do not meet ADA requirements, do not exist, or are isolated from the greater district pedestrian grid.

Top Example of good sidewalk condition | **Middle** Example of fair sidewalk condition (too narrow) | **Bottom** Example of poor sidewalk condition (not ADA compliant)

Map Existing Sidewalk Conditions

Pedestrian Access, Comfort and Safety:
Lighting

Generally, the presence of lighting is very consistent on the downtown side of the Study Area and inconsistent or nonexistent on the EaDo side.

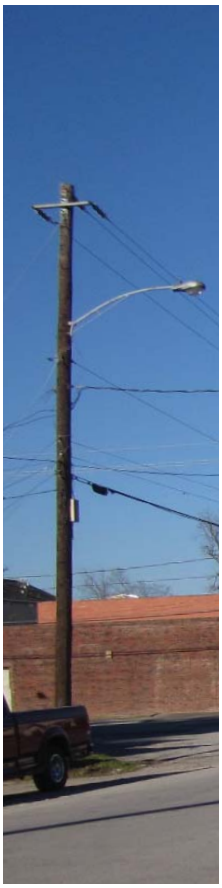
An existing downtown lighting framework is comprised of three specific pole lights including the downtown standard cut-off, the Historic District, and Ballpark District pole lights.

1. The Downtown District standard pole light is a contemporary cut-off fixture that incorporates banners and can be modified to be integral with traffic signals at intersections.
2. The Historic District light is a more traditional acorn light fixture and is located in the Historic District of downtown Houston.
3. The Ballpark District pole light can also become integral to the traffic lights and supports a sign and banner system. This light continues to the east side past US-59, connecting the Lofts at Ball Park. The proposed Dynamo Stadium will include event lighting and the standard downtown pole light.

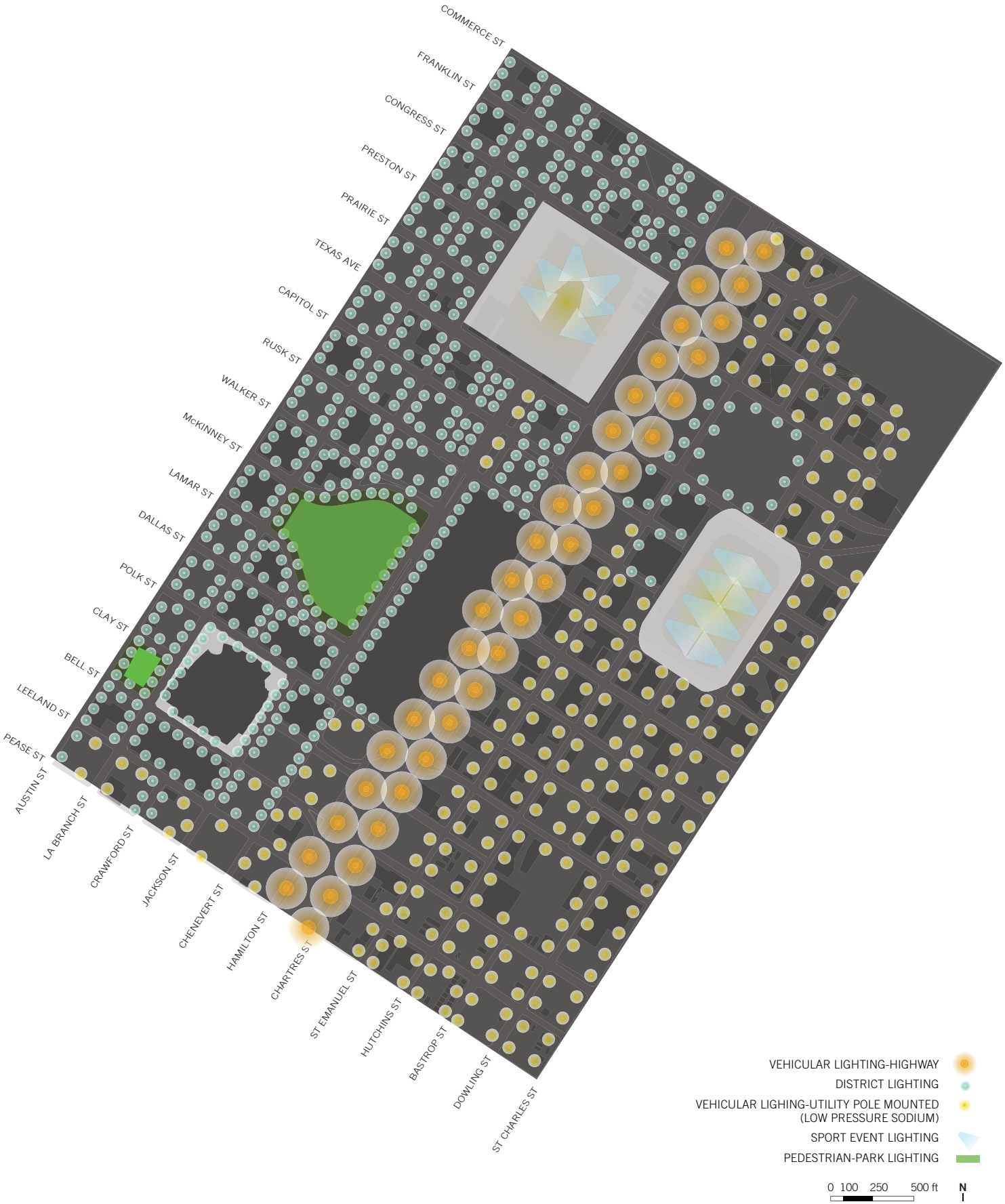
Although the overall appearance of the pole lights relates to the pedestrian scale, the height and scale of the fixtures is more vehicular in character and does not necessarily establish a pedestrian-friendly environment.

The existing distribution of lighting on the east side of US-59 is less developed, haphazardly placed utility pole-mounted cobra head lighting. The low pressure sodium results in the poor rendering of objects and individuals, and the widely spaced lights result in non-lighted areas.

A variety of pedestrian and accent lighting are currently associated with the walks, paths and pedestrian promenades of Discovery Green and Root Memorial Square Park. The lighting is specific to the use and character of the parks.



From Left to Right **1** Vehicular Street Lighting: Standard Downtown, **2** Vehicular Street Lighting: Historic District, **3** Vehicular Street Lighting: Ball Park District, **4** Vehicular Street Lighting: Utility Pole Mounted, **5** Pedestrian Lighting: Discovery Green, **6** Pedestrian Lighting: Discovery Green



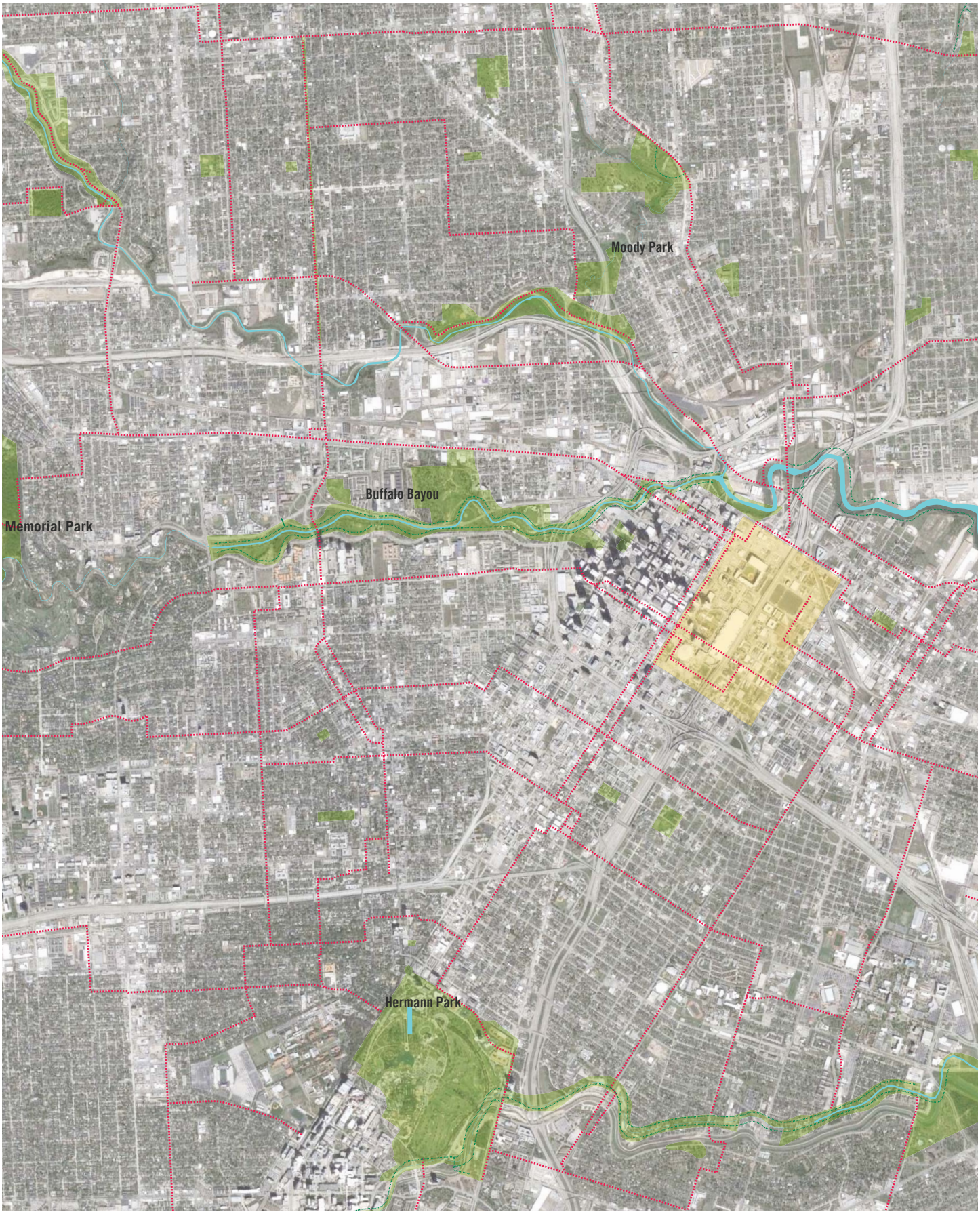
Map Existing Lighting

Open Space: Use, Functionality and Access
City Wide

The City of Houston owns over 50,000 acres of park land within the city limits including two of the most visited city parks in the United States, Memorial Park and Hermann Park, according to The Trust for Public Land 2010 study. Discovery Green, located within the Study Area, has been nationally recognized as a model for an actively used urban park. In addition, a network of greenways and bike lanes connect to many of these parks.

However, many of the city's residents, including some in the Study Area, are not within walking distance of a park, either because there are no parks in their neighborhood or because no paths exist to link them to nearby parks.

Top Sprayground at Hidalgo Park | **Bottom** Memorial Park "Living" Bridge / Trail



Map Trail System

Open Space: Use, Functionality and Access
Walking Distance

In general, the downtown area has a large number of parks. All provide places for active recreation and some are highly programmed. However, the parks located in the Study Area are not evenly distributed and some are not programmed to meet the specific demands of the area. EaDo is devoid of dedicated park space and would benefit from pulling open space program elements into this area as a catalyst and structure for future development. In addition, EaDo is not well-connected to the existing parks around it, including Discovery Green, the greenbelt along Buffalo Bayou, and neighborhood parks in the East End and Third Ward.

Open Spaces within the Downtown Management District
1. Discovery Green
2. Root Memorial Square

Adjacent Parks and Open Spaces / Program
3. Eleanor Tinsley Park
   - Paths
   - Rolling lawn
   - Picnic area
   - Boat launches
4. Sam Houston Park
   - Small pond, fountain
   - Wetland garden
   - Gazebo
   - Trails / walkways
   - Garden
   - Sculpture
   - Park Amenities
   - Historic Structures
5. Tranquillity Park
   - Grassy embankments (lawn)
   - Pools
   - Fountains
   - Walkways

Left The 2010 Regatta at Allen's Landing | **Right** Improvements to Market Square 2011

6. Sesquicentennial Park
   - Fountain
   - Promenade (walkway)
   - Lawn (sloping) –The Common
   - Garden (native planting)
   - Sculpture
   - Boat launches
   - Park Amenities

7. Market Square
   - Fountains
   - Lawn (central lawn)
   - Restaurant Kiosk (Niko Niko's)
   - Trellis
   - Plaza
   - Dog run
   - Garden
   - Park Amenities
   - Sculpture, Public Art and Art installations

8. Allen's Landing
   - Wharf (canoe and kayak)
   - Terrace and Promenade
   - Trails / Walkways
   - Lawn
   - Picnic area
   - Public art

9. Guadalupe Plaza Park
   - Plaza (for performing arts)
   - Trellis and Stage
   - Park Amenities
   - Pathways
   - Lawn

10. Settegast Park
   - Water playground
   - Tennis courts, baseball field

11. Emancipation Park
   - Playground
   - Tennis courts, baseball field
   - Paths
   - Lawn
   - Pool

12. Baldwin Park
   - Pavilion
   - Paths
   - Park Amenities
   - Playground
   - Lawn

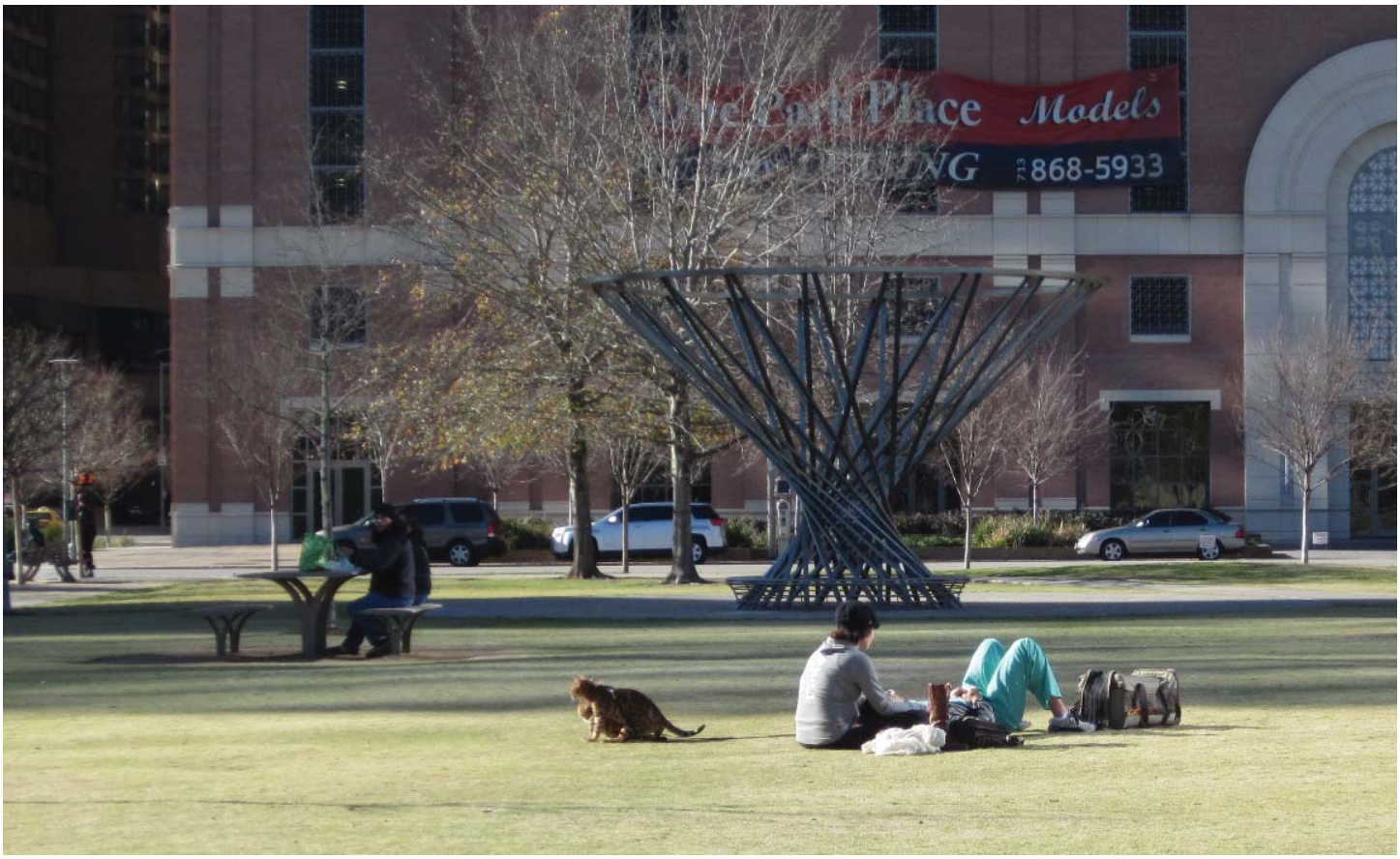
13. Tony Marron Park
   - Trail
   - Pavilion
   - Paths
   - Park Amenities
   - Playground
   - Soccer Field

Map Proximity of Existing Parks

Open Space: Use, Functionality and Access
Public Parks

Discovery Green
- Walks / Trails / Promenade
- Pond
- Fountains
- Playground
- Art and sculpture
- Amphitheater
- Dining / Restaurant (The Grove)
- Cafe (Lake House)
- Interactive water features
- Dog runs
- Great lawn
- Recreation play equipment

Root Memorial Square
- Walks
- Basketball courts
- Art and Sculpture
- Amphitheater
- Fountain
- Lawn



Top Root Memorial Square Park | **Bottom** Discovery Green

Map Existing Public Parks

Open Space: Use, Functionality and Access
Plazas

Paved plazas account for much of the publicly accessible open space within the Study Area. These serve as an entry or threshold to offices, large hotels, and sporting venues. The plazas include pedestrian scale elements that reinforce the building's identity or corporate image. Elements that support the process of access and egress into the buildings include paving, lighting, planting and furnishings.

Plazas can be programmed to add activity to the area. For example, the Promenade within Discovery Green acts as a public plaza for vendors, markets and informal gatherings. However, most of the plazas in the area are unprogrammed and function mainly as circulation spaces.

Toyota Center Plaza

Map Existing Plazas

Barriers

The most noticeable barrier within the Study Area is its bifurcation by US-59. The physical and psychological barrier results in a dramatic shift in the overall setting of the urban landscape.

Major venues also act as barriers by disrupting the street grid. Of the 17 east-west streets within the Study Area, 9 are blocked by Minute Maid Park, the Dynamo Stadium, the GRB Convention Center, or Toyota Center. Similarly, of the 12 north-south streets, 6 are blocked.

Further to the east, railroad tracks cut off most streets between EaDo and the East End, leaving only a few connections. To the north, railroad tracks, freeways, and Buffalo Bayou similarly cut off the Fifth Ward, Near North Side, and Warehouse District.

In a less obvious way, the noticeable absence of sidewalks amenities and buildings on the east side and southwest side results in an unkind environment. The lack of these physical elements results in an area that appears isolated, inaccessible and neglected.

Top The absence of Streetscape amenities such as benches, sidewalks and lighting deter pedestrian use and new development
Left Rail lines on the North East of the site isolate the area to the North | **Right** US-59 creates a visual and physical separation from the Downtown District

Map Existing Barriers

Bike Connectivity and Conditions

The Study Area lies within a short bike ride of many neighborhoods and destinations. However, a lack of strategic connectivity and amenities tend to discourage cycling. On paper, the city's bike network connects the Study Area in all directions. In practice, some of these connections are effective because of low-traffic streets or marked bikes lanes, while others are simply designated routes that have no design measures to enable cycling. Off-street bike trails converge on the Study Area form the north, east, and south, but these trails do not connect to each other or to major destinations.

Top Cyclists Riding on sidewalk - La Branch Street | **Bottom** Typical Bike Route Signage

Map Existing Bike Routes

Transit Use

The state of transit within the Study Area is a “tale of two sides” of the US-59 corridor. On the downtown side, transit access into the core is facilitated via several routes heading east-west and north-south to promote movement within downtown. In addition, several routes are more circuitous in nature, serving destinations within the Study Area such as the GRB Convention Center and Discovery Green. Accessing the downtown core is at the heart of the METRO service model. With a downtown transit share in excess of 35%, that model is working very well.

The EaDo side of the Study Area is served by a total of four transit routes. The most prominent East-West connection, the Harrisburg #50 Route, is in the process of being converted from Bus Transit to Light Rail; the convergence of the Southeast and East End LRT Routes near the Dynamo Stadium will increase access to transit for much of the northeastern quadrant of the Study Area.

The southeastern quadrant is served by three existing bus routes, the #36, #40, and #80, with a combined frequency along Leeland of 7 minutes during peak service and 12 minutes off -peak. While this amounts to very good service levels, the travel distance required to access these routes for many transit patrons within the Study Area is prohibitive.

Map Existing Transit

Automobile Safety and Traffic Flow

Traffic flow across the Study Area is hampered by discontinuities that limit the ability for individuals to seamlessly access the core of the area and confuse those not familiar with the area. Generally, freeway access to or from downtown is well-marked and fairly direct. Freeway access to or from EaDo is less clear; connections to surrounding neighborhoods is indirect and sometimes confusing; and the ability to travel through the Study Area is often difficult. In general, motorists have to sort several decisions pertaining to direction of travel, destination, and desired route in order to navigate the area.

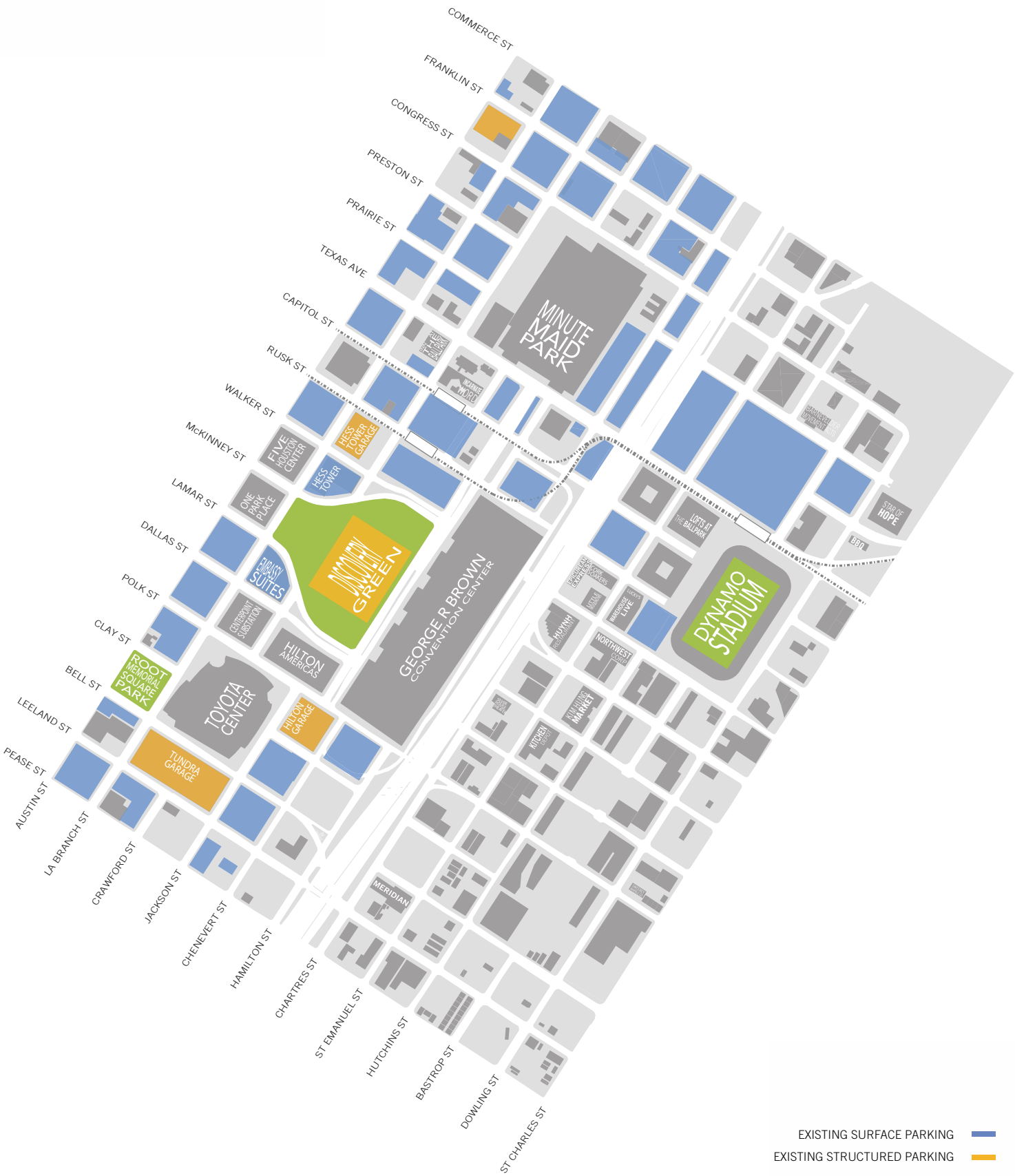
Once someone from the core of the area reaches the edges of the Study Area, freeway access becomes readily apparent on the west side of US-59 given the improvements that have been made to the vehicular wayfinding signage, while access to and egress from EaDo could benefit from improvements to wayfinding signage. Additionally, local east-west connections across the Study Area are limited to a few US-59 Freeway crossings – which include Leeland, Polk, Texas, and Congress – and are not always easy to navigate given the Downtown one-way couplet patterns. Drivers within this section of downtown and EaDo need to be keenly aware of their route, destination, and travel options in order to successfully navigate the Study Area, and while that does not prove difficult over time, it does lead to specific corridors being heavily utilized.

As population and employment within the Study Area grows, these heavily utilized corridors will become more congested than current volumes, leading to peak-hour congestion that may frustrate some, while causing others to reconsider their travel pattern and commuting options.

Map Existing Vehicular Traffic Flow

Parking

Parking is a major concern throughout the Study Area during major events at any of the venues, and this parking concern extends throughout the Study Area. As development and redevelopment of parcels occurs, the availability of surface parking lots will be reduced and the need to manage on-street parking and provide for centralized structured parking will continue to grow. Currently, on-street parking is managed haphazardly. Downtown parking is metered, but complex signage and rules make it difficult for users to know where to park. Furthermore, meter rates and times do not correspond well to demand. EaDo has some meters and many unmetered areas; their distribution is due to historical circumstances and not current needs.



Map Existing Parking

Existing Plans

The Study Area has been largely defined by high profile large-scale public projects which were built from the 1980s through the 2010s: the GRB Convention Center (1987, 2003), Minute Maid Park (2000), Toyota Center and Tundra Garage (2003), Hilton Americas and the associated garage (2003), and Discovery Green (2008.) Associated infrastructure improvements have upgraded sidewalks, lighting, wayfinding, and traffic lanes in Downtown. Two current large-scale construction projects are further reshaping the area, the Dynamo Stadium and Light Rail.

1. The new Houston Dynamo Stadium will be the third large sport venue in the Downtown / East Downtown area, occupying six blocks in EaDo just across the freeway from Minute Maid Park and the GRB. Construction is underway and completion is scheduled for 2012, when the stadium will start hosting Houston Dynamo soccer games, Texas Southern University football games, and other events. The stadium will be accessed from all sides, and a plaza on three sides of the stadium will be open to the public at all times.

2. The East End and Southeast light rail lines cut across the Study Area from east to west on Texas, Capitol, and Rusk. Stations at Crawford and Brazos will put half the Study Area within walking distance of high-frequency transit. The light rail involves a complete reconstruction of the streets it operates on, and associated utility work is affecting other streets as well.

3. The GRB Convention Center recently completed a long-term planning study, concluding that further expansion of the venue is possible. However, this plan states that "the future development and success of the GRB Convention Center cannot be fully realized without the future development and success of the "Convention Center District." The plan prioritizes construction of more adjacent hotel rooms — including another 1000+ room hotel like the Hilton Americas — over the expansion of the GRB Convention Center itself. It also underlines the importance of pedestrian improvements and of retail and entertainment development surrounding the Convention Center to serve convention-goers, with residential development to help support that retail.

4-5. Other public planning efforts have also looked at private sector development, albeit without the dramatic impact of the public sector projects. Both the Downtown and East Downtown Management Districts have done market studies and master plans and have coordinated with individual developers.

6. One current planning effort is the Downtown Retail Core Study, which positions Dallas Street and Main Street as the primary retail areas in downtown and lays out a program of improvements to achieve that goal.

7. Just across the railroad tracks, the Greater East End Management District concluded a Livable Centers Study focused on the intersection of Navigation and Jensen and has followed that with an implementation study. The GEEMD has also work on pedestrian improvements along Harrisburg and on a bicycle master plan for the entire East End.

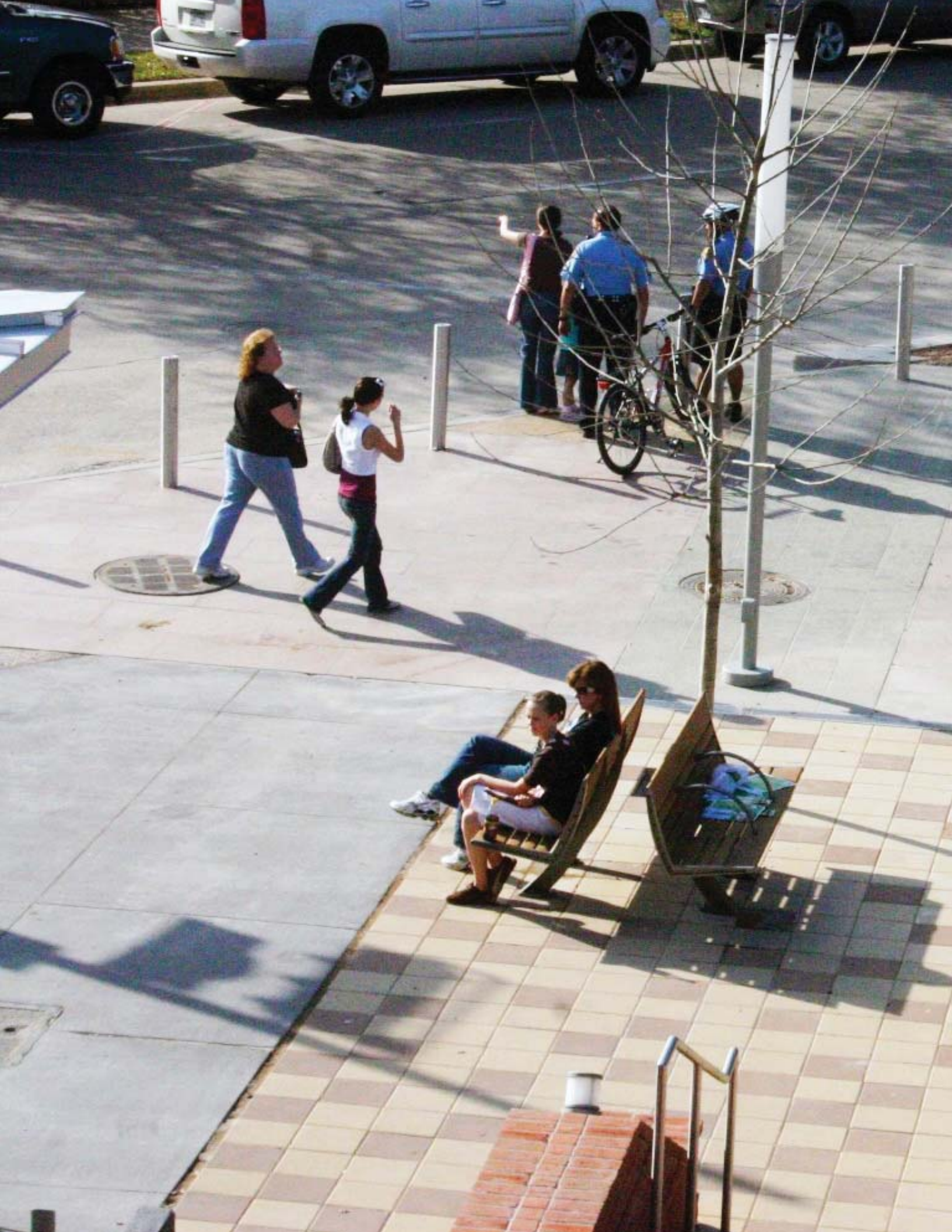
This study is intended to build on and coordinate these existing efforts. See the appendix for a list of previous and ongoing studies.

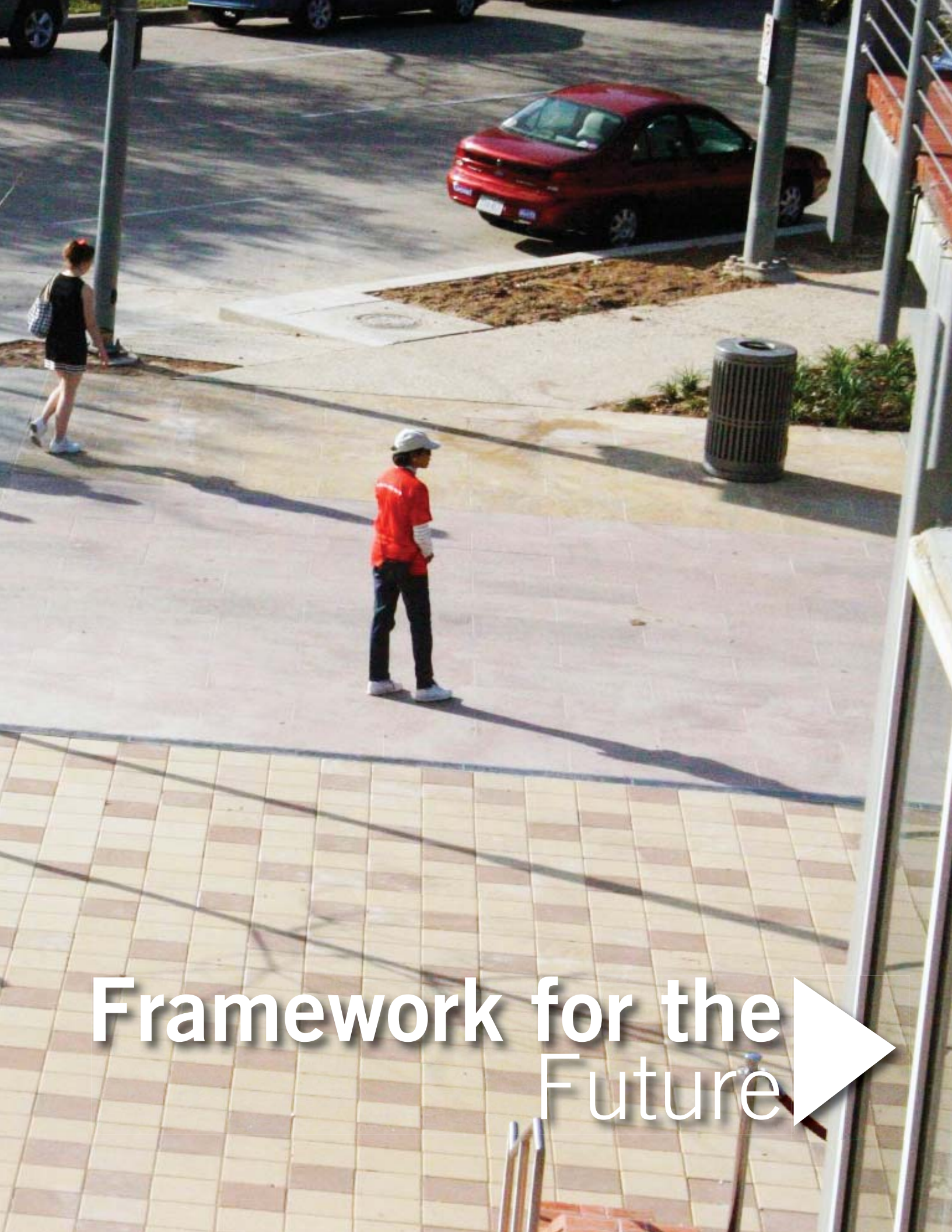
CONCURRENT PLANS

DYNAMO STADIUM	1
EAST END AND SOUTH-EAST LIGHT RAIL	2
GRB CONVENTION CENTER 2025 MASTER PLAN	3
DOWNTOWN RESIDENTIAL DEVELOPMENT STUDY	4
LAND USE & DEMOGRAPHICS	5
HOUSTON DOWNTOWN MIXED USE RETAIL CORE	6
GREATER EAST END LIVABLE CENTER	7
BASTROP PROMENADE	8

0 100 250 500 ft N

Map Ongoing and Recent Plans





Framework for the Future

Vision

In the future, the Study Area will be a thriving place with 24/7 activity sustained by a mix of uses. The convention-goers, sports fans, and park visitors who come here will be joined by others who come to shop, eat, or enjoy a night out and by thousands of new residents. New development will support existing venues and create new destinations.

This Livable Center will be defined by three focus areas with distinct character.

The **Dallas Corridor**, extending from Main Street to the GRB Convention Center, will be lined with retail and restaurants.

The **Capitol / Rusk Corridor** will include new hotels, residences, and places to eat, linking Discovery Green, the GRB Convention Center, Minute Maid Park, and light rail.

The **EaDo Core** will be defined by two complementary places, both influenced by the industrial heritage of the area: a restaurant and club “main street” on St Emanuel and a green space promenade surrounded with new residential on Bastrop.

These three places will be linked to each other, to the downtown core, and to the surrounding neighborhoods by multimodal connections. Pedestrian-friendly streets will connect the disparate parts of downtown and EaDo and extend under US-59. On-street and off-street bikeways will connect to parks, neighborhoods, jobs, light rail, and bayou greenways. All of the Study Area will be within walking distance of high-quality transit. Traffic will flow smoothly east-west and north-south.

Map Proposed Districts

Residential Vision

Downtown and EaDo will both become residential neighborhoods and activity centers, with residential options ranging in scale from townhouses to highrises. Every part of the residential market will be addressed: high-end condos, mid-range apartments for young professionals, student and workforce options, and affordable housing. All residents will be able to walk to shopping, high-quality transit, and parks. Residential growth in downtown and EaDo will ease pressure on surrounding neighborhoods, preserving their community and character.

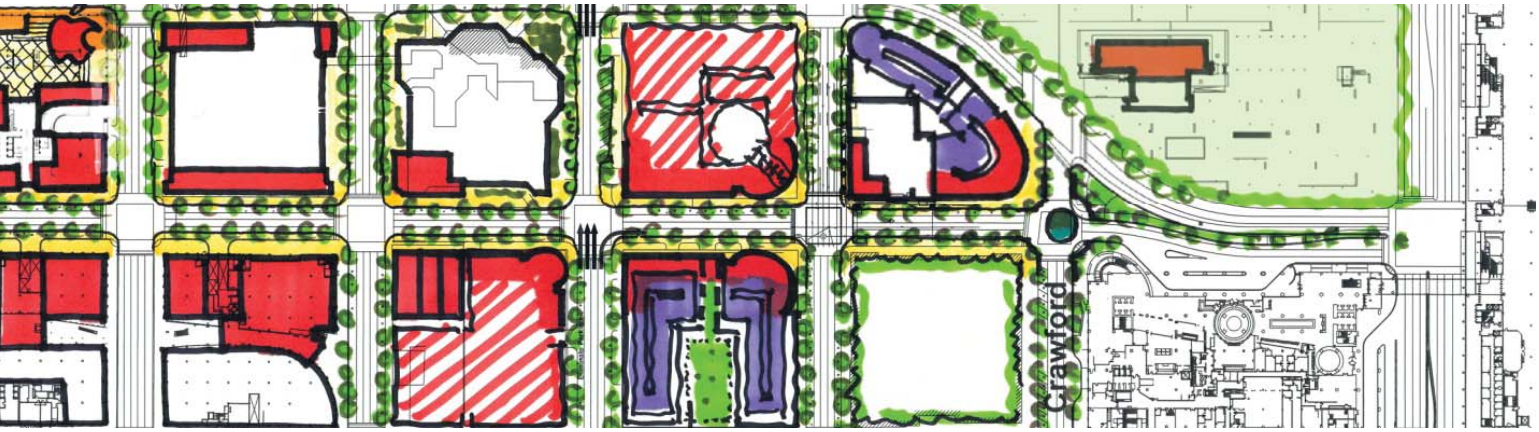
Proposed Residential Development in the Study Area

Lunch
Special
Little
Saigon
VINTAGE
CLOTHING
STARBUCKS

Dallas Corridor Vision

The Dallas Corridor will be part of a retail and dining district that will extend from the Hilton Americas along Houston Pavilions to Macy's and then up Main Street to downtown's Historic District. Wide sidewalks on both sides of the street will be lined with storefronts and vibrant signage offering clothes, electronics, books, casual food, and white table cloth dining. Above the storefronts will be offices, residential, and hotels. High-quality sidewalks and street furniture will encourage office workers to emerge from the tunnels, convention-goers to explore downtown, residents to feel at home, and people from all over Houston to come downtown for an afternoon or evening.

Rendering Downtown Mixed-use Retail Core Study, AECOM
Map Downtown Mixed-use Retail Core Study, AECOM


Crawford

Capitol / Rusk Corridor Vision

Between Discovery Green, the GRB Convention Center, and Minute Maid Park, residents will mingle with convention-goers, sports fans, and out-of-town business travelers. A new hotel the size of the Hilton Americas will host major conferences, and smaller hotels will provide additional rooms. High-rise residential will overlook Discovery Green. Restaurants, bars, and a grocery store will offer lunch, dinner, and drinks for out of town guests, families visiting the park, and residents of downtown and EaDo. Wide sidewalks will connect everything to light rail and to the surrounding venues. The activity will draw pedestrians across the freeway threshold. Capitol / Rusk Corridor will be a hub, linking downtown and EaDo.

1. UNDERGROUND LOADING FOR FUTURE HOTEL ACCESS FROM CHARTRES ST
2. REGIONAL TOURISM CENTER RESIDENTIAL TOWER ABOVE
3. LIGHT RAIL STATION
4. PEDESTRIAN PLAZA
5. IMPROVED TRAFFIC FLOW FROM HAMILTON / TEXAS TO CAPITOL
6. POTENTIAL SITES FOR 1,000 ROOM HOTEL
7. PEDESTRIAN IMPROVEMENTS UNDER US-59
8. ON-STREET SEPARATED BIKE PATH CONNECTING DISCOVERY GREEN TO UNION STATION /COLUMBIA TAP

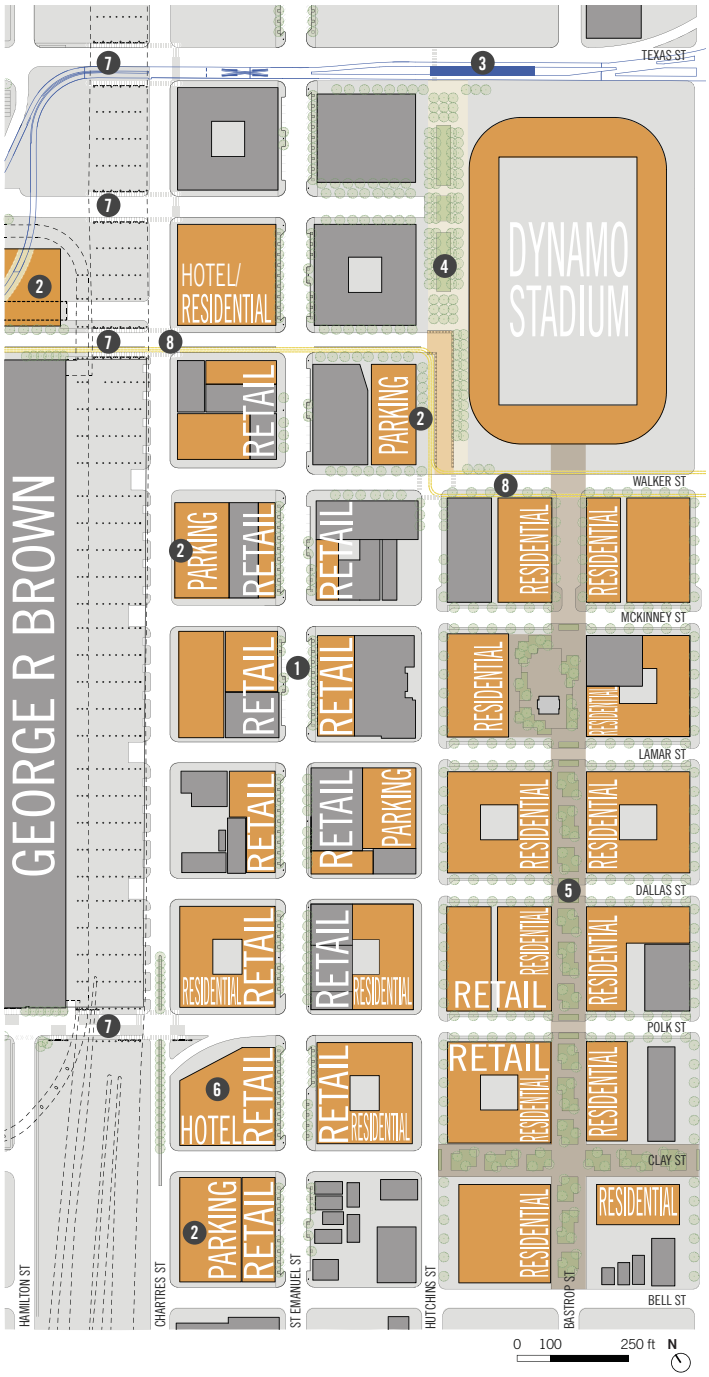
Map Proposed vision for Capitol / Rusk Corridor
Rendering Proposed Vision on Crawford Street looking north

Top Photo Existing conditions on Crawford Street looking north

EaDo Core Vision

EaDo will remain an edgier place than downtown. The restaurants will be little more exotic, the music more underground. The warehouse character will remain, but density will increase. St Emanuel will be EaDo's "main street," pedestrian-friendly and designed for local traffic. Two blocks away, a green promenade will be a shared back yard for residents and a venue for special events. Residential development along the promenade will complement the retail focus on St Emanuel.

1. PEDESTRIAN-FRIENDLY "MAIN STREET" ON ST EMANUEL
2. SHARED STRUCTURED PARKING
3. LIGHT RAIL STATION
4. LINEAR PARK
5. BASTROP PROMENADE
6. PROPOSED SITE FOR 1,000 ROOM HOTEL
7. PEDESTRIAN IMPROVEMENTS UNDER US-59
8. ON-STREET SEPARATED BIKE PATH CONNECTING COLUMBIA TAP AND UNION STATION HIKE & BIKE TRAIL



Map Proposed vision for EaDo Core
Rendering Proposed Vision on St Emanuel Street looking north

Top Photo Existing conditions on St Emanuel Street looking north

Project Goals

Livable Centers are walkable, mixed-use places that provide multimodal transportation options, improve environmental quality and promote economic development.

1 **Access**
Improve access to and from the Study Area.

2 **Connectivity**
Improve connectivity within the Study Area.

3 **Integrated Transportation**
Create an integrated network of multimodal transportation opportunities.

4 **District Character**
Maintain the character of two distinct districts: Downtown and EaDo.

5 **Major Venues**
Provide amenities for visitors to major venues.

6 **Visitor Experience**
Enhance the experience of regional visitors, out-of-town visitors, local residents and office users.

7 **Street Life**
Create a vibrant street life that is not dependent on a connection to the Downtown tunnel / skywalk system.

8 **Mix Of Uses**
Balance land uses to create a 24 / 7 area.

Rendering Proposed activity on St Emanuel Street looking south

EaDo

Land Use Recommendations

Land Use Recommendations

New residential, hotels, and retail will fill the gaps in the Study Area, adding activity throughout. Mixed uses and active facades will strengthen street life. The GRB Convention Center expansion and new hotels will not only support bigger conventions but also improve the neighborhood.

1. TARGET CITY POLICY TO INCREASE RESIDENTIAL DEVELOPMENT IN AND NEAR DOWNTOWN
2. IDENTIFY POTENTIAL LAND FOR HOTELS NEAR THE GRB CONVENTION CENTER

3.1 REQUIRE ACTIVE GROUND FLOORS ON CAPITOL, RUSK, CRAWFORD AND AVENIDA DE LAS AMERICAS IN DOWNTOWN

3.2 REQUIRE ACTIVE GROUND FLOORS ON POLK AND DALLAS IN DOWNTOWN

3.3 REQUIRE ACTIVE GROUND FLOORS ON ST EMANUEL, POLK, CAPITOL AND RUSK IN EaDo

4. EXPAND THE GRB CONVENTION CENTER
5. IMPROVE SOCIAL SERVICES
6. ENSURE LOADING ACCESS ZONES FOR MAJOR VENUES
7. DESIGNATE PUBLIC SPACE FOR DYNAMO EVENTS
8. UPGRADE UTILITIES IN EaDo

Map Land Use Recommendations Key

LU1

Target City Policy to increase residential development in and near downtown

Modify city regulations and adopt incentives to encourage residential development near downtown.

BENEFITS
Increases activity in downtown and EaDo; supports local businesses; reduces commute distances and traffic impacts; expands tax base; allows more affordable housing; reduces redevelopment pressures on East End and Third Ward.

GOALS SUPPORTED
1. Access
2. Connectivity
3. Integrated Transit
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
Private
COH - Planning & Development
COH - Economic Development
Houston Downtown Management District
East Downtown Management District
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Houston First Corporation
COH - General Fund
COH - Housing & Community Development / Houston Housing Authority
Houston Downtown Management District
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority
380 Agreement

APPROVAL REQUIRED FROM
City Council
COH - Planning & Development / Planning Commission

While downtown has been successful in remaining competitive as an employment center, it has yet to be perceived as a well-rounded District that covers multiple facets of livability. The public at large and the business community have noted the lack of sidewalk vitality outside of primary office hours with insufficient neighborhood-scaled retail that provides standard convenience goods and services. Downtown and EaDo stakeholders have long recognized that the most important ingredient needed to address this concern is a substantial increase in the residential population.

In addition, there is a significant need for workforce and affordable housing within the urban core. As land values rise, middle and low-income urban residents are being displaced to outer areas where they do not have good access to jobs, education, social services, or community support structures. Residential development within the Study Area can address this need directly by providing low-income or workforce units and indirectly by absorbing demand for market-rate housing that might otherwise have been met in existing neighborhoods.

Unfortunately, some inherent barriers exist to large scale, rapid development of housing within the Study Area. Some of these barriers are physical, such as infrastructure, streetscape, and urban design, which are being addressed by other recommendations in this report. However, a primary cause of retarded residential growth is the financial feasibility gap that discourages the private sector from new housing development. New policies and initiatives on the part of the public sector and others targeted specifically to housing development could help overcome these barriers. These policies can be categorized into three types:

- Enhancing residential demand through targeted public improvements and amenities;
- Subsidies to specific residential projects; and
- Intermediate land acquisition, joint venturing, and financing assistance.

Policies to Enhance Demand

As an unzoned city, landowners are free to price their property per their perception of the highest and best use. In the Study Area, this means potential residential development must compete with such high-cost, high-value uses as large office towers and first-class hotels. In most of the Study Area, feasible residential development would therefore default to mid-rise and high-rise projects that are expensive to build and require high rents or unit sale prices to generate a satisfactory return to the developer. Past assessments of housing demand indicate large amounts of interest for living in and around downtown, but an unwillingness to pay the rents or sale prices required for project feasibility. Financial analysis of hypothetical projects shows that achievable rent or sale prices have the greatest impact on feasibility. Therefore, a key strategy in the Study Area should be to invest in improvements and services that make a larger share of the market willing to pay more to live in this location.

In a pioneering urban location without existing residential neighborhood amenities, a primary way to create such market appeal is quality open space. This means open space that is attractive, physically functional for surrounding residents, and well-managed. Discovery Green has provided a prominent example downtown, resulting in the development of One Park Place, a high-rise apartment tower developed across the street. Furthermore, it has successfully leased up at top of market rental rates. Other public parks and plazas that serve as local greenery and “breathing” space should be created.

This is particularly the case in EaDo which currently suffers from a lack of such spaces that could soften the rough edges of what is not yet perceived as a residential neighborhood and help the area compete at the price levels needed for project feasibility. The Bastrop Promenade (Recommendation P12) could be an effective development catalyst in this regard.

Residential revitalization in the downtown areas of other cities such as Oklahoma City and Little Rock indicates that, in addition to user-friendly public facilities such as parks, destination-quality retail and entertainment – generally of the small or moderate-scale variety – can also spur demand. As a local example, the proximity to popular restaurants and nightclubs has helped the northwestern part of Midtown Houston achieve high apartment rent levels. In the Downtown / EaDo Study Area, the dining and entertainment corridor that is developing along St Emanuel could have a similar effect if it continues to expand. Improvements to this corridor, described later in this report, would therefore not only help commercial land uses but also secondarily boost the residential market.

Subsidies to Residential Projects

Past analysis of hypothetical financial models of residential projects in and around downtown has indicated that financial shortfalls could possibly be remedied through direct subsidies. Thus, in targeted locations where residential development is most desired, public sector agencies such as the City of Houston, Redevelopment Authorities, and the Management Districts could consider a financial incentive program. It should be noted, however, the financial analyses indicated that in most cases the required grant or reimbursement may be large, particularly if the project's pro forma indicates that supportable rent or sale prices are significantly below levels needed for financial feasibility. Thus the relatively minor assistance of a measure such as a City property tax abatement would likely be insufficient to produce feasibility in most projects. The incentive providers would be wise to restrict assistance to projects that provide pro forma projections showing that the anticipated rents or sale prices are not far below what would be required for financial feasibility. "Clawback" provisions could even be included in incentive agreements in case actual rents or sale prices turn out to exceed pro forma feasible levels.

Intermediate Land Acquisition, Joint Venturing, and Financing Assistance

Another strategy that could provide a larger-scale initiative would be assistance with land and financing costs. These types of strategies are typically used to encourage housing that is affordable to renters or buyers making median incomes or below.

Since land value is a significant barrier to housing feasibility in much of the Study Area, actors in the public or not-for-profit sectors could proactively acquire land and write down the cost to a housing developer. An opportunity for such an effort already exists in the Study Area, where the Houston Endowment possesses a large block immediately north of Discovery Green that could be attractive for residential development. These types of entities could also partner with private sector developers to provide equity, either through land investment or otherwise, that would require a lower rate of return thus aiding in project feasibility. Community land trusts are a variant of this approach; while not yet tried in Houston, they work by separating ownership of the land from ownership of the housing improvements. This not only helps to develop affordable housing, it helps to keep it affordable by lifting the property tax burden from the housing owner. Community land trusts have become active in other cities, including Austin, where their primary objective is to provide affordable for-sale housing.

Lastly, a variety of types of financing assistance are available, especially to developers of various types of multifamily housing for renters of low to moderate incomes. The low income housing tax credit (LIHTC) program has proved popular for developers of standard affordable apartment complexes. The U.S. Department of Housing and Urban Development (HUD) offers the Section 202 and 811 programs targeted to low income seniors and persons with disabilities. However, even with such programs it is unlikely that affordable housing development will be feasible on high-cost sites that are typical in most of the Study Area. It would be better for these initiatives to target land that is less expensive – for the moment at least – to the east of the Study Area; the area around the planned Leeland Station on the Southeast Light Rail Corridor would be a example.

LU2

Identify potential land for hotels near the GRB Convention Center

To the northwest and southeast, locate hotels as required to support the GRB Convention Center.

BENEFITS
Recruit and support statewide and national conventions at the GRB Convention Center.

GOALS SUPPORTED
5. Major Venues
6. Visitor Experience
7. Street Life
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
Private
Houston First Corporation
COH - Economic Development
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Private / For-profit Unreimbursed
Houston First Corporation
TIRZ 15 / East Downtown Redevelopment Authority
380 Agreement

APPROVAL REQUIRED FROM
City Council

Large conventions depend on 1000-room hotels to house the majority of attendees. While some attendees and vendors will book smaller hotels on their own, convention organizers prefer large hotels to reserve big blocks of rooms. Large hotels also provide auxiliary meeting, function and parking space.

Downtown Houston currently has two large hotels: the Hilton Americas (1200 rooms), which is attached to the GRB Convention Center, and the Hyatt Regency (984 rooms), which is far enough away to require shuttle buses. These two hotels account for nearly half the hotel rooms downtown.

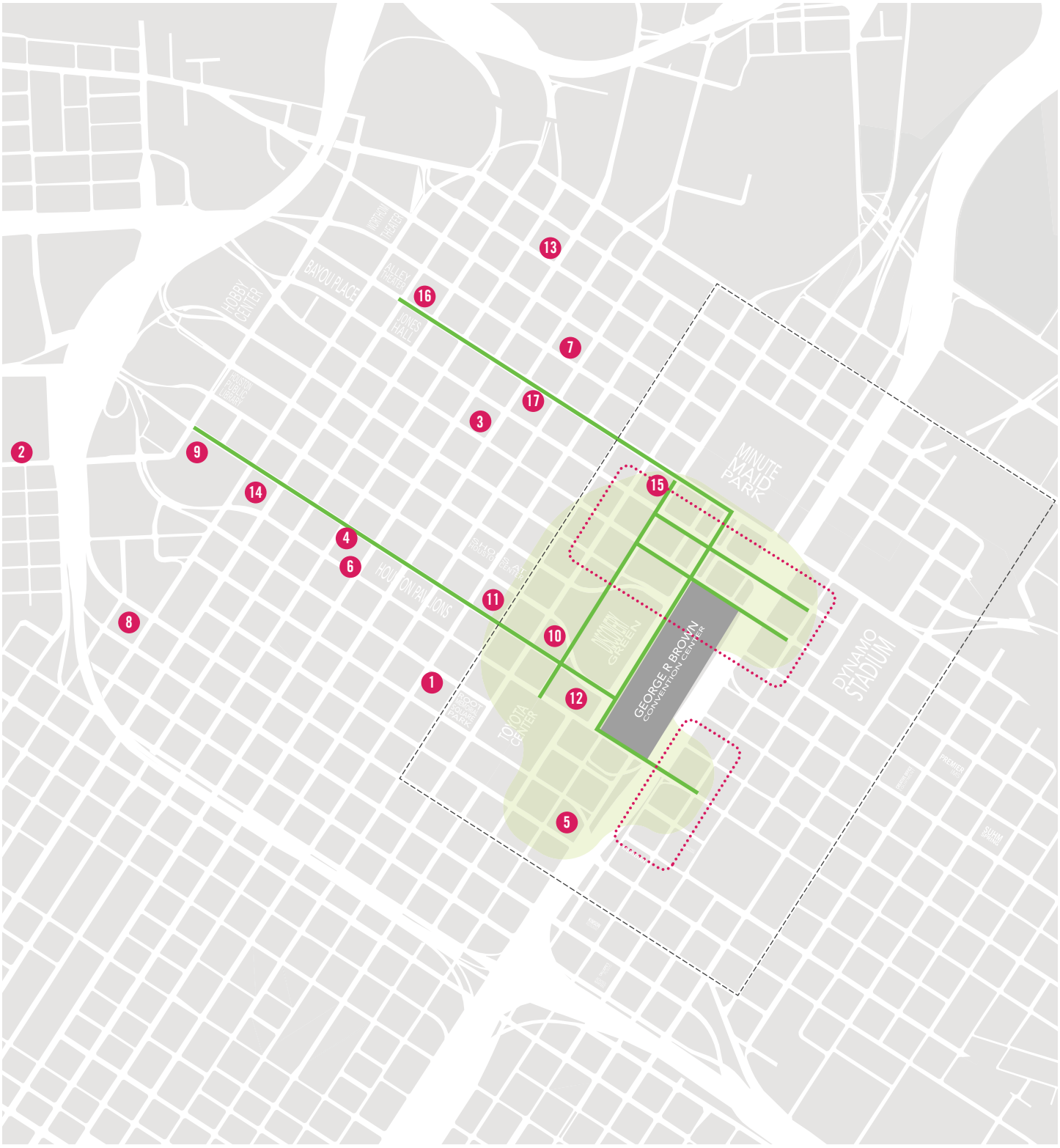
The lack of a third or fourth large hotel complicates arrangements for large conventions and drives some away. Conventions are currently busing attendees from Uptown, the Medical Center, and elsewhere. For some large conventions, the logistical details involved are reason enough to not consider Houston.

If another large hotel is to be built to serve the GRB Convention Center, it will require a two-block site within walking distance. Such sites are scarce. The prime locations are north of Discovery Green and on Polk in EaDo and are also suited for other development.

The best way to preserve the potential of another large hotel adjacent to the GRB Convention Center is to identify locations now and preserve the land for hotel development. This may involve working with the landowners or it may involve the City acquiring the property for a short duration hold.

	LIMITED SERVICE HOTELS	ROOMS
1	ATHENS HOTEL	20
2	BEST WESTERN DOWNTOWN	76
3	CLUB QUARTERS IN HOUSTON	240
4	COURTYARD DOWNTOWN	191
5	HOLIDAY INN EXPRESS	90
6	RESIDENCE INN	171
	FULL SERVICE / BOUTIQUE / LUXURY HOTELS	
7	ALDEN HOUSTON	97
8	CROWNE PLAZA	259
9	DOUBLE TREE HOTEL	350
10	EMBASSY SUITES	262
11	FOUR SEASONS	404
12	HILTON AMERICAS	1,200
13	HOTEL ICON	135
14	HYATT REGENCY	984
15	INN AT THE BALLPARK	201
16	THE LANCASTER	93
17	THE MAGNOLIA	314

Market Area Hotel Properties



EXISTING HOTELS
STUDY AREA BOUNDARY
PROPOSED HOTEL LOCATIONS IN STUDY AREA
KEY PEDESTRIAN CORRIDORS
5 MINUTE WALK FROM GRB

NOT TO SCALE N

Map Potential locations for new hotels

LU3

Require active ground floors on designated streets in the Study Area

Enact a city ordinance to require ground floor active uses (though not necessarily retail) with transparent facades on designated streets in the Study Area.

BENEFITS
Create more pedestrian-friendly environments in downtown and EaDo.

GOALS SUPPORTED
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
COH - Planning & Development
Houston Downtown Management District
East Downtown Management District

POSSIBLE FUNDING SOURCES
Houston Downtown Management District
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority
380 Agreement

APPROVAL REQUIRED FROM
City Council
COH - Planning & Development / Planning Commission

We propose the following ordinance, based on language in the LEED for Neighborhood Development standard developed by the United States Green Building Council.

All building frontages on these blocks shall meet the following requirements:

- *At least 80% of the total linear feet of street-facing building façades in the project is no more than 25 feet from the property line.*
- *At least 50% of the total linear feet of façades in the project is within 1 foot of a sidewalk or equivalent provision for walking.*
- *Functional entries to the building occur at an average of 75 feet or less.*
- *All ground-level uses have clear glass on at least 60% of their façades between 3 and 8 feet above grade.*
- *If a façade extends along a sidewalk, no more than 40% of its length or 50 feet, whichever is less, is blank (without doors or windows).*
- *Any ground-level retail, service, or trade windows must be kept visible (unshuttered) at night.*
- *At-grade crossings with driveways account for no more than 10% of the length of sidewalks along the street.*
- *No more than 20% of the street frontages within the project are faced directly by garage and service bay openings.*
- *No ground floor parking (structured or unstructured) faces the sidewalk.*

This proposed ordinance does not specify building uses. While ground floor retail is ideal, market demand may not exist (at least not immediately) for retail in every building. Instead, other ground floor uses – office space, classrooms, lobbies – with sidewalk-facing windows and entries can enliven the street.

Buildings, and the way they relate to a sidewalk, are a crucial component of a pedestrian-friendly environment. Buildings can serve several purposes:

- They add activity that attracts pedestrians;
- Even from several blocks away, they act as landmarks and as highly visible indications of activity;
- They create a human scale at the sidewalk and add visual interest;
- They define spaces and intensify activity;
- They create a feeling of security through lighting and the presence of "eyes on the street."

However, a badly designed building can actually diminish the pedestrian experience:

- Long blank walls make sidewalks feel inactive and dangerous;
- Driveways and loading docks interrupt the sidewalk, block walking paths with parked vehicles, and increase the chance of accidents;
- Entries facing parking lots or private courts draw activity away from the street making it difficult for pedestrians to reach their destinations.

It only takes a single block to disrupt the pedestrian activity. Unfortunately, past projects in this area – the Centerpoint Energy substation, the south face of the Hilton Americas, and the GRB Convention Center itself – have already created gaps in the pedestrian fabric.

The GRB Convention Center 2025 Report expansion study concluded that creating a pedestrian-friendly environment around the Convention Center is critical to serving the needs of convention-goers (both locals and out-of-town visitors) and to attracting major conventions. To enable this, we must ensure that every new building built within walking distance of the Convention Center adds to, rather than subtracts from, the pedestrian experience. The easiest way to accomplish this goal is for the City of Houston to adopt an ordinance requiring pedestrian-friendly buildings in the area immediately around the GRB Convention Center. This ordinance is specifically justified by the needs of the GRB Convention Center, a regional facility with a significant economic impact.

Top Ground floor retail in Phoenix
Bottom Market Street Cafe in Philadelphia

LU3.1

Require active ground floors on Capitol, Rusk, Crawford and Avenida de las Americas in downtown

Enact a city ordinance to require ground floor active uses with transparent facades on streets connecting Minute Maid Park, Discovery Green and GRB Convention Center.

BENEFITS
Create more pedestrian-friendly environment around the GRB Convention Center.

GOALS SUPPORTED
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
COH - Planning & Development
Houston Downtown Management District

POSSIBLE FUNDING SOURCES
Houston Downtown Management District
380 Agreement

APPROVAL REQUIRED FROM
City Council
COH - Planning & Development / Planning Commission

This recommendation applies the ordinance proposed in LU3 to the Capitol / Rusk Corridor, a key area linking the Convention Center, Discovery Green and Minute Maid Park.

This ordinance applies to the following streets:
- Texas from La Branch to US-59
- Capitol from La Branch to US-59
- Rusk from La Branch to US-59
- Walker from Crawford to Avenida de las Americas
- Crawford from Prairie to McKinney
- Avenida de las Americas from Texas to Walker

It is, of course, necessary to accommodate parking as well as loading docks. Parking can be located, as it has been in many downtown buildings, in structured parking either below grade or above the ground floor. Loading docks can face streets not specified in the ordinance (La Branch, Jackson, Chenevert) or can be consolidated in alleys or behind single driveways. The GRB Convention Center parking garage proposed between US-59, Avenida de las Americas, Capitol, and Rusk can be designed to include a below-grade loading level serving the blocks between Capitol and Rusk and accessed by a ramp off of Chenvert. Toyota Center implemented a similar solution, creating active facades on all four sides.

Active ground floor in Tacoma, Washington

Map Proposed active facades in Downtown

LU3.2

Require active ground floors on Polk and Dallas in downtown

Enact a city ordinance to require ground floor active uses with transparent facades on streets connecting Discovery Green, the GRB Convention Center, Hilton Americas, the downtown Shopping District, and EaDo.

BENEFITS
Create more pedestrian-friendly environment around the GRB Convention Center.

GOALS SUPPORTED
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
COH - Planning & Development
Houston Downtown Management District

POSSIBLE FUNDING SOURCES
Houston Downtown Management District
380 Agreement

APPROVAL REQUIRED FROM
City Council
COH - Planning & Development / Planning Commission

This recommendation applies the ordinance proposed in LU3 to the Dallas Corridor, around the GRB Convention Center, Discovery Green and the Hilton Americas, as well as the Polk connection to EaDo.

This ordinance applies to the following streets:

- Lamar from La Branch to Avenida de las Americas
- Dallas from Austin to Avenida de las Americas
- Crawford from Lamar to Polk
- Avenida de las Americas from Dallas to Polk
- Polk from Avenida de las Americas to US-59

Much of the frontage in this area is already developed, including some faces (the Centerpoint substation, the west face of the Hilton Americas, the south face of the GRB Convention Center, and the Hilton parking garage) that have large sections of inactive frontage. This makes the remaining sections all the more critical. The ordinance will apply to development on current vacant lots and to any redevelopment that may occur. It can also coordinate with efforts to insert active uses into existing buildings.

Parking can be located in structured parking either below grade or above the ground floor. This ordinance applies to no more than three faces of any block, leaving the remaining faces for loading docks.

Map Proposed active facades in Downtown

LU3.3

Require active ground floors on St Emanuel, Polk, Capitol and Rusk in EaDo

Enact a city ordinance to require ground floor active uses with transparent facades on pedestrian-oriented streets in EaDo, including connections to downtown.

BENEFITS
Create more pedestrian-friendly environment around the GRB Convention Center.

GOALS SUPPORTED
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
COH - Planning & Development
East Downtown Management District

POSSIBLE FUNDING SOURCES
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

APPROVAL REQUIRED FROM
City Council
COH - Planning & Development / Planning Commission

This recommendation applies the ordinance proposed in LU3 to the St Emanuel Corridor in EaDo.

This ordinance applies to the following streets:

- St Emanuel from Capitol to Clay
- Capitol from US-59 to St Emanuel
- Rusk from US-59 to St Emanuel
- Polk from US-59 to Dowling

Parking can be located in structured parking either below grade or above the ground floor. This ordinance applies to no more than three faces of any block, leaving the remaining faces for loading docks. In general, Chartres, Hutchins and Dowling are designated for loading while St Emanuel is intended to be a pedestrian-oriented street.

PROPOSED ACTIVE GROUND FLOORS

0 100 250 500 ft N

Map Proposed active facades in EaDo

LU4

Expand the GRB Convention Center

Reserve land south of the GRB for future expansion when that expansion is justified.

BENEFITS
Attract more conventions to Houston, increasing economic activity.

GOALS SUPPORTED
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life

PROPOSED IMPLEMENTING AGENCY
Private
Houston First Corporation

POSSIBLE FUNDING SOURCES
Houston First Corporation

APPROVAL REQUIRED FROM
City Council
COH - Planning & Development
COH - Planning & Development / Planning Commission

Expansion of the GRB Convention Center may be desirable in the future. This expansion will require a large footprint for another convention hall, connected with the existing building.

The only site that can accommodate this footprint without major infrastructure changes (such as putting US-59 below grade) or significant harmful effects on traffic connectivity and neighborhood character is the area south of the GRB Convention Center.

As recommended by the GRB Convention Center 2025 Master Plan, the proposed site would occupy four blocks, from Polk to Bell and from Jackson to Hamilton. Two streets would need to be closed: two blocks of Jackson and two blocks of Clay. Because Toyota Center, the existing GRB Convention Center, and US-59 have already severed these streets, there would be no significant impact on traffic circulation. However, it is imperative that Polk remain open. The only structures currently in this footprint are the Hilton Americas parking garage, which would need to be incorporated or replaced, and the Convention Center loading dock access ramp, which would need to be rerouted along Hamilton to tie into Bell.

The GRB Convention Center expansion is not an immediate prospect. However, in order to preserve the possibility of expansion this land should be protected from other development through acquisition.

Map GRB Convention Center potential expansion

LU5

Improve Social Services

Implement comprehensive city policy on homelessness to coordinate social services and make them more effective. Require that all social service providers have sufficient space on their property to accommodate the people they are serving and regulate the delivery of services in public areas.

BENEFITS
Better serve homeless and low-income populations without negative impacts for local business and residents.

GOALS SUPPORTED
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
East Downtown Management District
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
COH - General Fund
COH - Housing & Community Development / Houston Housing Authority
Federal
Foundations / Conservancies / Private Grants

APPROVAL REQUIRED FROM
City Council

Homelessness is a city-wide problem. However, this Study Area feels a disproportionate impact from that problem. Perceived as an industrial area, the northern portions of downtown and EaDo became home to homeless services that were not welcomed in residential neighborhoods or business districts. These services now discourage new development, particularly in EaDo.

Ironically, this concentration of services has not resulted in meaningful intervention that offer long term solutions for the homeless. Services are well-intentioned but often uncoordinated, and city policy has tended towards band-aid fixes rather than a comprehensive solution. While some organizations provide excellent multi-faceted outreach, others provide services — like feedings in public areas — that tend to keep homeless on the street rather than finding them new jobs and places to live.

The issues of homelessness cannot be solved on the scale of a single neighborhood. A true solution to improve the lives of the homeless will require a comprehensive public-private partnership for services, support, and policies. In addition, city policies can reduce the impact of homeless services on surrounding neighborhoods. For example, an institution that serves meals should be required to provide safe, comfortable places for its clients to wait and eat, rather than expecting them to huddle on sidewalks, vacant lots, and abandoned buildings.

SOCIAL SERVICES LOCATED WITHIN THIS AREA

0 100 250 500 ft N

Map Social Services

LU6

Ensure loading access zones for major venues

Preserve access to loading docks at major venues and designate truck access routes. Design loading access for future facilities to minimize impacts on pedestrian environment.

BENEFITS
Supports operation of venues and helps attract more events, with reduced impacts on pedestrian realm.

GOALS SUPPORTED
5. Major Venues

PROPOSED IMPLEMENTING AGENCY
Houston First Corporation
COH - Planning & Development
Houston Downtown Management District
East Downtown Management District

POSSIBLE FUNDING SOURCES
Private
Houston First Corporation
Houston Downtown Management District
East Downtown Management District
Foundations / Conservancies / Private Grants

APPROVAL REQUIRED FROM
City Council
COH - Planning & Development / Planning Commission

All of the major venues have large loading docks for supplies, food, convention displays, show sets, and broadcast vans. The functionality and capacity of these docks, as well as the ability to stage and route trucks to them, is important to event organizers and can be a factor considered in whether events come to Houston or not. However, these loading docks can also be a significant impediment to creating a good pedestrian environment. Loading docks interrupt sidewalks and, for much of the time, they are effectively blank walls.

Access to existing loading docks must be considered at all major venues in the Study Area, particularly those that modify the streets alongside the docks. Key streets in this regard are Chartres behind the GRB Convention Center, Congress at Minute Maid Park, Polk at the Hilton Americas, and Walker at the Dynamo Stadium.

Recommendations P2 and P3 are intended to avoid any impact on the GRB's major loading docks; LU3.3 establishes St Emanuel, not Chartres, as the major pedestrian street in part to separate pedestrians from those loading docks. Loading doors on the north and south sides of the GRB Convention Center are infrequently used but need to be kept accessible in the design of recommendations P9 and B3.

New venues, including new hotels, should be designed to minimize impacts on key pedestrian streets. This may require more complex loading arrangements. For example, new hotels north of Discovery Green could be loaded from underground loading docks accessed from Chartres Street, much like Toyota Center's loading docks are accessed from the basement of the Tundra Garage.

Map Major venue loading zones

LU7

Designate public space for Dynamo events

Support events at the Dynamo Stadium by designating space for pre-game activities, tailgating and RV-ing.

BENEFITS
Opportunity for pre-game events and increased program and pedestrian activity with the EaDo District.

GOALS SUPPORTED
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life

PROPOSED IMPLEMENTING AGENCY
Private
COH - Public Works & Engineering
COH - Parking Management
East Downtown Management District

POSSIBLE FUNDING SOURCES
Private
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

APPROVAL REQUIRED FROM
COH - Public Works & Engineering

Key streets have been identified within the Study Area to support game-day activity including portions of Hutchins, Bastrop, Lamar and Dallas Streets. The streets are in close proximity to the Dynamo Stadium and will have the least impact on vehicular circulation.

The area identified for pre-game activity is in close proximity to the proposed Bastrop Rail Station and connects to the proposed off-street bike lane pilot project. These connections allow pedestrians to safely travel across EaDo without vehicular / pedestrian conflict, providing increased safety and accessibility.

On-street tailgating areas as identified do not function as primary routes within EaDo. Providing a structured area for tailgating reduces game day congestion throughout EaDo and creates an identifiable gathering space for the event. Using public street space for tailgating requires careful management. A possible policy would be as follows:

- All cars wanting to tailgate need to be in the designated streets two hours prior to the game.
- Two hours prior to the game, barricades are set up to close off the streets. These barricades form a perimeter.
- Alcohol may be consumed with the perimeter. However, no open cans, bottles, or cups may be carrier in or out of the designated area. This is enforced by security.
- Once the game is over, fans are given 30 minutes to dispose of any open alcohol and pack up their belongings.
- 30 minutes after the game, the barricades are removed and the streets are reopened.

Dynamo Stadium ground-breaking

TAILGATING IN PARKING LOTS SHOULD BE EXPLORED FURTHER IN CONJUNCTION WITH PRIVATE AND PUBLIC LAND OWNERS ****

AREA FOR PRE-GAME ACTIVITY

AREA IDENTIFIED FOR ON-STREET TAILGATING

0 100 250 500 ft N

Map Proposed public space for Dynamo events

LU8

Upgrade utilities in EaDo

Upgrade utilities in EaDo to City of Houston standards criteria.

BENEFITS
Enable more residential and commercial development in EaDo and decrease street flooding.

GOALS SUPPORTED
1. Access
2. Connectivity
3. Integrated Transit
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
Private
COH - Public Works & Engineering
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

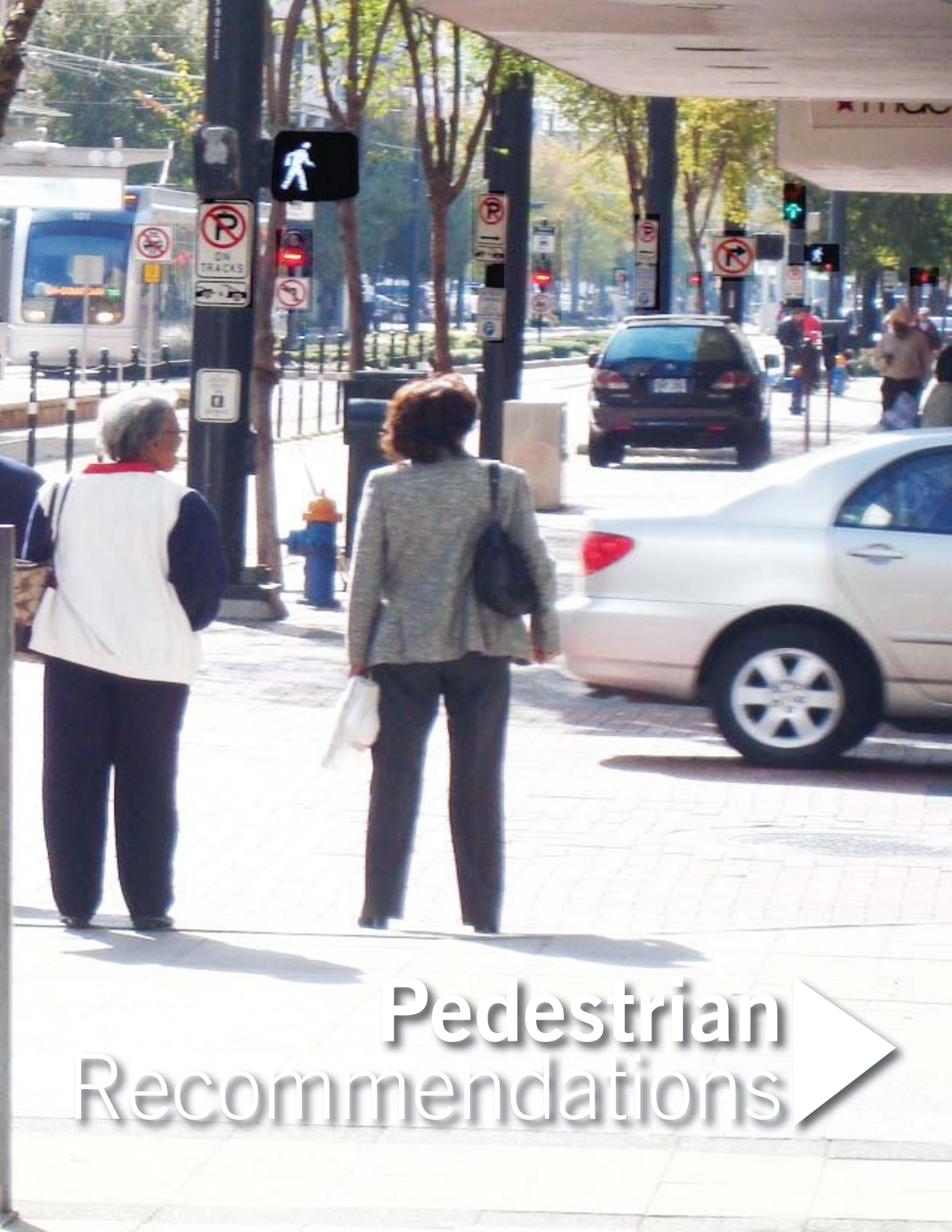
POSSIBLE FUNDING SOURCES
Private
COH - Renew Houston
COH - Housing & Community Development / Houston Housing Authority
TIRZ 15 / East Downtown Redevelopment Authority
380 Agreement

APPROVAL REQUIRED FROM
City Council
COH - Public Works & Engineering

The EaDo portion of the Study Area traverses existing old storm sewer, sanitary sewer and water line systems within a highly urbanized commercial development. An initial assessment of the existing City of Houston infrastructure indicates that the systems are inadequate and will require substantial improvements before significant surface improvements are made. It is recommended that Houston Downtown Management District and East Downtown Management District discuss the applicable infrastructure projects and criteria with the City of Houston prior to the start of any significant development in the area.

Overhead utilities have a significant visual impact on the Study Area. More significantly, they impair the pedestrian realm by blocking sidewalks with poles and limiting the size (and thus shading potential) of street trees. As seen in downtown, buried utilities create a more pedestrian-friendly urban fabric. Thus, any street or utility project in an area with overhead utilities should consider burying those utilities. This will be easier today, before large-scale development has occurred, and it can also be done in conjunction with development.

Map Upgrade underground utilities zone



Pedestrian Recommendations

Pedestrian Recommendations

Pedestrians will be able to comfortably and safely traverse the entire Study Area. Reinvented and enriched public spaces along key streets will enhance the visitor experience as well as encourage residents to use outdoor public spaces as part of their daily routine. Significant east-west and north-south streets that link the major destinations, cross US-59, and connect to the Downtown core as well as surrounding neighborhoods, will be upgraded as high-quality pedestrian environments forming the spines of a pedestrian network. Portals will link downtown to EaDo. All sidewalks will be upgraded to meet minimum standards, connecting every parcel in the Study Area to the overall pedestrian network. The East End and Third Ward will be better connected. All residents, regardless of age or income, will benefit from better access to business, jobs, and transit.

1. IMPLEMENT PEDESTRIAN WAYFINDING AND IDENTITY PROGRAM
2. IMPROVE PEDESTRIAN CROSSINGS AT CHARTRES AND UNDER US-59 AT TEXAS, CAPITOL AND RUSK
3. IMPROVE PEDESTRIAN CROSSING AT CHARTRES AND UNDER US-59 AT POLK
4. IMPLEMENT PEDESTRIAN IMPROVEMENTS ALONG CAPITOL FROM CHARTRES TO ST EMANUEL
5. IMPLEMENT PEDESTRIAN IMPROVEMENTS ALONG RUSK FROM CHARTRES TO ST EMANUEL
6. IMPLEMENT PEDESTRIAN IMPROVEMENTS ALONG DALLAS FROM MAIN TO AVENIDA DE LAS AMERICAS
7. CREATE A PEDESTRIAN PLAZA ON AVENIDA DE LAS AMERICAS FROM RUSK TO POLK
8. REBUILD POLK FROM AVENIDA DE LAS AMERICAS TO DOWLING
9. REBUILD ST EMANUEL FROM COMMERCE TO LEELAND
10. DEVELOP PEDESTRIAN REALM DESIGN STANDARDS IN EaDo
11. IMPLEMENT MINIMUM PEDESTRIAN STANDARDS FOR THE ENTIRE STUDY AREA
12. CREATE BASTROP PROMENADE
13. CREATE NORTH-SOUTH LINEAR PARK TO CONNECT LIGHT RAIL TRANSIT TO THE BASTROP PROMENADE

Map Pedestrian Connectivity and Circulation

P1

Implement pedestrian wayfinding and identity program

Provide a coherent, comprehensive wayfinding program to guide pedestrians to their destinations. Use wayfinding and gateway elements to strengthen the identity of EaDo.

BENEFITS
Improved pedestrian circulation and activity throughout the Districts.

GOALS SUPPORTED
2. Connectivity
4. District Character
6. Visitor Experience
7. Street Life

PROPOSED IMPLEMENTING AGENCY
Private
Houston First Corporation
Houston Downtown Management District
East Downtown Management District
METRO

POSSIBLE FUNDING SOURCES
Private / For-profit Unreimbursed
Houston First Corporation
Houston Downtown Management District
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

APPROVAL REQUIRED FROM
COH - Public Works & Engineering

Creating a coherent and complete pedestrian realm includes having clear and legible signage at key intersections for improved pedestrian wayfinding. Providing this information will encourage visitors to investigate the entire Study Area and support local retail and entertainment options.

Using the current vocabulary of signage already in place in the Downtown District, there is great opportunity to connect EaDo to downtown with the introduction of a comprehensive signage program. The design of the new District signage should promote EaDo as a unique regional destination.

DOWNTOWN	A
GRBCC / GREEN	B
TOYOTA CENTER	C
MINUTE MAID PARK	D
DYNAMO STADIUM	E
BUFFALO BAYOU	F
BASTROP PROMENADE	G
EADO	H
PEDESTRIAN PORTALS	
MAJOR PEDESTRIAN STREETS	

0 100 250 500 ft N

Map Pedestrian Wayfinding and Identity

P2

Improve pedestrian crossings at Chartres and under US-59 at Texas, Capitol and Rusk

Add lighting and architectural elements to underpasses on Texas, Capitol and Rusk to make them welcoming to pedestrians. Add pedestrian safety improvements on Chartres.

BENEFITS
Encourage pedestrians to cross US-59 between EaDo and downtown.

GOALS SUPPORTED
2. Connectivity
3. Integrated Transit
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life

PROPOSED IMPLEMENTING AGENCY
Houston First Corporation
COH - Public Works & Engineering
Houston Downtown Management District
East Downtown Management District
METRO
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Houston First Corporation
COH - General Fund
Houston Downtown Management District
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority
Federal
METRO

APPROVAL REQUIRED FROM
TxDOT
COH - Public Works & Engineering
METRO

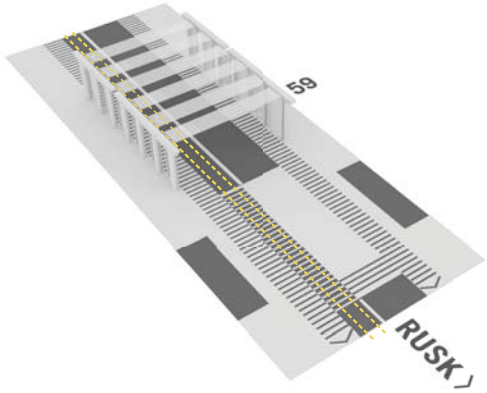
The elevated structure of US-59 in conjunction with high-speed traffic on Chartres serves as a barrier to pedestrian movement between downtown and EaDo. This recommendation is intended to address both these issues on Capitol, Rusk, and Texas, key east-west pedestrian connections on the respective streets.

The underside of the freeway will be transformed with the addition of lighting and scrims that create a gateway, draw pedestrians through the site, and add nighttime lighting for safety. These improvements will create a visual connection that can be reinforced with pedestrian-friendly development on both sides.

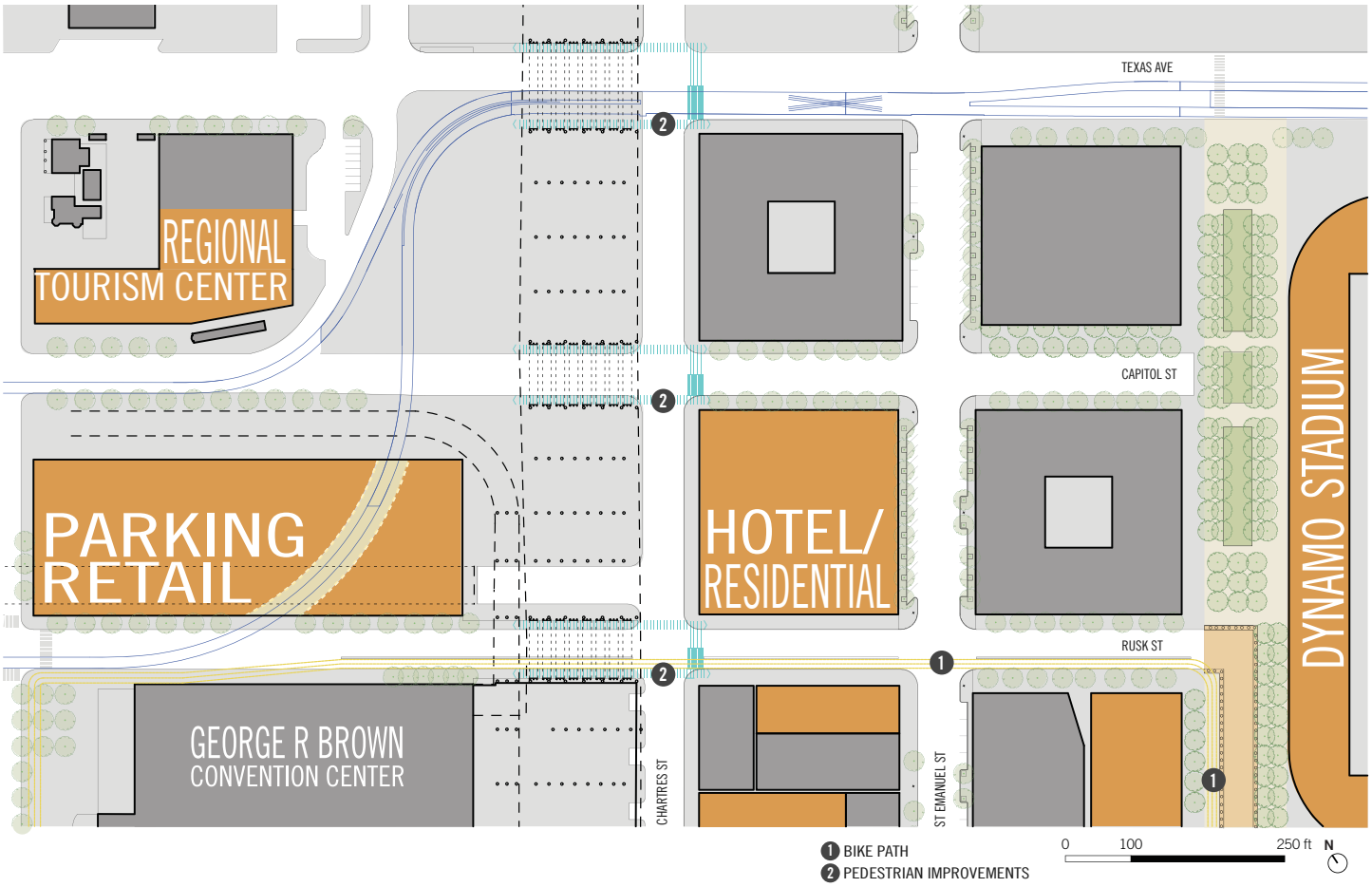
Pedestrian safety treatments at these intersections are crucial to allow pedestrians to cross safely by signaling to cars that pedestrians are present. For example, changes in roadway textures within an intersection's design indicate a universal change in roadway character for motorized, non-motorized and pedestrian traffic. Paving accents across an intersection not only emphasize the increased importance of a particular intersection, but they also draw attention to and extend the pedestrian realm into the roadway. This heightened awareness by vehicular traffic increases the safety of pedestrian movement across the intersection while enhancing the intersection's overall aesthetic appeal. The design of these improvements must be done in cooperation with the City of Houston. However, alternate approaches that are not currently in City standards, but have been proven elsewhere, may be necessary.

As Light Rail Transit (LRT) continues its development from Texas Avenue to Capitol and Rusk, special attention to the progression of motorized and non-motorized movement between these corridors as it relates to the LRT. Although specific signal timings for these intersections are not provided within this report, further analysis is warranted to ensure ample signal phasing is provided as it inter-relates between pedestrian, bicycle, vehicular and LRT traffic movements.

There is not currently a traffic signal at Chartres and Capitol. A High Intensity Activated Cross Walk (HAWK) will provide a signalized crossing for pedestrians at an otherwise unsignalized vehicular intersection. The signal is activated by the push of a button and is only intended to be used when pedestrians want to cross a high speed roadway.



Axonometric Diagram at Chartres and under US-59 at Rusk



Top Rendering of proposed pedestrian improvements at Chartres and under US-59 at Texas, Capitol and Rusk
Map Proposed pedestrian improvements at Chartres and under US-59 at Texas, Capitol and Rusk

P3

Improve pedestrian crossing at Chartres and under US-59 at Polk

Add lighting and architectural elements to the underpass on Polk, making it welcoming to pedestrians. Add pedestrian safety improvements on Chartres.

BENEFITS
Encourage pedestrians to cross US-59 between EaDo and downtown.

GOALS SUPPORTED
2. Connectivity
3. Integrated Transit
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life

PROPOSED IMPLEMENTING AGENCY
Houston First Corporation
COH - Public Works & Engineering
Houston Downtown Management District
East Downtown Management District
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Houston First Corporation
COH - General Fund
Houston Downtown Management District
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority
Federal

APPROVAL REQUIRED FROM
TxDOT
COH - Public Works & Engineering

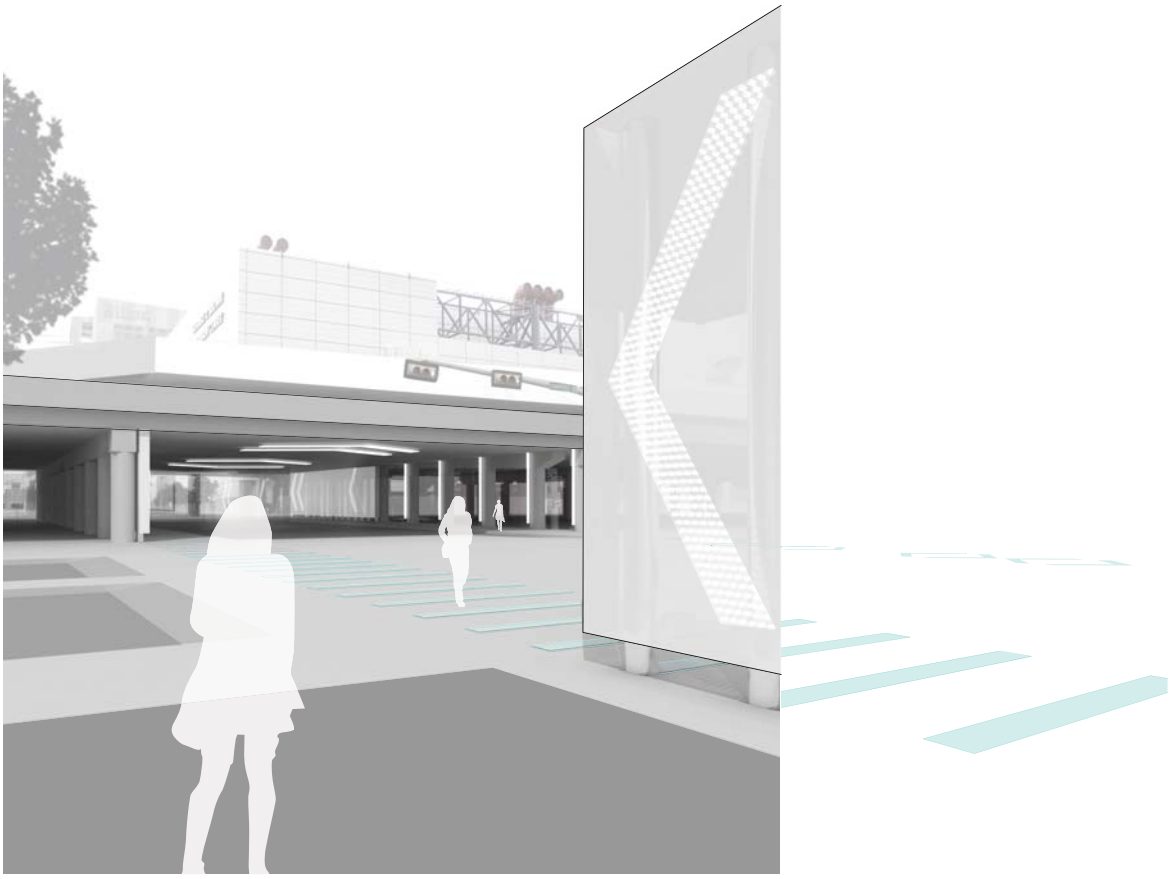
The elevated structure of US-59 in conjunction with high-speed traffic on Chartres serves as a barrier to pedestrian movement between downtown and EaDo. This recommendation is intended to address both issues on Polk, the key east-west pedestrian street south of the GRB Convention Center as well as the key link to possible hotel development in EaDo. Together with improvements on Polk and Dallas, this creates a continuous pedestrian link from Main Street to the Bastrop Promenade.

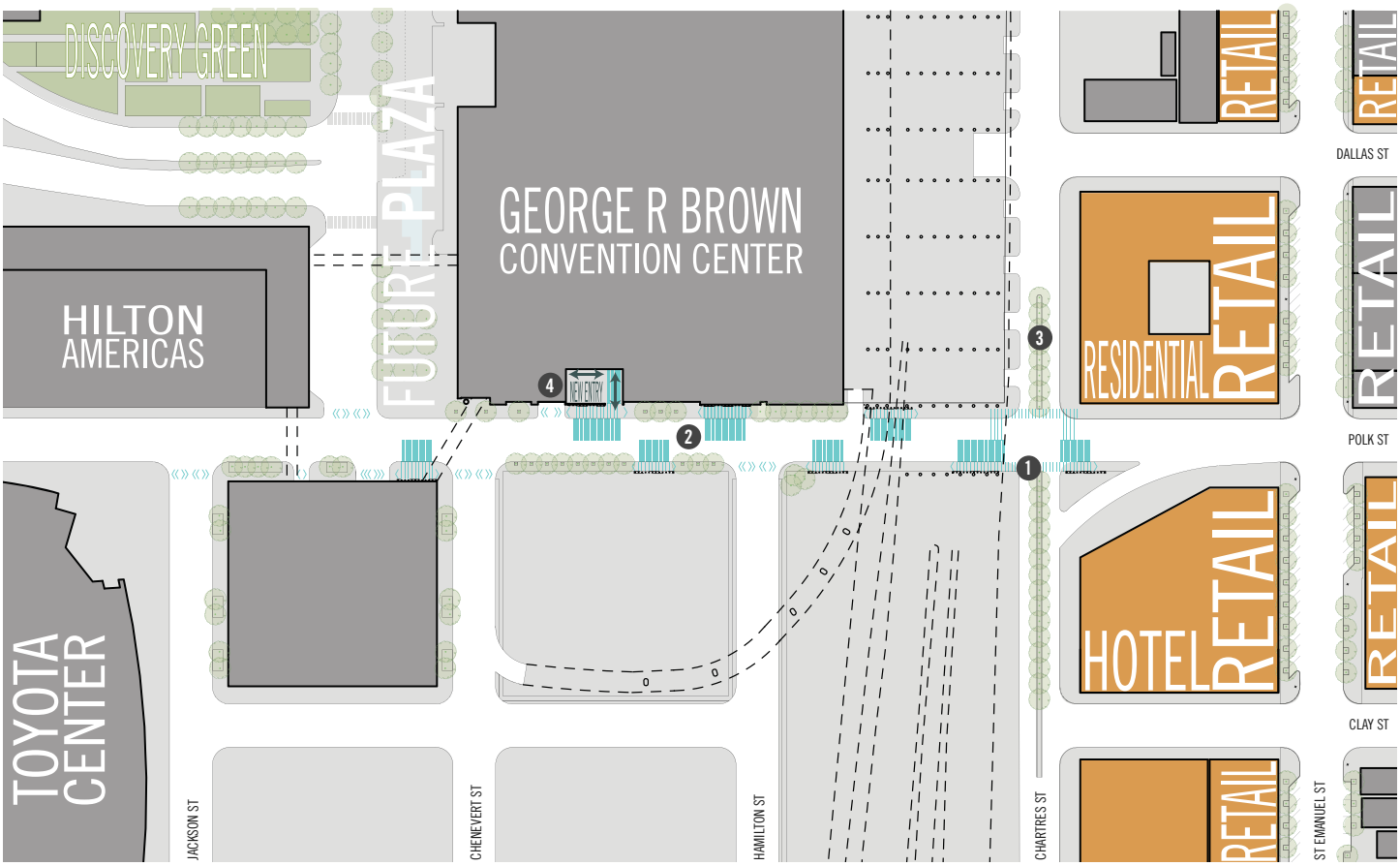
The underside of the freeway will be transformed with the addition of lighting and scrims that create a gateway, draw pedestrians through the site, and add nighttime lighting for a perception of safety. Additional scrims and lights on both sides will create a visual connection that can be reinforced with pedestrian-friendly development on both sides.

A raised median at Chartres north and south of Polk acts as a pedestrian refuge zone between opposing lanes of traffic and helps reduce vehicular speeds. The median ends before the GRB Convention Center loading docks to preserve access.

Pedestrian safety treatments at this intersection are crucial to allow pedestrians to cross safely by signaling to cars that pedestrians are present. For example, changes in roadway textures within an intersection's design indicate a universal change in roadway character for motorized, non-motorized and pedestrian traffic. Paving accents across an intersection not only emphasize the increased importance of a particular intersection, but they also draw attention to and extend the pedestrian realm into the roadway. This heightened awareness by vehicular traffic increases the safety of pedestrian movement across the intersection while enhancing the intersection's overall aesthetic appeal. The design of these improvements must be done in cooperation with the City of Houston. However, alternate approaches that are not currently in City standards, but have been proven elsewhere, may be necessary.

Connectivity between the GRB Convention Center and EaDo can be further improved by adding a new street level entrance to the GRB on Polk, connecting the sidewalk to the overhead circulation that also links to the Hilton Americas. This would benefit EaDo merchants and new hotel development in EaDo and give the convention center more flexibility in access.





Top Vision of proposed pedestrian improvements at Chartres and US-59 at Polk
Map Proposed pedestrian improvements at Chartres and US-59 at Polk

P4

Implement pedestrian improvements along Capitol from Chartres to St Emanuel

Upgrade all sidewalks along Capitol from Dynamo Stadium to match the improvements already in place at Lofts at the Ballpark.

BENEFITS
With the extension of the light rail, Capitol will provide an important link from EaDo into Downtown. As a mass transit portal between the Districts, Capitol Street will provide increased activity and accessibility.

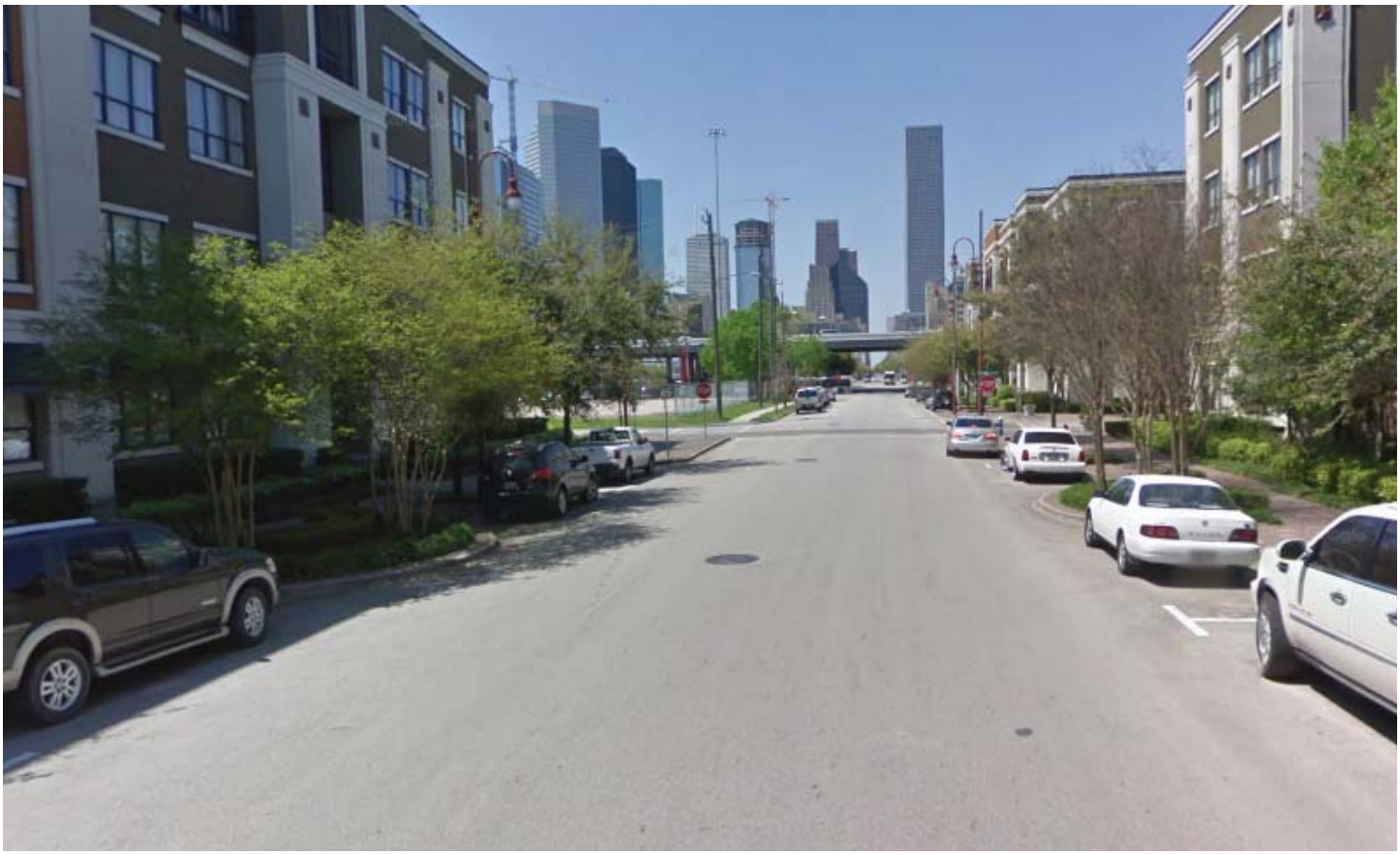
GOALS SUPPORTED
1. Access
2. Connectivity
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life

PROPOSED IMPLEMENTING AGENCY
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Houston First Corporation
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority
METRO

APPROVAL REQUIRED FROM
TxDOT
COH - Public Works & Engineering

Physical improvements are recommended beginning at the existing Lofts at the Ball Park to improve the quality of the pedestrian environment and provide continuity between EaDo and the Downtown District.
Specifically the following items should be included in the improvements: bulb-outs at intersection, accessible sidewalks, accessible ramps, street trees and district lighting. Making these specific improvements will help strengthen the connection between EaDo and downtown.



Top Capitol Street looking west
Bottom Proposed pedestrian improvements on Capitol from Hamilton to St Emanuel

P5

Implement pedestrian improvements along Rusk from Chartres to St Emanuel

Upgrade all sidewalks, lighting and street trees to match the improvements already in place at Lofts at the Ballpark. Build Houston's first separated on-street bike lane.

BENEFITS
Improved pedestrian environment and a new connection to Houston's regional bike trail system.

GOALS SUPPORTED
1. Access
2. Connectivity
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life

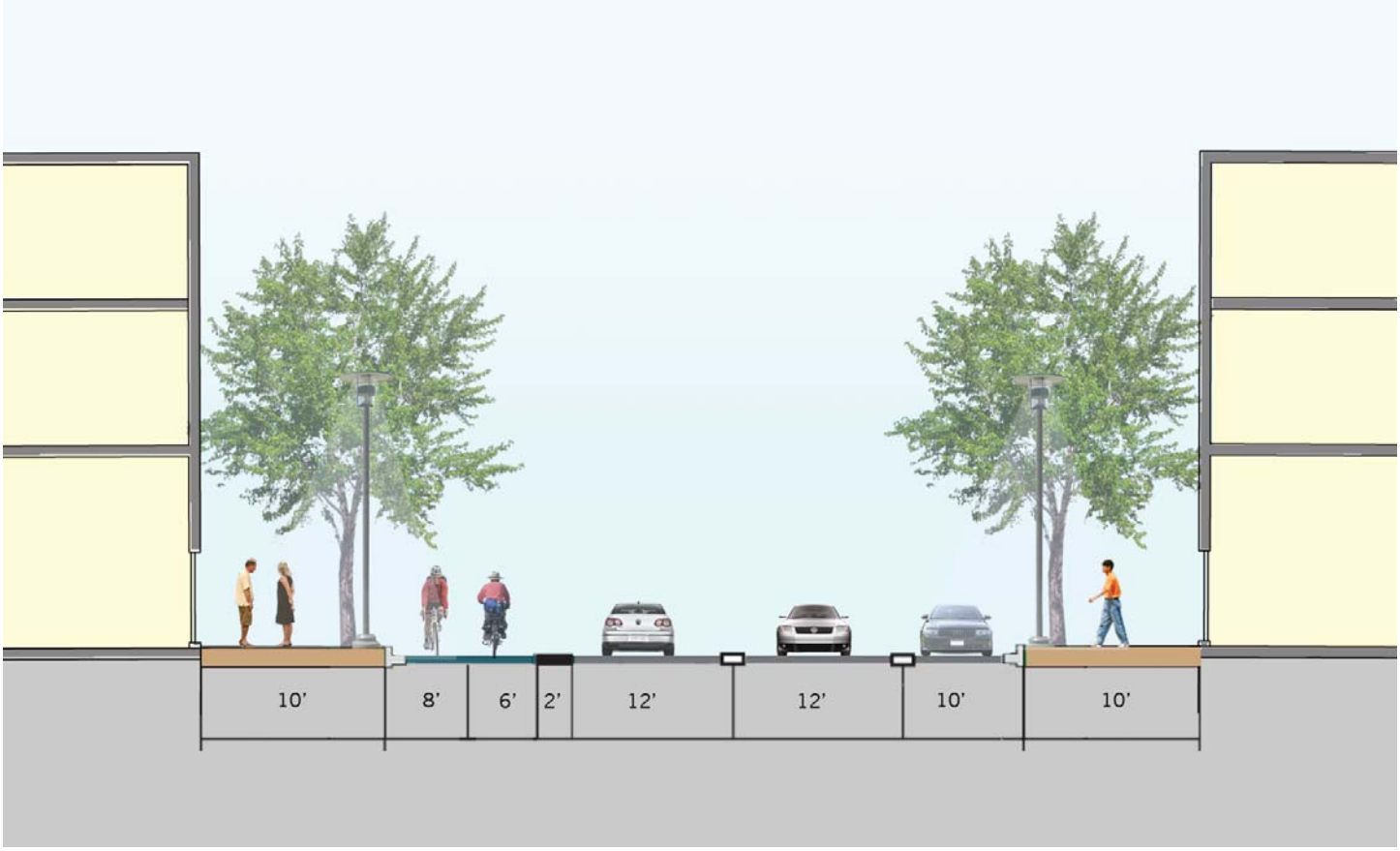
PROPOSED IMPLEMENTING AGENCY
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Houston First Corporation
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

APPROVAL REQUIRED FROM
COH - Public Works & Engineering

Rusk will play a key role in linking cyclist and pedestrians across the Study Area and regionally. The proposed cross section includes a fourteen foot wide separated bike lane that extends from the linear park at Hutchins to Discovery Green.

Key improvements are recommended within the pedestrian realm including street trees, lighting, and furnishings to support both cyclist and pedestrian activity. The addition of accessible sidewalks from back of curb to face of building will provide an unobstructed pedestrian connection from the heart of EaDo to the convention area.



Section Rusk Street section
Map Proposed pedestrian improvements on Rusk from Hamilton to St Emanuel

P6

Implement pedestrian improvements along Dallas from Main to Avenida de las Americas

Follow recommendations in the Downtown District's Retail Core Study to widen and improve sidewalks along Dallas by removing a lane and adding street trees, lighting and wayfinding.

BENEFITS
Improve opportunities for pedestrian activity within the Downtown District along the Dallas Corridor.

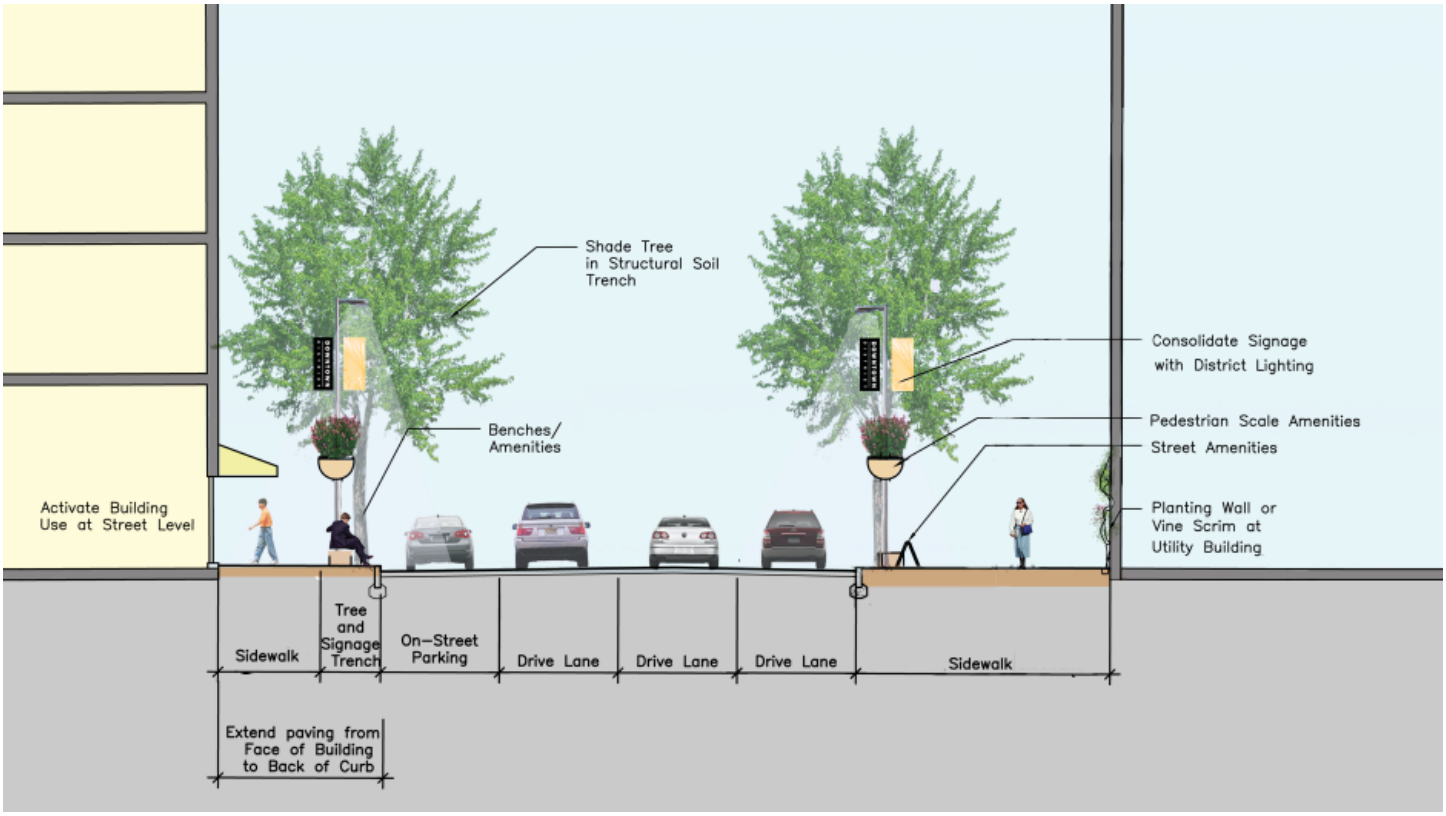
GOALS SUPPORTED
1. Access
2. Connectivity
3. Integrated Transit
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
Houston Downtown Management District

POSSIBLE FUNDING SOURCES
Houston First Corporation
Houston Downtown Management District

APPROVAL REQUIRED FROM
COH - Public Works & Engineering

In multiple phases, the Downtown District has made improvements to the streetscape of the Dallas Corridor, from the Hyatt and DoubleTree hotels west of Main Street to the recent improvements at the Houston Pavilions. A current project for Dallas Street including the generous widening of sidewalks, tree plantings, pedestrian and vehicular lighting, and wayfinding improvements from Caroline to Crawford Streets. One traffic lane will be removed from the south side of Dallas Street, accommodating a widened sidewalk to support active ground floor building uses such as storefronts and sidewalk patio seating. A complimentary reconfiguration of Crawford Street, between Polk and Lamar, will add a public plaza adjacent to the Hilton Americas Hotel, providing a stronger connection to Discovery Green. With the overarching goal of enhancing the visitor's pedestrian experience, the Dallas Street improvements are a vital link between the GRB Convention Center and downtown's core.



Top Dallas Street looking east
Bottom Proposed pedestrian improvements on Dallas from Main to Avenida de las Americas

P7

Create a pedestrian plaza on Avenida de las Americas from Rusk to Polk

Create a 60 feet wide pedestrian plaza on Avenida de las Americas in front of GRB. Provide key physical changes including off-street bike lane, bus loading, flexible plaza space, public art, bike amenities, seating opportunities and a civic fountain.

BENEFITS
Within downtown's Convention District, a new plaza will support and encourage pedestrian use while greatly enhancing the convention experience of the neighborhood.

GOALS SUPPORTED
1. Access
2. Connectivity
3. Integrated Transit
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life
8. Mix of Uses

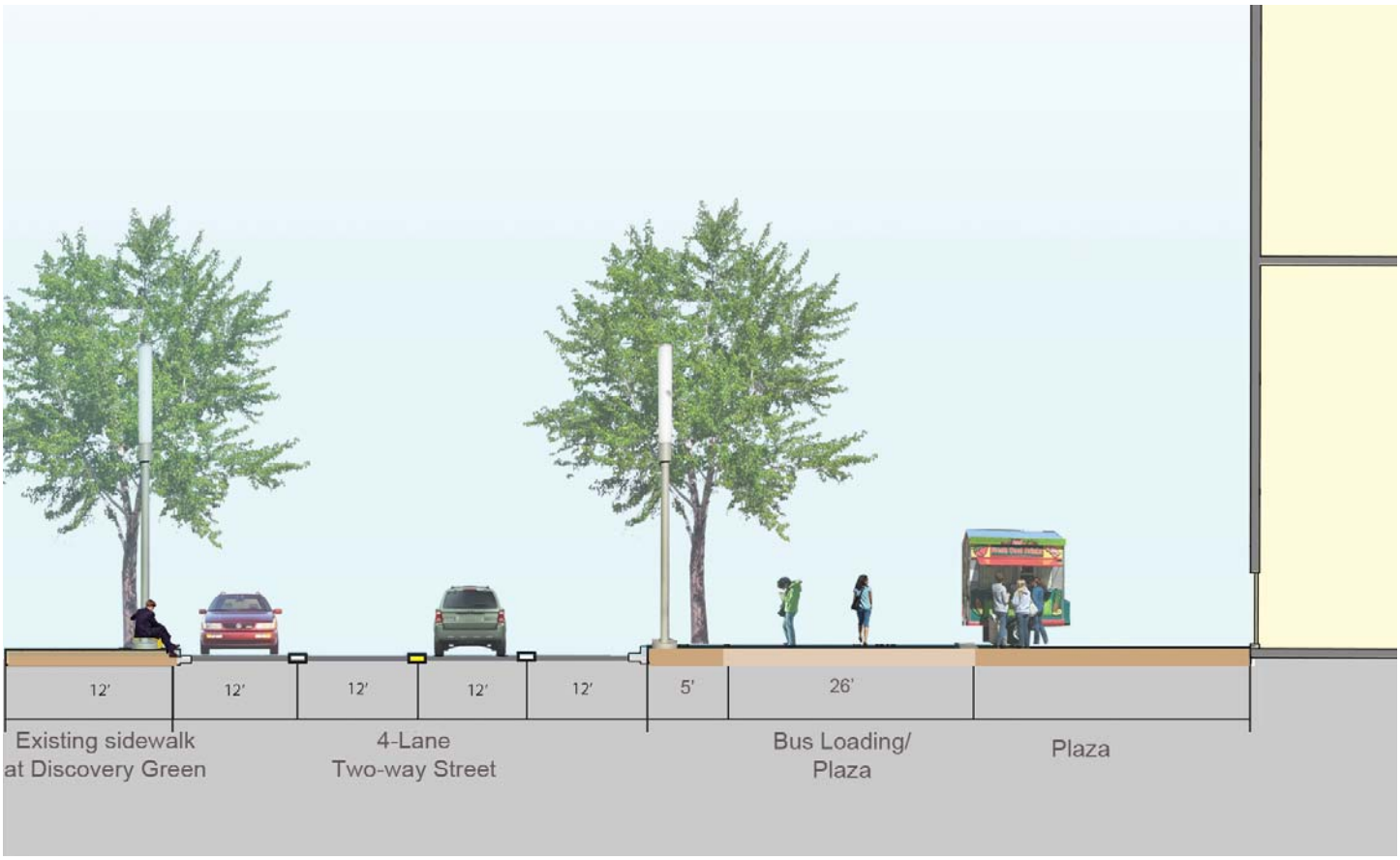
PROPOSED IMPLEMENTING AGENCY
Houston First Corporation
COH - Public Works & Engineering
Houston Downtown Management District
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Houston First Corporation
COH - General Fund
Houston Downtown Management District

APPROVAL REQUIRED FROM
COH - Public Works & Engineering

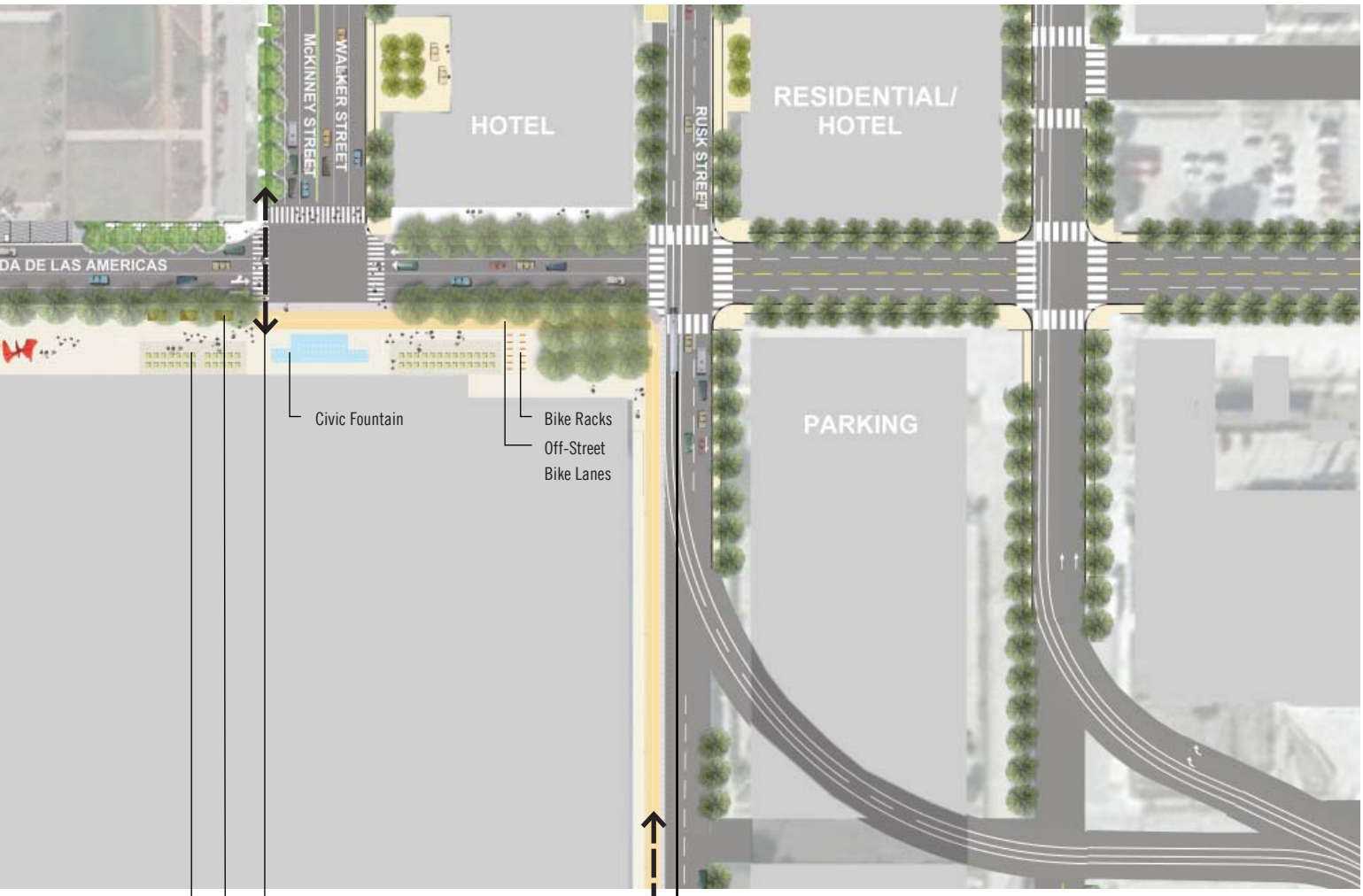
Removing the existing street median and combining that "found" area with the existing space in front of the GRB Convention Center will provide a 60-feet wide zone for pedestrian activity. Setting the stage with key elements and providing areas for flexible activity to support existing convention program and district activity will prove essential to creating a successful space.

The new plaza includes a 26 feet wide bus loading zone to accommodate concentrated times of a specific convention event's loading and unloading. The plaza provides a flexible open space to support convention and downtown activities. Civic elements such as public art, civic fountains, and a signature design (benches, lighting, and paving systems) will promote the plaza as a new regional destination for the Downtown District and the City of Houston.



Top Avenida de las Americas looking north
Bottom Proposed pedestrian plaza on Avenida de las Americas

Map Proposed pedestrian plaza on Avenida de las Americas from Rusk to Polk



Improved pedestrian and bicycle connections from GRB Plaza to Discovery Green and Downtown

Proposed Rail Line

Vendors

Off-Street Bike Lane to connect to East Downtown (EaDo) and Union Station Bike and Hike Trail

Cafe / Outdoor Seating - supporting interior and exterior vendors

P8

Rebuild Polk from Avenida de las Americas to Dowling

Extend Polk street's four-lane section, two-way lane configuration east of US-59 to Dowling. Provide sixteen foot wide "sharrows" on outside lanes to accommodate joint bike and vehicular traffic lanes.

BENEFITS
Provide essential vehicular and bike traffic connections between downtown and EaDo District.

GOALS SUPPORTED
1. Access
2. Connectivity
6. Visitor Experience
7. Street Life

PROPOSED IMPLEMENTING AGENCY
Houston First Corporation
COH - Public Works & Engineering
Houston Downtown Management District
East Downtown Management District
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Houston First Corporation
COH - General Fund
COH - Renew Houston
Houston Downtown Management District
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

APPROVAL REQUIRED FROM
City Council
COH - Public Works & Engineering

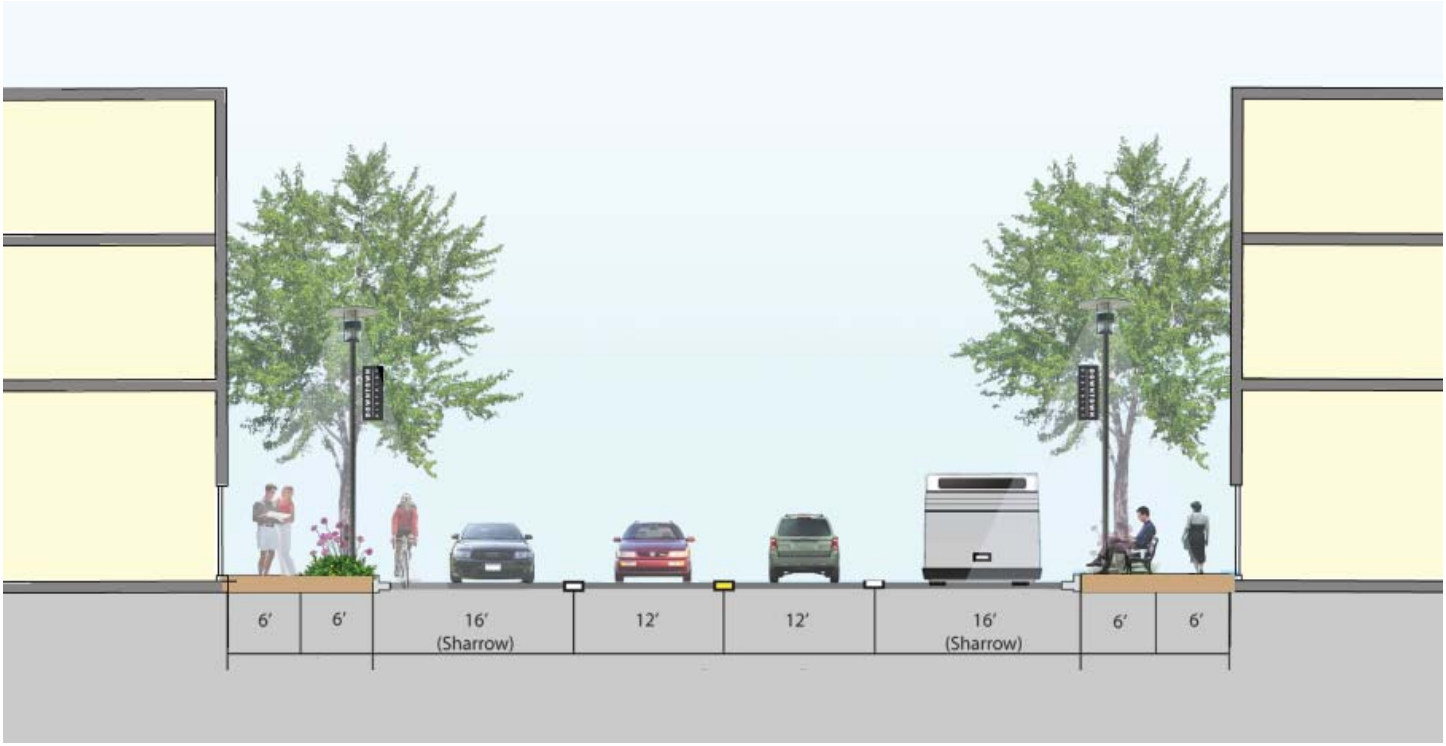
Currently, the intersection of Avenida de las Americas (AdlA) and Polk presents four lanes of traffic along Polk and eight lanes along AdlA. The proposed intersection would re-align the intersection west of its current location based on the revisions recommended for the AdlA travelway. The intersection would allow four travel lanes along Polk and four travel lanes along AdlA. The modified intersection would provide a clearer sight line for traffic turning onto / from AdlA, a more defined pedestrian crossing area, and a queuing area for traffic turning onto Polk headed westbound from Chenevert.

Polk Street is located in the southern portion on the Study Area and provides access to several local attractions within the Study Area (Toyota Center, GRB Convention Center, Discovery Green and the proposed Bastrop Promenade). Given its location, this corridor provides for a natural progression of pedestrian traffic between the downtown and EaDo Districts. To ensure continued and future use of this corridor, it is recommended that 6 to 12 feet wide sidewalks be mandated, where more narrow sidewalks may be preferred in areas with established tree growth. Where wider sidewalks are preferred, tree grates should be installed to ensure the continued progression of shading within the pedestrian corridor.

In terms of vehicular and bicycle traffic, Polk Street is the primary corridor that travels from Austin to Dowling through the southern portion of the Study Area. Although Dallas and Clay parallel Polk Street, and accommodate opposing westbound traffic movements, they are obstructed by the Toyota Center and, the GRB Convention Center, respectively. Given the importance of Polk Street, the following recommendations are also proposed in coordination with wider sidewalks to ensure the full potential and use of this multimodal corridor:

1) For seamless transition of traffic from Polk to AdlA, it is recommended that Polk Street be reconfigured to properly accommodate the eight-to-four lane redesign of Avenida de las Americas. Lane configuration and traffic flow recommendations are provided within the illustration of the Proposed Plan for Polk Rebuild, at right.

2) To accommodate bike traffic, it is recommended that 16 feet wide outside lanes or "Sharrows" be established to accommodate shared vehicular and bicycle traffic. Given the current configuration of the roadway, the use of a Sharrow provides a relatively inexpensive alternative to separated bike lanes which preserve the current lane configuration of the roadway west of US-59 without compromising current and future vehicular traffic flow.



Section Polk Street Section
Map Proposed Plan for Polk Rebuild

P9

Rebuild St Emanuel from Commerce to Leeland

Rebuild St Emanuel from curb to curb, widening sidewalks to 12 feet wide along both sides of the roadway incorporating angled parking to accommodate a greater number of parking spaces, and upgrading utilities.

BENEFITS
Creates a business-friendly, pedestrian and local traffic-oriented "main street" where visitors can park and access storefront shops via angled parking and wide pedestrian sidewalks.

GOALS SUPPORTED
1. Access
7. Street Life
6. Visitor Experience
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
COH - Public Works & Engineering
East Downtown Management District
Not-for-profit / Civic

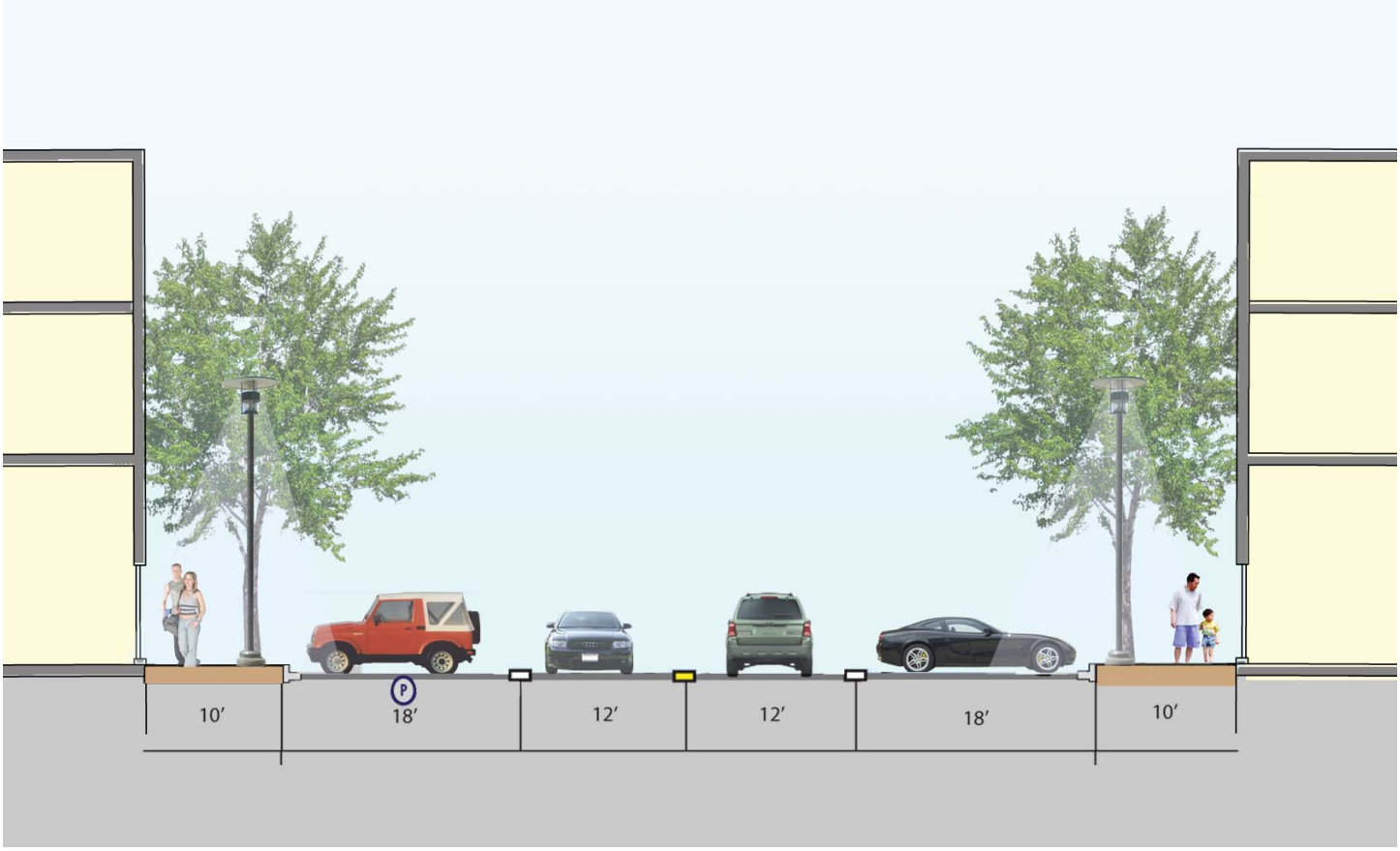
POSSIBLE FUNDING SOURCES
COH - General Fund
COH - Renew Houston
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

APPROVAL REQUIRED FROM
City Council
COH - Public Works & Engineering

St Emanuel is a two-lane street that accommodates multi-directional traffic within EaDo's north-south corridor. Currently, the old warehouses lining the street are being redeveloped into restaurants, clubs, and stores, which are attracting visitors and pedestrian traffic. The roadway does maintain an existing pedestrian corridor, but fails to adequately provide consistent and well-established sidewalk widths which help to promote pedestrian traffic. Similarly, on-street parking is prevalent along the corridor, but painted, formalized parking spaces are not. St Emanuel has the potential to be developed into the "main street," or retail spine, of EaDo.

All sidewalks should be expanded to a minimum of 10 feet, which according to the Institute of Transportation Engineer's Recommended Practices, meets the desired recommended standards of 9 to 13 feet wide for a roadway of this nature. The proposed ten-foot sidewalk not only fits dimensionally within the existing section, but also provides ample space to incorporate elements of a "complete street" including furniture (i.e. benches), extended storefront awnings, and sidewalk merchandise displays, to name a few. Finally, where possible, angled parking is recommended to encourage parking along this corridor providing increased accessibility to street side storefronts. Where existing trees or buildings are present, eight-foot parallel parking spaces will suffice to avoid unnecessary and costly disruption to existing infrastructure. As the street is rebuilt, existing utilities should be upgraded to reduce street flooding, to meet current standards, and to support future development.

St Emanuel Street looking North



Top St Emanuel Street Section Primary
Bottom St Emanuel Street Section Secondary

P10

Develop pedestrian realm design standards for EaDo

Develop a master plan document that outlines specific design standards for EaDo. The standards should carry over or relate to the current downtown standard and include paving, street furnishings, structures, signage, tree and planting types.

BENEFITS
Improves the pedestrian experience and build neighborhood identity.

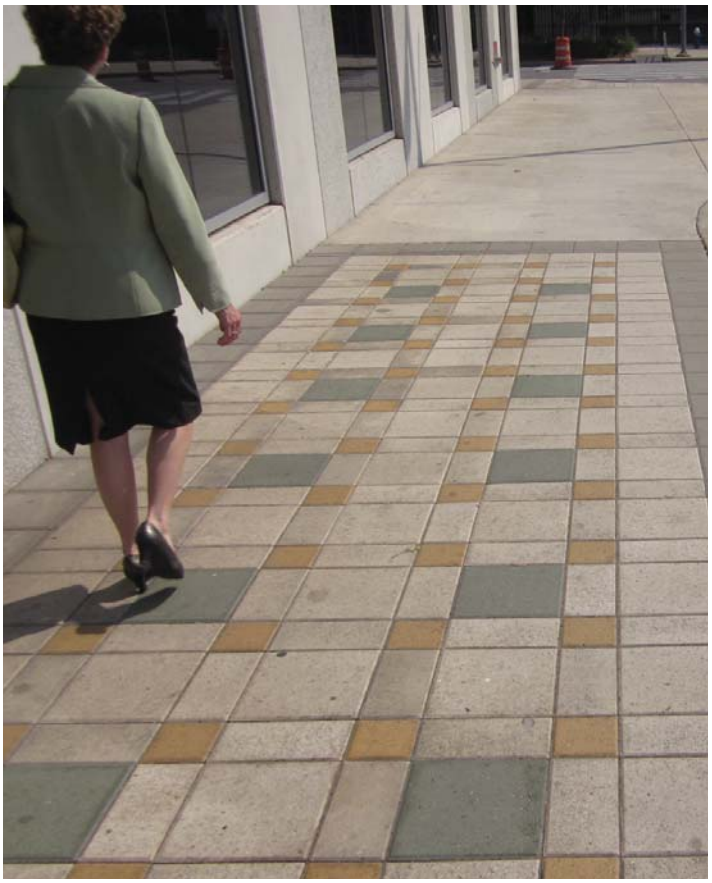
GOALS SUPPORTED
1. Access
2. Connectivity
4. District Character
6. Visitor Experience
7. Street Life
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
East Downtown Management District

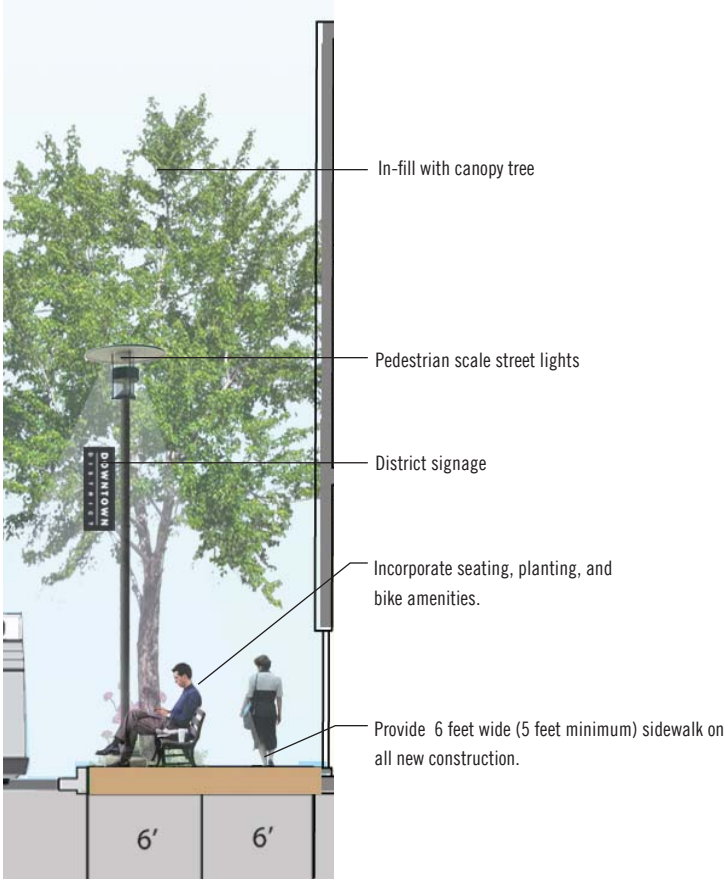
POSSIBLE FUNDING SOURCES
Private
COH - General Fund
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

APPROVAL REQUIRED FROM
COH - Public Works & Engineering

Developing a document that outlines specific design standards for EaDo will serve as a tool that will provide guidance and opportunity for cohesive growth and change within the district. Identifying a palette of street trees, plantings, paving and accents will help guide decisions and increases stakeholder investment. The standards will help transform and enhance the districts into a vibrant destination within the City of Houston.



Accessible Sidewalk



Street Trees and Plantings

Stately shade trees such as the Quercus Virginiana Live Oak line some of Houston's most prestigious neighborhoods and Downtown streets. Developing a district street tree plan that maximizes canopy cover will further add to this great legacy and provide shade for sitting, strolling and parking.

Planting should provide texture and seasonal interest, and help identify and enhance the pedestrian experience throughout the neighborhood. Species should be native or well adapted to the Houston climate.

Irrigation infrastructure to support new tree plantings should be considered for planning and operational phases.

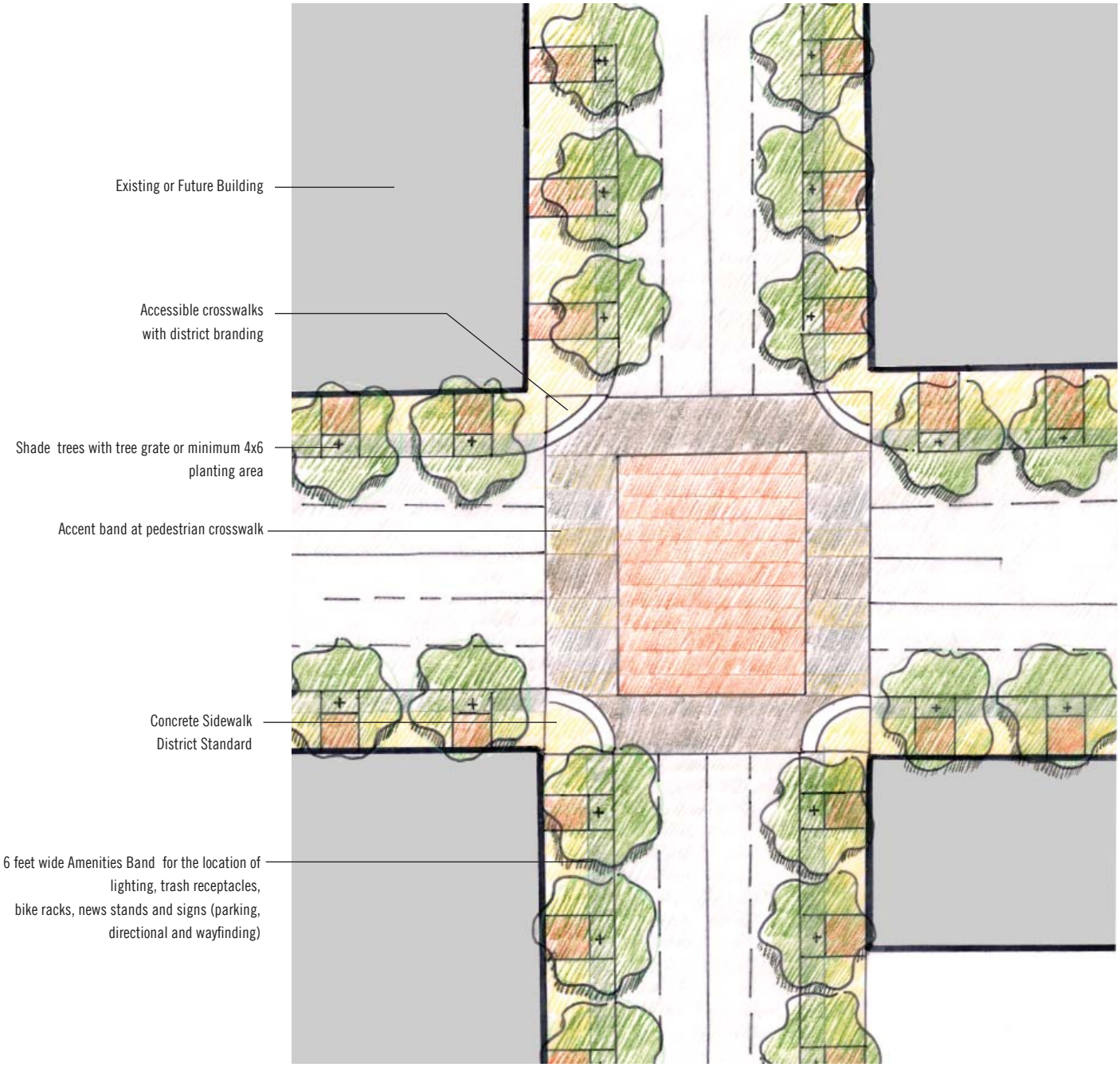
Top Left Cedar Elm | **Top Middle** Cedar Elm | **Top Right** Live Oak
Section Minimum sidewalk requirements

Paving

Select paving systems that are appropriately scaled to support uses within the urban environment and accommodate expected loads for vehicular and pedestrian uses.

Accents

Provide key accents such as bike racks, waste receptacles, shelters and benches to support district activity and encourage street activity. Seating may include secured benches in typical public environments and / or moveable seating in controlled outdoor areas such as cafes or parks. Waste receptacles should be incorporated into future development and an appropriate maintenance regime developed to ensure that the public realm is free of debris.



Map Minimum Requirements

P11

Implement minimum pedestrian standards for the entire Study Area

Provide city standard sidewalks, ADA ramps, street trees and lighting across the entire Study Area.

BENEFITS
Improved pedestrian realm with opportunity to safely traverse the Study Area. New lighting should minimize light pollution with the careful selection and fixture type and design.

GOALS SUPPORTED
1. Access
2. Connectivity
4. District Character
6. Visitor Experience
7. Street Life

PROPOSED IMPLEMENTING AGENCY
Private
COH - Public Works & Engineering
Houston Downtown Management District
East Downtown Management District
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Private
COH - General Fund
Houston Downtown Management District
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

APPROVAL REQUIRED FROM
COH - Public Works & Engineering

Photo Discovery Green

P12

Create Bastrop Promenade

Build a promenade with walkways, gathering spaces and natural planting in the Bastrop right-of-way from Walker to Bell. Program events and activities. Encourage the development of residential on both sides.

BENEFITS
Provide a new urban park space for EaDo. Create a prototype for new low impact development (LID) in urban neighborhoods in the City of Houston.

GOALS SUPPORTED
1. Access
2. Connectivity
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
Private
COH - Public Works & Engineering
COH - Parks & Recreation Department
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Private
COH - General Fund
COH - Renew Houston
COH - Parks & Recreation Department
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority
380 Agreement
Federal
Foundations / Conservancies / Private Grants

APPROVAL REQUIRED FROM
City Council
COH - Public Works & Engineering

The Bastrop right-of-way from Walker to Bell represents an incredible opportunity: largely vacant publicly owned land in the heart of EaDo, near existing businesses on St Emanuel, the new soccer stadium, and existing residential, surrounded by potential development tracts. Discovery Green has shown how a well-designed and programmed park can provide an amenity to people already in the area, draw people from elsewhere, and support new development. A Promenade in the Bastrop right-of-way can do the same, providing an identifiable place within the EaDo District and the City of Houston.

The right-of-way is currently vacant and unpaved from Bell to McKinney. This area could be developed as a park, with gathering areas, programmed spaces, greenery, and other amenities. The layering of pedestrian scale amenities including paving, lighting, furnishings and planting will transform the area into a unique urban pedestrian experience. The central storm water collection area will be a native garden that provides neighborhood-scale respite, reduces the urban heat island effect and links to wildlife corridors along the Buffalo Bayou-Basin creating habitat for birds, butterflies and other fauna.

The northernmost block, from McKinney to Walker, is paved but carries a low level of traffic; this should be designed as an extension of the Promenade while still accommodating traffic. The Promenade will also give the pedestrians precedence over the vehicle by narrowing crossing distances along Polk, Dallas, Lamar and McKinney streets.

In addition to serving as park space, the Promenade, in conjunction with the Hutchins linear park, would play a key role to enable north-south pedestrian connections in EaDo, linking residential and business areas to downtown (via Rusk and Polk), the soccer stadium, and light rail.

The Promenade should complement St Emanuel, which is already developing as a restaurant, club, and retail street. Thus, the best development along the Promenade is residential. As Discovery Green has shown, parks make residential more attractive, and residential development adds 24 / 7 life that will keep a park active.

A programming exercise is currently underway on the Promenade, under the leadership of Sister Cities of Houston.

Top Vision for Bastrop Promenade. Low Impact Development Competition, image source Gensler, Clark Condon, WP Moore
Map Proposed Bastrop Promenade. Low Impact Development Competition, image source Gensler, Clark Condon, WP Moore

P13

Create a north-south linear park to connect light rail transit to the Bastrop Promenade

Build a three-block linear park in the Hutchins right-of-way from Walker to Texas providing space for pregame events and linking residents and businesses south of the Dynamo Stadium to the light rail line and Downtown.

BENEFITS
The recommendation for the Hutchins right-of-way will provide a flexible open space that functions as a neighborhood park, district connector, and event space for game-day activity. Connecting Rusk and Walker will improve east-west vehicular movements and pedestrian activity during non-event times. During district events, the Rusk / Capitol connection will increase the capacity for pedestrian activity to accommodate markets, festivals, and game day activity.

GOALS SUPPORTED
1. Access
2. Connectivity
3. Integrated Transit
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life

PROPOSED IMPLEMENTING AGENCY
Private
COH - Public Works & Engineering
COH - Economic Development
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

POSSIBLE FUNDING SOURCES
Private
COH - General Fund
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

APPROVAL REQUIRED FROM
City Council
COH - Public Works & Engineering

The linear park will serve several functions. It will provide a neighborhood park for local residents and event space before Dynamo games. It will also be an important link in east-west bike circulation, provide a connection for local traffic between Hutchins and Rusk, and connect pedestrians to the light rail station and to the soccer stadium. Furthermore, it will function as an extension of the Bastrop Promenade, better connecting it to the light rail station, the soccer stadium, and the Lofts at the Ballpark.

The linear park is intended as a flexible space, combing greenery with paved areas. The segment between Walker and Rusk will be open to cars at most times but closed for events or used as a drop-off area.

Map Proposed north-south linear park on Hutchins right-of-way

TEXAS AVENUE
LOFTS AT THE BALL PARK
CAPITOL STREET
LOFTS AT THE BALL PARK
RUSK STREET
DYNAMO STADIUM
0
100 ft
N

Bicycle Recommendations

Bicycle Recommendations

It will be safe and easy to bike to any destination within the Study Area and to the surrounding areas. New off-street bike paths and on-street separated bike path will link the Buffalo Bayou, Heritage, Harrisburg, Union Station, and Columbia Tap Hike and Bike Trail into a regional system and connect with Discovery Green and the light rail lines. The East End, Third Ward, and Fifth Ward will be better connected to jobs, businesses, and education, benefiting all residents, regardless of age or income. A new east-west link will tie the core of downtown into this network. Bike lanes and bike-friendly streets will serve the remainder of the Study Area. Bike-friendly open spaces including the plaza in front of the GRB Convention center, existing paths in Discovery Green, the Hutchins linear park, the plaza around the Dynamo Stadium, and the Bastrop Promenade will allow bicyclists to mix with pedestrians, extending the bike network. Improved wayfinding will make this system easy to use. Bike racks at venues, parks, transit stations, retail areas, and other destinations will allow residents to use bicycles for errands, commuting, and recreation. The City of Houston is preparing to implement a bike sharing program which will include a concession in Discovery Green, opening up the bicycle network to out-of-town visitors and others who do not have a bike available.

1. IMPLEMENT BICYCLE WAYFINDING AND IDENTITY PROGRAM
2. ENHANCE DESIGNATED BIKE NETWORK
3. IMPLEMENT SEPARATED ON-STREET BIKE PATH PILOT PROJECT
4. STUDY MAJOR EAST-WEST BIKE ROUTE ACROSS DOWNTOWN
5. CONNECT UNION STATION HIKE & BIKE TRAIL TO BUFFALO BAYOU
6. PROVIDE PEDESTRIAN AND BIKE LINKAGE TO EAST END THROUGH HARRISBURG UNDERPASS
7. ROTATE STOP SIGNS ON COLUMBIA TAP AND UNION STATION HIKE AND BIKE TRAIL
8. PROVIDE BIKE RACKS AT TRANSIT STATIONS AND MAJOR DESTINATIONS

Map Bike Routes diagram

B1

Implement bicycle wayfinding and identity program

Provide a coherent, comprehensive wayfinding program to guide bicyclists to their destinations. Use wayfinding and gateway elements to strengthen the district identity of downtown and EaDo.

BENEFITS
Improve ease of bicycling navigation. Integrate wayfinding elements into the district character and support the connection of larger pedestrian open space circuits, downtown destinations and bicycle / pedestrian trails.

GOALS SUPPORTED
1. Access
2. Connectivity
3. Integrated Transit
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
COH - Public Works & Engineering
Houston Downtown Management District
East Downtown Management District

POSSIBLE FUNDING SOURCES
COH - General Fund
Houston First Corporation
Houston Downtown Management District
East Downtown Management District
Foundations / Conservancies / Private Grants

APPROVAL REQUIRED FROM
COH - Public Works & Engineering

Clearly marked and well-constructed bike paths and lanes supported by a clear and identifiable family of signs at key direction points will help connect people to destinations within the Study Area. Well-marked bike lanes and paths will improve cyclist experience, safety and overall use, resulting in increased bicycle activity into and throughout downtown and EaDo.

DOWNTOWN / BUFFALO BAYOU	A
EADO / COLUMBIA TAP	B
EADO	C
BASTRO PROMENADE	D
COLUMBIA TAP	E
DISCOVERY GREEN	F
HARRISBURG TRAIL	G
BUFFALO BAYOU	H

OFF-STREET HIKE AND BIKE TRAIL
ON-STREET SEPARATED BIKE PATH
BIKE FRIENDLY OPEN SPACE
ON-STREET BIKE LANE
SIGNED BIKE ROUTE

0 100 250 500 ft N

Map Bicycle Wayfinding and Identity

B2

Enhance designated bike network

Enhance the current bike network by establishing bikeways that intersect the center of the Study Area, providing increased access and connectivity between Districts and site attractions. Promote the ridership experience via established bike-friendly open spaces on Avenida de las Americas, Discovery Green, Bastrop Promenade and at Dynamo Stadium for enhanced rider experience.

BENEFITS
Provides safe and efficient north-south and east-west connectivity for all on- and off-street biking corridors.

GOALS SUPPORTED
1. Access
2. Connectivity
4. District Character
5. Major Venues
7. Street Life

PROPOSED IMPLEMENTING AGENCY
COH - Public Works & Engineering
Houston Downtown Management District
East Downtown Management District
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Houston First Corporation
COH - General Fund
Houston Downtown Management District
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority
Foundations / Conservancies / Private Grants

APPROVAL REQUIRED FROM
COH - Public Works & Engineering
TxDOT

The current bike network is located predominately along or just outside the perimeter of the Study Area. Polk Street, Commerce, and portions of Leeland Street provide the current east-west bicycle connections while Austin Street is the only north-south bicycle corridor within the Study Area. Based on this current configuration, little to no access is provided to the area's primary attractions, further emphasized by the lack of north-south and centralized east-west bike way corridors.

To increase both access and connectivity within the Study Area's bikeway network, La Branch and St Emanuel should be incorporated into the network's primary north-south bicycle corridors. Similarly, portions of Walker and Rusk should be incorporated to provide an additional east-west corridor, providing access to key area locations such as the Dynamo Stadium, the GRB Convention Center and Discovery Green. Implementing these recommendations will require city approval and an official change to the City's designated bikeway network.

On-sreet bike lane in Portland, Oregon

COMMERCE ST
FRANKLIN ST
CONGRESS ST
PRESTON ST
PRAIRIE ST
TEXAS AVE
CAPITOL ST
RUSK ST
WALKER ST
McKINNEY ST
LAMAR ST
DALLAS ST
POLK ST
CLAY ST
BELL ST
LEELAND ST
PEASE ST
AUSTIN ST
LA BRANCH ST
CRAWFORD ST
JACKSON ST
CHENEVERT ST
HAMILTON ST
CHARTRES ST
ST EMANUEL ST
HUTCHINS ST
BASTROP ST
DOWLING ST
ST CHARLES ST
Congress / Preston
Market Square / Buffalo Bayou
Route TBD
Downtown / Buffalo Bayou
Polk / Clay
Downtown
Buffalo Bayou Trail
East End / Fifth Ward
Harrisburg Blvd Trail
East End
Linear Park and Bike Trail
Union Station
Polk
EaDo / East End
Leeland
EaDo / East End
Columbia Tap Trail
Third Ward / UH
MINUTE MAID PARK
MARKET SQUARE PARK
FIVE HOUSTON CENTER
HESS TOWER GARAGE
HESS TOWER
ONE PARK PLACE
MARIANO'S
MARKET SQUARE TOWER
MARKET SQUARE HOTEL
MARKET SQUARE GARAGE
MARIANO'S

B3

Implement separated on-street bike path pilot project

Build Houston's first on-street separated bike path on segments of Hutchins, Rusk, and Walker by eliminating parking along the south side of Rusk and creating 2 to 4 feet wide barriers between vehicular traffic and bicyclists.

BENEFITS
Provide physical separation and additional comfort for bicyclists riding along major, vehicular-focused roadways while extending the Union Station Hike & Bike Trail to Discovery Green.

GOALS SUPPORTED
1. Access
2. Connectivity
4. District Character
5. Major Venues
7. Street Life

PROPOSED IMPLEMENTING AGENCY
COH - Public Works & Engineering
Houston Downtown Management District
East Downtown Management District
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Houston First Corporation
COH - General Fund
Houston Downtown Management District
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority
Federal

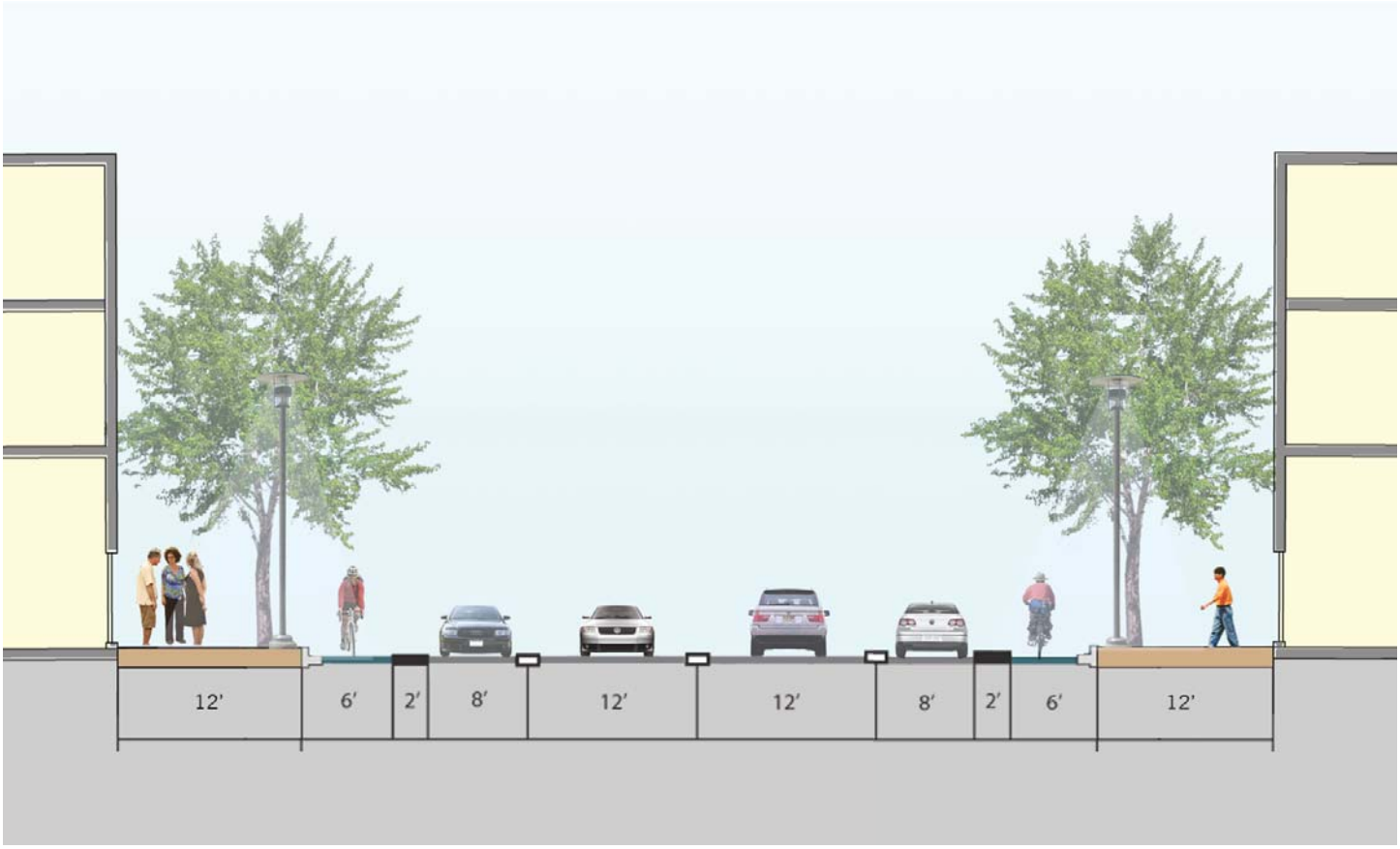
APPROVAL REQUIRED FROM
COH - Public Works & Engineering
TxDOT

The Columbia Tap and Union Station Hike and Bike Trails form a 4-mile, 10-foot wide north-south trail that intersects the existing bike network at Polk and terminates at Walker and Dowling. Before the construction of the soccer stadium, bike lanes extended this trail north along Bastrop to Preston, where it ended well short of any significant destination. The stadium no interrupts these lanes for three blocks. The result is a disjointed network that fails to grant access to key area attractions.

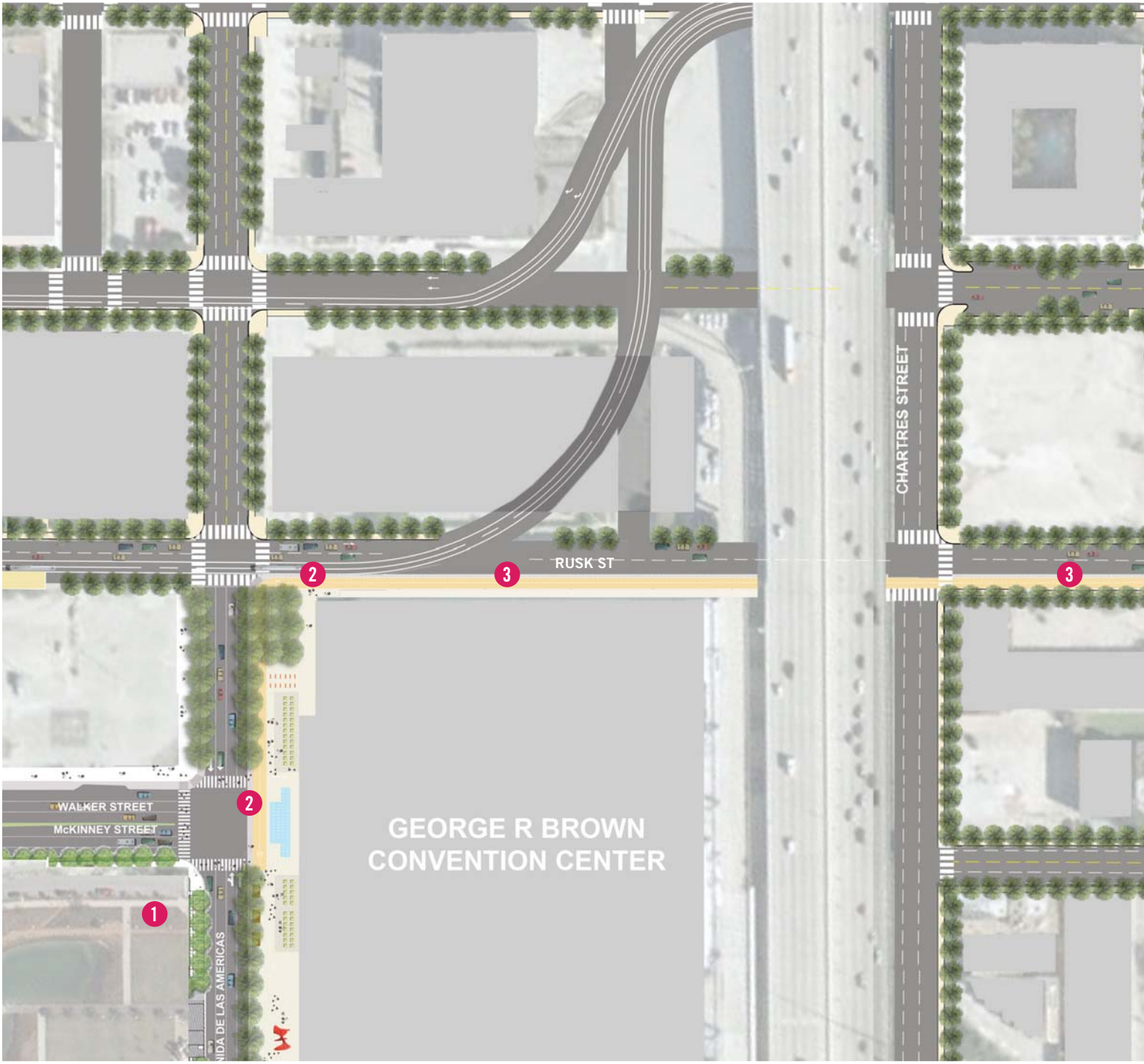
To provide for connectivity across the central part of the Study Area, as well as provide an extension of the greenway to areas such as Discovery Green and Sam Houston Park, it is recommended that separated bike path be established along the Walker / Rusk east-west corridor as illustrated. As a greenway extension, separated bike paths allow for less experienced riders to utilize the corridor where concerns regarding vehicular traffic is lessened, and as such may encourage use by downtown employees daily and recreation tourist alike.

Where multidirectional traffic exists, separated one-way bike paths are proposed, while joint, 12 feet wide multidirectional bike paths are proposed along one-way streets and on Avenida De Las Americas alongside the pedestrian plaza. In the Hutchins linear park, the path would continue as a bicycle-only path within the park.

On-street separated bike path in New York City

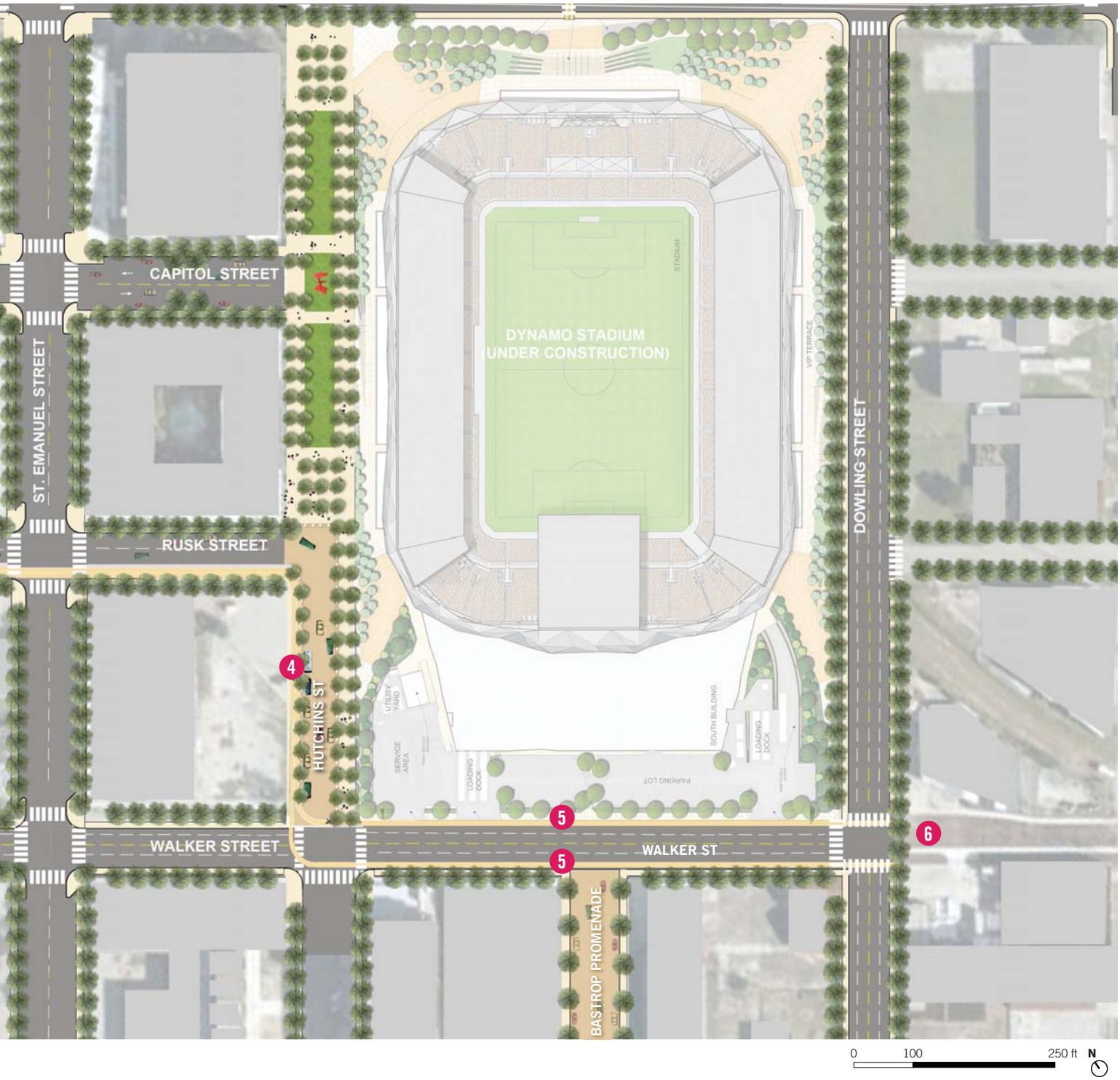


Top Section Rusk Street with 12 feet wide bike path
Bottom Section Walker Street with 6 feet wide bike paths



Map Proposed separated on-street bike lane pilot project

1. BEGINNING OF BIKE PATH AT DISCOVERY GREEN
2. BIKE PATH ALONGSIDE PEDESTRIAN PLAZA
3. 2-WAY BIKE PATH ON SOUTH SIDE OF RUSK
4. BIKE PATH IN LINEAR PARK
5. ONE-WAY BIKE PATH ON EACH SIDE OF WALKER
6. EXISTING UNION STATON TRAIL CONNECTING TO COLUMBIA TAP



B4

Study major east-west bike route across downtown

Identify an east-west bike corridor across downtown, connecting Discovery Green (and the Columbia Tap Hike & Bike Trail, EaDo, East End and Third Ward) to Sam Houston Park (and Buffalo Bayou, Super Neighborhood 22, Fourth Ward, Neartown and Memorial Park).

BENEFITS
Enhances ridership experience and expand existing bike network to primary destinations in and around the designated Study Area.

GOALS SUPPORTED
1. Access
2. Connectivity
3. Integrated Transit
6. Visitor Experience
7. Street Life

PROPOSED IMPLEMENTING AGENCY
COH - Public Works & Engineering
Houston Downtown Management District
TIRZ 3 / Downtown Redevelopment Authority
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Houston Downtown Management District
Federal

APPROVAL REQUIRED FROM
COH - Public Works & Engineering
TxDOT

While the Enhanced Bike Network (Recommendation B2) provides a centralized, highly connected bike route, greater east-west connections are needed throughout the downtown area. In particular, analysis should be geared towards providing connectivity between Discovery Green at the eastern edge of downtown and Sam Houston Park at the western edge.

Map East-West Bicycle Routes

B5

Connect Union Station Hike & Bike Trail to Buffalo Bayou

Build a new hike and bike trail connecting the Union Station Hike & Bike Trail to Buffalo Bayou, linking the Columbia Tap / Braes Bayou Hike and Bike Trail network to the Buffalo Bayou / White Oak Bayou / MKT network.

BENEFITS
Promote connection to the larger networks of trails and neighborhoods east and north of downtown. Increase the level of activity on the streets and bring cyclists and pedestrians from the neighborhoods into the Study Area. Provide access and connections to existing recreational infrastructure such as bike trails and running paths. Overcome the barrier created by the existing rail line at north-east of the Study Area.

GOALS SUPPORTED
1. Access
2. Connectivity
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life

PROPOSED IMPLEMENTING AGENCY
COH - Public Works & Engineering
COH - Economic Development
East Downtown Management District
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
COH - General Fund
East Downtown Management District
Federal
Foundations / Conservancies / Private Grants

APPROVAL REQUIRED FROM
COH - Public Works & Engineering
TxDOT

Currently, the Buffalo Bayou / White Oak Bayou trail system, the Harrisburg Trail, and the Columbia Tap trail come close to each other but do not meet. The active railroad line just east of the Study Area provides an opportunity to link these trails and connect them into downtown. Increasing connectivity will also allow a greater level of on-street activity and draw pedestrians from adjacent neighborhoods into the area.

The proposed trail would be a paved, 10 feet wide off-street trail, built to the standards of the Columbia Tap, linked to other trails and to local streets. While it follows the railroad lines, it does not use railroad right-of-way. Instead, it combines several rights-of-way alongside the railroad line.

Segment 1, from Commerce to Dowling, uses a dormant street right-of-way called Shrempf Street. This is City-owned right-of-way.

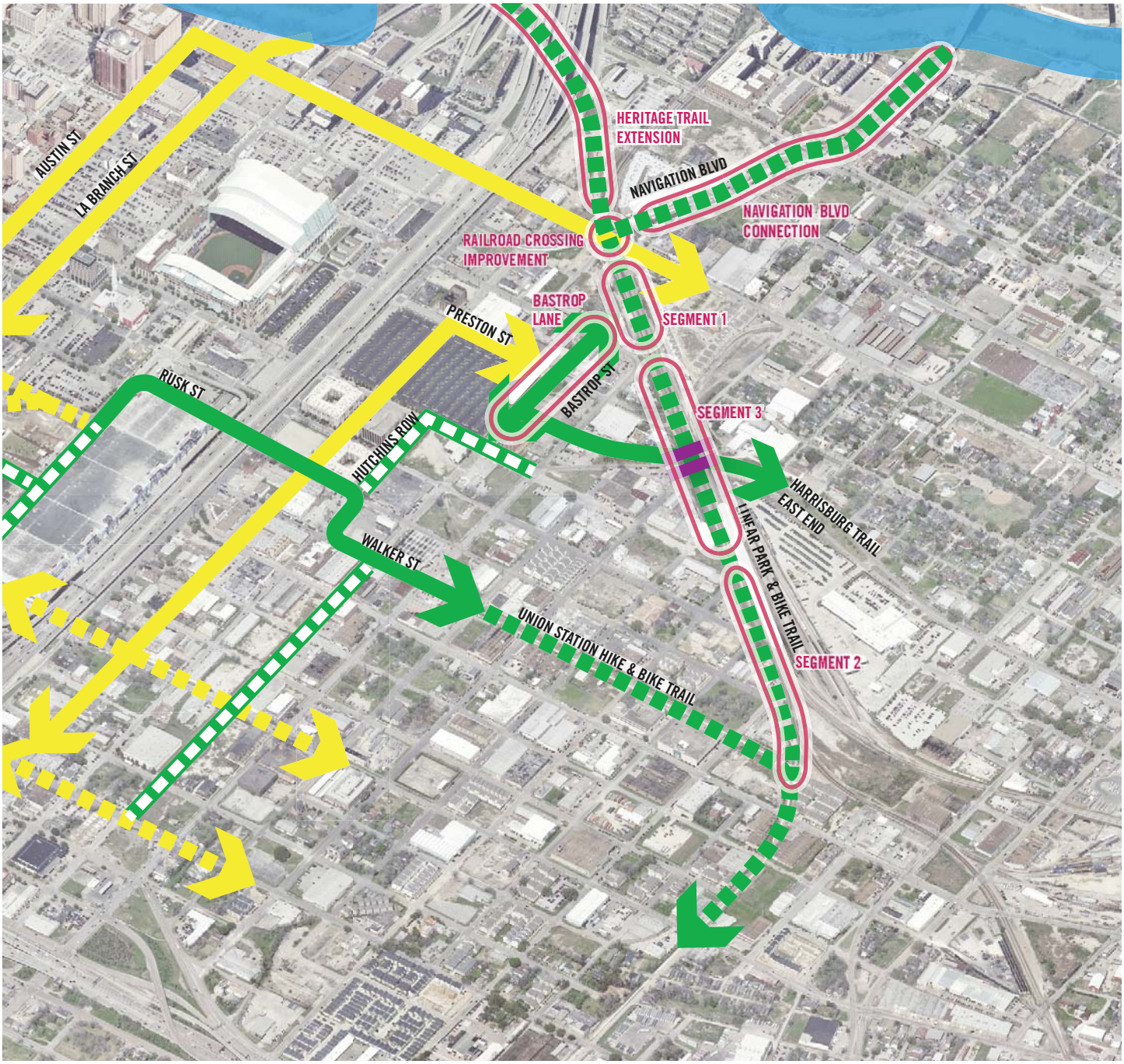
Segment 2, from Texas to the Columbia Tap, uses METRO property acquired for the Southeast light rail line. The Southeast Line and the Columbia Tap will already run alongside each other from Walker to Dallas; this will simply continue that design north to Texas.

Segment 3, from Dowling to Texas, presents the most difficulties. It requires property acquisition from landowners including Star of Hope and Harris County and a new bridge over Harrisburg, which is below-grade under the railroad. This segment may be postponed to second or third phase (the other segments are useful without it), but it is a key connection.

An on-street separated bike path on Bastrop will connect this trail to light rail and the Hutchins linear park. Improvements to the railroad crossing at Commerce will enable bicycles to safely cross the track and to access Navigation Blvd, while a bike trail along Navigation Boulevard will connect to the Buffalo Bayou trails in the East End.

An extension of the Heritage Trail on abandoned rail right-of-way from McKee to Commerce would further connect the trail to the rest of the system. An extension of the Heritage Trail on abandoned rail right-of-way from McKee to Commerce would further connect the trail to the rest of the system. This extension could be designed to run alongside a right of way for potential future commuter rail.

Using the existing right-of-way along the rail line will provide access and connections to existing recreational infrastructure such as bike trails and running paths. The linear park will also help overcome the barrier created by the existing rail line running north-east of the EaDo District. The trail and its connections will allow pedestrians and bicyclists to minimize vehicular conflict and connect to the larger recreational park system.



PROJECT SEGMENTS
BICYCLE AND PEDESTRIAN BRIDGE
OFF-STREET HIKE AND BIKE TRAIL
ON-STREET SEPARATED BIKE PATH
BIKE FRIENDLY OPEN SPACE
ON-STREET BIKE LANE
SIGNED BIKE ROUTE

0 250 ft N

Map Connect Columbia Tap and Union Station Hike & Bike Trail to Buffalo Bayou
Bottom Schuylkill Trail. Photo River Park Alliance

0 100 250 ft N

Map Columbia Tap and Union Station Hike & Bike Trail to Buffalo Bayou

Map Commerce / Bastrop trail intersection

B6

Provide pedestrian and bike linkage to East End through Harrisburg Underpass

Reconfigure the Harrisburg underpass to incorporate separated bike and pedestrian corridors.

BENEFITS
Provide connection point for bicyclist and pedestrians from EaDo to the East End, linking the Harrisburg Trail, the Columbia Tap Hike & Bike Trail, Buffalo Bayou, and Downtown.

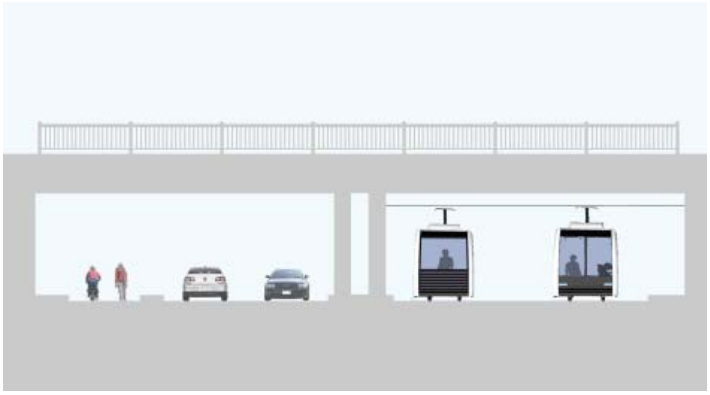
GOALS SUPPORTED
1. Access
2. Connectivity
7. Street Life

PROPOSED IMPLEMENTING AGENCY
COH - Public Works & Engineering
East Downtown Management District
METRO

POSSIBLE FUNDING SOURCES
COH - General Fund
East Downtown Management District
Federal
METRO

APPROVAL REQUIRED FROM
City Council
COH - Public Works & Engineering
METRO

The Greater East End Management District has created a conceptual plan for connecting the Harrisburg Trail into the Study Area via Harrisburg Boulevard, utilizing the underpass at the West Belt Railroad subdivision. This design concept would create a two-way bicycle lane roughly 10 feet wide in a section of the right-of-way that can afford to lose the dedicated vehicular use, given that the roadway to the east of this location is one lane in either direction. This project would utilize an existing grade separation from the freight railroad to provide bicycle access into and out of the Study Area, promoting the regional trails network, and allowing safe crossing at the freight rail tracks for pedestrians and bicyclists.



Top Existing conditions of Harrisburg Underpass looking West
Bottom Proposed section diagram of Harrisburg Underpass looking East

Map Proposed pedestrian and bike linkage to East End through Harrisburg Underpass

B7

Rotate stop signs on Columbia Tap and Union Station Hike & Bike Trail

Alter stop signs where local streets cross the Columbia Tap and Union Station Hike & Bike Trails so that cars stop for bicyclists.

BENEFITS
Enable faster and safer bicycle trips.

GOALS SUPPORTED
1. Access
2. Connectivity

PROPOSED IMPLEMENTING AGENCY
COH - Public Works & Engineering

POSSIBLE FUNDING SOURCES
COH - General Fund

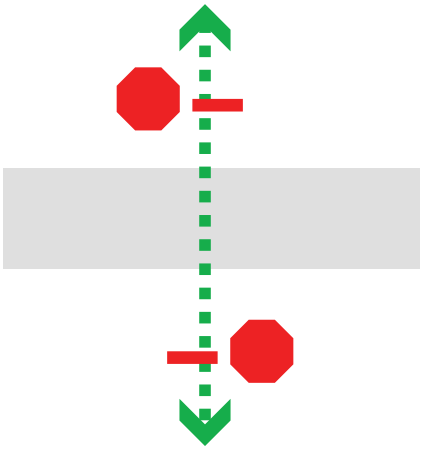
APPROVAL REQUIRED FROM
COH - Public Works & Engineering
TxDOT

Off-street bike paths should function as the arterials of the bikeway system, linking neighborhoods, universities, employment centers, and parks. The Columbia Tap Hike & Bike Trail is an example of this potential, linking downtown, EaDo, the Third Ward, TSU, and the Texas Medical Center.

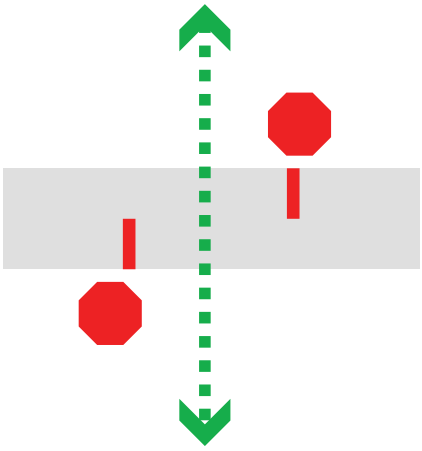
However, bicycle travel along the Columbia Tap Hike & Bike Trail is impeded by frequent stop signs. At all cross streets, stop signs are located such that bicyclists are expected to stop and yield to all cross traffic. This slows down bicyclists and requires extra effort at each intersection. As a result, bicycling on the trail is less attractive, encouraging bicycle commuters to use streets instead and discouraging others from choosing bicycles.

Where the Columbia Tap Hike & Bike Trail crosses major streets like Leeland or Elgin, stop signs should remain on the trail to keep vehicular traffic moving. However, on minor streets like Bell, Hadley, or Tuam, rearranging the stop signs so that automobile traffic must yield to cyclists instead will have minimal impact on vehicular traffic. These minor streets account for three quarters of the intersections on the trail, having the potential to greatly improve bicycle travel conditions if this change is made.

Current:
Bikes stop for cars



Proposed:
Cars stop for bikes



Top Diagram of proposed stop sign rotation
Bottom Columbia Tap Hike & Bike Trail

B8

Provide bike racks at transit and major destinations

Install bike racks at light rail stations, major bus stops, event venues, retail and entertainment areas, and parks.

BENEFIT
Improve and increase bicycle access to major destinations within the Study Area, regional trail systems and commuter connections.

GOALS SUPPORTED
1. Access
2. Connectivity
3. Integrated Transit
4. District Character
6. Visitor Experience
7. Street Life

PROPOSED IMPLEMENTING AGENCY
COH - Public Works & Engineering
COH - Parking Management
Houston Downtown Management District
East Downtown Management District
METRO

POSSIBLE FUNDING SOURCES
Houston First Corporation
COH - General Fund
Houston Downtown Management District
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority
METRO
Foundations / Conservancies / Private Grants

APPROVAL REQUIRED FROM
COH - Public Works & Engineering
METRO

With the construction of new light rail, it is important to provide conveniently located bike racks to promote ridership. The bike racks will be incorporated into all new development and connect directly to the proposed bike networks and key pedestrian destinations. By providing bike parking close to major transit routes, this will support the use of multi-modal systems and connectivity within the district and regionally.

Top Bike racks in Tempe, Arizona
Bottom Right Bike amenities | **Bottom Left** Bike racks at Discovery Green

ONE WAY
R
R

Transit Recommendations

Transit Recommendations

Transit is essential for EaDo residents to access jobs and education outside the Study Area, especially in the downtown core, and for visitors to be able to access events, retail, dining, and entertainment in the Study Area. Transit is particularly important to low-income residents who may have no other option to access jobs and education. Linkages to surrounding neighborhoods, especially the Third Ward and East End, will give residents of those communities access to more services and amenities.

Interconnections within the system will become more convenient based on the improvements within the bicycle and pedestrian realms; and the overall availability of transit throughout the Study Area will become much more apparent to residents, employees, and visitors. In addition to the light rail lines currently being built, this report recommends two significant new transit services to serve the Study Area: an extended downtown circulator that serves the heart of EaDo, and a revised operating configuration for the #36 and #40 METRO bus routes. While the provided image highlights these projects, the current basic infrastructure of transit operations is still a very important component of the overall program of projects for the Study Area, including the local access bus routes that operate at the fringes of the Study Area. Finally, the implementation of additional transit routes – such as the streetcar into the Greater East End and enhancement of bus services for large activities around the Study Area – will continue to be of importance with future examination of projects within the area.

1. CREATE CIRCULATOR SERVICE FROM DOWNTOWN TO EaDo
2. REROUTE LOCAL BUS SERVICE ONTO POLK AND MARKET OVERLAPPING ROUTES AS HIGH FREQUENCY SERVICES
3. IMPLEMENT EAST END STREET CAR

Map Proposed Transit Connectivity and Circulation

T1

Create circulator service from downtown to EaDo

Establish a circulator route from downtown to St Emanuel Street, utilizing Polk and Rusk as primary transit corridors and providing an essential connection between Avenida de las Americas (downtown) and St Emanuel (EaDo).

BENEFITS
Promote connectivity between EaDo's "main street" and downtown's primary tourist and convention attractions.

GOALS SUPPORTED
1. Access
2. Connectivity

PROPOSED IMPLEMENTING AGENCY
Houston Downtown Management District
East Downtown Management District
METRO
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Private
Houston First Corporation
Houston Downtown Management District
East Downtown Management District
Federal
METRO
Foundations / Conservancies / Private Grants

APPROVAL REQUIRED FROM
COH - Public Works & Engineering
METRO

Currently a local service operator that connects the greater Downtown District and the EaDo core does not exist. To encourage pedestrian movement to defined areas of interest, many popular tourist destinations promote the use of local circulators (i.e. DC Circulator of Washington, D.C.) . According to a study conducted in 2010 by the Transportation Research Board in coordination with the Federal Transit Administration, circulators are especially successful at providing direct, reliable, and consistent service to key locations that are attractive to tourist, local to-work commuters, and residents. To promote increased tourism within the Study Area and connect key areas, it is recommended that key circulator stop locations along St Emmanuel and Avenida de las Americas be established. Although exact locations for proposed stops require additional study, the presence of circulator stops on these key corridors will help to increase connectivity in an otherwise bifurcated Study Area. Similarly, additional stops are recommended at all major venues throughout downtown. Main Street, although not within this study's defined scope, is also considered an essential component of a successful circulator service and provides an essential link into the greater downtown network.

Washington, D.C. circulator bus

Map Proposed Downtown to EaDo Circulator

T2

Reroute local bus service onto Polk and market overlapping routes as high frequency services

Reroute the #36 and #40 buses onto Polk, creating a combined frequency of 7.5 minutes peak and 15 minutes off-peak; market combined service as a high frequency route connecting EaDo to downtown.

BENEFITS
Promotes use of bus transit service for daily work trip commutes, as well as for tourists and local residents.

GOALS SUPPORTED
1. Access
2. Connectivity
4. District Character
6. Visitor Experience
7. Street Life
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
METRO

POSSIBLE FUNDING SOURCES
METRO

APPROVAL REQUIRED FROM
METRO

A series of local bus routes serve the Study Area, providing work and recreational transit service for residential communities both to and from the Downtown and EaDo Districts. Given the current conditions of the Study Area, pedestrian access to transit service is between Congress and Capitol in the northern portion, and between Bell and Polk in the south. Treatments to the north portion of the Study Area are currently underway with the implementation of a light rail transit (LRT) system along the Texas corridor, as previously discussed. The southern corridor, however, still offers a unique opportunity to enhance transit service to the potential growing presence of residential communities within the greater EaDo and East End Districts that lie just east of the study, and as such, to have a direct impact on the success of the region's greater growth. To encourage residential use of the METRO transit system, and further enhance the residential experience for both work and recreational transit trips, it is recommended that Routes 36 and 40 utilize a common corridor and service the same stops. The combined service would reduce residential wait times at transit stops to 7.5 minutes peak and 15 minutes off-peak. Further, it is recommended that Routes 36 and 40 be rerouted on to Polk Street.

As previously discussed the Polk corridor acts as one of the primary east-west connector between the Study Area's Districts, as well as its associated attractions. The current routes' configuration utilizes Leeland and Bell Streets as their main east-west connector, circumventing the south side of the Toyota Center and providing little to no access to primary area attractions and work locations. Polk Street, however, provides direct access to EaDo's retail-focused St Emanuel, the GRB Convention Center, Discovery Green and Hilton Americas, offering direct connection to the extended pedestrian network as well as primary employment centers.

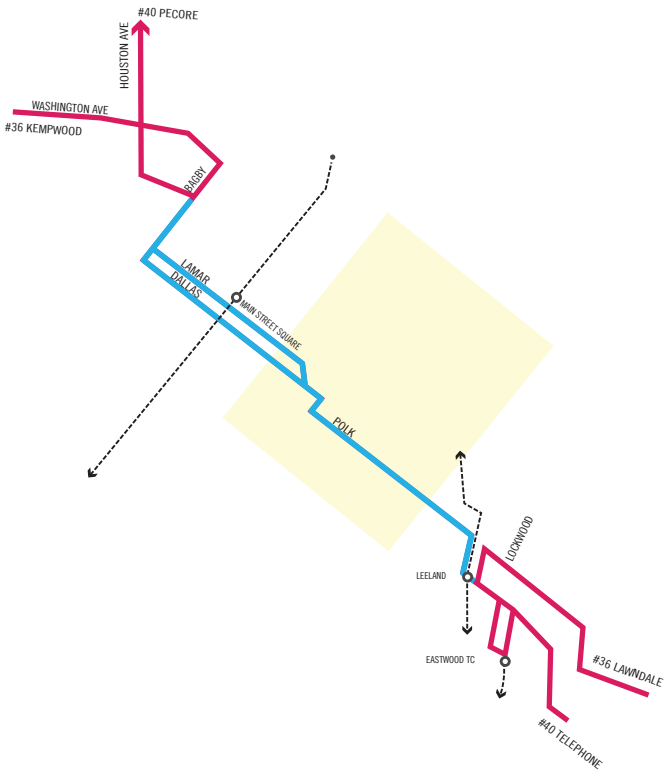


Diagram Proposed routing for #36 and #40 buses. The shared high-frequency route is in blue.

Map Proposed modification of bus routes

T3

Implement East End streetcar

A new East End streetcar should connect to the Bastrop light rail station via Bastrop or St Emanuel. A second phase extension down St Emanuel should be considered.

BENEFITS
Provide essential connection between proposed East End and EaDo attractions.

GOALS SUPPORTED
2. Connectivity
3. Integrated Transit
4. District Character
6. Visitor Experience
7. Street Life

PROPOSED IMPLEMENTING AGENCY
Private
Greater East End Management District
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority
METRO
Not-for-profit / Civic

POSSIBLE FUNDING SOURCES
Private
Greater East End Management District
East Downtown Management District
Federal
METRO
Foundations / Conservancies / Private Grants

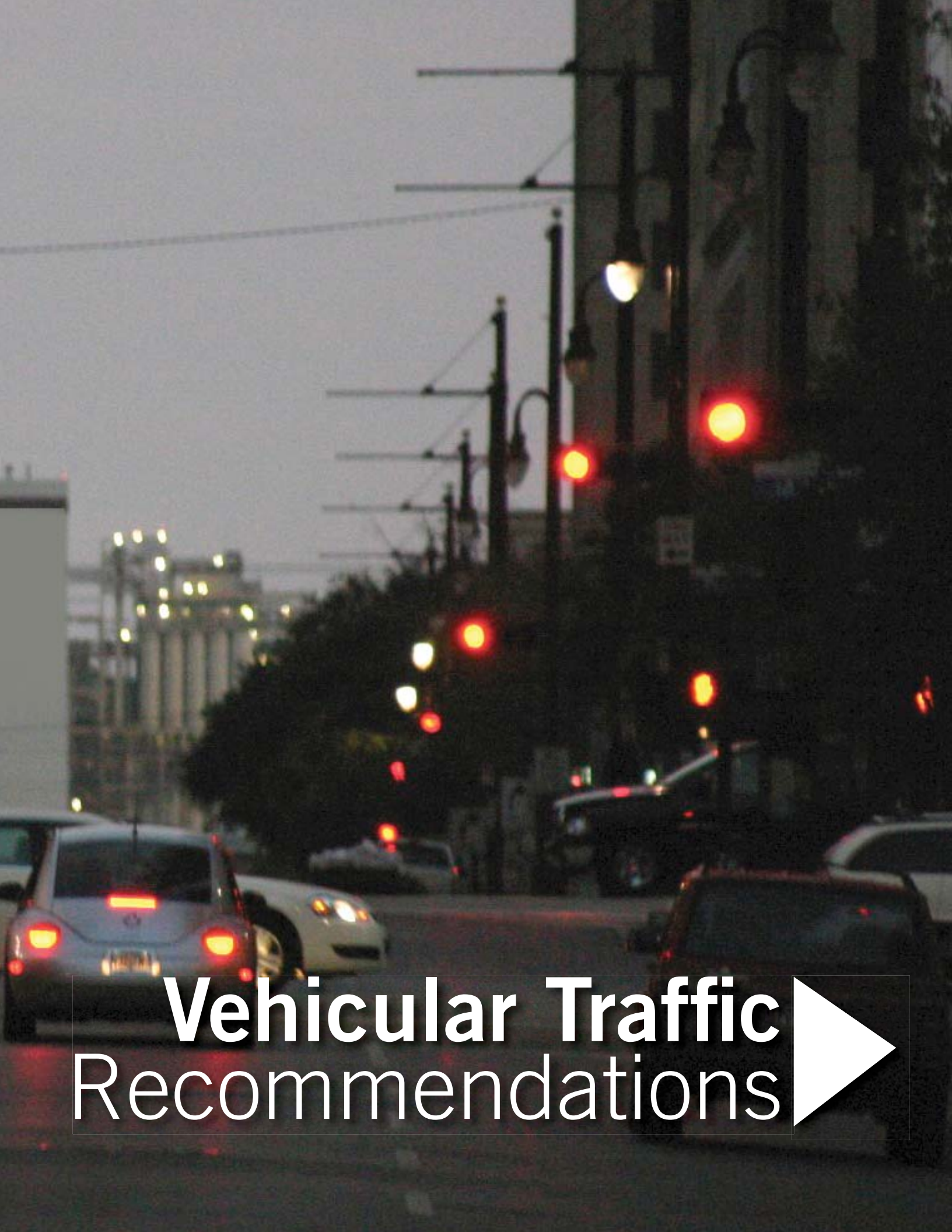
APPROVAL REQUIRED FROM
City Council
COH - Public Works & Engineering
METRO

The Greater East End's Livable Centers Study proposes the establishment of a streetcar to extend from Buffalo Bayou to the proposed Bastrop Station. In coordination with efforts provided by this Study, it is recommended that the proposed streetcar connect to the Bastrop light rail station via Bastrop or St Emanuel. The East End Study proposes alignment along the Bastrop corridor. However, due to the prominence of St Emanuel as a future retail corridor, as well as its increased accessibility to the Bastrop Transit Station, it is recommended this corridor be considered for future study.

To further enhance network connectivity, it is recommended that a second phase extension be implemented on St Emanuel providing access to the area's enhanced retail.

Historic street car, source Karen Warren, Houston Chronicle

Map Proposed EaDo Street Car Corridor Map



Vehicular Traffic Recommendations

Vehicular Traffic Recommendations

Traffic will move easily across the Study Area, connecting it to surrounding areas and the region. Traffic to and from downtown will continue to flow well, while neighborhood-to-neighborhood connections and local circulation will be strengthened.

A comprehensive wayfinding and signage program on both sides of US-59 will guide drivers. Where the creation of several mega blocks within the Study Area has had a funneling effect with a large component of the traffic being filtered into very few streets, driving patterns will be clarified and two-way connections created. Texas Avenue will act as a two-way link between downtown, EaDo, and the East End, connected to Harrisburg on one end and the downtown grid on the other. Polk will be improved to function as a two-way street over the full length of the Study Area. Dowling and Congress will act as a northwest-southeast vehicular access route capable of carrying traffic around the core of the Study Area and connecting to the Third Ward. St Emanuel will be the main street for local access within the core of EaDo, connected to the major east-west streets. Traffic demand and the impacts of traffic flow will also be balanced by improvements to other modes.

The vehicular patterns will continue to dominate much of the overall traffic within the Study Area. However, the creation of space for additional modes can help alleviate the peak hour and activity-based congestion that currently exists and is projected to worsen throughout the Study Area.

1. IMPLEMENT VEHICULAR TRAFFIC WAYFINDING AND IDENTITY PROGRAM
2. CONVERT TEXAS TO 2-WAY CONFIGURATION FROM HAMILTON EASTWARD
3. REBUILD DOWLING AND CONVERT CONGRESS TO 2-WAY CONFIGURATION FROM LA BRANCH TO DOWLING
4. RECONFIGURE INTERSECTION AT ST EMANUEL / FRANKLIN / NAVIGATION
5. PROVIDE METERED ON-STREET PARKING IN EaDo
6. CREATE NEW STRUCTURED PARKING TO PROVIDE SHARED PARKING FOR MAJOR VENUES

Map Proposed Vehicular Traffic Recommendations Key

V1

Implement vehicular traffic wayfinding and identity program

Provide a coherent, comprehensive wayfinding program to guide motorists to their destinations. Use wayfinding and gateway elements to strengthen the respective identities of downtown and EaDo.

BENEFITS
Make it easier for visitors to navigate the area; reduce congestion caused by lost motorists.

GOALS SUPPORTED
1. Access
3. Integrated Transit

PROPOSED IMPLEMENTING AGENCY
COH - Public Works & Engineering
COH - Parking Management
Houston Downtown Management District
East Downtown Management District

POSSIBLE FUNDING SOURCES
Houston Downtown Management District
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

APPROVAL REQUIRED FROM
COH - Public Works & Engineering

The Downtown District does maintain wayfinding signage for vehicular traffic. However, the location of signs can be improved and further expanded by providing for three (3) types of transportation wayfinding that caters to vehicular inbound, vehicular outbound, and transit users.

Although Vehicular inbound wayfinding signage may be utilized by the daily “to work” commuter, it is designed specifically to cater to those individuals who do not frequent downtown and, as a result, rely most heavily on directional signage. To accommodate these types of trips, signage to prominent area locations, such as the GRB Convention Center, Minute Maid Park, Discovery Green, Toyota Center, Dynamo Stadium and the proposed Bastrop Promenade, should be provided at key locations to assist in seamless commutes for infrequent users of the roadway network.

Vehicular outbound movement is aimed at getting network users out of the Study Area effortlessly. The current one-way lane configuration of many of the streets within this area often results in unwarranted confusion. For enhanced clarity and understanding of the network, it is recommended that key points for highway access corridors be established.

Transit wayfinding signs are geared towards the pedestrian network and act as transition points between the pedestrian and vehicular signage designations. As such, it is recommended that wayfinding signage be established in high-density pedestrian corridors and within the vicinity of key transit stop locations.

There is currently no or limited vehicular inbound / outbound or transit wayfinding in EaDo.

Map Vehicular Traffic Wayfinding and Identity

v2

Convert Texas to 2-way configuration from Hamilton eastward

Reduce total number of travel lanes from four to three providing for two eastbound lanes and one westbound lane along Texas east of Hamilton to Harrisburg Boulevard.

BENEFITS
Allows for rail implementation along an otherwise heavily traveled vehicular roadway, and provides the only 2-way roadway connection between Dynamo Stadium, Minute Maid Park, Discovery Green, and the GRB Convention Center.

GOALS SUPPORTED
1. Access
3. Integrated Transit

PROPOSED IMPLEMENTING AGENCY
COH - Public Works & Engineering
METRO

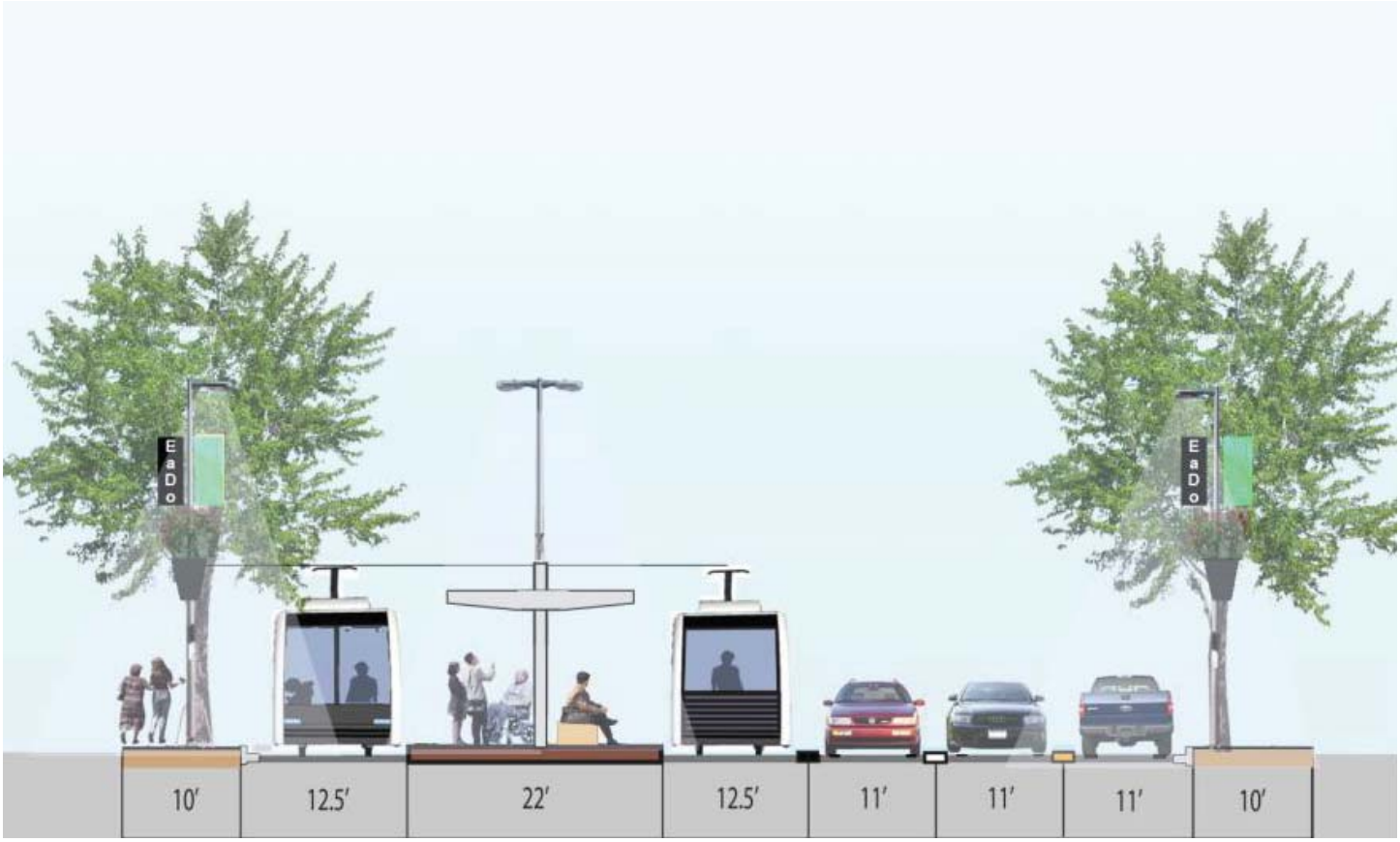
POSSIBLE FUNDING SOURCES
COH - General Fund
METRO

APPROVAL REQUIRED FROM
City Council
COH - Public Works & Engineering
COH - Planning & Development / Planning Commission
METRO

Texas Avenue currently traverses the entirety of downtown as a one-way street that provides access to US-59 from the downtown core. The couplet pair to Texas is Prairie within downtown; however, Prairie does not continue through the entire Study Area. The one-way flow on this street has limited the ability of traffic within EaDo and the Greater East End to utilize Texas / Harrisburg as an access point into the downtown core. The implementation of LRT service along the routes identified as the Southeast and East End LRT routes has provided an opportunity to re-think the use of Texas, specifically east of US-59.

Beginning at Texas' intersection with Harrisburg and extending to Hamilton, the design concept presented will require further refinement; however the general premise would introduce traffic in a two-way configuration east of US-59 with the two-way configuration terminating between the current alignment of Hamilton and Avenida de las Americas. The vehicles traveling from the east would turn south to access Capitol along with the westbound LRT vehicles. This concept would allow residents and visitors from EaDo and the East End another entry point into the downtown grid, while street reconfiguration could progress along with the LRT construction. Finally, this concept would provide one additional signalized entry across Chartres for vehicular traffic into Downtown.

Map Proposed reconfiguration of Texas Avenue



Top Texas LRT Roadway Configuration Section
Bottom Texas LRT Roadway Configuration Plan

V3

Rebuild Dowling and convert Congress to 2-way configuration from La Branch to Dowling

Extend the 2-way, 4-lane configuration that is characteristic of Dowling Street onto Congress to La Branch Street. These enhanced roadways will create a vital through route linking the Third Ward, EaDo, the East End and Downtown.

BENEFITS
Extension of the Dowling vehicular corridor east-west on Congress providing for key access points to event parking as well as increased connectivity to the Third Ward, EaDo, the East End and downtown.

GOALS SUPPORTED
1. Access
2. Connectivity
5. Major Venues
6. Visitor Experience

PROPOSED IMPLEMENTING AGENCY
COH - Public Works & Engineering
Houston Downtown Management District
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

POSSIBLE FUNDING SOURCES
COH - General Fund
COH - Renew Houston
Houston Downtown Management District
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

APPROVAL REQUIRED FROM
City Council
COH - Public Works & Engineering
COH - Planning & Development / Planning Commission

The corridors of Congress and Dowling provide a direct connection between the Third Ward, EaDo, the East End and downtown. As a highly utilized vehicular corridor, the current configuration of Dowling provides an emphasized four-lane, two-way roadway with narrowed sidewalks in the pedestrian realm. However, this treatment stops abruptly at Congress where the road is reduced to just two lanes and traffic is only one-way, with the southside of Congress from Hutchins to Dowling underutilized.

To alleviate congestion and provide a vehicular-focused corridor that establishes a complete through route within the Study Area, it is recommended that the current configuration of Dowling be extended onto Congress to La Branch. This extension would not only provide the connections stated above, but would also provide direct access to event parking in and around the Dynamo Stadium and Minute Maid Park.

Further, to allow for bus transit within the network, it is recommended that outside lanes be widened to 13 feet. To accommodate the presence of some pedestrian traffic, all sidewalks should be 5 feet wide at minimum with a proposed 10 feet wide pedestrian buffer for increased pedestrian safety.

Top Existing conditions on Dowling Street looking north
Section Proposed Dowling / Congress Cross Section

v4

Reconfigure intersection at St Emanuel / Franklin / Navigation

Install a traffic signal at the intersection of St Emanuel / Franklin / Navigation to clarify the circulation pattern and allow for protected turns, making it easier to change travel directions within the northeastern section of the Study Area.

BENEFITS
Enable better easier circulation between Fifth Ward, East End, EaDo, and Third Ward.

GOALS SUPPORTED
1. Access
2. Connectivity
6. Visitor Experience
7. Street Life

PROPOSED IMPLEMENTING AGENCY
COH - Public Works & Engineering
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

POSSIBLE FUNDING SOURCES
COH - General Fund
East Downtown Management District
TIRZ 15 / East Downtown Redevelopment Authority

APPROVAL REQUIRED FROM
City Council
COH - Public Works & Engineering
COH - Planning & Development / Planning Commission

While a detailed traffic signal study has not been performed, the circulation patterns, localized congestion, potential safety concerns, and pedestrian experience would likely benefit from the addition of a traffic signal at this intersection. Other strategies include the reconfiguration of the intersection as part of an overall design strategy.

In order to simplify the intersection of St Emanuel / Franklin / Navigation, this would modify the intersection from 5-way to 4-way and provide clarity within the automobile travel way, we are suggesting that an analysis be undertaken for the closure of Franklin Street east of the intersection. Projects that are being considered by other agencies within the Study Area, such as the Gulf Cost Rail Districts (GCRD) propose grade separation of Navigation and Commerce at the West Belt Freight Rail subdivision would also benefit from this closure. A key issue to be analyzed, is the continuation of the Hutchins right-of-way adjacent to the intersection given that the GCRD grade separation study is proposing to close the at-grade access of the Hutchins right-of-way.

Map Proposed reconfiguration of the St Emanuel / Franklin / Navigation intersection

v5

Provide metered on-street parking in EaDo

Provide on-street parking meters throughout EaDo. Phase I parking meters will accommodate future uses including those generated by the Dynamo Stadium as well as existing establishments. Phase II parking meters will support St Emanuel and the Bastrop Promenade.

BENEFITS
Provide more predictable visitor parking in EaDo; raise revenue for street improvements.

GOALS SUPPORTED
1. Access
2. Connectivity
3. Integrated Transit
4. District Character
5. Major Venues
6. Visitor Experience
7. Street Life
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
COH - Parking Management

POSSIBLE FUNDING SOURCES
COH - General Fund

APPROVAL REQUIRED FROM
City Council
COH - Public Works & Engineering

As previously discussed, on-street parking is a vital component to increased pedestrian traffic within the EaDo District. Given the current nature of EaDo, on-street parking configurations are anticipated to cater to certain groups of patrons. The first are those individuals attending events at the Dynamo Stadium, Minute Maid Park and the GRB. The second set of patrons consists of restaurant and retail shoppers, who are expected to increase as EaDo continues to mature and implement recommendations as previously stated. The final group consists of local residents or tourists who visit the area for many of the same purposes mentioned.

Metered parking is a tool that benefits each of these groups, the City and the District. With the introduction of the Dynamo Stadium, vehicular traffic is expected to increase. Metered parking offers patrons an alternative to event parking lots and encourages vehicular traffic onto less commonly used streets resulting in increased exposure to EaDo's retail shops and restaurants. Similarly, metered parking limits the time a vehicle may occupy a particular space, promoting circulation along business store fronts while facilitating traffic. Finally, metered parking provides revenue to the City which may be used for improvements within the District such as St Emanuel and the Bastrop Promenade, benefiting both local residents and tourists.

Metered parking is recommended to be implemented in two phases. In coordination with the construction of Dynamo Stadium, metered parking should first be established in the northeast quadrant of the Study Area, providing patron exposure to the area. As the area becomes more established, Phase 2 on-street metered parking should be implemented, providing traffic management along retail corridors.

Map Metered parking 2-phase implementation

V6

Create new structured parking to provide shared parking for major venues

Adopt Downtown Parking Task Force recommendations to share structured parking among uses and make parking easier and less intimidating for visitors. Over time, add more structured parking to serve new uses and replace existing surface lots.

BENEFITS
Meet parking demand in a cost-effective and user-friendly way as more development occurs; enable redevelopment by small property owners.

GOALS SUPPORTED
1. Access
2. Connectivity
5. Major Venues
8. Mix of Uses

PROPOSED IMPLEMENTING AGENCY
Private
Houston First Corporation
COH - Parking Management
Houston Downtown Management District
East Downtown Management District

POSSIBLE FUNDING SOURCES
Private / For-profit Unreimbursed
Houston First Corporation
TIRZ 15 / East Downtown Redevelopment Authority
380 Agreements

APPROVAL REQUIRED FROM
City Council

In most of the Study Area, parking needs are currently met with surface lots on individual properties, privately operated pay parking lots, and publicly owned lots associated with Minute Maid Park and the GRB Convention Center. As development occurs in the Study Area and density increases, parking demand will rise while supply of surface lots will decrease.

Structured parking will have to be a significant part of the parking solution in the area, as it already is in downtown with garages at Toyota Center, Hilton Americas, and Discovery Green.

Structured parking should be managed as a shared amenity for all surrounding uses. Shared parking has several key benefits:

- Complementary uses (like daytime office use and night time entertainment use) can share the same spaces, reducing the total amount of spaces required.
- Larger garages can be more efficient, being less expensive per space to build as well as operate.
- The availability of nearby parking means that developers do not need to provide parking on their own property, enabling the development of small parcels that could not accommodate parking within the parcel.
- By not building their own parking, developers can reduce the up-front capital cost of their projects.

In a developed urban area, it is reasonable to charge for parking, as downtown garages already do. Convention-goers, sports spectators, and concert attendees are also accustomed to paying for parking. In a developing area that has not reached critical mass, though, retail and restaurant customers may not be willing to pay for parking, and it may be necessary to validate parking.

In a developed area, parking can be built with a reasonable payback period based on revenue. This is the case today in the center of downtown; it is not the case in this Study Area. A large development should be able to finance its own parking, but where the intent is to enable a series of smaller projects, or where parking is oversized to accommodate future demand or events use, an initial public subsidy or a guarantee of future revenue to a private parking developer may be required. Alternately, a public entity may build and manage the parking, as the city does now in the Theatre District.

All parking in the area, new and existing, regardless of the owner, should be coordinated by the Management Districts to have similar hours, rates, signage, and policies, simplifying the visitor experience.

EXISTING STRUCTURED PARKING

CURRENTLY PROPOSED STRUCTURED PARKING

AREAS WHERE ADDITIONAL STRUCTURED PARKING WILL BE REQUIRED

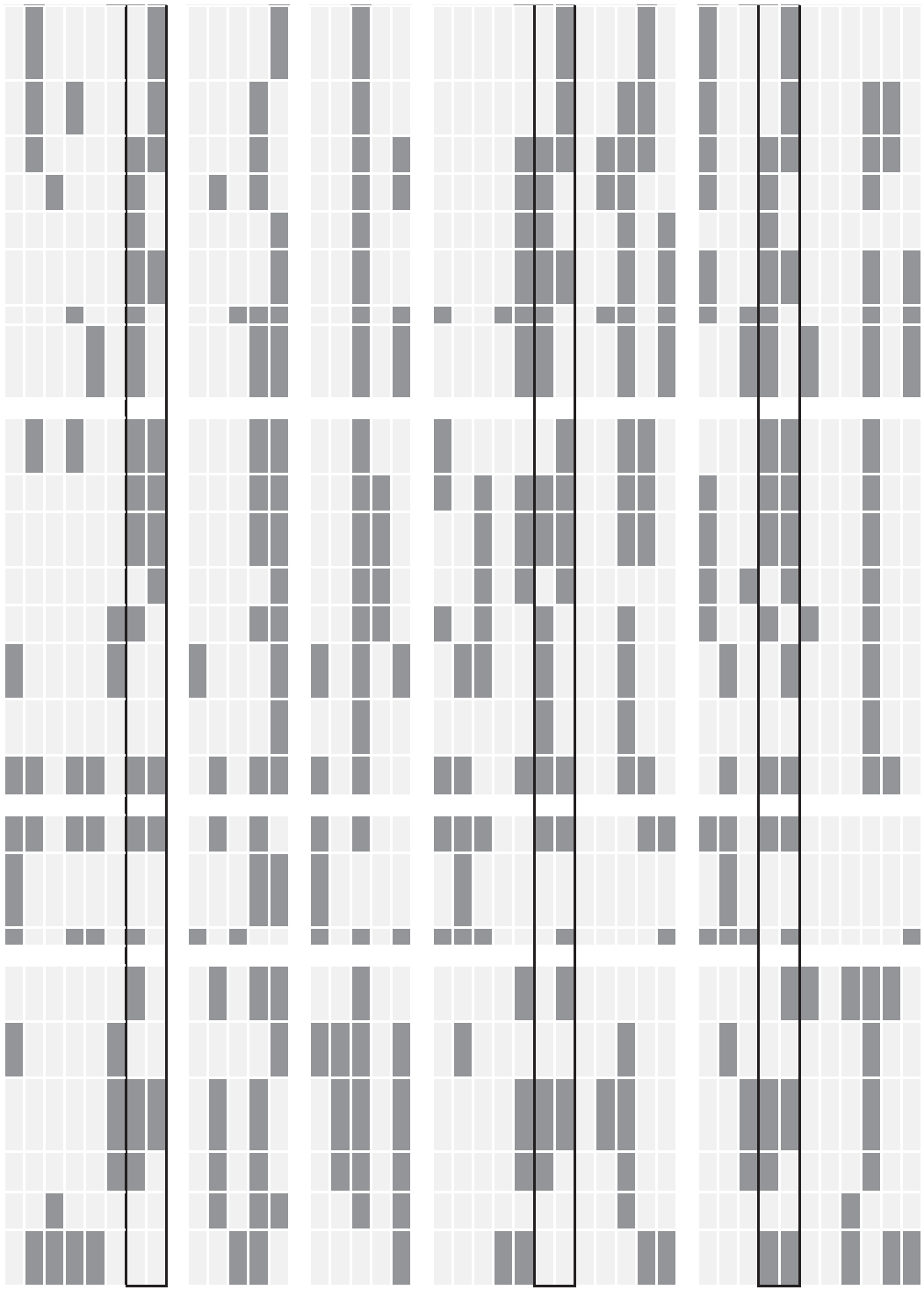
0 100 250 500 ft N

Map Proposed structured parking areas

Appendix

Implementation Matrix

	LAND USE RECOMMENDATIONS	LU1 Target City Policy to increase residential development in and near downtown	LU2 Identify potential land for hotels near the GRB Convention Center	LU3.1 Require active ground floors on Capitol, Rusk, Crawford and Avenida de las Americas in downtown	LU3.2 Require active ground floors on Polk and Dallas in downtown	LU3.3 Require active ground floors on St Emanuel, Polk, Capitol and Rusk in EaDo	LU4 Expand the GRB Convention Center	LU5 Improve Social Services	LU6 Ensure loading access zones for major venues	LU7 Designate public space for Dynamo events	LU8 Upgrade underground utilities in EaDo	PEDESTRIAN RECOMMENDATIONS	P1 Implement pedestrian wayfinding and identity program	P2 Improve pedestrian crossings at Chartres and under US-59 at Texas, Capitol and Rusk	P3 Improve pedestrian crossing at Chartres and under US-59 at Polk	P4 Implement pedestrian improvements along Capitol from Chartres to St Emanuel	P5 Implement pedestrian improvements along Rusk from Chartres to St Emanuel
possible implementing agency	Private	■	■							■	■		■				
	Houston First		■				■		■				■	■	■		
	COH-Public Works & Engineering								■	■	■		■	■	■		
	COH-Parking Management																
	COH-Planning & Development	■		■	■	■											
	COH-Economic Development	■	■					■									
	Houston Downtown Management District	■		■	■				■				■	■	■	■	■
	East Downtown Management District	■				■			■	■	■		■	■	■	■	■
	TIRZ / Redevelopment Authority										■					■	■
	METRO												■	■			
	Not-for-Profit / Civic	■	■					■						■	■	■	■
possible funding sources	Private / For-profit Unreimbursed		■						■	■	■		■				
	Houston First	■	■				■		■				■	■	■	■	■
	COH-General Fund							■						■	■		
	COH-Renew Houston										■						
	COH-Housign & Community Development / Houston Housing Authroity							■			■						
	Houston Downtown Management District	■		■					■				■	■	■	■	■
	East Downtown Management District	■				■			■	■				■	■	■	■
	TIRZ 15 / East Downtown Redevelopment Authority	■	■			■				■	■		■	■	■	■	■
	380 Agreements	■	■	■	■						■						
	Federal	■						■						■	■		
	METRO													■		■	
	Foundations / Conservancies / Private Grants							■	■								
approval req'd	City Council	■	■	■	■	■	■	■	■		■						
	TxDOT													■	■	■	
	COH-Public Works & Engineering						■			■	■		■	■	■	■	■
	COH-Planning & Development / Planning Commission	■		■	■	■	■		■								
	METRO													■			
priority	Short Term (1-3 years)	■	■	■	■	■		■	■	■	■		■	■	■	■	■
	Medium Term (3-10 years)						■	■	■		■		■				
	Long Term (10 years +)										■						
	Based on Opportunity / Need							■			■		■				
	Based on Other Projects Outside Study Area																
operational funding	Houston Downtown Management District												■	■	■	■	■
	East Downtown Management District									■			■	■	■	■	■
	COH - Public Works & Engineering										■			■	■	■	■
	Private Landowners	■		■	■	■			■	■	■		■				
	Not-for-Profit / Civic							■									
	COH - Parking Management																
	Houston First		■				■						■			■	■
	METRO													■			



P6	Implement pedestrian improvements along Dallas from Main to Avenida de las Americas
P7	Create a pedestrian plaza on Avenida de las Americas from Rusk to Polk
P8	Rebuild Polk from Avenida de las Americas to Dowling
P9	Rebuild St Emanuel from Commerce to Leeland
P10	Develop pedestrian realm design standards for EaDo
P11	Implement minimum pedestrian standards for the entire Study Area
P12	Create Bastrop Promenade
P13	Create a north-south linear park to connect light rail transit to the Bastrop Promenade
BICYCLE RECOMMENDATIONS	
B1	Implement bicycyle wayfinding and identity program
B2	Enhance designated bike network
B3	Implement separated on-street bike path pilot project
B4	Study major east-west bike route across downtown
B5	Connet Union Station Hike & Bike Trail to Buffralo Bayou
B6	Provide pedestrian and bike linkage to East End through Harrisburg Underpass
B7	Rotate stop signs on Columbia Tap and Union Station Hike and Bike Trail
B8	Provide bike racks at transit stations and major destinations
TRANSIT RECOMMENDATIONS	
T1	Create circulator service from downtown to EaDo
T2	Reroute local bus service onto Polk and market overlapping routes as high-frequency service
T3	Implement East End streetcar
VEHICULAR TRAFFIC RECOMMENDATIONS	
V1	Implement vehicular traffic wayfinding and identity program
V2	Convert Texas to 2-way configuration from Hamilton eastward
V3	Rebuild Dowling and convert Congress to 2-way configuration from LaBranch to Dowling
V4	Reconfigure intersection at St Emanuel / Franklin / Navigation
V5	Provide metered on-street parking in EaDo
V6	Create new structured parking to provide shared parking for major venues

Record of Public Outreach

Public Involvement Plan

As part of Houston-Galveston Area Council (H-GAC) initiatives to address mobility challenges and quality of life within the eight-county region, a study was conducted to develop a plan for a Livable Center in the Downtown area of Houston. The study encompasses an 11 x 16 block area that includes Downtown and East Downtown (EaDo) Houston, an area that has experienced major development in recent years, including the GRB Convention Center, Minute Maid Park, Toyota Center, Discovery Green and Columbia Tap Hike & Bike Trail. The Study Area's future development plans include the new Houston Dynamo Stadium, METRO Light Rail facilities and new public spaces.

In conjunction with H-GAC, project sponsors Houston Downtown Management District and East Downtown Management District oversaw the project. The goal of the Livable Centers Study: to create a plan that analyzes the safety and quality of life of the pedestrian environment and identifies existing and potential pedestrian generators to provide solutions for implementing a successful pedestrian environment.

- Actively engaging the public in the decision-making process was an integral part of the study, with key initiatives providing invaluable guidance.
- Present options to the public in a clear and objective manner.
- Allow the public the opportunity to debate issues.
- Frame alternative solutions that will affect the final decision.
- Maintain dialogue during the decision-making process between agency and non-agency partners.
- Use a variety of techniques to target different groups and ensure people are not left out of the process.
- Engage in communication and approaches that elicit comments, participation and feedback from the public.
- Consider and evaluate all suggestions from the community.

Public Involvement Approach: Targeted Groups

Three primary groups were targeted for this study, each group providing unique perspectives in relation to the project:

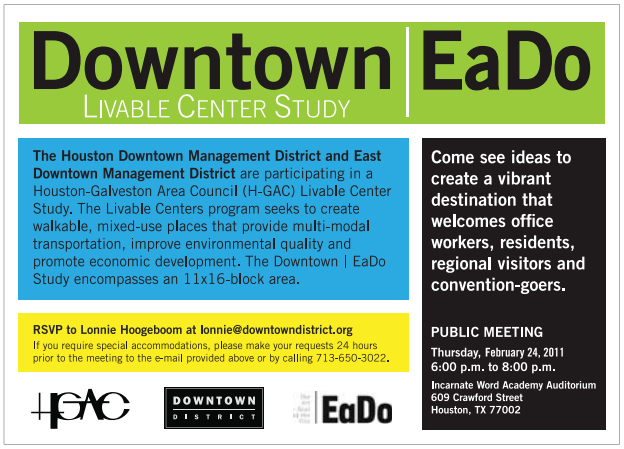
Stakeholder Advisory Committee: This core team provided leadership on the direction of the study and will ultimately be responsible for moving the final recommendations and projects forward after the study is complete. This group also provided guidance for suggested stakeholder focus groups.

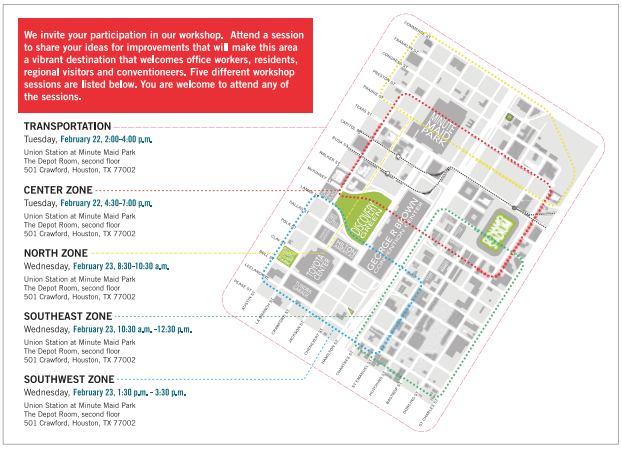
Members included representatives of the following groups:

- Chinatown CDC
- City of Houston Council, Districts H and I
- City of Houston, CE&F Department (Houston First Corporation)
- City of Houston, Finance Department
- City of Houston, Planning & Development
- Discovery Green Conservancy
- East Downtown Management District
- Greater East End Management District
- Harris County, Precincts 1 and 2
- Harris County, Houston Sports Authority
- Hilton Americas
- Houston Astros and Minute Maid Park
- Houston Convention Center Hotel Corporation
- Houston Downtown Management District
- Houston Dynamo
- Houston-Galveston Area Council
- Houston Rockets and Toyota Center
- Metropolitan Transit Authority of Harris County
- Texas Department of Transportation
- Texas House of Representatives, Districts 147 and 148
- Texas State Senate, District 6
- Texas Southern University
- Third Ward Community Cloth Cooperative
- TIRZ #15 / East Downtown Redevelopment Authority

Other Stakeholders: Additional stakeholders with a vested interest in the future of the Study Area, such as:

- City and county staff representing bicycle, parking and public works departments, etc.
- Design and construction teams for current and proposed projects including:
- Dynamo Stadium
- East Downtown Bastrop Promenade (Sister Cities of Houston)
- TIRZ 15 streets and infrastructure
- GRB Convention Center Master Plan
- Tourism study
- Dynamo sidewalk project
- METRO light rail
- Downtown Core Retail Study
- Dan Nip's Convention Center hotel





Flyer Invitation to Workshop and Public Meeting No. 1

- Office building owners, tenants and property managers
- Hotel owners and operators
- Restaurants, bars and retail tenants and property owners
- Industrial manufacturers
- Greater Houston Convention and Visitors Bureau
- GRB Convention Center leadership
- Area schools and churches
- Housing tenants, owners and property managers
- Real estate developers active in Study Area
- Local charities and organizations

General Public: It is essential to promote honest, educational and active two-way communication with the public, listening to their comments and concerns, keeping them informed while addressing their concerns and giving them an opportunity to participate in the study. This includes all parties interested in the study, regardless of whether or not they have a direct connection to the Study Area.

Public Involvement Events

To adequately involve the general public, area stakeholders and local citizens, various meetings were held for different targeted audiences to gain informative and productive feedback.

Stakeholder Advisory Committee Meetings: A total of four meetings were held with this core leadership group, covering the following topics:

- February 11, 2011 — project introduction
- February 22, 2011 — guidance from committee members prior to conducting workshops on specific geographic sectors or topics
- April 15, 2011 — review initial list of recommended projects
- July 29, 2011 - review final recommendations and gather comments prior to presenting to the public

Two-Day Workshop: The project team orchestrated a charrette on February 22-23, 2011 to identify the study's core principles, seek input and ideas, and develop design solutions and concepts. Key stakeholders were invited to participate in targeted discussions according to these topics:

- Transportation
- Center Zone
- North Zone
- Southeast Zone
- Southwest Zone

The results of the workshop provided the basis for outlining projects and recommendations.

Public Open House: A three-hour open-house format meeting was held on February 24, 2011, after the two-day workshop to display the outcomes of the workshop to the general public. Several individuals who had participated in the workshops attended the public meeting to learn the outcome of their input, as well as area residents, real estate agents and business owners.

Small Group Meetings: The team participated in several individual or focus group meetings to cover topics of interest to specific groups and to coordinate with other projects active in the Study Area. These meetings encompassed the following groups and individuals:

- GEEMD Master Plan study team
- GRB Convention Center Master Plan study team
- Houston Downtown Mixed-use Retail Core study team
- Houston Dynamo study team
- Local Developers
- Texas House of Representatives District 147, Mr. Garnet Coleman

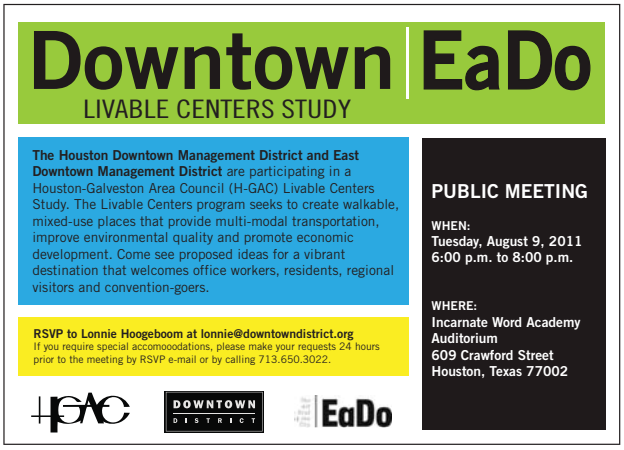
Public Meeting: An open-house style meeting was held August 9, 2011, to present final recommendations and collect comments, feedback and concerns.

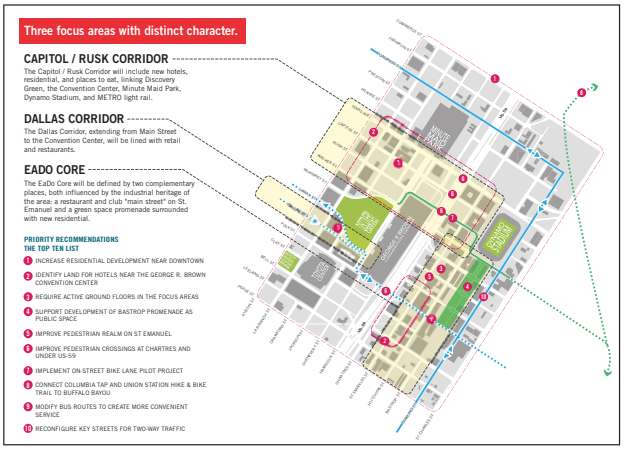
Publicity Approach

To ensure adequate attendance from the public, a variety of methods were used to publicize the meetings to the community. The goal was to reach people of all socioeconomic and cultural backgrounds in providing awareness of the project as well as to maximize input to direct future implementation. The Downtown Management District and EaDo played an active role in publicizing the events through their websites and e-mail communications. Meeting notifications included postcards mailed and distributed to area residential complexes and at community meetings.

Meeting Summary

After each meeting, a brief report was provided to all team members summarizing information gained from the meeting and utilized as a tool to develop or revise recommendations and shape the study's progress.





Flyer Invitation to Public Meeting No. 2

Stakeholder Advisory Committee (SAC)

Prefix	First	Last	Title	Company
Ms.	Tina	Araujo	General Manager	East Downtown Management District
Ms.	Michelle	Barnes	Director, Community Artists Collective	Third Ward Community Cloth Cooperative
Mr.	Tad	Brown	CEO	Houston Rockets
Mr.	Ric	Campo	Chairman	Houston Convention Center Hotel Corporation
Mr.	Chris	Canetti	President	Houston Dynamo
Mr.	Garnet	Coleman	State Representative, District 147	Texas House of Representatives
Mr.	Tim	Douglass	Deputy Director, Economic Development	City of Houston, Finance Department
Mr.	Rodney	Ellis	State Senator, District 13	Texas Senate
Mr.	Bob	Eury	Executive Director	Houston Downtown Management District
Ms.	Jessica	Farrar	State Representative, District 148	Texas House of Representatives
Mr.	Mario	Gallegos, Jr.	State Senator, District 6	Texas Senate
Ms.	Pam	Gardner	President, Business Operations	Houston Astros
Mr.	Ed	Gonzalez	Council Member, District H	City of Houston
Mr.	George	Greanias	President & CEO	Metropolitan Transit Authority
Mr.	Don	Henderson	President	Houston Downtown Management District
Mr.	Andy	Icken	Chief Development Officer	City of Houston
Mr.	Michael	Kramer	Assistant Director	City of Houston, Planning & Development Dept.
Mr.	El Franco	Lee	County Commissioner, Precinct 1	Harris County
Mr.	Barry	Mandel	President	Discovery Green Conservancy, Inc.
Mr.	Travis	Milner	Transportation Funding Specialist	Texas Department of Transportation, East Region Support Ctr.
Mr.	Jack	Morman	County Commissioner, Precinct 2	Harris County
Mr.	Dan	Nip	President	Chinatown CDC
Mr.	Norm	Pegram	Chairman	East Downtown Management District
Mr.	Gordon	Quan	Chairman	TIRZ 15
Mr.	James	Rodriguez	Council Member, District I	City of Houston
Dr.	John	Rudley	President	Texas Southern University
Ms.	Diane	Schenke	President	Greater East End Management District
Ms.	Janis	Schmees	Executive Director	Harris County-Houston Sports Authority
Mr.	John	Sedlak		Metropolitan Transit Authority
Ms.	Dawn	Ullrich	Director	City of Houston, Convention & Entertainment Facilities Dept.

Meetings

Meeting Date	Meeting Title / Description	Attendees
December 13, 2010	Kick-off Meeting	H-GAC, HDMD, EDMD, Consultant Team
December 17, 2010	Dynamo Conference Call	Consultant Team, Dynamo
December 29, 2010	Public Engagement Meeting	H-GAC, HDMD, EDMD, Consultant Team
January 4, 2011	GRB Convention Center - Expansion Coordination	HDMD, EDMD, Morris, Clark Condon, GRBCC Staff, GRBCC Study Team
January 12, 2011	GRB Convention Center - Expansion Coordination Meeting	HDMD, Morris, Kimley-Horn
January 31, 2011	Pre-SAC Kick-off Meeting	H-GAC, HDMD, EDMD, Consultant Team
February 8, 2011	GEEMD Study Team Coordination Meeting	GEEMD Study Team, Morris
February 11, 2011	SAC Kick-off Meeting	H-GAC, HDMD, EDMD, SAC, Consultant Team
February 22, 2011	Task 1 Client Meeting	H-GAC, HDMD, EDMD, Consultant Team
February 22, 2011	SAC #2 Meeting	H-GAC, HDMD, EDMD, SAC, Consultant Team
February 22, 2011	2-Day Workshop - Day 1: Transportation, 2 - 4 p.m. North Zone, 4:30 - 7:00 p.m.	H-GAC, HDMD, EDMD, SAC, Consultant Team
February 23, 2011	2-Day Workshop - Day 2: North Zone, 8:30 - 10:30 a.m. Southeast, 10:30 a.m. - 12:30 p.m. Southwest, 1:30 - 3:30 p.m.	H-GAC, HDMD, EDMD, SAC, Consultant Team
February 24, 2011	Public Meeting	H-GAC, HDMD, EDMD, SAC members, Consultant Team, Public
March 18, 2011	Task 2 Client Meeting	H-GAC, HDMD, EDMD, Consultant Team
March 24, 2011	Developer Round Table Meeting	HDMD, Morris, Local Developers
March 29, 2011	Houston Downtown Mixed-Use Retail Core Coordination Meeting	HDMD, Morris, Clark Condon, Houston Downtown Mixed-Use Retail Core Study Team
April 1, 2011	GEEMD Master Plan Coordination Meeting	EDMD, Morris, Clark Condon, GEEMD, Civic-Design
April 12, 2011	GRB Convention Center Expansion Coordination Meeting	HDMD, Morris, Clark Condon, Gensler
April 15, 2011	SAC #3 Meeting	H-GAC, HDMD, EDMD, SAC, Consultant Team
April 19, 2011	Dan Nip Coordination Meeting	HDMD, Morris, Clark Condon, Gensler, Dan Nip, Don Henderson, Caps Architects
May 25, 2011	GRB Convention Center - Expansion Coordination / Houston Downtown Mixed-Use Retail Core Coordination Meeting	HDMD, Morris
June 8, 2011	Task 3 Client Meeting	H-GAC, HDMD, EDMD, Consultant Team
July 27, 2011	Task 4 Client Meeting	H-GAC, HDMD, EDMD, Consultant Team
July 29, 2011	SAC #4 Meeting	H-GAC, HDMD, EDMD, SAC, Consultant Team
August 8, 2011	Public Meeting	H-GAC, HDMD, EDMD, SAC members, Consultant Team, Public

Previous, On-going and Proposed Projects

Project / Study	Client	Team	Status
Avenidas - East End Study		Gensler	Completed March 2008
Dynamo Stadium	Sports Authority	Populous, Clark Condon Associates, Walter P Moore, Ward, Getz and Associates, M-E Engineers, Millennium Sports	Ongoing
EaDo Promenade Competition	East Downtown Tax Increment Reinvestment Zone (TIRZ 15) Landwater Sustainability Forum	Clark Condon Associates, Gensler, Walter P Moore,	Completed April 2010
East Downtown Tax Increment Reinvestment Zone (TIRZ) No. 15 Infrastructure Assessment Study	East Downtown Tax Increment Reinvestment Zone (TIRZ 15)	HNTB	Completed April 2009
Final Environmental Impact Statement: Southeast Corridor Fixed Guideway in Houston, Harris County, Texas	FTA, METRO	U.S. Department of Transportation Federal Transit Administration and Metropolitan Transit Authority of Harris County, Texas	Completed January 2007
GRB Convention Center Master Plan	City of Houston	Gensler	Ongoing
Houston Downtown Mixed-Use Retail Core	Houston Downtown Management District	AECOM	Completed August 2010
Intown Living Task Force: Downtown Residential Development	Central Houston, Inc.	Central Houston, Spillette Consulting, Page Southerland Page	Completed June 2009
Land Use and Demographics East Downtown	East Downtown Management District	CDS Market Research	Completed May 2009
Parks & Recreation Master Plan Update	Houston Parks & Recreation Department		Completed March 2009
Southeast Corridor Light Rail Transit Project	METRO	Metro Solutions	Ongoing
TIRZ 15 Visioning Report	East Downtown Tax Increment Reinvestment Zone	Gensler	Completed May 2009