
LIVE
VIVA
GREATER EASTWOOD:
A LIVABLE CENTERS STUDY
Prepared for:
EAST END
DISTRICT
Houston-Galveston
Area Council

LIVE VIVA GREATER EASTWOOD: A LIVABLE CENTERS STUDY

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PLAN ESSENTIALS

Introduction

Live/Viva Greater Eastwood: A Livable Centers Study (Plan) is a holistic plan funded by the Houston-Galveston Area Council (H-GAC) in partnership with the East End District with an intent to identify ideas and projects that create and enhance livability within Greater Eastwood. Primary components of a "livable" center include:

- Safety, mobility options, and accessibility for people of all ages and abilities
- Economic development and opportunities
- Environmental quality and green spaces for people to recreate
- Community vibrancy and a sense of place

The study area for this project encompasses the Greater Eastwood community, including Eastwood, Houston Country Club Place, Sunnyland, and parts of Lawndale. The study area is bound by Harrisburg Boulevard to the north, I-45 to the south, Sampson Street/Scott Street to the west, and Wayside Drive to the east. It is approximately 2.8 square miles in size and has a population of 15,874. The study area is approximately one mile east of Downtown Houston and one half mile north of University of Houston. Of particular note within the study area are eleven schools ranging from elementary to high school.

The Greater Eastwood community is a historic, vibrant, and diverse community. The history lives on today through much of the architecture, art, and materials seen in the public realm and neighborhoods. Diversity includes culture and ethnicity as well as ages and income levels. This plan aims to build on the history, diversity, and culture in Greater Eastwood and identify projects that will support the community's needs today and in the future while maintaining the unique nature and value.

This plan was conducted over the course of a year from December 2019 to November 2020. The primary components of this project consist of a study of existing conditions and previous plans, creation of a conceptual plan with tangible recommendations, and an implementation plan to prioritize the recommendations and identify funding opportunities. This plan was developed with participation from stakeholders and people who live, work, learn, and play in Greater Eastwood to ensure the community's needs, ideas, and priorities were identified and incorporated into the development of recommendations.

Early 20th Century Map of Houston with a Focus on Greater Eastwood
Source: University of Houston Special Collections

Plan Essentials

The Live/Viva Greater Eastwood Livable Centers Study provides the East End District with a guide to improve safety, expand mobility options, increase access to destinations, provide parks and open spaces, facilitate economic development, and support the overall quality of life in the community. This plan was developed using data and analysis of existing conditions in the Fact Book (Appendix A), feedback from the Stakeholder Advisory Committee, and input from the community (Appendix C). Clear objectives from these three sources were identified and used to develop recommendations. The objectives are in Figure 1, below.

This plan identifies six core recommendations that build on each other and collectively aim to meet all of the identified objectives. These core recommendations are identified below.

Greater Eastwood is...

1. Anchored by Great Streets
2. Active and Healthy
3. A Hub for Education
4. A Connected and Walkable Community
5. A Place with a Strong and Vibrant Culture
6. Rich with Opportunities for the Future

Figure1 Project Objectives

The core recommendations each have several sub-recommendations within them that include physical projects, programs, and policies. The recommendations work together to provide a holistic and comprehensive framework to improve livability in Greater Eastwood. Figure 2 on the following page provides an overview map of the recommendations. It shows that collectively, the recommendations touch all areas of Greater Eastwood and build on each other and the community's existing assets. The Figure 2 legend is provided below.

While some recommendations are intended to meet a single objective, others relate to multiple objectives. Figure 3 shows each core and sub-recommendation and identifies which objective(s) it aims to achieve through implementation. The table shows that the plan holistically can meet the various needs in the community and help the East End District achieve its goals of creating a livable community within the Greater Eastwood area.

The information following Figure 3 provides key information on each recommendation in a summary form that brings together information from the community, data analysis, a recommendation summary and implementation information.

Legend for Figure 2 Recommendations Map

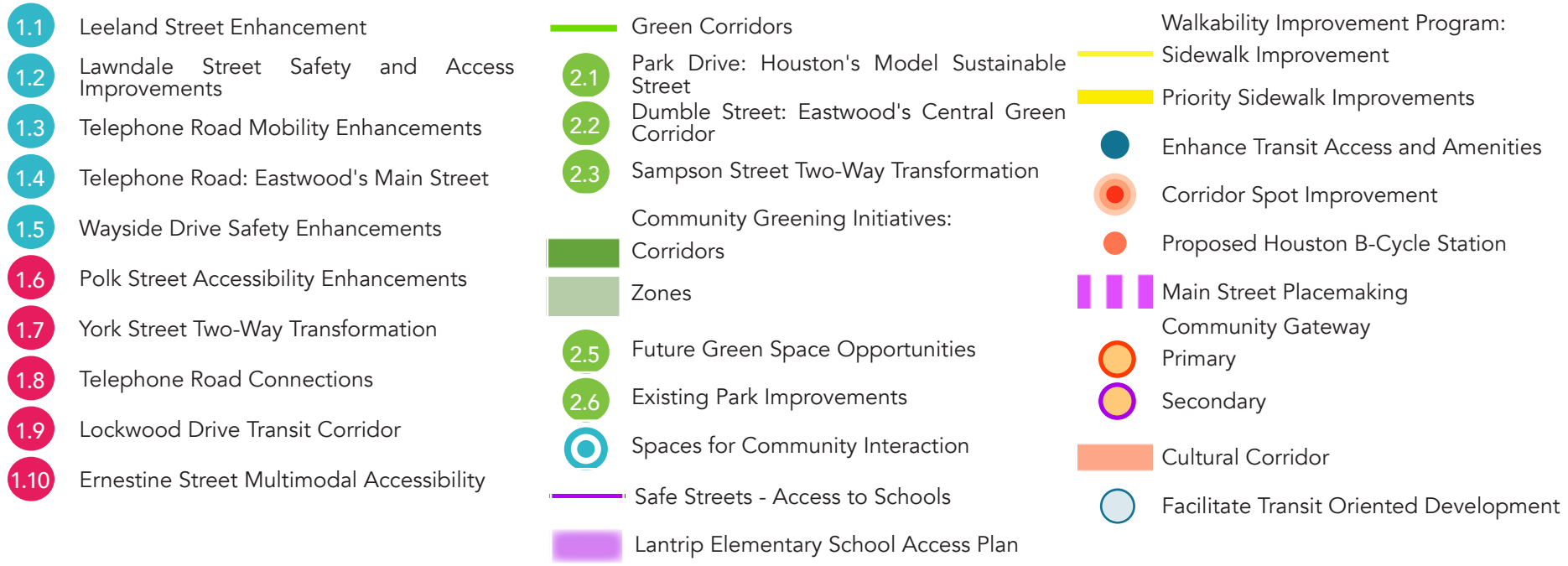


Figure 2 Recommendations Map
Note: Some recommendations are programmatic in nature and do not have a physical location associated with them. Those Recommendations are not listed in this map.

Figure 3 Recommendations Summary Table

Greater Eastwood is...			Project Objectives 1	2	3	4	5	6	7	8
1: Anchored by Great Streets	1.1	Leeland Street Enhancement	X	X	X		X			
	1.2	Lawndale Street Safety and Access Improvements	X	X	X	X				
	1.3	Telephone Road Mobility Enhancements	X	X	X		X			
	1.4	Telephone Road: Eastwood's Main Street	X	X	X	X	X	X	X	
	1.5	Wayside Drive Safety Enhancements	X	X	X		X			
	1.6	Polk Street Accessibility Enhancements	X	X	X					
	1.7	York Street Two-Way Transformation	X	X	X		X		X	
	1.8	Telephone Road Connections	X	X	X					
	1.9	Lockwood Drive Transit Corridor	X	X	X					
	1.10	Ernestine Street Multimodal Accessibility	X	X	X					
2: Active and Healthy	2.1	Sampson Street: A Healthy Community Connection	X	X		X			X	
	2.2	Park Drive: Houston's Model Sustainable Street	X			X		X	X	
	2.3	Dumble Street: Eastwood's Central Green Corridor	X		X	X			X	
	2.4	Community Greening Initiatives				X	X		X	
	2.5	Future Green Space Opportunities				X		X	X	
	2.6	Existing Park Improvements				X		X	X	
	2.7	Create Spaces for Community Interaction				X	X	X		
3: A Hub for Education	3.1	Build Safe Streets to Schools	X	X	X	X				
	3.2	Data Collection Program	X	X						
	3.3	Walk Assessment & Encouragement Program	X	X				X		
	3.4	Walk & Wheel Skills Hub		X	X	X		X		
	3.5	School Access Plans	X	X	X					
4: A Connected and Walkable Community	4.1	Create a Walkability Improvement Program	X	X	X	X	X			
	4.2	Enhance Transit Access and Amenities	X	X	X					
	4.3	Corridor Spot Improvements		X						
	4.4	Develop Priority Bikeways	X		X		X			
	4.5	Expand Houston B-Cycle Stations			X					
	4.6	Provide Bike Parking at Destinations			X		X			
5: A Place with a Strong and Vibrant Culture	5.1	Main Street Placemaking				X	X	X		
	5.2	Incorporate Placemaking Enhancements					X	X		
	5.3	Create Community Gateways						X		
	5.4	Create Cultural Corridors				X	X	X		
6: Rich with Opportunities for the Future	6.1	Facilitate Transit Oriented Development			X	X	X			X
	6.2	Create Character & Development Guidelines					X	X		
	6.3	Revitalize Commercial Corridors					X	X		
	6.4	Establish a Real Estate and Developer Coordination Group					X			X
	6.5	Partner in a Housing Needs Study								X
	6.6	Promote Programs Aimed at Home Ownership								X

1. Multimodal Networks
2. Safety
3. Access to Opportunities
4. Quality of Life
5. Vibrant Economy
6. Community Culture
7. Environmental Resiliency
8. Housing Options

1 Anchored by Great Streets

Related Objectives:

1 2 3 4 5 6

Streets are the backbones of communities and neighborhoods. Great Streets support economic opportunity, neighborhood character, mobility, access, safety, and environmental resiliency for people of all ages and abilities. In Greater Eastwood, re-imagining a few key corridors have the potential to strengthen safety and access of existing businesses and destinations and can attract new development aligned with the community's goals. This recommendation describes two "types" of Great Streets: Livable Streets and Connection Corridors.

From the Community:

"Improve transportation to encourage more pedestrian traffic, access to businesses and amenities, nightlight, and entertainment"

"Revitalize Telephone Road"

42% *of survey respondents stated multimodal improvements should be prioritized*

Telephone should be a Main Street for the East End with street trees, bike lanes, and sidewalks"

"Lockwood and Ernestine look like highways. How can we make them more friendly for residents?"

From the Data:

- Most primary corridors operate below vehicle capacity
- 4.5% of commuters use transit
- Approximately 28% of trips are 3 miles or less
- 60% of employed residents live within 10 miles of work;
- 33% of study area employees live within 10 miles of work.
- Much of the commercial development is along major corridors making them important destinations

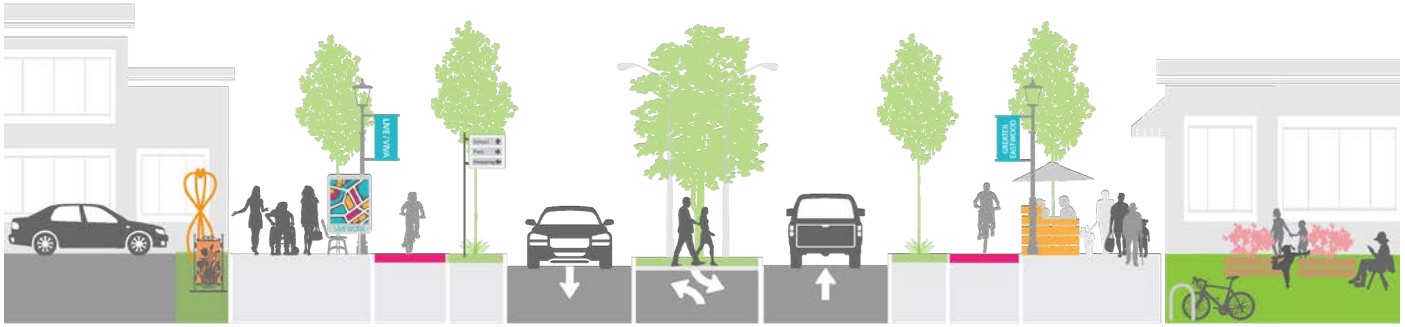
About the Recommendations:

Livable Streets

Livable streets present an opportunity to breathe life into our most versatile and highly used corridors. These streets are intended to promote and sustain economic activity and are highly accessible by all modes of transportation.

Connection Corridors

Connection corridors focus on providing great access for the community from neighborhoods to destinations and other corridors. They should be safe and accessible for multiple modes and people of all ages and abilities.



Recommendation Type: Project | Program | Policy

Quick Wins

High level of benefits with lower costs or fewer barriers to implementation. Implement in the short-term.

- 1.2 Lawndale Street Safety & Access Improvements
- 1.3 Telephone Road Mobility Enhancements
- 1.5 Wayside Drive Safety Enhancements
- 1.8 Telephone Road Connections

Big Moves

High level of benefits with higher costs or significant level of effort required for implementation. Implement in the long-term.

- 1.1 Leeland Street Enhancement
- 1.4 Telephone Road: Eastwood's Main Street
- 1.6 Polk Street Accessibility Enhancements
- 1.7 York Street Two-Way Transformation
- 1.9 Lockwood Drive Transit Corridor
- 1.10 Ernestine Street Multimodal Accessibility

Building Blocks

Some community benefits, lower costs, fewer barriers to entry. Implement over time.

N/A

Implementation Considerations

- Some of these projects are large in scope and will need phased development to implement.
- Reconstruction projects will take significantly more resources than retrofit projects. There are instances where a retrofit and reconstruction make sense on the same corridor. For example, if it is possible to develop project 1.4 within the next 5-10 years, then the retrofit project 1.3 would not make fiscal sense to also develop. If project 1.4 is anticipated to take more than 10 years to implement, then the more modest recommendations in the project 1.3 retrofit would be appropriate to make.
- Working with partners will be essential due to the nature of the primary corridors. Working with partners will help leverage funding opportunities and strengthen grant applications.

Potential Partners

- City of Houston
- Harris County Precinct 2
- METRO
- TIRZ 23

2 Active & Healthy

Related Objectives:

1 2 3 4 5 6 7

Places for play, social connections, community health, and environmental resiliency are essential for developing great places with a high quality of life. Physical activity and social connections are important factors in community health. Paired with ecological improvements that boost resiliency, these components work together to help create a basis for an active, healthy, livable community. Greater Eastwood has many opportunities to enhance community health with a thoughtful plan. These recommendations include Green Corridors, park system improvements, social spaces for community interaction, and initiatives to improve environmental quality and resiliency.

From the Community:

"Eastwood needs more pocket-parks"

"More parks and green space for families"

42% *of survey respondents reported parks as their favorite place to go in the neighborhood*

"more pedestrian public spaces, such as parks and attractions"

"More trails and outdoor options"

From the Data:

- 9 total open spaces exist - includes parks, spark parks, one plaza and one cemetery
- There is a lack of wildlife habitat and natural programming
- Many neighborhoods and commercial corridors lack a high-quality tree canopy
- Only 2% of existing land is open space, but 18% is undeveloped or publicly owned
- Some neighborhoods have no park or open space within 1/2 mile
- Distinctive, but hidden, natural features represent green infrastructure and open space opportunities

Summary of Recommendations:

Green Corridors

Green Corridors are naturally vibrant connections between neighborhoods and places where people can enjoy activity and/or the natural environment, such as parks, open spaces, public plazas, or trails.

Environmental Quality and Resiliency

Through the implementation of Low Impact Development principles and tree planting recommendations throughout the district, on public and private lands, the benefits of a high-quality micro-climate and ecosystem services can be distributed to the entire Greater Eastwood Community.

Open Space Recommendations

Informed by the consideration of the district's existing collective open space program, recommendations are made to add types of parks and open spaces that the district currently lacks.

Park System Improvements

Improving park spaces can realize a more complete park system in Greater Eastwood. Recommendations aim to address open space gaps and programmatic deficiencies.

Social Spaces for Community Interaction

Social Spaces for community interaction provide points of concentration for the Greater Eastwood Community to gather, play, and relax, together. These recommendations emphasize exciting opportunities to re-allocate some of the large quantities of public, and private space currently allocated to the automobile, as well as strategies for vacant lots.

Recommendation Type: Project | Program | Policy

Quick Wins

High level of benefits with lower costs or fewer barriers to implementation. Implement in the short-term.

- 2.2 Park Drive: Houston's Model Sustainable Street
- 2.4 Community Greening Initiatives
- 2.6 Existing Park Improvements
- 2.7 Create Spaces for Social Interaction

Big Moves

High level of benefits with higher costs or significant level of effort required for implementation. Implement in the long-term.

- 2.1 Sampson Street: A Healthy Community Connection
- 2.3 Dumble Street: Eastwood's Central Green Corridor
- 2.5 Future Green Space Opportunities

Building Blocks

Some community benefits, lower costs, fewer barriers to entry. Implement over time.

- N/A

Implementation Considerations

- Partnerships will be essential to implement the recommendations as they pertain to locations in public right-of-way and private property.
- Tying into existing efforts and identifying opportunities to piggy back onto (such as CIP projects where drainage is a component) can leverage funding and provide opportunities to move some recommendations forward quicker
- Incentives, programs, and media-campaigns could also be explored to encourage the creation of more social spaces.

Potential Partners

- City of Houston
- Harris County Precinct 2
- Houston Parks Board
- Businesses
- Area Developers
- Property Owners
- Community/Philanthropic Organizations

3 A Hub for Education

Related Objectives:

1 2 3 4

Schools are places for children to learn, grow, and interact with others, yet also provide vibrancy and a sense of community to the adjacent neighborhoods. Greater Eastwood has an abundance of high-quality schools drawing in families from inside and outside the immediate community and is a Hub for Education in this area of Houston. Focusing on access to schools for children and families to walk or bike builds healthy, active habits for the future and provides value for the surrounding neighborhood, and encourages more local investment. Additionally, community partnerships and programs that involve schools and children broaden the scope of learning in the community and encourages new perspectives and ideas.

From the Community:

A majority of survey respondents identified sidewalks, safe crosswalks, bikeways, and trails as improvements that would make getting to school and other destinations easier.

"My favorite place to go is walking around Lantrip Elementary."

68% *of survey respondents (students or student family member) drive or get dropped off at school*

"I wish it were easier to get to schools."

From the Data:

- There are 11 schools from elementary to high school levels within the study area
- There are close to 7,000 students traveling in and around the study area daily
- Most schools are located along primary corridors
- 83% of students at Eastwood Academy drive or are driven to school
- Less than 15% of Lantrip Elementary students walk or bike to school

Summary of Recommendations:

Safe Streets to Schools

Safe access to schools is important for the health, safety, and mobility options for children. Schools have unique travel patters and have a higher reliance on safe access for walking and biking, as well as transit for those who ride METRO to school. Safe Streets are primary corridors within 1/4 mile from school facilities and focus on providing access for all ages and abilities, keeping traffic at slow speeds, and employing proven Safe Routes to Schools countermeasures.

Data Collection Program

A data collection effort is recommended for use in project prioritization and evaluation as well as to assist in obtaining grant funding. Collecting data on pedestrian and bicycle use is important, but data for access to schools should be a priority.

Walk Assessment & Encouragement Program

This recommendation is focused on developing an assessment program and supporting materials for walkability and is intended to help prioritize improvements and encourage more active and healthy transportation options.

Walk & Wheel Skills Hub

Development of a biking and walking safety course for educational activities and programs for people of all ages and abilities

School Access Plan

A School Access Plan (SAP) identifies improvements and needs and priorities focused around access to schools at an individual level. Both infrastructure improvements and programs can be implemented in partnership with schools, the community, and other organizations.

Recommendation Type: Project Program Policy

Quick Wins

High level of benefits with lower costs or fewer barriers to implementation. Implement in the short-term.

3.4 Develop a Walk and Wheel Skills Hub

3.5 Partner to Create School Access Plans - Lantrip Elementary Access Plan Model

Big Moves

High level of benefits with higher costs or significant level of effort required for implementation. Implement in the long-term.

N/A

Building Blocks

Some community benefits, lower costs, fewer barriers to entry. Implement over time.

3.1 Build Safe Streets to Schools

3.2 Create and Participate in a Data Collection Program

3.3 Develop a Walk Assessment and Encouragement Program

Implementation Considerations

- Prioritize routes closest to schools for sidewalk ADA and safety enhancements by prioritizing these projects in annual work plan. This could be communicated through interactive maps on the District's website to highlight work to be done and accomplishments.
- Coordination with schools, the City and County to develop a project can help when seeking grant money and/or planning for it in the CIP (EED or City's CIP)
- Utilize the East End District's website and existing social media to provide encouragement information, maps, updates on priorities, and more.
- Utilize students and other existing resources (such as H-GAC's counters or City of Houston data) to collect data and maintain information pertinent to walking, biking, and access to schools.

Potential Partners

- Area Schools
- City of Houston
- Harris County Precinct 2
- Community/Philanthropic Organizations
- H-GAC

4 A Connected & Walkable Community

Related Objectives

1 2 3 4

Greater Eastwood has the potential to be one of the most walkable, transit, and bike-friendly neighborhoods in Houston. With a connected street grid, frequent transit services, and potential to improve places for people to walk and bike, Greater Eastwood will become a place with abundant access to opportunities. Strong, interconnected networks encourage walking, biking, and transit use, allowing for safer, more seamless connections to access schools, jobs, parks, dining, and more in ways that are economical and healthy for people of all ages, abilities, and incomes.

From the Community:

Families use Dumble as a main road for walking/biking to get to Eastwood Park. It needs sidewalks and bike accommodations.

"We need safe bike routes"

39% *of survey respondents stated that intersection crossings do not feel safe or visible*

Need easier access to and improved "all weather bus and rail shelters"

A lack of sidewalks and trails or sidewalks in good condition are the biggest mobility barriers. (from the online survey)

From the Data:

- 53% of assessed sidewalks are missing or in poor condition
- 11.7% of households have no automobile available
- Less than 20% of bus stops have shelters or benches
- There is a noticeable lack of connected, safe bike facilities
- There are only 2 existing bike share stations

Summary of Recommendations:

Focus on Walkability

Walkability Improvement Program

Walkability is at the core of any great community that provides access to destinations, goods, and services for people of all ages and abilities. Improving walkability in Greater Eastwood is a foundation to many components of this plan and can be accomplished by focusing on sidewalk and curb ramp conditions on primary corridors and beyond into neighborhoods.

Enhance Transit Stops

Transit users are also pedestrians. While ensuring access to transit stops is an important component of walkability, ensuring that those transit stops are comfortable for people while they wait for the bus is also important. In order to encourage more use of the transit system, improving and enhancing bus stops and facilities is essential.

Priority Spot Improvements

Certain locations in the study area have the potential to spark significant and rapid improvements in area mobility in exchange for only moderate investments. Because these locations are points, they are not captured by the Corridor Recommendations; instead, they are described in this section as Spot Improvements.

Build a Bike Network

A great bicycle network is based on using a variety of facility types that meet the community's needs and the surrounding context. This recommendation highlights prioritized bicycle corridors to focus on for implementation, increase access to the bicycle network with bike share stations, and bike parking.

Recommendation Type: Project Program Policy

Quick Wins

High level of benefits with lower costs or fewer barriers to implementation. Implement in the short-term.

4.1 Develop an Annual Walkability Improvement Program

4.2 Enhance Transit Access & Amenities

4.3 Corridor Spot Improvements

Big Moves

High level of benefits with higher costs or significant level of effort required for implementation. Implement in the long-term.

4.4 Develop Priority Bikeways

Building Blocks

Some community benefits, lower costs, fewer barriers to entry. Implement over time.

4.5 Expand Houston B-Cycle Stations

4.6 Provide Bike Parking at Destinations

Implementation Considerations

- Create a Walkability Improvement Program to budget and plan for sidewalk improvements each year that is based off priority project implementation over time
- Partner with METRO to potentially enhance bus stops in their CIP to add placemaking and coordinate to determine which bus stops have the greatest need for improvement
- Coordinate with the City of Houston's 311 program and existing maintenance for faded intersection markings and partner for enhancements where possible.
- In coordination with Houston Bcycle, solicit resident and business input on three new station locations and have the community vote on their favorite/hopeful spot. EED can coordinate with Bcycle staff to seek a grant to pay for new install, or can plan/program for implementing stations over time.
- Advertise for the "Go Healthy Houston" initiative to seek out desired locations for bike racks throughout Eastwood. EED can then coordinate with Go Healthy Houston representatives and local business owners on installing bike racks

Potential Partners

- City of Houston
- Harris County Precinct 2
- METRO
- Houston BCycle
- Businesses
- Area Developers

5 A Place With A Strong & Vibrant Culture

The Greater Eastwood community is known for its culture and history. Incorporating these elements into new investments in public space and development projects can breathe new life into the community by showcasing the past and embracing it with placemaking and branding. Placemaking enhances the public realm through physical, cultural, and social identifiers that define a place and support its continued evolution. Through signage, gateways, public art, furnishings, and a unique material language Greater Eastwood can showcase community culture and build on it for the future.

Related Objectives

4 5 6

From the Community:

Ptotecting the history and culture of the community is a top challenge (from the online survey)

Corridors are "Opportunities for streetscaping with sidewalks and bike routes"

34% *of survey respondents reported strong culture and history as Greater Eastwood's top asset.*

"Gateway space for neighborhoods" are needed improvements

From the Data:

- Areas west and north of Greater Eastwood have significantly more placemaking
- Few places with public art or community furnishings
- A significant number of gateway opportunities exist to use infrastructure as a placemaking element.
- Most art and placemaking elements are located along METRORail's Green Line on Harrisburg and near the Purple Line stations.

Summary of Recommendations:

Main Street Placemaking

At the commercial heart of the district the recommendations of placemaking elements, and cultural spaces, combines with economic activity to create a vibrant Main Street and community destination along Telephone Road.

Placemaking Elements

Branded signage and wayfinding, public art, street furnishings, and a unique material palette work together to bring the built environment to life and create a sense of place in the community. Using these placemaking elements creates value and connects the community's present and future with its history and culture.

Community Gateways

Gateways provide a visual cue that a person is entering a place that has unique or different community characteristics. By using gateways, the identification of the Greater Eastwood area becomes more defined and adds value to neighborhoods, businesses, and the community overall.

Cultural Corridors

Cultural Corridors are opportunities to expand on other recommendations in this plan and incorporate components identified here to bring out the history and unique culture of the community.

Recommendation Type: Project Program Policy

Quick Wins

High level of benefits with lower costs or fewer barriers to implementation. Implement in the short-term.

N/A

Big Moves

High level of benefits with higher costs or significant level of effort required for implementation. Implement in the long-term.

5.1 Main Street Placemaking

Building Blocks

Some community benefits, lower costs, fewer barriers to entry. Implement over time.

5.2 Incorporate Placemaking Enhancements

5.3 Create Community Gateways

5.4 Create Cultural Corridors

Implementation Considerations

- Coordination with local businesses on aesthetic guidelines can be pursued to unify district sense of place
- Explore grant programs and integration of gateway monumentation with other corridor and infrastrucural improvement projects
- Coordinate with East End Houston Cultural District Strategic Plan recommendations, and integrate public art into capital projects, as well as implementation in existing open spaces - coordinate with Houston Arts Alliance to engage arts community and facilitate implementation
- Build on existing placemaking efforts by extending existing furnishing program. Apply furnishing elements unique to Eastwood that reflect its unique history and culture
- Engage local communities through a program or grant structure to identify local points of significance. Explore grant programs or private partnerships to finance implementation

Potential Partners

- City of Houston
- Harris County Precinct 2
- METRO
- Houston Arts Alliance
- Neighborhood Associations
- Community/Philanthropic Organizations
- Businesses

6 Rich with Opportunities for the Future

Related Objectives

3 4 5 6 8

Greater Eastwood is prime for leveraging existing infrastructure investments in transit and street improvements that can facilitate economic development opportunities and housing choices in ways that enhance the existing community fabric. These investments can become catalytic providing job opportunities and housing options to meet the needs of the community. Greater Eastwood is rich with opportunities for new housing options, especially near areas served by high-quality transit and also rich in opportunities where large industrial tracts are likely to redevelop with potential to enhance the fabric of the community.

From the Community:

"Making a business district on Telephone and Lockwood with sidewalks, reconfigured parking. This could be the best shopping area in inner Houston"

Need "housing along rail transit"

60% *of survey respondents stated mixed use development would produce jobs or provide other services attractive to the community*

Need housing that is "affordable and smart, community-oriented design"

From the Data:

- Jobs are expected to increase 39% by 2045
- Greater Eastwood has higher than typical homeownership rate of nearly 44%
- There is an imbalance of employed residents and jobs within the study area
- Majority of multi-family housing are small-scale apartments
- The area has multiple transit nodes (around stations and transit centers) that can support more multimodal trips and incorporation of housing and economic development
- 57.5% of all housing is single family

Summary of Recommendations:

Transit Oriented Development (TOD) Opportunities

TOD is a way to leverage public infrastructure investments and facilitate places that are walkable, encourage transit use, and reinforce economic and housing opportunities in a more sustainable manner. The recommendations in this section highlight the opportunities for TOD within the Greater Eastwood community and key components that could move these opportunities forward.

Facilitating Economic Development

To provide opportunities for the future, Greater Eastwood must have a strong economic foundation and environment. There are parts of the study area that house vibrant businesses that also contribute to the culture of the community. Recommendations in this section identify multiple ways for the East End District to work with developers and property owners to encourage walkable places and retail, facilitate the revitalization of commercial corridors, promote existing businesses, and coordinate opportunities and needs for the future.

Supporting Housing Options

A lack of housing choices for people of all ages and income levels have created community needs for diversifying housing options. There are key opportunities to utilize land near transit to accommodate the needs of the community for housing in ways that add to the vibrancy, culture, and history of Greater Eastwood. Recommendations include supporting housing options and choices near transit, partnering with other entities in a housing study, and promoting programs that can help homeowners repair and maintain homes to decrease the potential pressures of housing sales and gentrification.

Recommendation Type: Project Program Policy

Quick Wins

High level of benefits with lower costs or fewer barriers to implementation. Implement in the short-term.

N/A

Big Moves

High level of benefits with higher costs or significant level of effort required for implementation. Implement in the long-term.

6.1 Facilitate Transit Oriented Development

Building Blocks

Some community benefits, lower costs, fewer barriers to entry. Implement over time.

6.2 Create Character & Development Guidelines

6.3 Revitalize Commercial Corridors

6.4 Establish a Real Estate & Developer Coordination Group

6.5 Partner in a Housing Needs Study

6.6 Promote Programs Aimed at Home Ownership

Implementation Considerations

- Coordinate with COH and METRO on TOD opportunity at Eastwood Transit Center and see how ordinance could apply to improvements in this location. Solicit private developers near Eastwood Transit center to support TOD concepts/economic development; seek grants to help support public infrastructure improvements supporting walking/biking access to/from TOD to U of H and into greater Eastwood neighborhoods.
- EED could adopt a set of character and development guidelines that can be coordinated with COH's ordinances; host guidelines on EED website and encourage developers to support the guidelines in developments around Greater Eastwood.
- Send this Livable Centers plan to the East End Chamber and encourage consideration of commercial corridor collaboration among business owners to support a collective voice that can support improvements along some of Eastwood area commercial corridors.
- Establish a regular weekly or monthly "shout out" to local businesses to highlight everything going on in the area and what goods the business has to offer. This should be district-wide but will support Eastwood businesses too.

Potential Partners

- METRO
- TIRZ 23
- City of Houston
- Harris County Precinct 2
- TxDOT
- Community/Philanthropic Organizations

PROJECTS
PROGRAMS
POLICIES

Projects, Programs & Policies

About the Recommendations

This section of the plan provides specific recommendations and strategies for the East End District and their partners to use to improve livability in the Greater Eastwood area. The recommendations are in the form of projects, programs, and policies.

Together these three types of recommendations, or the 3P's address the variety of needs present in the community and various ways to address them and achieve desired outcomes. For example, a transit route can provide people with access to a variety of destinations, but if there are not safe, accessible sidewalks leading to the transit stop, seating and shelter to make waiting for transit more comfortable, or education on how to ride and information about where the route is going, the transit route will not reach its full potential. Likewise, quality sidewalks or bikeways may make a greater impact in a community when combined with education and outreach at schools for learning how to cross streets and bicycle correctly, and with policies that ensure intersections and facility design are intended to accommodate all users.

Projects

Projects contain recommendations and descriptions for facility or design improvements that will improve the built environment and public realm, such as roads, sidewalks, or parks. These improvements can have significant benefits and impacts on economic development, the environment, accessibility, safety, and housing, as well. Projects may be implemented by the East End District or a community partner like the City of Houston, Harris County, METRO, TIRZ 23 or other agency.

Programs

Programs support the development, expansion, or enhancement of programs that generally encourage and support the plan's objectives. Programs may be implemented by or in partnership with agencies like the City of Houston or METRO, and organizations outside of the District as well, such as non-profits or businesses. Programs typically represent short-term to make meaningful impacts.

Policies

Policies support the plan's objectives and further define the how the vision for the community can be achieved. Policies may provide guidance on how to develop projects or programs and inform priorities on investments. Policies are typically able to be implemented in the short-term, but achieving the objectives in the policies may be a long-term effort.

The following information provides detailed recommendations for each of the six core recommendations identified in the Plan Essentials section of this report.

1 Anchored by Great Streets

Streets are the backbones of communities and neighborhoods. Great Streets support economic opportunity, neighborhood character, mobility, access, safety, and environmental resiliency for people of all ages and abilities. In Greater Eastwood, re-imagining a few key corridors have the potential to strengthen safety and access of existing businesses and destinations and can attract new development aligned with the community's goals. This recommendation describes two "types" of Great Streets: Livable Streets and Connection Corridors.

Related Objectives

1 2 3 4 5 6

Recommendation Types:

Project

Summary of Recommendations:

Livable Streets

Livable streets present an opportunity to breathe life into our most versatile and highly used corridors. These streets are intended to promote and sustain economic activity and are highly accessible by all modes of transportation. The information on pages 24-30 identifies the classified Livable Streets and their associated improvements in greater detail. Livable Streets are shown in Figure 4, providing key connectivity to businesses and community destinations.

Connection Corridors

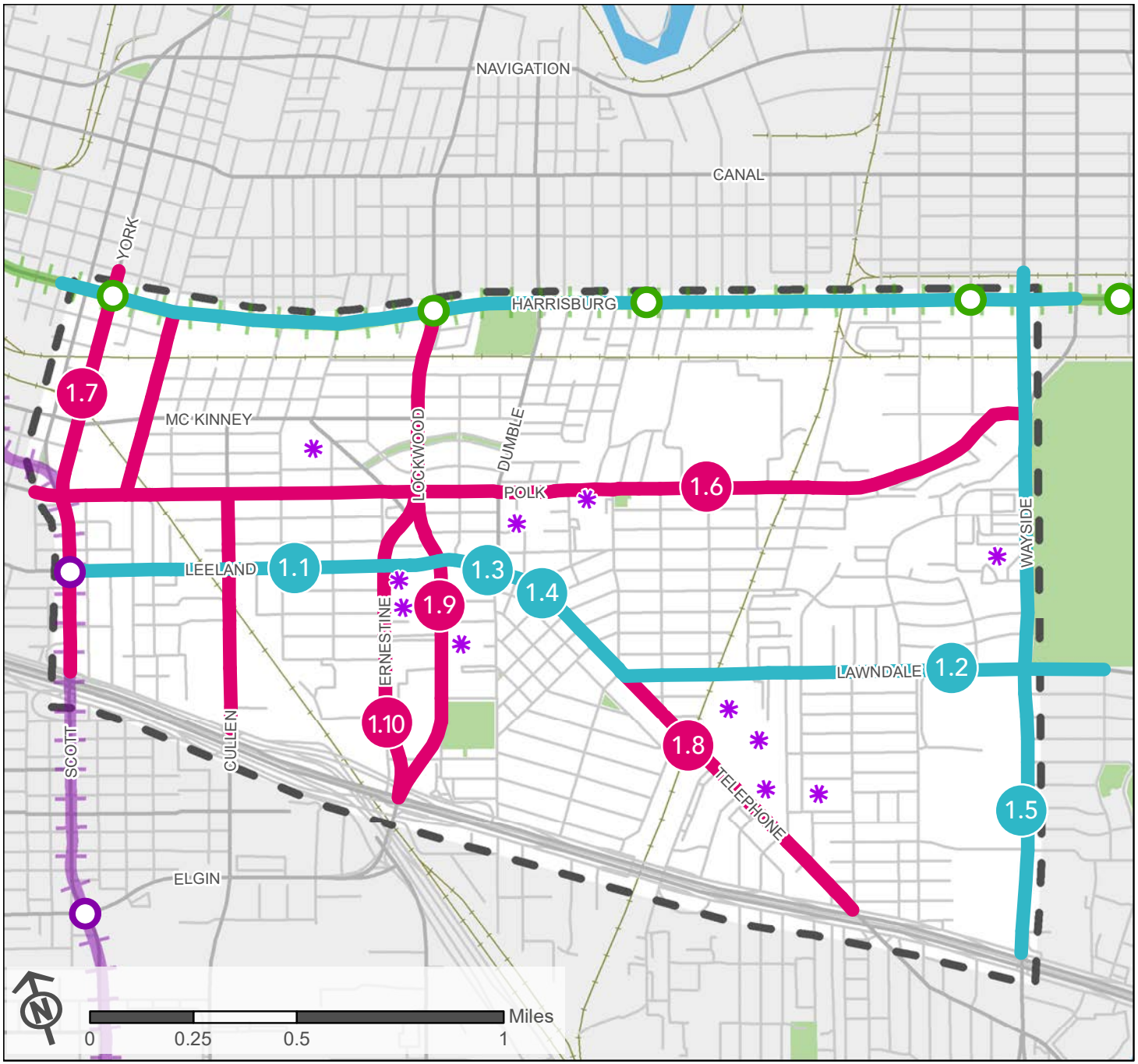
Connection corridors focus on providing great access for the community from neighborhoods to destinations and other corridors. They should be safe and accessible for multiple modes and people of all ages and abilities. The information on pages 30-35 identifies the classified Connection Corridors and their associated improvements in greater detail. Connection Corridors are shown in Figure 4, providing multimodal access to transit, schools, and a variety of destinations.

Key Considerations

Street cross sections should include safe and inviting facilities for all ages and abilities and modes. Pedestrian, bicycle, and transit facilities should be considered a priority in all road designs. How to accommodate each mode will differ based on demand and the surrounding contexts within a corridor. For example, a corridor like Telephone Road has a wider variety of trip types and demand than Cullen Boulevard so the appropriate sidewalk and bikeway widths and design would likely differ. Wayside drive is another good example as it carries a significant number of vehicles along the corridor, particularly in the southern section of the corridor. On-street bicycle facilities would likely need physical protection, or be designed as off-street facilities to ensure safety without compromising access for vehicles and buses.

Figure 4 Great Streets Overview Map

- 1.1 Leeland Street Enhancement
- 1.2 Lawndale Street Safety and Access Improvements
- 1.3 Telephone Road Mobility Enhancements
- 1.4 Telephone Road: Eastwood's Main Street
- 1.5 Wayside Drive Enhancement Coordination
- 1.6 Polk Street Accessibility Enhancements
- 1.7 York Street Two-Way Transformation
- 1.8 Telephone Road Connections
- 1.9 Lockwood Drive Transit Corridor
- 1.10 Ernestine Street Multimodal Accessibility



Legend

- School
- Livable Street
- Connection Corridor
- Green Line Station/LRT
- Purple Line Station/LRT
- Major Roadway
- Roadway
- Railroad
- Park
- Study Area Boundary

Livable Streets

Livable Streets are defined by the activity and variety of uses that are accessed by the corridor. These corridors provide direct access to businesses and economic activity, including community services, restaurants, and shopping. As these corridors house a variety of destinations, they attract people from all over the community who drive, walk, bike, and ride transit. These corridors must be accessible for people of all ages and abilities for all of these modes. The following corridors in the study area are classified as Livable Streets and shown in Figure 4:

- Telephone Road (west of Lawndale Street)
- Lawndale Street
- Leeland Street
- Wayside Drive
- Harrisburg Boulevard

It is important that the design of facilities provide both consistent expectations for safety and use, but also vary depending on the context of the roadway and surrounding land uses. In general, Livable Streets should have a comfortable pedestrian zone, high-comfort transit stops, and safe bicycle access and amenities, such as bike parking, near businesses. Sidewalks should be a minimum of 6' wide where possible with wider facilities where there is higher pedestrian activity. The wider pedestrian zone can accommodate higher volumes of people walking, activities, or outside seating related to storefronts, and bicycle parking. Amenities such as seating, trees, shade, and lighting to ensure comfort and safety for people walking and spending time in the area and visiting businesses and public spaces.

Transit stops must be ADA accessible and incorporate seating and shelters where possible. Comfortable transit stops with signage indicating connectivity to local places and transit route frequency can encourage more use of transit in the community.

Bicycle facilities should be comfortable for people of all ages to use with separation from vehicle traffic where possible. This will improve safety and access for people biking and encourage more people to access destinations by bicycle instead of driving.

Vehicle access, parking, and turn lanes should be designed for the safety of all users and accommodate access to businesses. While Livable Streets should be multimodal, access for vehicles and appropriate parking will help ensure that the wide variety of transportation needs are accommodated.

For roadways, intersections present an opportunity to provide safe crossings for everyone that are highly visible while also contributing to the overall feel and vibrancy of the community. Utilizing signage, colors, and materials in intersections to delineate crossing space and coordinate with the surrounding community are recommended

Projects identified in Figure 4 are described on the following pages.

Benefits of Livable Streets

Businesses with a variety of economic activity and customers who walk and bike for access report increased sales with infrastructure improvements for people walking and biking. Research indicates that people who walk and bike to businesses frequent those businesses more often and overall spend more money.

1.1 Leeland Street Enhancement

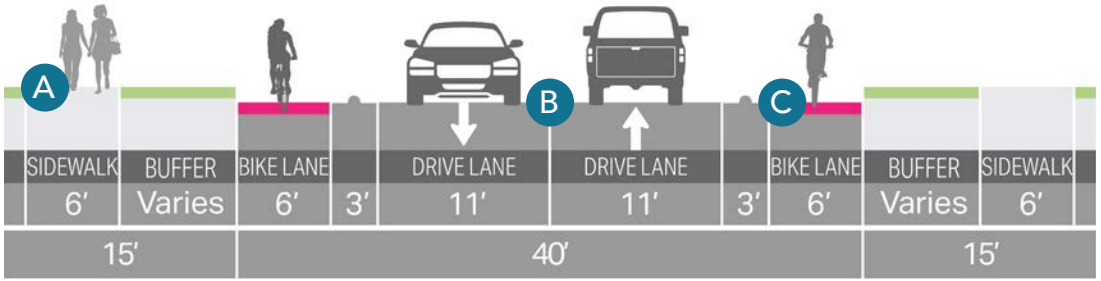
The Leeland Street corridor provides important access to the Columbia Tap trail, light rail, schools, and Telephone Road and is recommended to connect these destinations as a comfortable, multimodal corridor. West of Ernestine Street, Leeland Street is recommended to become a Livable Street with the following changes as shown in Figure 5, below. These changes are designed to be a retrofit project that can be constructed within the existing curb space. Additionally, this project would connect to and continue a current improvement project on Leeland, west of Cullen, by METRO.

A. Increase sidewalk width to 6′ and maintain buffer between the curb and sidewalk.

B. Provide one driving lane in each direction with an increased width of 11′ each.

C. Incorporate a 6′ protected bike lane in each direction. The bike lane should have a 3′ buffer with a physical barrier where possible.

Figure 5 Leeland Street Typical Cross Section



Leeland Street east of Sidney Street
Photo: Map Data: 2020 Google

1.2 Lawndale Street Safety and Access Improvements

Lawndale Street provides important connections from Telephone road to schools, Wayside Drive, and is a key multimodal connection to Gus Wortham and Brays Bayou trails. Additionally, Lawndale Street provides access to multiple schools from surrounding neighborhoods and must be accessible for kids of all ages and families. It is recommended that Lawndale Street be converted into a Livable Street with a retrofit project as highlighted in Figure 6 within the existing curb space and right-of-way.

In order to make the proposed improvements and accommodate the existing freight rail crossing across Lawndale Street, adjustments to the median on either side of the railroad tracks will be required.

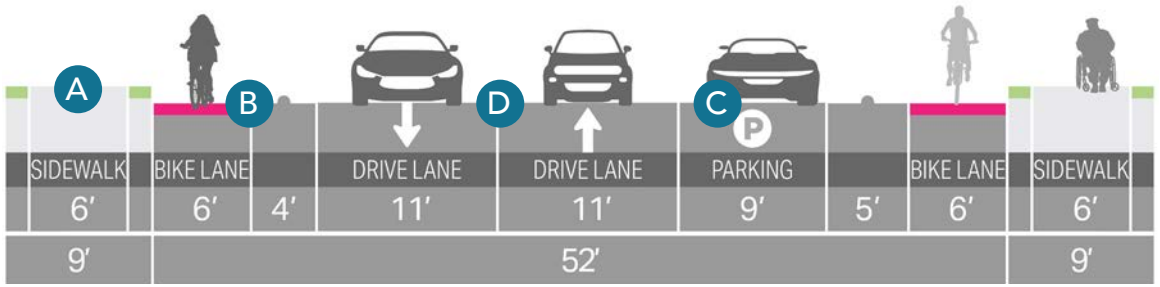
A. Increase sidewalk width to 6'.

B. Add a 6' protected bike lane. The bike lane should have a 4'-5' buffer with a physical barrier.

C. Provide a 9' parking lane on one side of the street. The parking lane can double as a queue lane for school drop off/pick up and should be restricted to no parking during those times of the day. The parking lane should alternate sides of the street as appropriate. Option: A center turn lane could be used where a parking lane is not needed for queuing.

D. Restripe the two center driving lane widths to 11'.

Figure 6 Lawndale Street Typical Cross Section



Lawndale Street east of railroad tracks at Kipp Schools
Photo: Map Data: 2020 Google

1.3 Telephone Road Mobility Enhancements

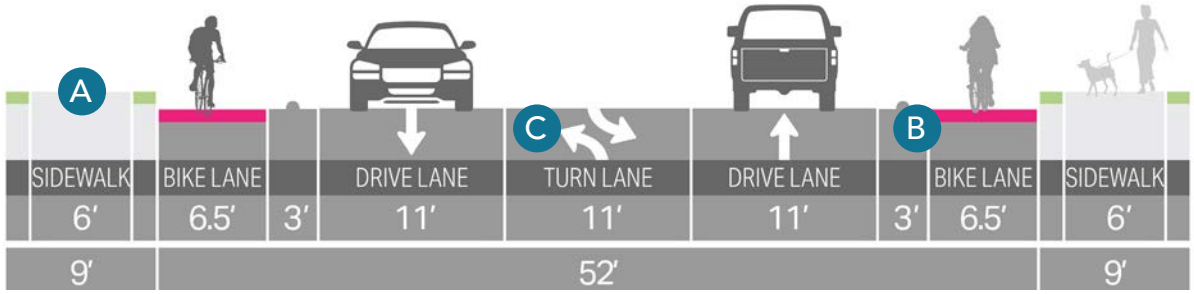
Telephone Road is in the heart of the study area and provides connectivity to local businesses, schools, neighborhoods, and more. It is recommended that in the short-term Telephone Road west of Lawndale Street be upgraded through a retrofit project as highlighted in Figure 7. This will make the corridor more friendly for people walking, biking, and accessing transit while maintaining important access to businesses and neighborhoods. It should be noted that the width of the current corridor varies and in some locations is more constrained. Where constraints exist, adjustments to the proposed cross-section would be applicable, such as reducing the width of the bike lane protection buffer.

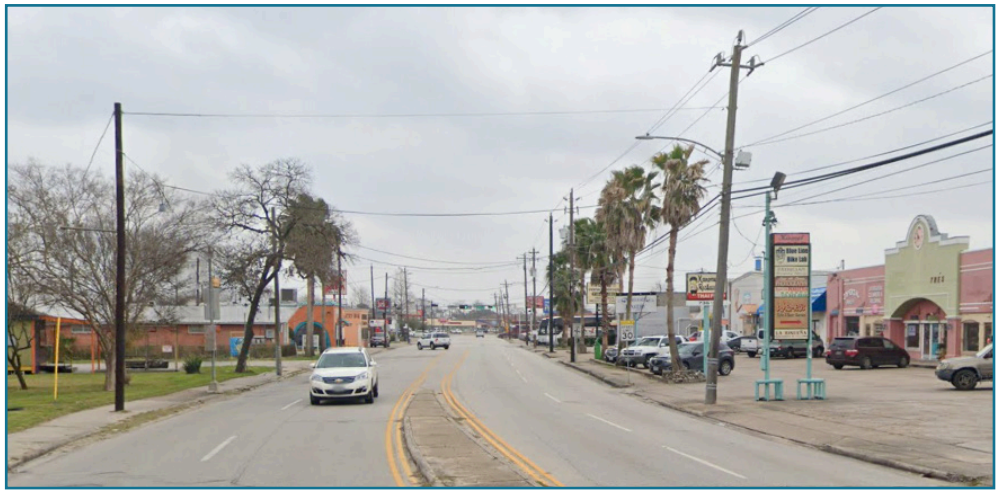
A Increase sidewalk width to 6′.

B Add a protected bike lane to enhance access for people biking. The bike lane is recommended to be 6.5′ with a 3′ buffer and physical barrier where possible.

C Provide two drive lanes and center turn lane with widths of 10′ to 11′ where possible.

Figure 7 Telephone Road Typical Cross Section





Telephone Road at Tlaquepaque Market
Photo: Map Data: 2020 Google

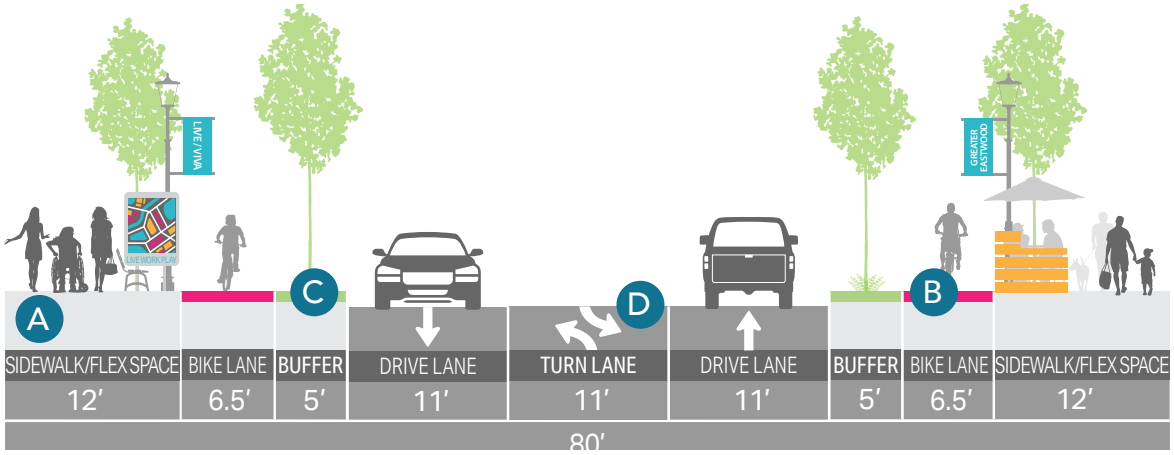
Telephone Road at Fourcade Street
Photo: Map Data: 2020 Google

1.4 Telephone Road: Eastwood's Main Street

Telephone Road can be enhanced to create a walkable, main street feel that drives economic development and embraces the history and culture of the community. This recommendation is long-term as it requires a full reconstruction of the corridor as shown in Figure 8. The Telephone Road Reconstruction project is also a proposed Catalyst Project. Developing a Main Street in the heart of Greater Eastwood can increase business opportunities and become a destination for the community with plazas and placemaking.

- **A** Increase the pedestrian area to 12' wide where possible, incorporating space for seating, art, wayfinding, trees, lighting, and more.
- **B** Construct a raised bike lane 6.5' wide.
- **C** Provide a 5' wide buffer between the bike and drive lanes. This should incorporate street trees to provide shade.
- **D** Provide one drive lane in each direction with center turn lane. The center turn lane may be landscaped in areas where there are no turning movements.

Figure 8 Telephone Road Vision Cross Section



This rendering provides visualization for the potential transformation of Telephone Road into a Main Street for the Greater Eastwood Community. It highlights comfortable and safe pedestrian crossings and sidewalks, buffered bike lanes, seating space to expand business activity outdoors, and trees and greenery to increase environmental resiliency.

1.5 Wayside Drive Safety Enhancements

Wayside Drive serves as a key north-south corridor in the study area. The corridor provides connectivity to Buffalo Bayou, Navarro Black Buffalo Bend Nature Park, Gus Wortham Park, METRO's Green Line LRT, residential neighborhoods, and several major commercial destinations including Wal-Mart.

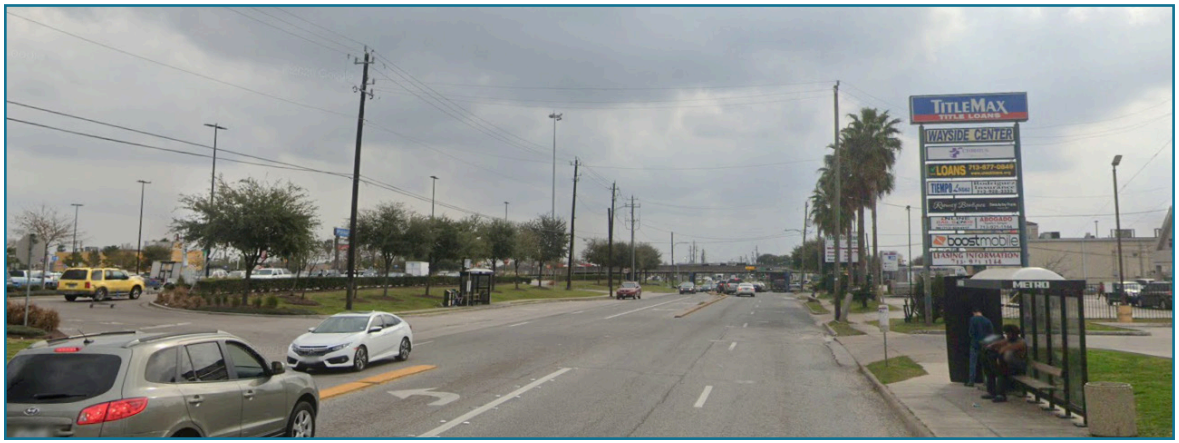
It is recommended that this corridor be enhanced for the safety of all users with wider sidewalks, high-comfort bikeways, enhanced bus stops, and visible, safe intersection crossings. There is also a need to improve pavement conditions and the overall aesthetic appearance of the corridor. There are multiple agencies planning for improvements to the Wayside Drive corridor including TxDOT, the City of Houston, Harris County, and more. It is recommended to coordinate and partner with these entities to develop a coordinated effort for improvements along the corridor. Recommendations four and six in this report identify specific walkability and transit stop improvements that should also be included in any coordination efforts in order to best leverage resources and create safe access.

Connection Corridors

These streets serve as crucial links between community destinations. Public investments in these corridors should emphasize safe travel for all modes. These corridors frequently serve as the only crossings of major barriers in the local street network, and as such will collect many local trips. The following corridors in the study area are classified as Connection Corridors and shown in Figure 4:

- Scott Street, York Street
- Milby Street
- Polk Street
- Cullen Boulevard south of Polk Street
- Lockwood Drive
- Ernestine Street
- Telephone Road south of Lawndale Street

Connection Corridors should be focused on safety and accessibility. Because of their role as bridges across major barriers, particular attention and investment should be given to these crossing locations to ensure access to the overall corridor. These locations include railroad crossings (at-grade and grade-separated alike), major roadway intersection crossings, and highway bridges and over/underpasses.



Wayside Drive looking southbound towards I-45. Wide corridor with bus stops and no pedestrian crossings. Photo: Map Data: 2020 Google

1.6 Polk Street Accessibility Enhancements

Polk Street is a current transit route and is planned to be an upgraded METRO Boost corridor in the future. Many sections throughout the corridor have wide buffers between the roadway and the sidewalk with many mature trees providing shade. These trees and wide buffers should be maintained where possible. Additionally, Polk to Cullen has been redesigned to have buffered and protected bike lanes. It is recommended to continue this design throughout the corridor to provide better accessibility for people walking, riding transit, and biking.

Figure 9 represents the proposed typical cross section for this corridor. Additionally, Figure 10 highlights how floating bus stops could be provided along this corridor with an example cross section. Flexibility in a typical cross section along a corridor is important so that the corridor can adapt to the surrounding context while providing consistent access for users.

A Resurface roadway and improve curb and gutter lines and restripe to maintain two drive lanes.

B Improve sidewalk and widen to 6′ where feasible to avoid existing mature trees. Include ADA accessible curb ramps at intersections.

C Provide two buffered bike lanes (5′ lane and 2′ buffer). If possible, a low barrier in the buffer could provide additional protection from vehicles as well as discourage parking in the bike lanes.

D For the section from Telephone to Eddington Street, east of Lockwood, Polk has been widened to a 4-lane cross section with a median. Two travel lanes with buffered bike lanes can be maintained through this segment with turn lanes at the Lockwood Intersection. The added width in the section can be allocated to improve transit stops such as floating bus stop treatments and streetscape improvements.

» At the intersection with Dumble, the east and west approaches of Polk are offset creating challenging geometry for anyone using the intersection. It is recommended to pursue additional right-of-way here to support a new traffic signal and a wider, aligned street that includes two travel lanes, one turn lane, and safe bike lanes, sidewalks, and curb ramps should also be improved.

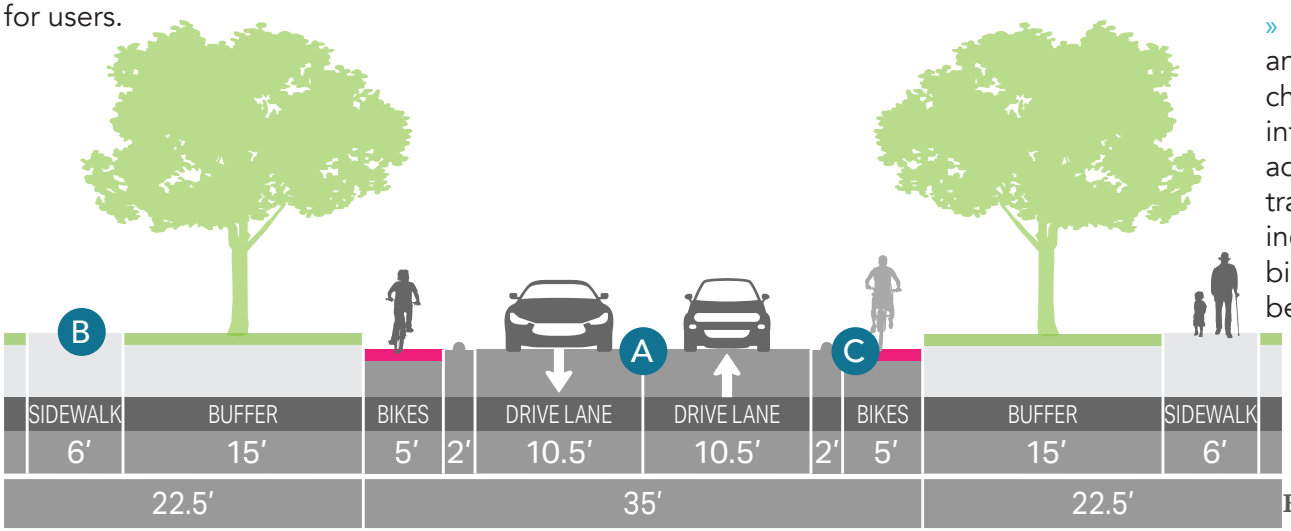


Figure 9 Polk Street Typical Cross Section

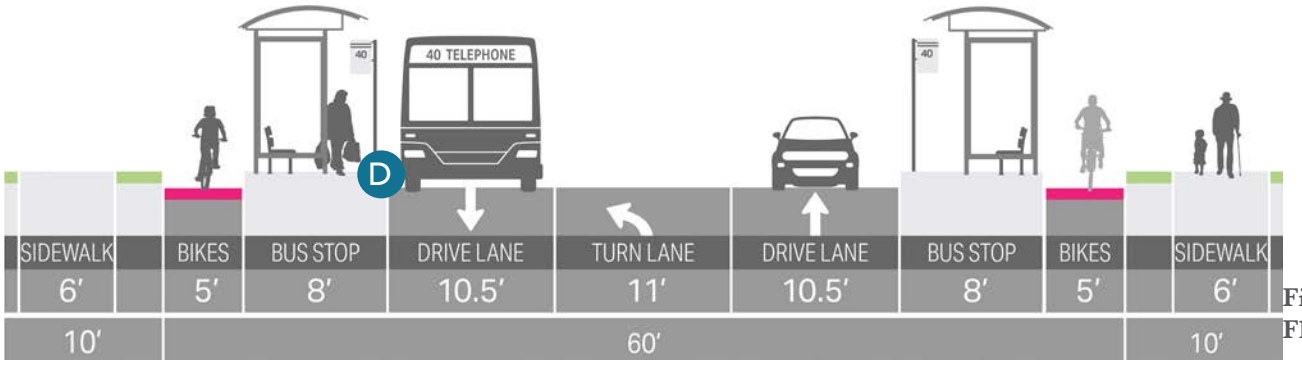


Figure 10 Polk Street Typical Cross Section with Floating Bus Stops

1.7 York Street Two-Way Transformation

York Street is currently a one-way street traveling northbound. It is recommended to reorient York Street to become a two-way, two-lane street with a center turn lane and on-street parking. The transformation from a one-way street to a two-way with grade separation across the railroad tracks is currently a future project in the Regional Transportation Plan. Figure 11 presents a specific proposed change to the corridor and highlights how the two-way change may be developed to accommodate all users and provide enhanced access to businesses along the corridor.

Of note, the proposed project is a retrofit that would fit within the existing pavement width. At major intersections reconstruction may be required to accommodate the appropriate turning movements as well as at the railroad crossing for the proposed grade separation. At the proposed railroad grade separation, Sampson Street will likely be cut off. This would require bicycle travel to be accommodated safely along York Street through this section. The potential cross-section over the railroad is shown in Figure 12.

A. Provide two 11′ driving lanes, bi-directional, with an 11′ center turn lane.

B. Increase sidewalk width to 6′ where possible for consistency. Some sections of the corridor are already 6′ wide.

C. Provide a parking lane on one side of the street for business access.

D. Provide a 10′ wide, two-way raised bike lane across the railroad to accommodate bicycling across the future underpass.

E. The sidewalks and bike facilities (where applicable) should be buffered from traffic with a 10′ buffer where possible. This buffer can accommodate trees, lighting, wayfinding, or other placemaking elements.

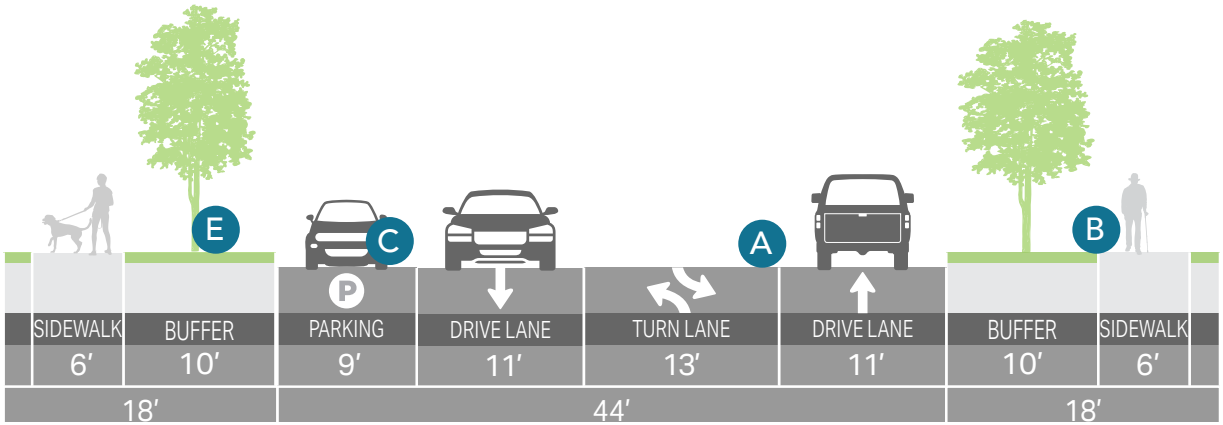


Figure 11 York Street Typical Cross Section

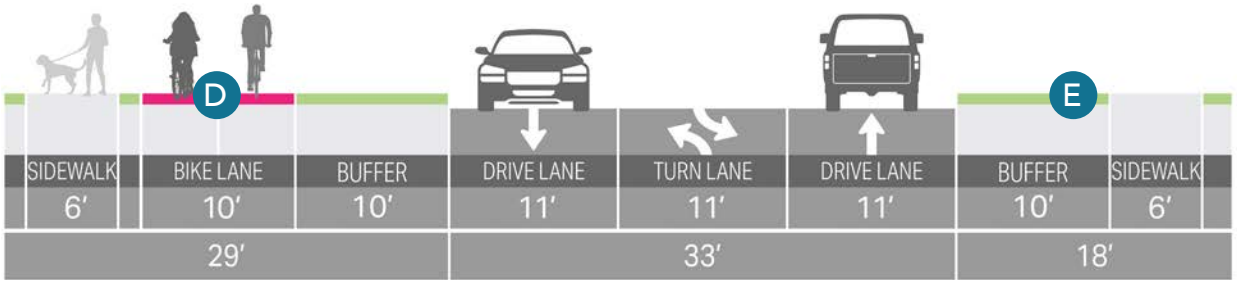


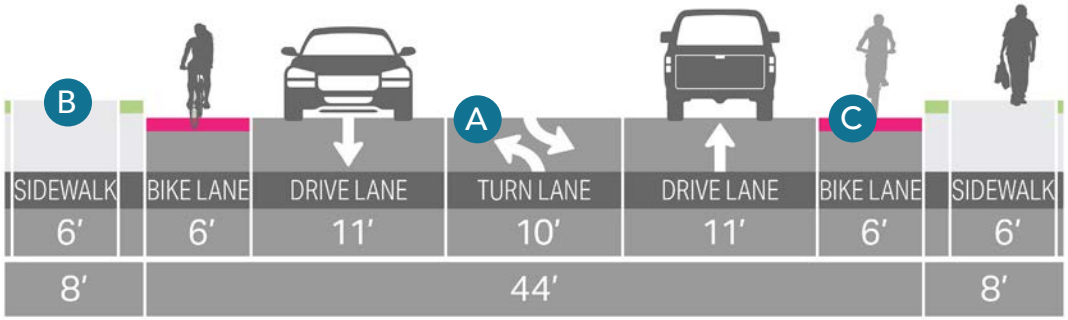
Figure 12 York Street at Railroad Grade Separation

1.8 Telephone Road Connections (east of Lawndale Street)

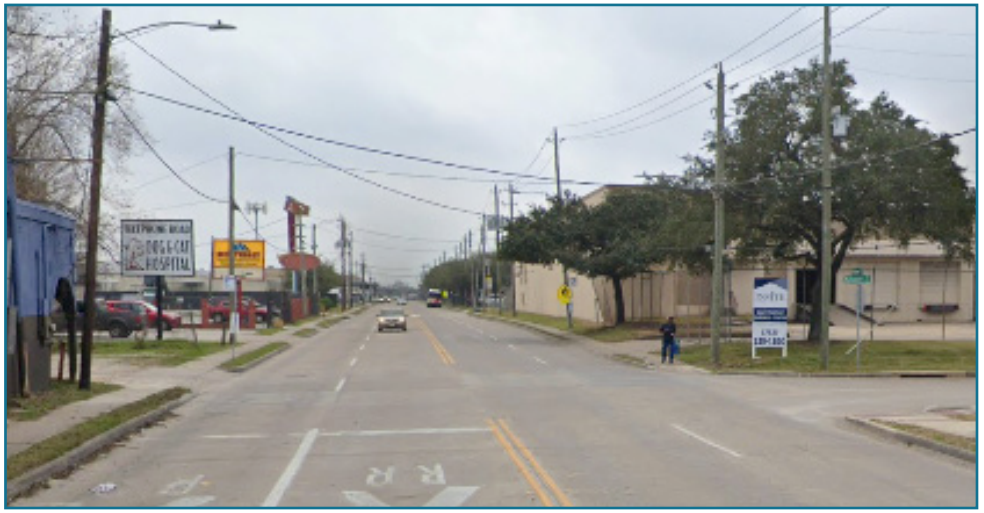
As Telephone Road is an important corridor for connections into and out of the study area, it is recommended that the corridor east of Lawndale Street be reconfigured as a retrofit project to provide safe, multimodal access and provide consistency with the section of Telephone Road west of Lawndale Street. Figure 13 shows how this section of the corridor is proposed to meet the needs of all users.

- A Restripe with one lane in each direction to have two drive lanes and one center turn lane.
- B Increase sidewalk width to 6′.
- C Provide a striped bike lane adjacent to each drive lane that is 6′ wide where possible.

Figure 13 Telephone Road (east) Typical Cross Section



York Street north of McKinney Street
Photo: Map Data: 2019 Google



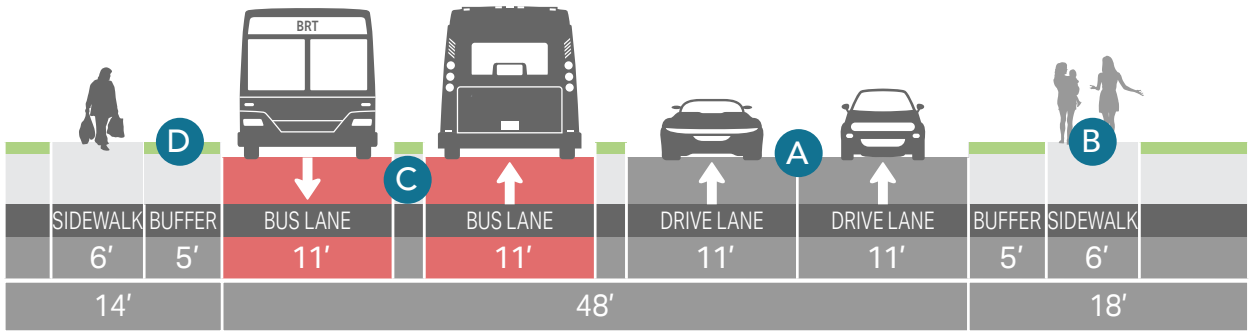
Telephone Road east of Lawndale Street
Photo: Map Data: 2020 Google

1.9 Lockwood Drive Transit Corridor

Lockwood Drive is an important corridor through the center of the study area. It is planned to have Bus Rapid Transit (BRT) operate along it in the future. Additionally, Lockwood Drive has a transit center and light rail station adjacent to it on the southern and northern ends of the study area, respectively. It is recommended to reconstruct Lockwood Drive with a focus on transit and walkability. Figure 14 highlights the proposed changes and design to the corridor. This cross section is for the segment of Lockwood Drive between I-45 and Polk Street. Lockwood Drive north of Polk Street becomes two-way and the segment north of Harrisburg is currently being reconstructed. It is important for the City of Houston, METRO, and the East End District to collaborate on how to provide BRT and safe access along Lockwood Drive north of Polk Street due to right-of-way constraints. It is also important that the segments of Lockwood Drive transition well and have as much consistency as possible between segments for the safety of all users.

- **A** Provide two 11′ northbound drive lanes.
- **B** Increase sidewalk width to 6′.
- **C** Incorporate a two-way, separated and center-running BRT corridor.
- **D** Maintain a buffer of at least 5′ where possible between the BRT/ travel lanes and the sidewalk for pedestrian comfort and safety.

Figure 14 Lockwood Drive Typical Cross Section



Lockwood Drive at Austin High School looking south
Photo: Map Data: 2020 Google

1.10 Ernestine Street Multimodal Accessibility

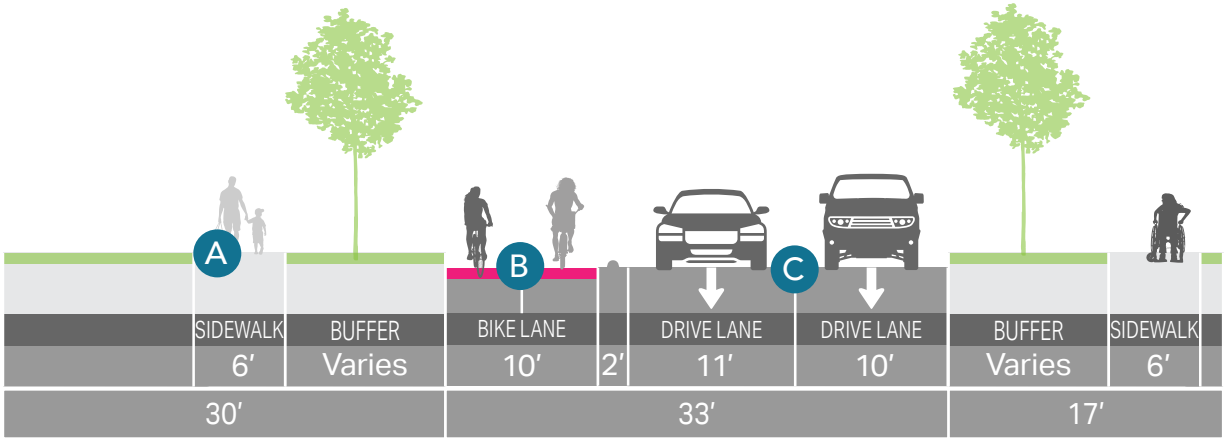
Ernestine Street is the southbound one-way pair to Lockwood Drive between I-45 and Polk Street. As there are multiple schools between and along Ernestine Street and Lockwood Drive, both corridors need to provide multimodal access. As Lockwood Drive is prioritized as a transit-focused corridor with proposed BRT, it is proposed that Ernestine Street is prioritized as a safe bicycle facility. This project would be constructed as a retrofit within the existing pavement. Figure 15 shows the proposed corridor changes.

A. Increase sidewalk width to 6′ and maintain a buffer between the sidewalk and the curb where possible.

B. Reallocate one southbound drive lane with a protected two-way bike lane. The bike lanes should be a minimum of 5′ wide with a 2′ wide buffer that has physical barriers.

C. Restripe the width of one drive lane from 11′ to 10′.

Figure 15 Ernestine Street Typical Cross Section



Ernestine Drive at Cage Elementary looking north
Photo: Map Data: 2020 Google

2 Active & Healthy

Places for play, social connections, community health, and environmental resiliency are essential for developing great places with a high quality of life. Physical activity and social connections are important factors in community health. Paired with ecological improvements that boost resiliency, these components work together to help create a basis for an active, healthy, livable community. Greater Eastwood has many opportunities to enhance community health with a thoughtful plan. These recommendations include Green Corridors, park system improvements, social spaces for community interaction, and initiatives to improve environmental quality and resiliency.

Related Objectives

1 2 3 4 5 6 7

Recommendation Types:

Project

Program

Summary of Recommendations:

Green Corridors

Green Corridors serve as naturally vibrant connections between neighborhoods and places where people can enjoy activity and/or the natural environment, such as parks, open spaces, public plazas, or trails. These corridors will incorporate natural elements and green infrastructure with placemaking to enhance the environmental fabric and connect these corridors with the community.

Environmental Quality and Resiliency

Through the implementation of Low Impact Development (LID) principles and tree planting recommendations throughout the district, on public and private lands, the benefits of a high-quality micro-climate can be distributed to the entire Greater Eastwood Community. A high-quality micro-climate, supported by green infrastructure, facilitates the health of individuals, ecosystems, and communities.

Open Space Creation

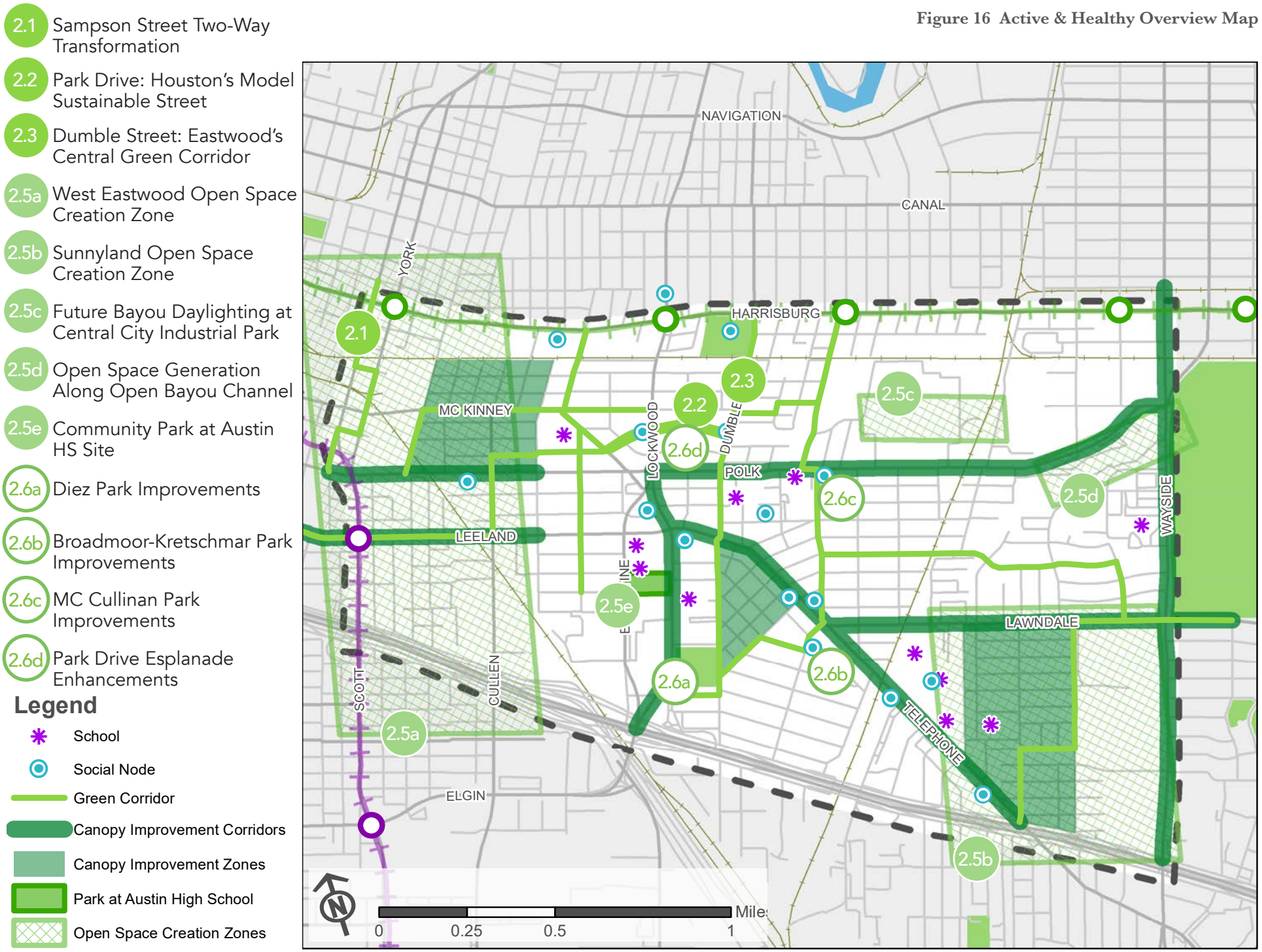
Informed by the consideration of the district's existing open space program, recommendations are made to add types of parks and open spaces that the district currently lacks. This section identifies green space strategies in these areas and recommended park types based on the Fact Book open space analysis.

Park System Improvements

Through park system improvements, a more complete park system can be realized in Greater Eastwood. Recommendations aim to address open space gaps and programmatic deficiencies.

Social Spaces for Community Interaction

Social Spaces for community interaction provide points of concentration for the Greater Eastwood community to gather, play, and relax. These recommendations emphasize exciting opportunities to re-allocate some of the large quantities of public, and private space currently allocated to vehicles, as well as strategies for vacant lots.


2.1 Sampson Street Two-Way Transformation
2.2 Park Drive: Houston's Model Sustainable Street
2.3 Dumble Street: Eastwood's Central Green Corridor
2.5a West Eastwood Open Space Creation Zone
2.5b Sunnyland Open Space Creation Zone
2.5c Future Bayou Daylighting at Central City Industrial Park
2.5d Open Space Generation Along Open Bayou Channel
2.5e Community Park at Austin HS Site
2.6a Diez Park Improvements
2.6b Broadmoor-Kretschmar Park Improvements
2.6c MC Cullinan Park Improvements
2.6d Park Drive Esplanade Enhancements
Legend
School
Social Node
Green Corridor
Canopy Improvement Corridors
Canopy Improvement Zones
Park at Austin High School
Open Space Creation Zones
NAVIGATION
CANAL
YORK
HARRISBURG
MC KINNEY
LOCKWOOD
DUMBLE
POLK
WAYSIDE
LEELAND
LAWNDALE
TELEPHONE
SCOTT
CULLEN
ELGIN
0
0.25
0.5
1
Miles

Green Corridors

Green Corridors are proposed streets in Eastwood featuring high-quality natural amenities designed within the frameworks of Low Impact Development and Green Infrastructure. Green corridors facilitate the implementation of a network that connects study area neighborhoods to the benefits and beauty of nature through integrated natural systems, while also fostering connections to nature and community culture through placemaking elements. Green Corridors are identified by the green lines in Figure 16.

Green Corridors are streets that integrate natural systems (water, weather, planting, wildlife) and human systems (culture, transportation, social spaces, infrastructure). The recommendations build this systems integration and its many resulting benefits through two frameworks: Low Impact Development and Green Infrastructure.

- *Low Impact Development (LID)* is an approach to development (or re-development) that works with nature to manage stormwater as close to its source as possible. LID employs principles such as "preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product." (US EPA)
- *Green Infrastructure* (also green stormwater infrastructure, or GSI), such as street trees, bioswales, green roofs, living walls, and rain gardens, helps manage stormwater while providing additional benefits. Benefits include improved water quality, reduced stress on gray infrastructure, groundwater recharge, improved air quality, greenhouse gas sequestration, improved biodiversity, reduced urban heat island, and reduced energy use. (Green Infrastructure Foundation)

Components of Green Corridors

Creating green corridors requires the use of multiple components that work together, including green infrastructure/Low Impact Development (LID) and Social Spaces/Placemaking. The application of the following elements and further encouragement of residential and commercial applications will catalyze the benefits described in Appendix A Fact Book and in the margin of this page. These elements are in Appendix B Toolbox.

Green Infrastructure & LID Elements

- Bioswales
- Rain Gardens/ Bioretention
- Planting Beds
- Canopy Trees
- Soft Surfaces
- Permeable paving
- Curb alternatives
- Green walls
- Green Roofs

Placemaking Elements

- Interpretive signage
- Park system & green corridor signage
- Special paving
- Planting
- Public art
- Furnishings
- Local/regional materials

Locations and Criteria for Corridor Selection

Identification of recommended Green Corridors was informed by three criteria. The criteria factored in connectivity, proximity, and street types to identify opportunities for creating green corridors that meld natural systems with mobility, access, and placemaking. These corridors represent Recommendations 2.1 - 2.3 in Figure 16 and the following pages.

- Connectivity: Between parks, open spaces, neighborhoods, social spaces
- Proximity: To parks, natural features, residential areas, social spaces
- Street Type: Local streets, low traffic volumes

Benefits of Green Corridors

- *An American Society of Landscape Architects (ASLA) literature review concluded that access to nature is linked to increased general health & well-being, as well as reduced incidence of physical, emotional, and mental health ailments.*
- *The Green Infrastructure Foundation promotes the following benefits of Green Infrastructure: storm-water management, improved water quality, reduced stress on existing gray-infrastructure, ground water recharge, improved air quality, greenhouse gas sequestration, improved biodiversity, reduced urban heat island, and reduced energy use.*
- *The US EPA highlights these benefits of LID: Improved water quality, reduced flooding, improved groundwater recharge, enhanced neighborhood beauty.*

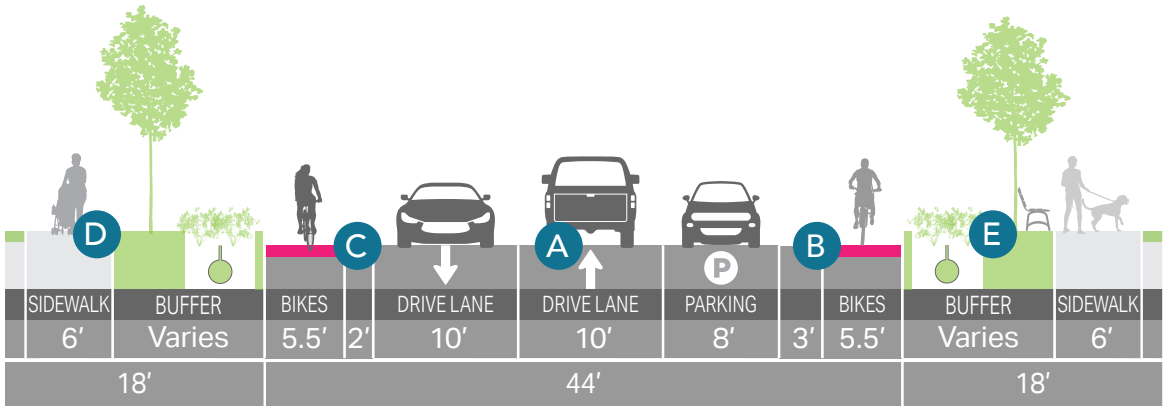
2.1 Sampson Street: A Healthy Community Connection

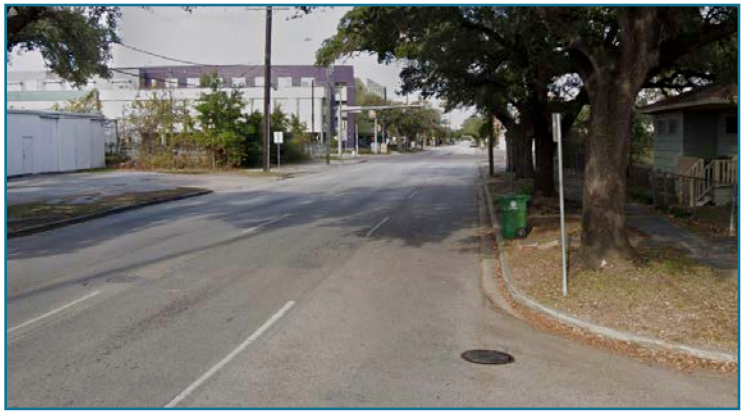
Sampson Street is currently a one-way street traveling southbound from Navigation Boulevard to Polk Street. Sampson Street is envisioned to be a lower-volume, two-way neighborhood street that connects the Greater Eastwood community to Navigation in a multimodal, comfortable and environmentally friendly way. Sampson Street provides connections to the Esplanade and Farmer's Market on Navigation Boulevard, as well as Buffalo Bayou and Tony Marron Park to the north. This corridor is recommended to be a retrofit project within the existing curb lines for vehicle and bicycle facilities and enhancements back of curb for sidewalks, green infrastructure, and placemaking elements. The transformation from a one-way street to a two-way is currently a future project in the Regional Transportation Plan. Figure 17 presents this proposed cross-section and highlights how the two-way change can better accommodate all users while providing environmental enhancement. Note, some sections of Sampson Street have upgraded sidewalks and some sections are constrained on one or both sides. Actual design of the corridor improvements should accommodate these variations and seek to create consistency and improvements where possible.

- **A** Provide two 10′ driving lanes.
- **B** Incorporate a parking lane on one side of the street.
- **C** Add a 5.5′ protected bike lane on each side of the corridor. The width of the protective buffer area should be 3′ where adjacent to the parking lane.
- **D** Provide 6′ wide sidewalks where current sidewalks are missing or not the minimum 5′ ADA accessible width.
- **E** Enhance the buffer space between the curb and sidewalk space with green infrastructure and lighting components. Placemaking components should be incorporated where feasible.

Project Option: Sampson Street could also remain a one-way southbound street that could serve the needs of various users in the corridor. It could accommodate one or two driving lanes, parking on either side and comfortable biking and walking facilities. This configuration would also be considered a retrofit and would support use of green infrastructure along the corridor to enhance environmental quality and community health.

Figure 17 Sampson Street Typical Cross Section





Sampson Street at Texas Street looking north
Photo: Map Data: 2020 Google

2.2 Park Drive; Houston's Model Sustainable Street

Park Drive is recommended to receive the most investment in the green corridor category, exemplifying all of the components described in the project Toolbox. The quality and amount of the existing space create an opportunity to shape a informative space with the capacity to be a leading reconstruction project in LID and green infrastructure practice throughout Houston. As recommended, Park Drive will become a thriving and highly functioning natural space, and a neighborhood commons. These outcomes can be achieved through the components identified in Figure 18 and described on page 42.

The rendering below visualizes how the multiple components in this recommendation can come together creating a sustainable, green corridor along Park Drive that has public space, catalyzing and enhancing the community.

Daylighting Natural Systems

Park Drive will become a model green infrastructure corridor. In concert with the facilitation of ecosystem services, the space will also become one of beauty, exposure to nature, socializing, and intuitive learning. The elements that facilitate these quantitative and qualitative benefits include:

(continued on page 42)

Figure 18 A Model Green Corridor - Park Drive Recommendations

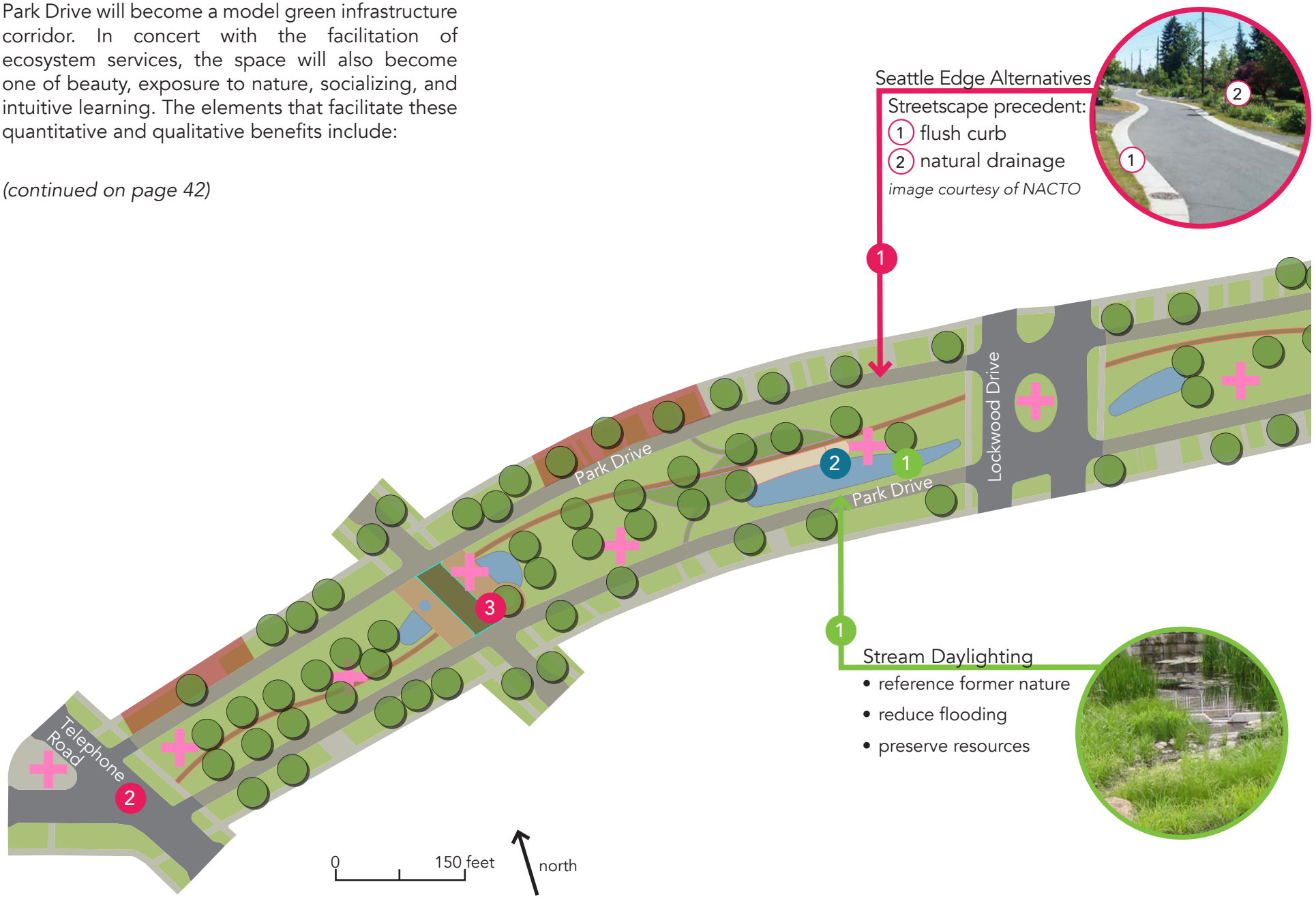
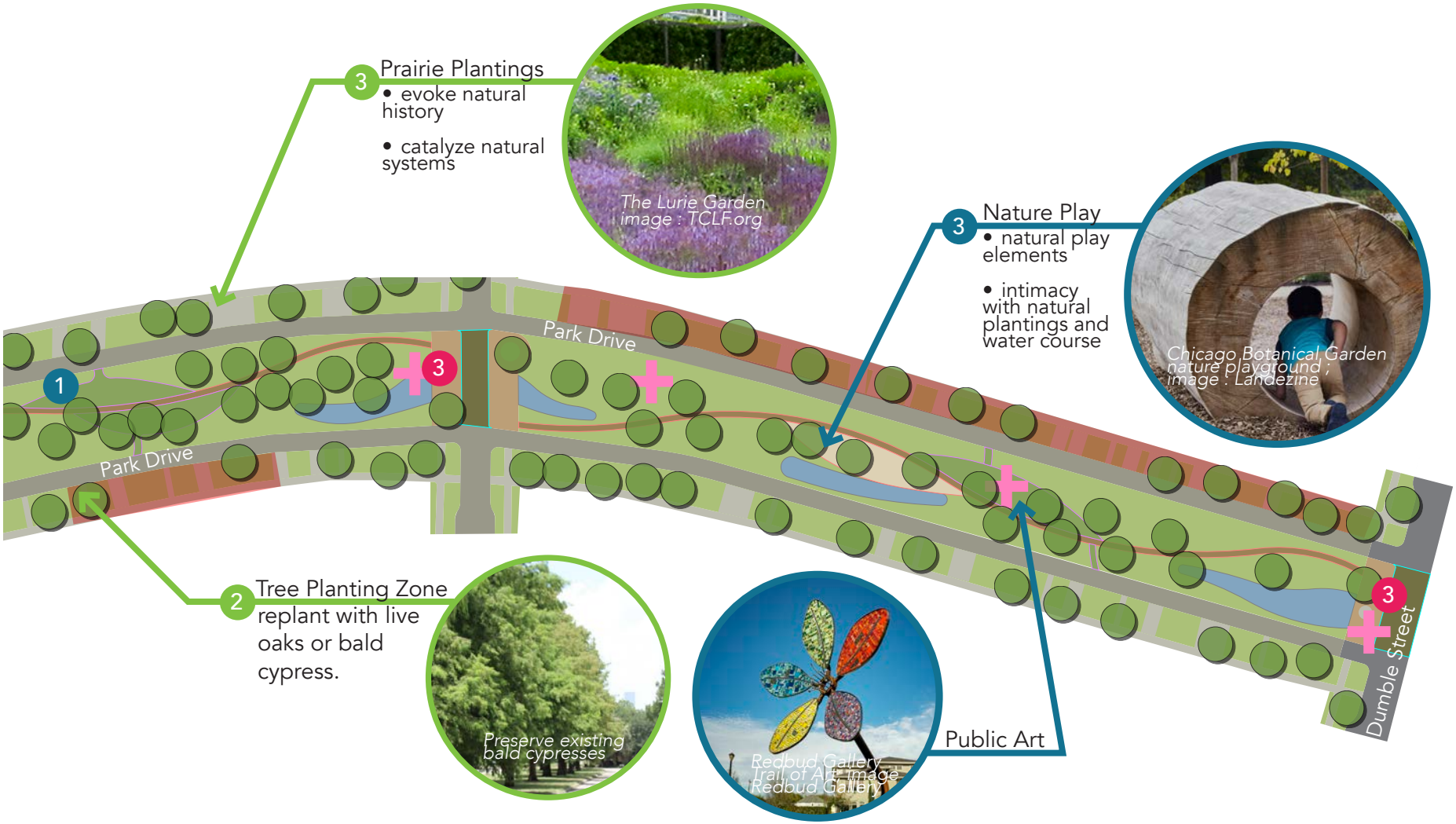


Figure 18 A Model Green Corridor - Park Drive Recommendations



Green Infrastructure & LID

1. selective stream daylighting
2. tree planting and preservation
3. prairie style plantings
4. 6′ natural surface trail

Road Reconstruction

1. 12′ one-way drive lanes with on-street parking where needed
2. raised intersections and planted bump-outs
3. new bridge/neighborhood plaza

Social Spaces and Placemaking

1. open lawn
2. decomposed granite plaza
3. nature play

+ public art

Park Drive Concept Recommendations continued

1 Selective Stream Daylighting

Selective daylighting of the currently channelized stream will facilitate the benefits of natural drainage, and create opportunities for residents to be exposed to an important, yet hidden, natural elemeent of the district. This exposure to natural systems generates various health benefits as described in the introduction to green corridors.

2 Tree Planting and Preservation

The stately Bald Cypress trees currently dominating the esplanade should be preserved. Extra care should be taken to ensure that daylighting of the stream does not interfere with the longevity of these trees. As indicated on the plan, areas currently lacking canopy trees should be replanted with either live oaks or bald cypress.

3 'New American' Prairie Style Plantings

In Arthur Comey's 1913 plan for a Houston park system the greater Eastwood area was described as a "Prairie district." The New American Style of planting design takes inspiration from the native prairies that once dominated the continent to create lush, beautiful, and beneficial compositions of primarily native prairie species.

Street Reconstruction

1 Drive Lanes

Park Drive currently features two one way streets, both currently constructed at a 20' width suitable for two way traffic. If on-street parking is not needed, the width of these drive lanes could be reduced to 12' on both sides, creating additional park, and green infrastructure space. The edges of drive lanes should be treated with flush curbs to facilitate stormwater management in roadside vegetated swales.

2 Intersections

The application of raised intersections at Lockwood, Dumble, and Telephone and consistent adoption of curb bump-outs is recommended to increase safety, slow traffic, and increase planting area. Design considerations for these features can be reviewed on the NACTO website. Reduced corner radii, 10' at local street intersections, 15' at the intersection of Lockwood, and 2' minimum at internal esplanade intersections, further increases planted, and pedestrian space. The corner radii should consider the appropriate design and control vehicles.

Surface Materials

Natural surface trails are recommended for corridor pedestrian walks. The use of natural surfaces reduces runoff, and facilitates natural drainage, which recharges groundwater, prevents flooding, and filters pollutants.

3 Create Distinctive Crossings

Park Drive once featured a natural channel running through the center of the esplanade. In concert with the recommendation to daylight this channel in selective places (described above) the bridges should be replaced. In the place of the current bridges, crossings that feature plaza decks for social activity and wildlife viewing in addition to vehicular lanes are recommended. These bridges are an opportunity to design a distinctive aesthetic and social element that defines, distinguishes, and draws users to the place.

Social Spaces & Placemaking

1 2 3 Spaces for Gathering and Recreation

Social spaces should be integrated with natural systems and placemaking elements along the corridor. As Figure 18 suggests, open lawn areas, decomposed granite plazas, natural play areas, and bridge decks should be distributed along the corridor to support varying uses and create common spaces along the corridor.

+ Public Art

Figure B.17 shows the suggested locations of public art elements. Local artists should be engaged to add this cultural layer to the esplanade. It is recommended that the art featured conceptually engages natural systems and human relations with nature.

Furnishings

Benches, dark sky lighting, interpretive signage, and litter/recycling receptacles should be integrated with social spaces. At bridge decks, custom benches integrated with the overlook deck are recommended. (See Recommendation 5 for further placemaking details)

Design and Material Language

Consistent use of materials that unifies LID principles and references to the historically significant arts & crafts design of the context should be applied. The use of galvanized, or weathering steel in combination with natural timber is recommended.

2.3 Dumble Street: Eastwood's Central Green Connector

Dumble Street represents a prime opportunity to establish a central green parkway between schools, parks, and commercial areas in the heart of Greater Eastwood. Considering the low traffic volumes on the corridor (Fact Book Figure A.4) and excessive lane widths, Dumble Street is well-positioned for transformation.

The introduction of green corridors in the study transforms a system of isolated parks, into a connected park network that acts positively on the broader feeling and function of the district. The transformation of Dumble Street will establish a key segment in this network, linking residents between legacy parks, such as Eastwood Park, Diez Park, and Park Drive, to schools, the central commercial corridor on Telephone Road.

Section 1 of Dumble Street presents an exciting opportunity to create a large provision of public space by narrowing this low traffic section from its present 40' to a 20' road surface where feasible. This frees up 20' of landscape area for the creation of walking paths, planting areas, and the addition of canopy trees, which are currently lacking. Parking lanes are recommended where needed, widening the road surface to 28' at Austin HS and Diez Park.

Section 2 interfaces with Eastwood Park and Park Drive. A slight narrowing of the driving surface to 10' lanes, from 12' lanes provides more spaces for natural drainage and adequate rooting volume for large canopy trees.

Reference Recommendation 5 regarding placemaking for the proposed elements to be applied on green corridors such as Dumble Street. Also reference Recommendation 2.7 and the Toolbox for projects and ideas that create generate social space with creative strategies.

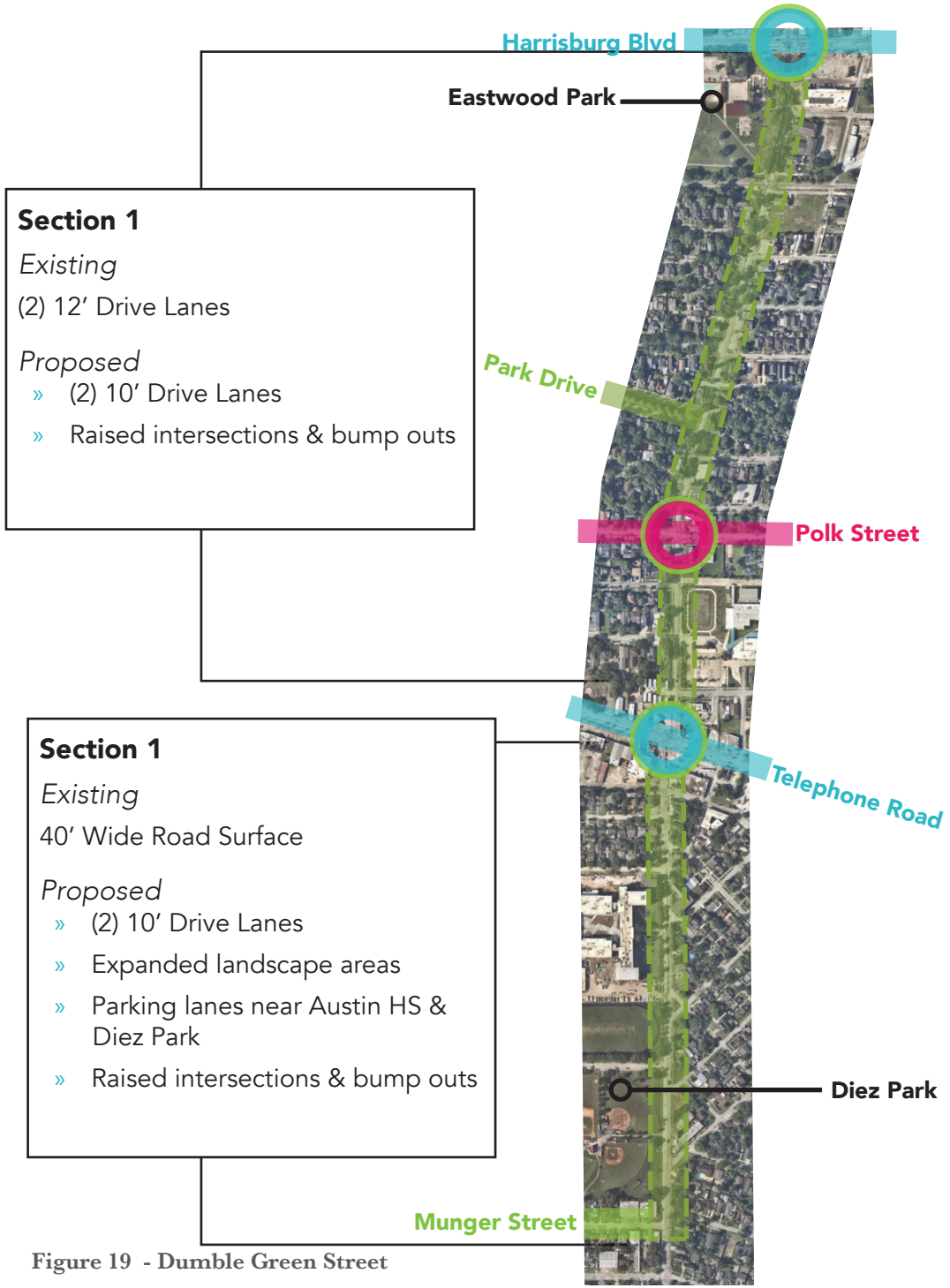


Figure 19 - Dumble Green Street

This rendering of Dumble Street showcases the ability to use natural materials and LID strategies to create a green corridor that supports the various mobility needs of the community (Recommendation 2.3).

2.4 Create Community Greening Initiatives

Encouraging LID Adoption in the Community

To harness the environmental benefits of low impact development practices throughout Greater Eastwood the East End District should encourage property owners and developers with incentives for LID or green infrastructure adoption. This could be achieved through an educational campaign that provides information to homeowners and businesses regarding the benefits of LID strategies, how they can be applied, and even local or regional incentive programs. The US EPA recommends the following local incentive mechanisms:

- Stormwater fee discounts or credits
- Development incentives
- Rebates and installation financing
- Awards and recognition programs
- Grants
- Workshops and give-away programs

Recommended LID/Green Infrastructure components for residential and commercial application:

- Bioswales
- Rain gardens/ bioretention
- Naturalized planting beds
- Canopy trees
- Soft surfaces
- Permeable paving
- Green walls
- Green roofs

Urban Forestry & Planting Initiatives

Greater Eastwood features a range of subdivisions planned and implemented in a patchwork logic throughout the years. Of these subdivisions, Eastwood, formed in 1914, features the most intact and high-quality tree canopy. Elsewhere in the district canopy trees are sparce, or non-existent. Figure 16 shows recommended areas for neighborhood and corridor canopy improvements. Trees for Houston, a non-profit organization dedicated to planting, protecting and promoting trees represents a potential partner in enhancing canopy coverage along corridors.

Recommended Tree Species Composition

In the historic Eastwood master-planned community, a uniform composition of Live Oaks enhances and defines the setting. This composition should be replicated along key corridors and in direct connection with existing high-quality canopy streets such as Leeland and Polk Streets adjacent to the Eastwood neighborhood. To establish a consistent spatial vocabulary the Main Street Placemaking Overlay (Recommendation 5), consisting of the Lawndale, Lockwood, and Leeland corridors, should be treated with a Live Oak Alle.

To foster resilience to canopy loss a diverse selection of canopy trees should be planted. Blocks and contiguous corridor segments should be planted uniformly for spatial composition, with alternating streets varying in species, thus achieving compositional uniformity and biological diversity in concert.

Planting in Urban Spaces

In locations where trees are being planted in paved settings care should be taken to ensure that the growth of the tree is facilitated with proper soil volume. Use of Silva Cells, or structural soils to ensure adequate soil volume in urban settings is recommended. See Appendix B Toolbox for design details on this recommendation.

Primary Strategies for Open Space Generation:

C *Green Corridors*

Described in detail on page B18 these corridors represent opportunities to redesign public rights of way as pedestrian and bicycle Greenways. Reference illustrations of Park Drive and Dumble Street for examples.

B *Removing barriers to access: Vacant/Underutilized Lots, Tactical Urbanism & Spark Parks*

Outlined in section 2.7 transformation of vacant and underutilized lots and vehicular spaces is recommended to create community spaces, especially where currently deficient.

N *Daylighting Natural Systems/Green Infrastructure*

Section 2.5 shows a case study and justifications for creating public space integrated with green infrastructure in natural systems corridors.

Park System Improvements

The recommendations shown in Figure 16 aim to correct deficiencies in the current Greater Eastwood park system. These deficiencies exist in the geographic distribution and programming of the current system.

Geographic Distribution

Fact Book Figure A.31 highlights areas lacking basic park accessibility within one-half mile in the study area. The locations of Open Space Creation Zones are intended to highlight these areas as district priorities for open space implementation.

Parks Programming

As Figure A.29 shows, the programmatic makeup of the existing park system lacks adequate acreage per person in several key categories. These categories include: neighborhood parks, community parks, linear parks/greenways, and natural areas/ reserves. In addition to understanding the district-wide deficiencies in programming, through the Accessibility Thresholds Case Study (Figures A.35-A.39), localized deficiencies within district neighborhoods were identified. These analyses have been applied to determine recommended locations and programming of future parks, as well as adjustments to existing open spaces. Community input also informs these recommendations and should be referenced in detailed programming of individual spaces. The top four park program elements and facilities desired by the community are walking/running paths, community gardens, playgrounds, and flexible lawn space.

2.5 Future Green Space Opportunitiese

The following recommendations are identified in Figure B.20. Recommendations are focused on creating new parks and open spaces to increase the recreation opportunities, play areas, and environmental enhancement within Greater Eastwood.

2.5a West Eastwood Open Space Creation Zone

The areas along Cullen Boulevard and west lack open space opportunities. The land use inventory in Fact Book Figure A.22 shows that this zone of the study area is largely commercial in use, but likely to redevelop in the future. The future redevelopment and residential infill, as seen in many other parts of the East End, can likely be expected, especially along the Leeland Livable Street. In anticipation of future development, the district should create open space and green corridors to fill this present gap, and ensure a healthy and livable neighborhood for residents.

Recommended Programming Components:

- Community Park
- Playgrounds
- Pocket Parks
- Nature Park
- Community Gardens

Strategies: C B

The most applicable strategies for generating new open spaces are creating green corridors and removing barriers to access.

2.5b Sunnyland Open Space Creation Zone

Geographic analysis conducted in the Fact Book (Figures A.31-A.38) identified this area as lacking sufficient access to open space. Both immediate and long-term solutions should be sought in order to provide improvements for the community in the short-term while longer-term solutions are developed. Recommended short term solutions include Spark Park establishment at JP Henderson Elementary, tactical and temporary urban interventions in neighborhood vacant lots and along green and cultural corridors.

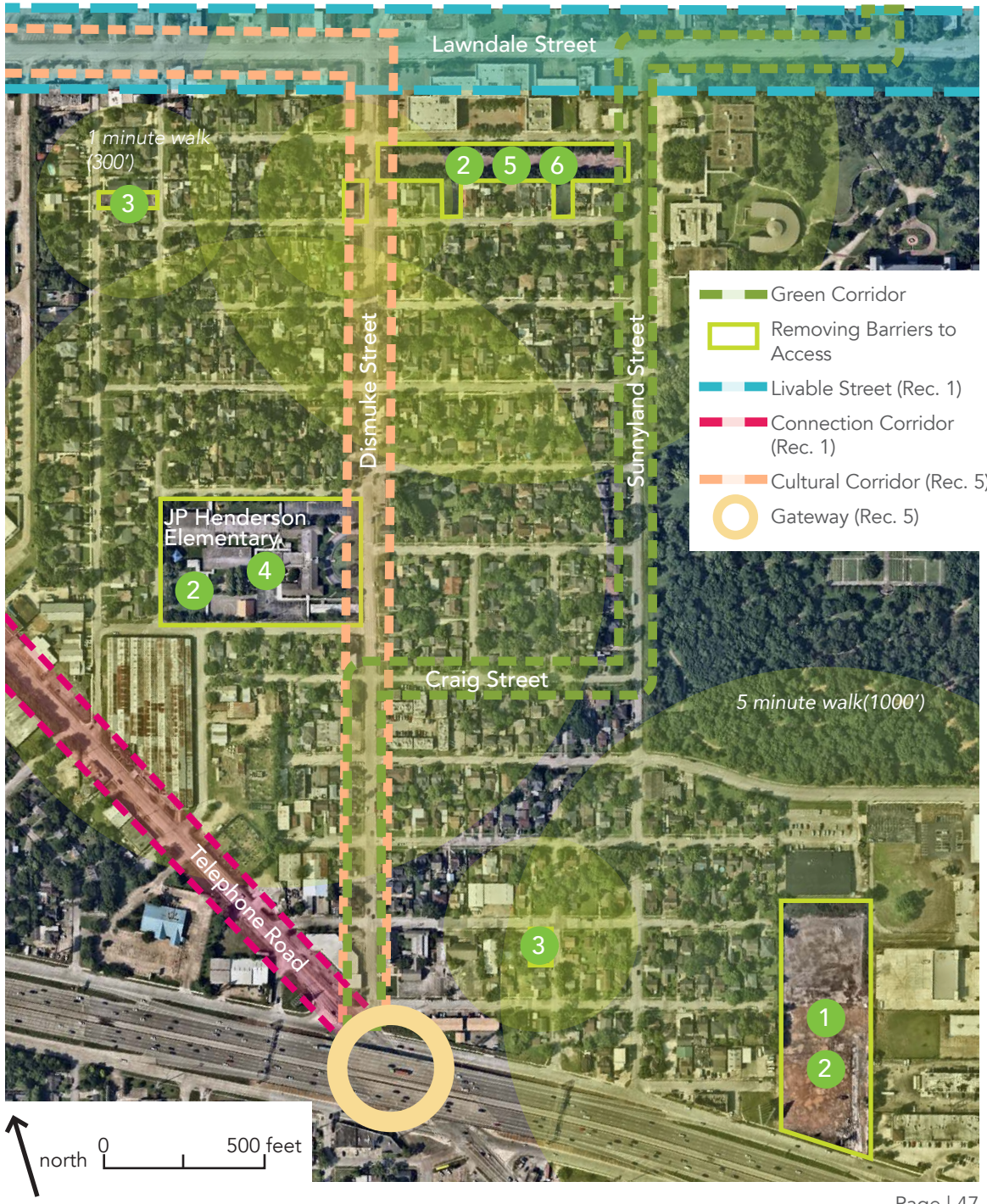
Recommended Programming Components:

1. Community Park
2. Playgrounds
3. Pocket Parks
4. Spark Parks
5. Community Gardens
6. Nature Park

Strategies: C B

The primary strategies for generating new open spaces are creating green corridors and removing barriers to access. The locations for these strategies are highlighted in Figure 20 along with other recommendations in this area to show how they overlap and can build on each other. These improvements would fill the access gap identified in this area and create multiple open space and play options within the community. When looking at accessibility thresholds the neighborhood would achieve access to a variety of parks of varying scale: from intimate local spaces and community scale parks to the broader park network linked through green corridors.

Figure 20 A Green Locale - Sunnyland Open Space Network



Bayous in History

"As urban areas are developed waterways are sometimes redirected, covered in impervious material, and/or buried in pipes, culverts, or a drainage system to create a more buildable surface area or in an attempt to protect properties from flooding" - National Resource Conservation Service
This narrative holds true in Greater Eastwood.

2.5c Daylighting: A Future Built with the Bayou

This recommendation centers on the physical and cultural Daylighting of the former "Slaughter Pen Bayou." This waterway was a dominant feature in the study area, but as the area was developed, for industrial and residential use, this beautiful and defining feature was erased. Recommended Programming Components:

- Greenway
- Naturalized/reserve

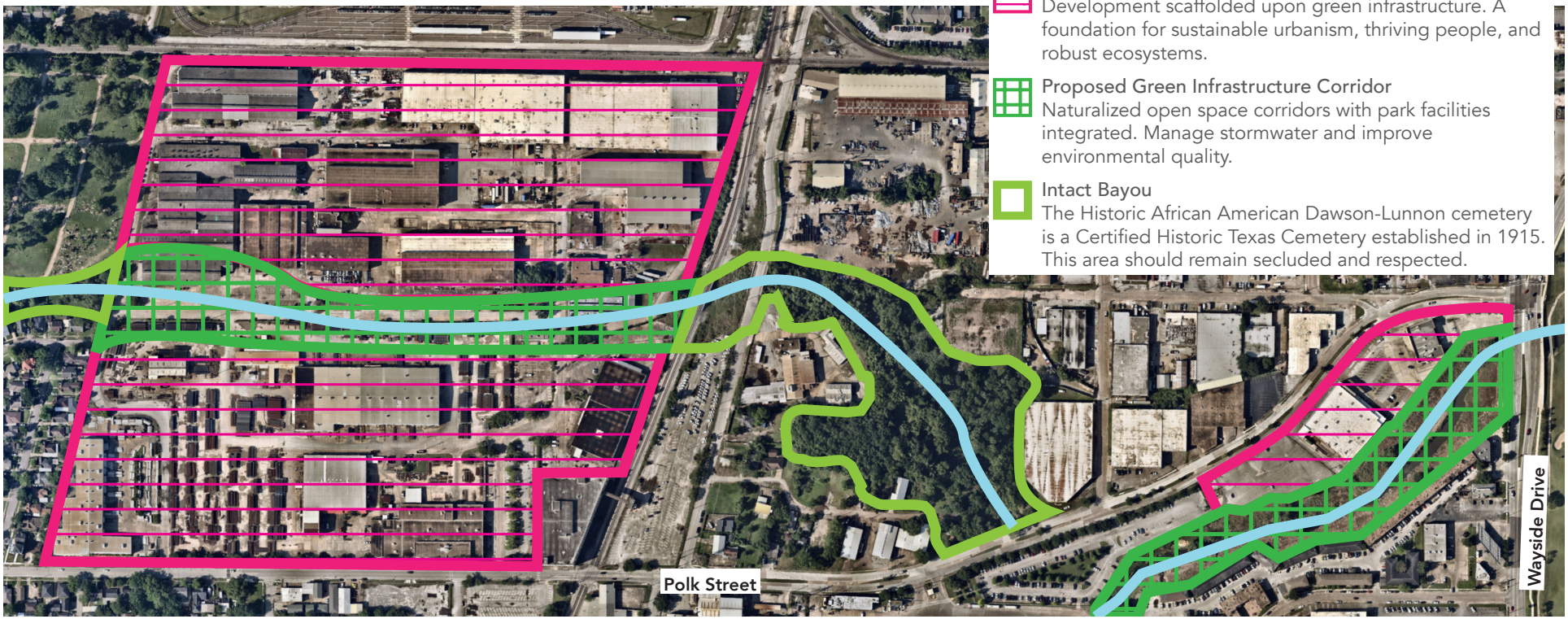
Strategies: B N

As the district changes economically, and as the climate continues to change, bringing more intense rain events, more frequently, the urban habit of suppressing natural systems produces consequences like flooding, nutrient pollution, and degraded habitats. Recommended here is a long term vision for building for a resilient, beautiful future, with the bayou.

The area shown in Figure 21 exemplifies how Slaughter Pen bayou has been incrementally erased throughout the evolving development of the district and where there are opportunities for daylighting and future development. Daylighting the bayou is proposed to be a signature opportunity that could capture a significant amount of development as well as provide housing choices, recreation options, and environmental resiliency. The case study on the following page highlights an example of daylighting that can be used as a best practice.

Presently, the environmental ecology and legibility of the unique natural systems and species of the

Figure 21 Slaughter-pen Bayou Daylighting Opportunities



locale & region are minimal. A concerted effort should be made to enhance the biodiversity of the study area and to create opportunities for residents to safely interact with natural phenomena and connect with nature. Enriching existing, and establishing new natural patches and corridors within the Greater Eastwood area will enhance not only the experience and sense of place of the district, but also ecosystem utility measured in carbon sequestered, microclimatic heat reductions, wildlife present, water infiltrated, food produced, and ultimately, years lived. Daylighting Slaughter Pen Bayou would result in a place more sustainable, livable, resilient, beautiful, and ecologically reinforced community. Using best practices that the Thornton Creek Water Quality Channel can help identify the breadth of opportunities and potential benefits while also presenting information to center ideas and conversations with stakeholders and the community around.

Intact Bayou at Dawson Lunnon Cemetary

Case Study: Thornton Creek Water Quality Channel Seattle, WA

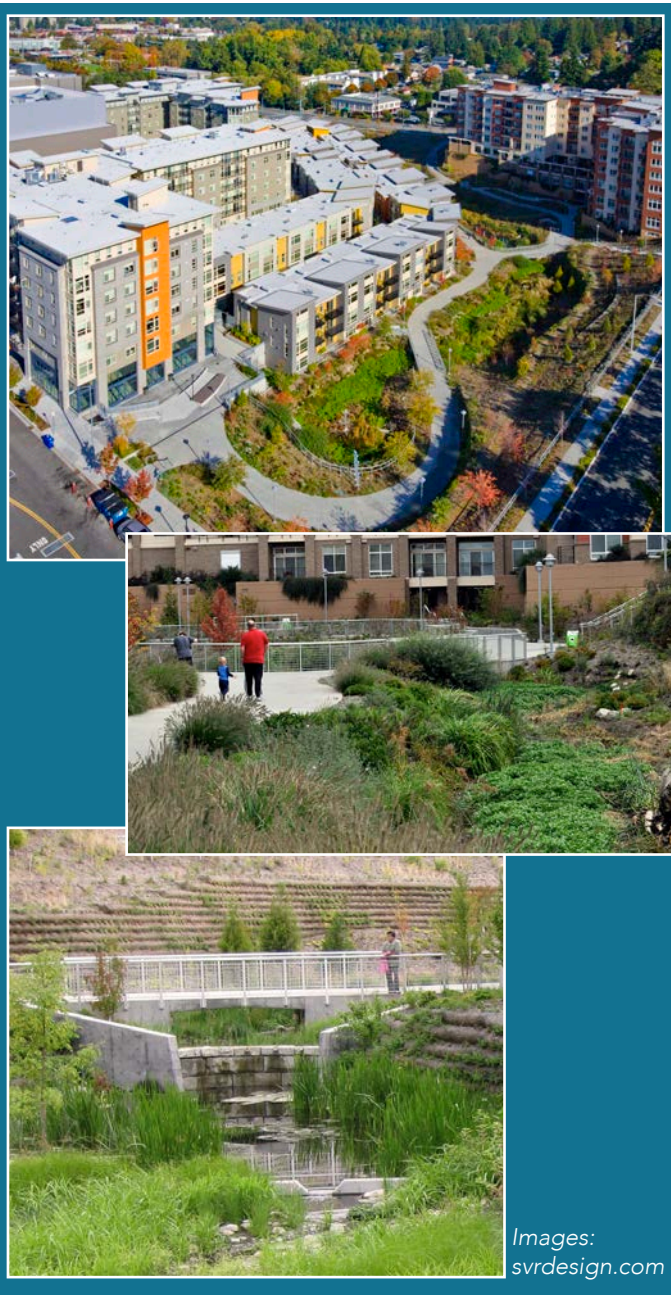
The Thornton Creek Water Quality is a precedent for urban development integrated with natural systems. Complete in 2009, and designed by SvR, a former parking lot was transformed into a multi-generational, mixed-use development centered around a stormwater filtration channel.

Metrics

Size: 2.7 ac
Budget: $14.7 million
Development catalyzed: $200 million
Year channelized: 1950
Year daylighted: 2009
Ecological: stormwater filtration, wildlife habitat
Community: condominiums, apartments, restaurants, retailers and a movie theater

Project Description (from MIG)

Carved out of an abandoned parking lot, the Thornton Creek Water Quality Channel is a water treatment facility and public open space that connects the surrounding community while restoring the environment. SvR designed and engineered this 2.7-acre urban respite with an artfully meandering channel that treats runoff from 680 acres. The channel creates a graceful, natural space at the heart of the mixed-use development that features condominiums, apartments, restaurants, retailers and a movie theater. Overlooks and bridges allow pedestrians to enjoy the channel habitat and wildlife. Form meets function at the channel, becoming a truly high performance landscape.



Images: svrdesign.com

"Burying or covering rivers and streams has the unintended consequences of increasing nutrient pollution, degrading habitats, and increasing downstream flooding."
- nrcsolutions.org/daylighting-rivers/

Eastwood Park

Uninviting edge condition, and barriers to use at Diez Park.

2.5d Community Park at Austin High School Site

While the historic Austin High School Building is under construction, the school facilities have been relocated across Lockwood on HISD property. With facilities returning to the permanent building upon completion, placing a park on the site represents an exciting opportunity for sizable community open space along a key corridor, near the commercial heart of the district, and proximate to residences and schools. In addition, the site historically featured the Slaughter-Pen Bayou channel. Reference to this natural history through a naturalized, LID/GI program, community gardens, and outdoor teaching spaces would create a unique educational space for students and residents to connect with the natural legacy of the place. It is recommended to coordinate and strategize with HISD and the City of Houston on this potential project.

Recommended Programming Components:

- Neighborhood park
- Community garden
- Naturalized/reserve
- Outdoor classroom

2.6 Existing Park Improvements

Existing park spaces are important places for activity and health in the community. Existing facilities present opportunities to enhance access and opportunities for the community to have healthy places for recreation, play, and other community activities. Eastwood Park is currently undergoing a detailed planning and redevelopment effort. This plan focuses on the other parks within the study area and for the park system as a whole in Greater Eastwood. The following programmatic and facility improvements to existing open spaces are recommended and are identified in Figure 16:

Greater Eastwood Park System (Holistic)

Reinforce: Lighting, wildlife habitat plantings, community gardens, shade structures, seating spaces, playgrounds, walking/running paths, public art, futsal courts, placemaking elements, green network access (Green Corridors, Multimodal Corridors)

Consider: Diversifying large turf spaces using naturalized planting areas and programming

Safety: In survey question 15, "What keeps you from using current parks or public spaces available in the study area? (Select all that apply)" 40% of respondents selected "Does not Feel Safe." To address safety in district parks, ample lighting, new investment, and routine maintenance are recommended.

2.6a Diez Park

Strengths: Home of East End Little League baseball, size, location (on well-trafficked, main corridors)

Weaknesses: Access issues, maintenance issues, circulation issues (ingress/egress, harsh chain-link edge

Opportunities: Add program elements to create a more functional space for the community. Replace chain link fence/create egress points to remove barriers to access, and create a more inviting feel. Connect to Austin HS, Dumble Street.

Threats: Vandalism

Recommendations: Maintain baseball as a primary use, but facilitate secondary uses, Establish a more permeable and inviting edge condition, increase maintenance, address circulation/access issues, utilize connections to nearby schools & Dumble corridor, add placemaking elements.

2.6b Broadmoor-Kretschmar Park

Strengths: Variety of programs, canopy cover, utility/intimacy to the immediate neighborhood, accessible, sheltered, a relaxed feel

Weaknesses: Age of equipment, condition of exterior walkways and fencing, lacks aesthetic character, on-street parking creates a barrier

Opportunities: Adjacent streets are low traffic - pedestrian space could be expanded, refresh edge condition/update elements, maintain mature canopy trees, proximity to Telephone Road

Threats: Occupation of adjacent streets by parked vehicles

Recommendations: Maintain diverse program and canopy trees, update equipment and aesthetic, add program elements, expand the park into the immediately adjacent street by claiming one parking lane, improve exterior sidewalks

2.6c MC Cullinan Park

Strengths: Location – adjacent to school and Polk corridor, mature trees, permeable edge condition, narrow adjacent streets, used by local kids

Weaknesses: Aging equipment, minimal aesthetic interest, lacking maintenance, program, drainage issues, uninviting edges

Opportunities: Proximity to parks, schools, residences, key corridors

Threats: Drainage issues

Recommendations: Preserve mature trees, diversify planting palette, add programs and placemaking elements

2.6d Park Drive Esplanade

Strengths: Mature bald cypress trees/canopy cover, the esplanade is wide enough to support leisure and walking, low traffic, residential, sheltered feel

Weaknesses: Lockwood corridor is a high-traffic barrier, no paths in the central median, minimal legibility of former natural feature, lack of interest or diversity in under-story planting, minimally programmed, excessively wide one-way roads.

Opportunities: Crossings/ interfaces with Lockwood, Dumble, Telephone, and Eastwood, replacement of aging bridges, an abundance of space.

Threats: Loss of trees

Recommendations: Reference Recommendation 2.2 for conceptual illustrations and details.

Top: Existing playground space at Broadmoor-Kretschmar Park

Middle: Open lawn space at MC Cullinan Park

Bottom: Park Drive Esplanade

Social Spaces: Supporting Infrastructure and Policies

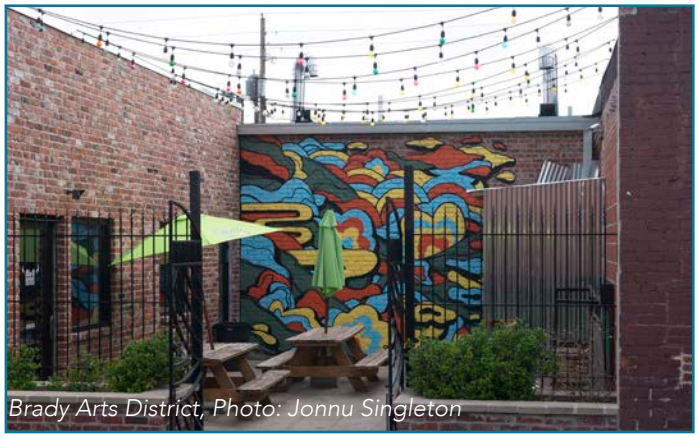
To facilitate implementation of social spaces, some city infrastructure improvements and/or policy considerations are needed. To support vibrancy of social nodes, infrastructure improvements should include (but are not limited to): widening sidewalks, bus stop accessibility and amenity improvements, protected bike lanes, bike parking at businesses/destinations, streetscape improvements including increased shade, and more. These improvements provide a level of comfort for people and can encourage them to spend more time at destinations, enhancing social space opportunities.

Policies, such as agreements with the City of Houston, to allow for social or public activities to take place within the public rights-of-way may be required. There may also need to be plan review, permits to allow certain uses, and/or public notice to notify people in the vicinity of any changes to the public right-of-way to accommodate the social spaces.

2.7 Create Spaces for Community Interaction

Social interaction is an important component of community health. When people feel connected to other people and places around them, it can have positive mental health impacts as well as increase social capital. Access to social and activity centers provides opportunities for local interactions between neighbors, businesses, and visitors to actively engage with others in the Greater Eastwood area. To increase the number of gather spaces there are opportunities to repurpose existing properties and public rights-of-way in ways that can enable a sense of community. For example, along commercial corridors, bringing life to the streets is possible with some creative thinking and coordination among businesses and the City allowing for outdoor dining, biking, walking, or hanging out.

On key corridors, not every traffic lane is being fully utilized for vehicular traffic flow, especially during non-peak traffic hours of the day (evenings, lunchtime, and weekends). This presents an opportunity to rethink outdoor space to activate those social connections. Pedestrian plazas, commercial streetscapes, and activating vacant lots are all opportunities to enhance community places and encourage social interaction, strengthening the community feel.



Brady Arts District, Photo: Jonnu Singleton

2.7a Social Space Creation

Social spaces are locations that can act as gathering places and provide a variety of options for people to connect with each other, play, exercise, or enjoy the community. These spaces can include locations for parks, art, culture, history, relaxation, and entertainment. Programming trails, corridors, and other public spaces with activities can encourage walking and more activity within the community. Social nodes should be combined with corridor improvements defined in this plan and can enhance the infrastructure recommendations defined along the Green Corridors, Livable Streets, and more.

Figure B.13 identifies locations of potential social spaces that could be created within the study area. These locations were identified based on locations of existing activity or where recommendations can create opportunities for community connections. Social spaces can be created in many more locations throughout the study area where there is a need or desire to accommodate people interacting, enhance outdoor dining or retail space, or host festivals and events. The best practices in this section provide examples of how social spaces may be incorporated.

2.7b Pedestrian Plazas and Commercial Streetscapes

The corridor and open space recommendations prioritize the reorientation of district corridors and public space towards a balance between vehicular throughput and human use. Pedestrian plazas and commercial streetscapes are often the direct byproducts of redesigning vehicular space for pedestrians. These projects occur in both the public and private realm. The Livable Street recommendations for the Telephone corridor are an example of public space creation within streetscapes. Social nodes, such as The Historic Cage School and Tlaquepaque Market, in concert with expanded

commercial frontages, represent opportunities for public and private investments in social gathering spaces.

The 2017 Project for Public Spaces report titled *Healthy Places: Improving Health Outcomes through placemaking* contains relevant considerations for the design of these community spaces, listed below.

Public Space Qualities Encouraging Use:

- Appealing aesthetics
- Amenities for different age groups
- Good maintenance and cleanliness
- Opportunities for social interaction
- Safety
- Lighting
- Natural Features
- Proximity to homes & other destinations

Additional Elements to Consider:

- Integration of public art and murals
- Connection to community culture and history through a consistent and distinct suite of placemaking objects and materials
- Flexibility of programs through the use of movable furnishings
- Shade facilitates pleasant spaces and reduced energy use
- Design elements and principles from the Green Corridors recommendations such as LID and Green Infrastructure can be applied to conserve resources and facilitate beautiful places

Best Practices and Greater Eastwood Concepts for Social Spaces

NACTO's guide on "Reclaiming the Right of Way with Parklets" is a best practice example that can encourage more social nodes in Greater Eastwood. Louisville, Colorado's Downtown Association hosts parklets each spring that pulls in culture while promoting social cohesion and celebrates dining and shopping outdoors.

The Westchase District, in west Houston, has successfully activated its Library Loop Trail (LLT) , creating social spaces and activities for the community. It incorporates exercise equipment, Little Free Libraries, and seating areas. Additionally, events that highlight these amenities along the trail further increase their value and use within the community. For example, a children's reading event could be developed around a "Little Free Library" station, or a fun run that also ties into Eastwood Park could be organizeds.

Dumble Street, a Green Corridor, could be an activated space for the community. It hosts several opportunities to incorporate social spaces that build on the parks and culture of the area: near commercial areas, at the Park Drive intersection, at parks and vacant lots, and more.

Telephone Road is a premier opportunity to bring culture and activity into the corridor and provide a great community destination through social spaces. Social spaces could enhance the corridor with community gathering places, whether integrated into the Old Cage School or with any local business including Tlaquepaque Market. This could activate the street with people walking, biking, dining, and socializing. See page B35 for visualization of these two areas.

Library Loop Community Event
Photo: Westchase District

Navigation Esplanade
Photo: 365ThingsInHouston.com

Telephone Streetscapes

As described in Recommendation 1.4, the reconstruction of Telephone Road prioritizes multimodal access to the study area's "main street." With this reconstruction, space becomes available for dedication to community use. Along these corridors, social spaces exist in close proximity both in the public and private realm. The symbiosis of private patios and outdoor dining spaces with well designed, well furnished, and culturally attuned public streetscapes is foundational to creating community social centers.

Tlaquepaque Market

Tlaquepaque market and the surrounding area along Telephone Road, is home to many unique and thriving local businesses that contribute greatly to the local culture and economy. The current plaza area, while having a unique feel and tie to the community, is primarily dedicated to parking, and thus presents a further opportunity to create a high-quality social space at the commercial heart of Greater Eastwood. Proposed enhancements include outdoor seating, wide walkways, trees and plantings, and a flexible parking surface that can be easily used for a variety of purposes. This will create a great community plaza that can continue to be at the heart of events. As Tlaquepaque Market is privately owned, it will be important to work with property and business owners to facilitate improvements. Note that parking requirements may mean that the total number parking spaces must be maintained, but the overall layout and function of the parking lot could be improved.

Cage School

The Historic Cage School, built in 1910, represents an exciting opportunity for the creation of a cultural node along the Telephone corridor. The creation of a flexible and distinctive outdoor public space is recommended to encourage, and support social connection through community events at the facility. There is significant interest in preserving and repurposing this facility for the future. Partnerships with other organizations, like the City of Houston, TIRZ 23, and Harris County can help bring this project to life and become a community anchor along Telephone Road.

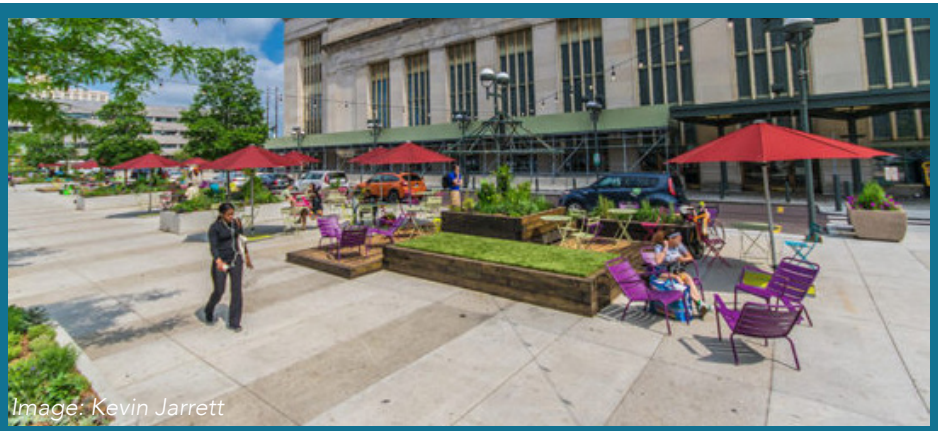


Image: Kevin Jarrett

Image: University City District

Image: University City District

The Porch at 30th Street Station in Philadelphia

The Porch at 30th Street Station is an evolving public space outside of Philadelphia's 30th Street train station that embodies the idea of re-purposing vehicular space for community use. The project, temporary, iterative, and culturally engaged, is extremely relevant to community social space considerations in Greater Eastwood.

Project Description The porch emerged from a DOT project to transform the area in front of 30th Street Station. With the opportunity to consider the use of the space, the University City District engaged the community to create a pedestrian oriented public space out of 33 parking-spaces.

The iterative nature of the porch, and its humble beginnings make it a powerful precedent of the transformative potential of even the most low-budget social space generation projects. Over time the implementation approach has remained small iterative investments over large one-time commitments. This impermanence and capacity for change has formed a space centered and responsive to the actions and desires of users. Within this thriving social context, the University City District also coordinates arts and entertainment programming.

More information on the project, its many iterations, and its process of realization can be viewed here: https://www.universitycity.org/the-porch-development.

Tlaquepaque Plaza

Historic Cage School

These renderings of the Tlaquepaque Plaza and Historic Cage School areas visualize how social spaces can be implemented and contribute to creating active and healthy communities.

2.7c Vacant Lot Strategies

Vacant land can be a problematic eyesore, or it can be a space for activity and community. Vacant lot activation is a strategy to activate vacant parcels of land that would provide temporary or long-term shops or activities that would aid in revitalization. As 18% of the study area is vacant, publicly owned, or institutionally held, there are many opportunities to create value and generate localized open spaces. This is particularly important to consider in areas that lack open space access or are along commercial corridors for revitalization. While these spaces are opportunities, appropriate agreements and coordination with property owners, the City of Houston, and the community are important.

Not only does this type of community activation of vacant parcels boost revitalization and open space efforts, it can also encourage people to walk and be active. Empty parcels can feel unwelcoming or unsafe when walking past them and can increase the perception of how long or far a trip is. When people and activities occur on previously empty parcels, there are more eyes on the street and the area can feel safer. Additionally, these newly activated places along a street create interest and destinations, which can make walking more appealing.

It is recommended that the East End District promote these opportunities with the City, community, and non-profit organizations to help find a champion with the District becoming a partner. The following information and case studies illustrate a few of many potentially relevant examples for vacant lot programming, and institutional approaches to open space generation on vacant lots.

Institutional Approach: Re-Imagining Cleveland

In an excerpt from the book "The Empty House Next Door," author Alan Mallach outlines an innovative strategy initiated in Cleveland by a collaborative team of organizations including Cleveland Neighborhood Progress (CNP), The Kent State School of Architecture, and the City of Cleveland:

> In 2009, CNP and the City of Cleveland initiated Re-Imagining Cleveland, a competitive vacant land reuse grant program, to empower neighborhood residents and other community stakeholders to turn vacant land bank property into community assets and pilot projects. With $500,000 in grant funds, they awarded small grants to 56 projects on nearly 15 acres, including environmentally oriented projects such as pocket parks, rain gardens, and agricultural projects including gardens, orchards, and vineyards.

Re-imagine Cleveland represents a model of how strategic partnerships and community involvement can generate buy-in and ideas to facilitate green space creation. A similar initiative conducted in Greater Eastwood, with the partnership of local design organizations, schools and/or businesses, as well as entities such as the East End Maker Hub, could generate similar community energy to facilitate the renewal of vacant space. http://www.clevelandnp.org/reimagining-cleveland/

Thackeray Community Garden - Re-imagining Cleveland

Image: Reimagining Cleveland

Program Categories for Vacant Lots

Vacant lots can present a variety of programming opportunities. The *Green Pattern Book* produced by the City of Baltimore Department of Planning in collaboration with the US Forest Service outlines the following patterns for holding and reusing vacant land:

1. Clean and Green
Temporary greened spaces meant as a short-term holding strategy for future development. Lots can also be planted with shade trees to create pleasant spaces.

2. Urban Agriculture
Land leased to urban farmers to grow food commercially.

3. Green Infrastructure
Land used to reduce runoff, filter stormwater, and decrease impervious surfaces.

4. Community Open Space
Vacant lots maintained by a community, nonprofit, or multiple households. Used for vegetable gardens, orchards, pocket parks, and small recreational spaces.

5. Green Parking
Land that can accommodate neighborhood parking needs while keeping greening and stormwater considerations in mind.

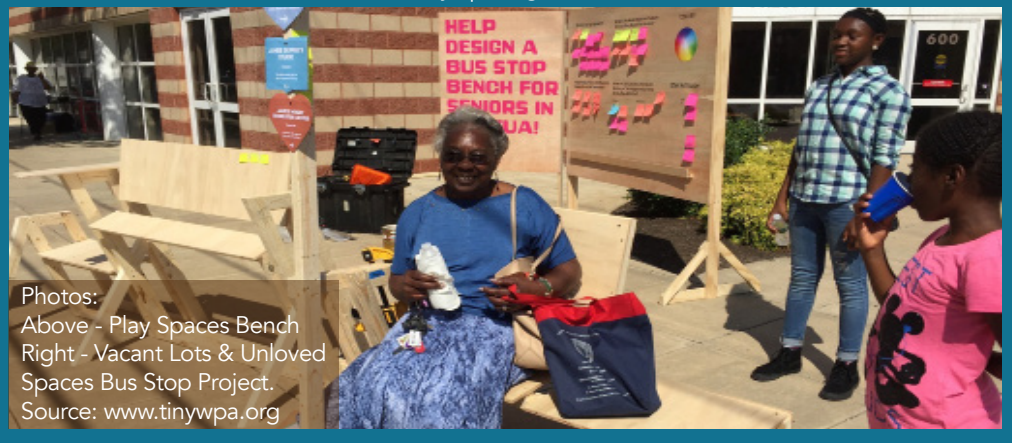
6. Neighborhood Park
Permanent public spaces that can be developed for passive and/or active recreation.

7. Combinations
Uses 1-6, and more can be combined to achieve a variety of goals.

In addition to these programs, vacant land that is in a commercial corridor can be used as a pop-up space for retail, markets, or for food trucks. Additionally, incorporating play space, like the examples from Tiny WPA, and including youth and community organizations like the East End Maker Hub in their design and development can facilitate further community activity.

UMADAOP Pocket Park- Re-imagining Cleveland
Image: Reimagining Cleveland

Tiny WPA is a non-profit organization in Philadelphia. They aim to engage people of all ages in the design of their cities and help lay the foundation for community-generated civic innovation. Its programmatic activities, neighborhood revitalization efforts, design-build projects, and creative placemaking initiatives vary in scope, but all are small in scale, community based, needs-driven, action-oriented and collaborative. Two key programs applicable here are Vacant lots & Unloved Spaces and Play Spaces.
Visit tinywpa.org for more information.



Photos:
Above - Play Spaces Bench
Right - Vacant Lots & Unloved Spaces Bus Stop Project.
Source: www.tinywpa.org

3 A Hub for Education

Schools are places for children to learn, grow, and interact with others, yet also provide vibrancy and a sense of community to the adjacent neighborhoods. Greater Eastwood has an abundance of high-quality schools drawing in families from inside and outside the immediate community and is a Hub for Education in this area of Houston. Focusing on access to schools for children and families to walk or bike builds healthy, active habits for the future and provides value for the surrounding neighborhood, and encourages more local investment. Additionally, community partnerships and programs that involve schools and children broaden the scope of learning in the community and encourages new perspectives and ideas.

Related Objectives

1 2 3 4

Recommendation Type:

Project

Program

Summary of Recommendations:

Safe Streets to Schools

With eleven schools in the Greater Eastwood area, safe access to schools is important for the health, safety, and mobility options for children. These "School Streets" have unique travel patters and have a higher reliance on safe access for walking and biking, as well as transit for those who ride METRO to school. School Streets are identified for primary corridors within 1/4 mile from school facilities and combine components of safe streets with Safe Routes to Schools best practices. When improving access to schools, these corridors should be prioritized.

Data Collection Program

Data is key to communicating needs and pursuing funding partnerships and grants for community improvements. Data is also essential to developing and evaluating community priorities and whether community projects are having the intended impacts. Coordination with other agencies regarding their data collection efforts is a helpful way to organize and obtain data. A data collection effort can use community volunteers, students, or area non-profit organizations. Collecting data on pedestrian and bicycle use is important, but data for access to schools should be a priority within Greater Eastwood.

Walk Assessment & Encouragement Program

Creating a program that focuses on safe access, particularly to schools, can not only benefit the families attending the schools but also improve the neighborhoods surrounding the schools as well. This recommendation is focused on developing an assessment program and supporting encouraging materials for walkability to schools and surrounding neighborhoods and destinations. This is intended to help prioritize infrastructure improvements and encourage more active and healthy transportation options.

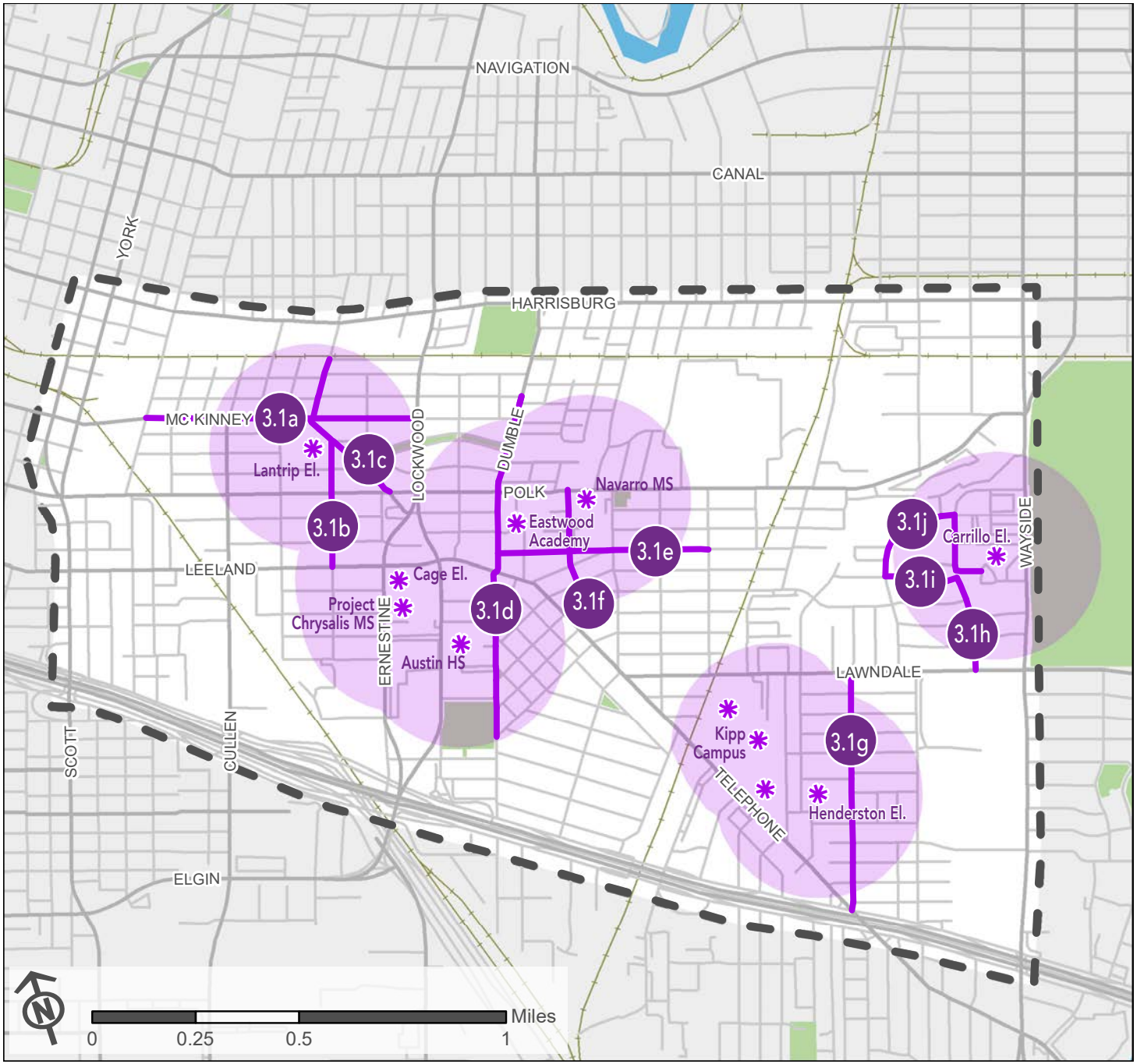
Walk & Wheel Skills Hub

Developing a biking and walking safety course for educational activities and programs related to biking skills and roadway safety for people of all ages and abilities. The facility can encourage students to walk and bike to school safely.

School Access Plans

It is recommended to develop a School Access Plan (SAP) that is focused on one school area or multiple schools in close proximity for all education nodes within the study area. The SAP should include both infrastructure improvements and programs that can be implemented by the school(s) and in partnership with the community and other organizations. A SAP has been developed as a part of this plan for Lantrip Elementary. The SAP is detailed on pages 64-65. The SAP can be used as a best practice that can be replicated for other school areas.

Figure 22 School Streets Map



- 3.1a McKinney Street
- 3.1b Eastwood Street
- 3.1c Telephone Road
- 3.1d Dumble Street
- 3.1e Leeland Street
- 3.1f Gustav Street
- 3.1g Dismuke Street
- 3.1h Villa De Matel Road
- 3.1i Brookside Drive
- 3.1j Fair Oaks Road

Legend

- School Street
- Education Node
- School
- Roadway
- Railroad
- Park
- Study Area Boundary

Benefits of School Streets

School Streets can benefit the community in a variety of ways. First, when kids and families can easily access school by walking or biking, they are incorporating healthy habits and exercise in their day. Establishing walking and biking as viable ways to get around early in life can make use of these modes as adults a more likely choice. Additionally, when a school has a significant number of students arriving by driving or being dropped off, the surrounding street network can become congested, making travel for everyone more difficult. By decreasing the reliance on vehicles for access to and from school, traffic, and air pollution issues can be reduced and the required parking or queuing areas for schools can be reallocated for other purposes.

3.1 Build Safe Streets to Schools

The Greater Eastwood area is home to eleven schools and is directly adjacent to the University of Houston's main campus, divided by I-45. Schools and universities add significant value and character to the neighborhood. Comfortable, accessible routes to and from to the area schools for people walking, biking, and taking transit are desired. Education hubs need to be linked to the community and provide access between the education hubs and beyond to places where students like to go.

"Safe Streets to Schools" are the corridors that provide direct access to and from the education hubs into the adjacent neighborhoods. They support safe, walkable, bikeable corridors that encourage families and children to walk or bike to school, establishing healthy mobility habits, and reducing reliance driving. Safe Streets utilize many components from the City of Houston's Neighborhood Traffic Management Program (see the Toolbox for more information), but also incorporate specific Safe Routes to Schools (SRTS) improvements.

The recommendations here are focused on providing access at least 1/4 mile around schools. As school streets are implemented, extending some School Streets beyond the 1/4 mile may be applicable based on specific school or neighborhood access needs. School Streets should utilize and pair with Livable Streets and Connection Corridors for major roadways within Greater Eastwood. This is an opportunity to coordinate with schools. Primary School Streets identified in Figure 22 and below:

a. McKinney Street between Milby and Lockwood
b. Eastwood Street between Harrisburg and Leeland
c. Telephone Road between Polk and McKinney
d. Dumble Street between Fourcade and Walker
e. Leeland Street Between Dumble and Collier
f. Gustav Street Between Polk and Pease
g. Dismuke Street between Lawndale and I-45 Frontage Road
h. Villa De Matel Road between Brookside and Lawndale
i. Brookside Drive between Villa De Matel and Fair Oaks
j. Fair Oaks Road between Brookside and Villa De Matel

Designating School Streets in the Greater Eastwood area is important to prioritize public infrastructure improvements around the important educational hubs that provide vibrancy to the larger community. Supporting School Streets, Safe Routes to School programs should be encouraged at the local school level with support and coordination with other area agencies. Tools supporting Safe Routes to Schools is included on the following pages.

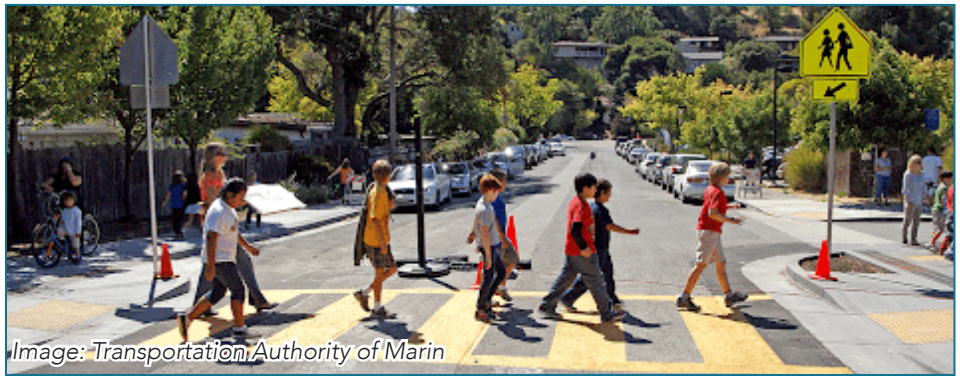


Image: Transportation Authority of Marin

Painted bump outs at a trail crossing to school facility

3.2 Data Collection Program

To prioritize safe access to and from schools, an annual data collection effort representing how kids get to and from school could be collected each school year to help illustrate trends of walking, biking, bus, METRO transit, car riding, or driving over time. This data collection could be encouraged at the school level, once per school year per school, and be sponsored by or coordinated with the East End District. The East End District could use this data to support needs for infrastructure improvements that facilitate mobility access to the education hubs in the District. The annual survey could be as simple as asking families to respond to how the students usually get to/from school (what mode) and how often they may take another mode, including conditions for their choices. This could help illustrate a percentage of kids who are able to walk, bike, or access transit to the schools.

Additionally, the District could identify one or two days in a year to organize volunteers, and potentially students, at key locations (by Eastwood Park, Tlaquepaque Market, etc.) to count the number of people walking and biking in a given time frame. Having this sort of baseline data for community destinations in conjunction with schools provides a more robust understanding of the demand and needs of the community. Coordination with the Houston-Galveston Area Council on the use of pedestrian and bicycle counters along trails could also provide valuable data that spans a longer period of time and can help identify usage trends.

3.3 Walk Assessment & Encouragement Program

Assessment

Understanding the existing conditions can inform decision making by the District. A preliminary assessment (Fact Book Figure A.8) was conducted along key corridors and around schools. While this assessment has been a useful input into this plan, a more detailed assessment can help the District as it plans for future projects focused on walkability.

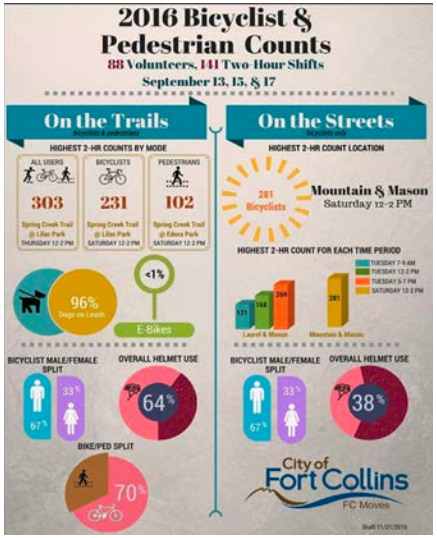
A detailed understanding of the existing infrastructure will allow the District to "right-size" projects. Understanding the existing conditions, while also updating regularly, will also allow for a detailed infrastructure asset management tool for the District. This data set could be used with other data to showcase a variety of factors that are critical to building successful grant applications and finding creative funding sources to continue the District's mission of becoming the most walkable community in Houston.

It is recommended that the District develop a robust data set of existing walking infrastructure that can be utilized to define and prioritize capital projects in the future. This program is developed to be a tool for assessment management, used in defining future projects, and as a method for public engagement.

Data Collection Best Practices:

Lantrip Elementary School and Eastwood Academy have collected information for how students get to and from school in the past. This data (especially if consistently collected over time) can be useful to include as a part of grant applications and funding considerations by implementing entities, supporting numbers and people who do walk and bike to school.

Fort Collins Annual Assessment Program: The City of Fort Collins, Colorado uses volunteers on particular days of the year to conduct a thorough count of bicycle and pedestrian use annually. They report the data annually to provide metrics and an understanding of use over time and the impact of projects. (see below image)



Encouragement

School and community walking maps (could be online, printed, or even posted maps) can be a great resource that encourages people to walk in their neighborhoods. Walking maps can focus on access to schools, or even between schools and neighborhoods to other destinations. They can be an opportunity to showcase local schools, businesses, community destinations, historic places, transit stops, parks, and more. Walking maps should identify preferred routes and typical walk times between destinations or for particular distances. Safety information and important phone numbers can be included with the maps to help ensure safety for residents and visitors. These maps could be used in conjunction with walk assessments and other Safe Routes to Schools programs, like Walking School Buses, to encourage students and families to walk to school instead of driving. (See example, below, frrom the City of Tigard, Oregon's Safe Routes to Schools Program)

Incorporating Schools and Students

A Sidewalk Working with students from area school provides a unique opportunity to both work with students to collect and maintain data for the program but to also enhance the program by working with students to capture their experiences and understand the immediate needs and wants of the community. Working closely with area schools also provides an opportunity to build on existing STEM programming or create a STEM-focused curriculum based on real-world applications of design and engineering. Utilizing students in creating walking maps can also be a fun and creative way for students to participate in community building while ensuring their, and their family's, perspectives on safety and navigating the community are represented. A Walkability Assessment Program Guide has been developed and is included in Appendix B for reference. The guide includes a full methodology that can be used to create and execute the program.

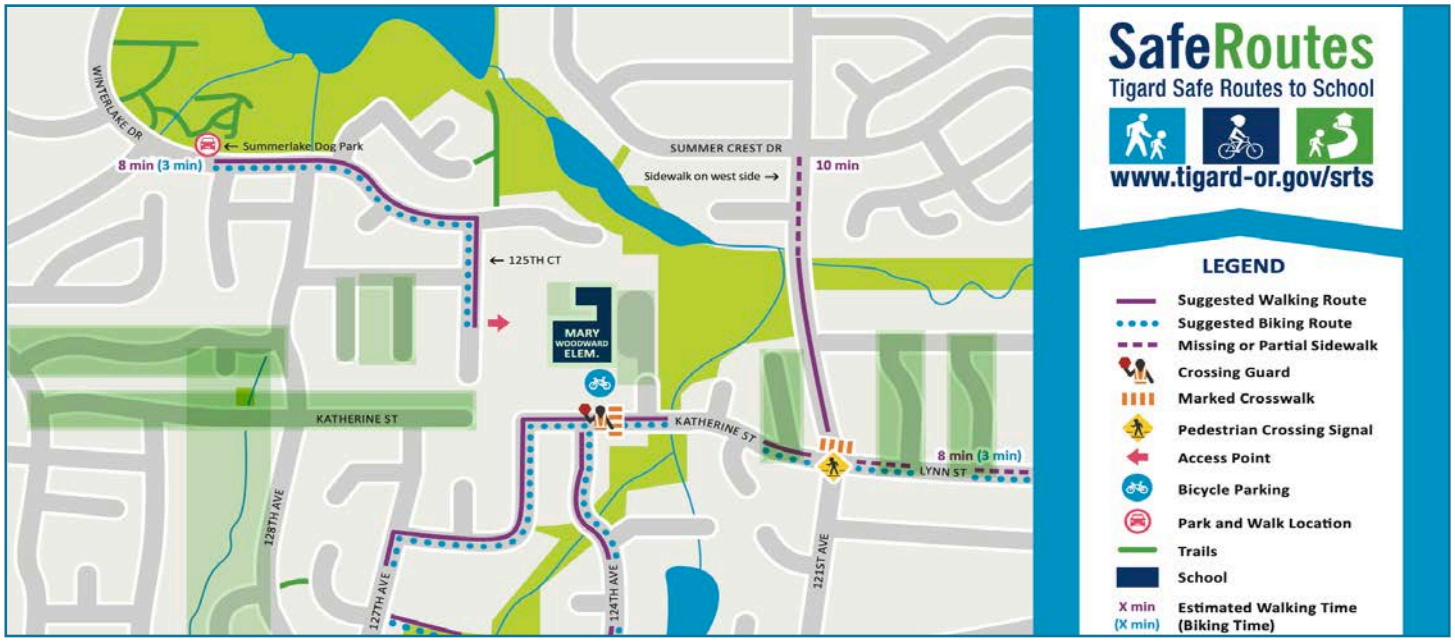


Image: City of Tigard, Oregon
Safe Routes to Schools Walking Map

3.4 Walk and Wheel Skills Hub

A Walk and Wheel Skills Hub is a biking and walking safety course for educational activities or programs related to biking skills and roadway safety for people of all ages and abilities. This type of facility can be a valuable component of community education and improving safety for vulnerable road users by focusing on helping people learn to ride a bike and become familiar with how to ride on and cross roadways. With many schools and students in Greater Eastwood, this type of project and programming can help increase the number of kids who walk and bike to school and other community destinations safely. Incorporating specific components, such as signage and crossings, provides skills and confidence for people learning how to walk safely to schools, parks, and other places.

These facilities can be small to large scale and implemented with minimal investment. It is recommended to work with community organizations like BikeHouston and local schools to identify a Walk and Wheels Skills Hub location and create the facility. Volunteers in the schools and community organizations and businesses can help with the development of the facility. It should feature various infrastructure types to practice safe walking and biking, a repair stand, a BCycle station, and learn-to-ride programs. Additionally, Learn-to-ride programs that provide children with a bicycle and helmet upon completion of the course could be incorporated to further access to biking in the community.

Walk and Wheel Skills Hub in Fort Collins, Colorado

The City of Fort Collins, Colorado is a best practice highlighted implemented a successful Walk and Wheel Skills Hub in an overflow church parking lot that the church has leased to the City. The space for the Skills Hub is approximately 1/2 acre in size and has both adjacent parking for people to drive to the facility and direct trail access.

The facility uses examples of familiar street markings, including bike lanes, crosswalks, a railroad crossing and a roundabout. Signs posted along the course describe the features and how a pedestrian or cyclist should properly navigate them. The facility also has an outdoor class area for monthly drop-in sessions with an instructor available to teach road safety skills for walking and biking, show people how to use the Skills Hub, and answer questions. Additionally, there is a repair stand and bike share station at the Skills Hub.

Infrastructure Considerations Supporting Education Hubs:

- *Sidewalk improvements: replace dilapidated sidewalks, create new sidewalks where none exist, and enhance existing sidewalks.*
- *Curb ramp improvements to allow for ADA accessibility and update out of date design.*
- *Lighting to provide safety and security along major school access routes for people walking and biking.*
- *Safe crossings that may include new crosswalks; raised medians; high visibility paint on crosswalks; HAWK signals, RRFB (rectangular rapid flash beacon) signals; pedestrian bulb-outs at intersections; and other considerations.*
- *Signage improvements that provide wayfinding and notification of pedestrians or cyclists that may be within the corridors.*

3.5 Create School Access Plans

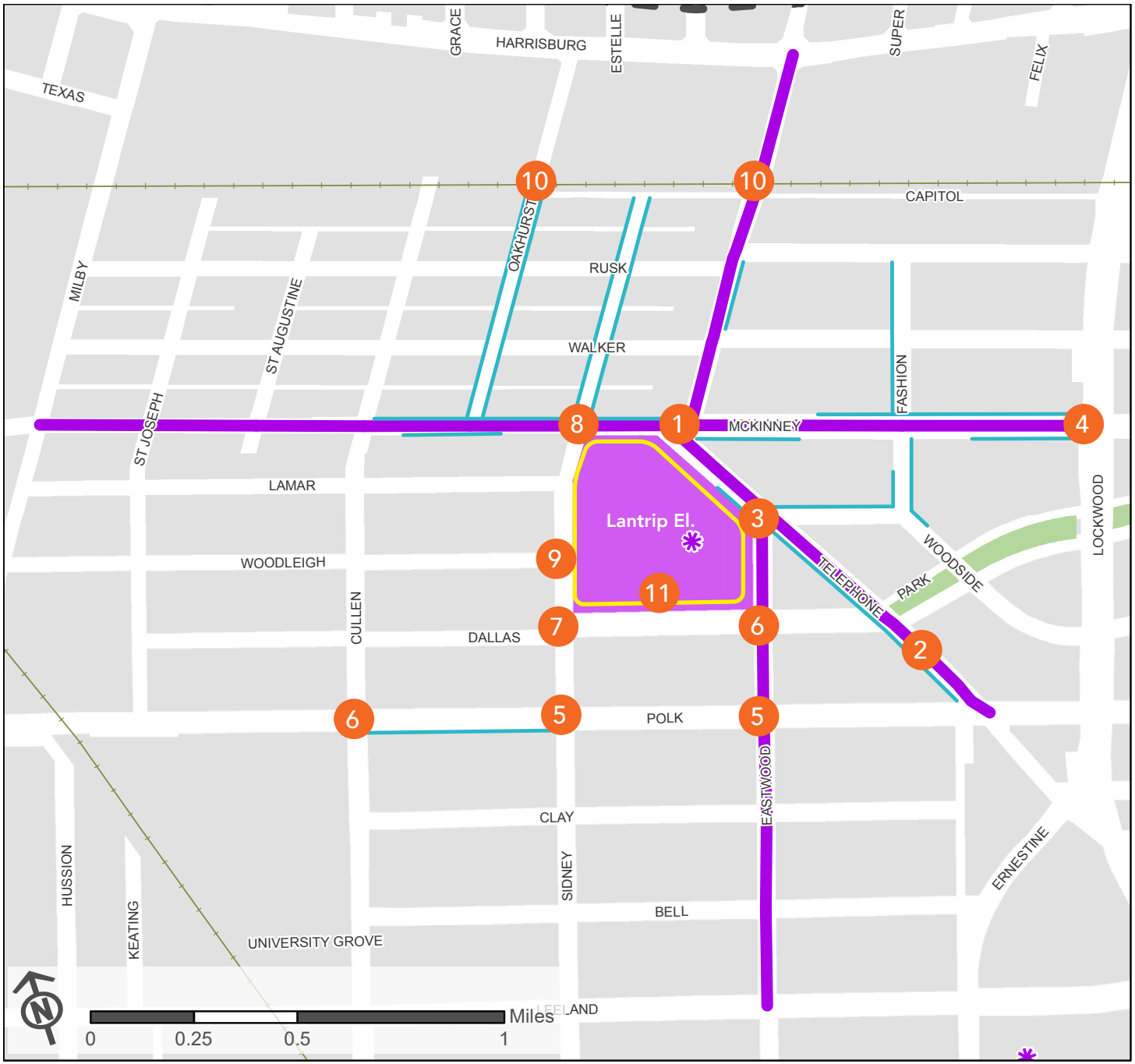
In conjunction with, or independent of a SRTS program, a School Access Plan (SAP) is recommended for the Greater Eastwood study area that focuses on one school area, that could set a standard for SAPs to be done at all the area schools. Through a school's SRTS program, a SAP could be one of the outcomes to further assess and prioritize needs supporting safe places to walk and bike adjacent to the schools. A SAP should include both infrastructure improvements and programs that can be implemented by the school(s) and in partnership with the community and other organizations. A SAP has been developed as a part of this plan for Lantrip Elementary. The SAP is detailed below and on page 65. The SAP can be used as a best practice that can be replicated for other school areas.

A SAP includes five steps: 1) data collection; 2) create a list of desired recommendations; 3) identify potential partners; 4) prioritize projects and create an action plan; and 5) champion for implementation (fundraising, grant writing, capacity building). The hopeful outcome of a SAP is to have a clear path forward to go after funding to implement the needs and desires of school/neighborhood families effectively. The following projects are shown in Figure 23 for reference and are key improvements for access to Lantrip Elementary. These recommendations can help serve as a guide for developing additional SAPs.

1. Ensure all curb ramps are ADA accessible, enhance street crossings to ensure high visibility, and construct a raised crosswalk on the west side of the intersection along Eastwood.
2. Redesign Telephone road to be a School Street with enhanced pedestrian and bicycle access on the western side of the corridor to maximize safety improvements while reducing potential impacts on street trees and residential property.
3. Ensure all curb ramps are ADA accessible, enhance street crossings to ensure high visibility, and construct a raised crosswalk across Telephone Road on the northern part of the intersection.
4. Construct ADA accessible curb ramps and include high visibility crosswalks with pedestrian refuges for crossing Lockwood Drive.
5. Construct ADA accessible curb ramps and enhance crosswalk visibility across Polk Street.
6. Construct ADA accessible curb ramps at all points of the intersection.
7. Ensure all curb ramps are ADA accessible, enhance street crossings to ensure high visibility, and construct a raised crosswalk across Sidney Street.
8. Construct ADA accessible curb ramps at all points of the intersection.
9. Construct ADA accessible curb ramps on the south side of Woodleigh across Sidney Street.
10. Construct an ADA accessible sidewalk across the railroad tracks.
11. Refinish and stripe the walking trail around the school for student and community access.

Key sidewalk improvements are identified by the blue lines in Figure 23. It is recommended to upgrade to a minimum of 5' wide, meeting ADA accessibility guidelines for these segments. All sidewalks and curb ramps near schools should be upgraded where possible to meet ADA requirements.

Figure 23 - Lantrip Elementary School Access Plan Map



4 A Connected & Walkable Community

Greater Eastwood has the potential to be one of the most walkable, transit, and bike-friendly neighborhoods in Houston. With a connected street grid, frequent transit services, and opportunities to improve places for people to walk and bike, Greater Eastwood will become a place with abundant access. Strong, interconnected networks encourage walking, biking, and transit use, allowing for safer, more seamless connections for people to access schools, jobs, parks, dining, and more in ways that are economical and healthy. Supporting the Greater Eastwood networks with safe streets provides mobility choices for people of all ages, abilities, and incomes.

Related Objectives

1 2 3 4

Recommendation Type:

Project

Program

Summary of Recommendations:

Focus on Walkability

Walkability Improvement Program

Walkability is at the core of any great community that provides access to destinations, goods, and services for people of all ages and abilities. Walking is a healthy form of transportation that has proven economic benefits as well. Both a community's physical and economic health can be bolstered by a well connected, safe, sidewalk network. Improving walkability in Greater Eastwood can be accomplished by first implementing a Walkability Improvement Program to improve sidewalk and curb ramp conditions. This program will provide the basis of many projects already identified in this report, but will also facilitate better access to transit, safe crossings, and overall safe streets.

Enhance Transit Stops

Transit users are also pedestrians. While ensuring access to transit stops is an important component of walkability, ensuring that those transit stops are comfortable for people while they wait for the bus is also important. In order to encourage more use of the transit system, improving and enhancing bus stops and facilities is essential. The perception of safety is also a crucial consideration when improving bus stops and access to transit.

Priority Spot Improvements

Certain locations in the study area have the potential to spark significant and rapid improvements in area mobility in exchange for only moderate investments. Because these locations are points, they are not captured by the Corridor Recommendations; instead, they are described in this section as Spot Improvements.

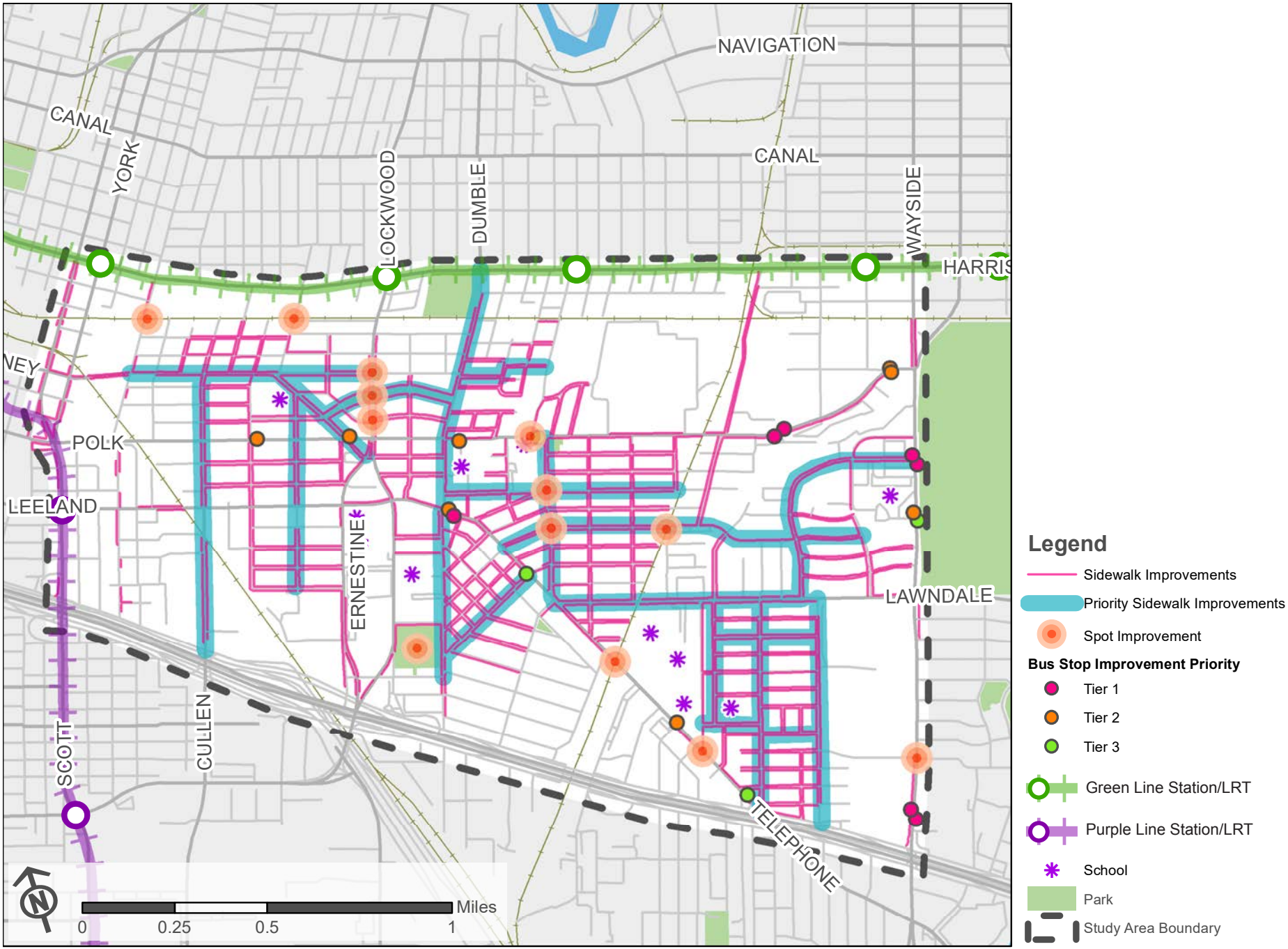
Facilitate Safe Streets

Safe Streets utilize a variety of tools to create streets that focus on safety for all users and reduce speeding. Safe streets harness and build on existing methods used by the City of Houston and can be applied in neighborhood areas throughout the study area.

Build a Bike Network

A great bicycle network is based on using a variety of facility types that meet the community's needs and the surrounding context. It is recommended to complete a District-wide bicycle plan to ensure proper connectivity within and beyond Greater Eastwood. This recommendation also highlights prioritized bicycle corridors to focus on for implementation. Additionally, it is encouraged to increase access to the bicycle network with bike share stations.

Figure 24 Walkability Improvement Map



4.1 Create a Walkability Improvement Program

A well-connected network of quality sidewalks that connect people to destinations within the community to improve safety and provide mobility options for the community. The East End District has received multiple grants and leveraged resources to improve miles of sidewalks in the district. Most of these improvements have been northwest of the study area. Many of these improvements have facilitated access to transit and community facilities. This recommendation seeks to build on previous work and provide a basis for where improvements are needed. There is a significant need for sidewalk improvements throughout Greater Eastwood. Figure 24 shows recommended sidewalk improvements along key corridors and in neighborhoods surrounding schools with prioritized corridors for walkability improvements.

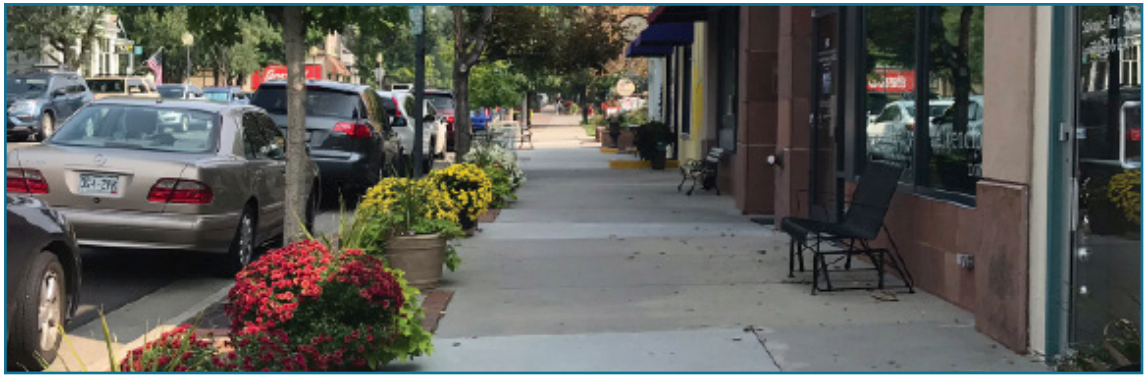
Beyond projects identified in broader Livable Street and Connection Corridor recommendations, it is recommended that sidewalk improvements be expanded into neighborhoods with connections to key corridors, schools, transit, and parks. Creating a grid to facilitate access in all directions is an important consideration and shown in the highlighted priority sidewalks in Figure 24. Over time, good-quality sidewalks should be expanded beyond the key corridors and initial grid into neighborhoods with the greatest needs and gaps.

Intersections are key locations for safety concerns for people walking, biking, and driving. Intersections that are clearly visible and communicate appropriate behavior for each mode can ensure that corridors are safe and accessible for people of all ages and abilities. There are four key elements to creating safer and more accessible intersections that at their core relate to visibility, access, and clear identification of usage: lighting, crosswalks, pedestrian crossing signals, and reduced crossing distance. See the Toolbox section of this plan for details on sidewalk and intersection improvement best practices.

Additionally, midblock crosswalks provide access to places that people want to go to that are not at existing intersections. These pedestrian crossings, which commonly occur at schools, parks, museums, and other destinations, can be difficult to access, creating unsafe or unpredictable situations for both pedestrians and vehicles. Potential solutions include visible crosswalks, median refuge islands, raised crosswalks, and pedestrian crossing signals.

It is recommended that the District implement an annual Walkability Improvement Program that facilitates the implementation of walkability improvements. While the cost of improving sidewalks is significant, breaking down the improvements into an annual program can help make continual progress in developing a walkable community.

Top: Improved sidewalk in East End
Bottom left: Comfortable sidewalk and custom bus stop in East End (Photo: Map Data: 2020 Google)
Bottom right: Wide pedestrian zone along commercial corridor



4.2 Enhance Transit Access and Amenities

Traveling to a bus stop and waiting for the bus are significant parts of nearly every transit trip. Bus stops that have good sidewalk access from the surrounding neighborhoods and businesses are more likely to be utilized as many people will not walk if there is not safe and comfortable access, particularly those who are older or have physical limitations. Building upon safe sidewalks, bus stops that provide comfortable amenities can enhance the transit experience, decrease perceived wait times, and contribute to increased transit usage. It is recommended that the District coordinate with METRO on, and where possible fund, improvements to bus stop accessibility and amenities within Greater Eastwood.

Bus stop amenities are elements that can improve comfort and safety and are customizable, which can further enhance the Greater Eastwood community through art and design features. The current level of amenities provided at bus stops varies greatly throughout the study area. While not all bus stops need to provide the same level of amenities, as ridership differs among stops, it is important that bus stop accommodations and access are appropriately provided based on community usage, need, and the surrounding context.

Figures 24 and 25 identify bus stop improvement locations and their associated priority tier. Tier 1 locations have the highest daily boardings and alightings, tier 2 has fewer daily boardings (between 15 and 25 on average) so benches and trash cans may be best applied here if a shelter is not feasible, and tier 3 are locations where benches or shelters may be most applicable to balance needs of access and comfort with lower daily use. Transit stops should utilize solar-powered lighting at shelters where possible and ensure other street or pedestrian lighting in the surrounding intersection and approaches encompass visibility for the bus stop as well. Pedestrian crossings at intersections near bus stops should also be improved to ensure that passengers can safely cross the surrounding corridors when getting to or leaving the bus.

This is a creative bus stop example from within the East End. Bus stops like this contribute to the community feel, but many were not created with ADA access. It is important to ensure full ADA accessibility from the sidewalk to the seating area and the bus loading area when custom bus stops are designed.

This is a standard METRO bus stop that has an artistic wrap to enhance the connection to the community.

Figure 25 Bus Stop Improvement Locations

Bus Stop Location	Stop #	Tier
S WAYSIDE DR @ GULF FREEWAY	813	1
WAYSIDE DR @ JAMAIL DR	819	1
TELEPHONE RD @ DUMBLE ST	9267	1
POLK ST @ HUGHES ST	9461	1
POLK ST @ HUGHES ST	9485	1
YORK ST @ HARRISBURG BLVD	9754	1
S WAYSIDE DR @ JAMAIL DR	9818	1
S WAYSIDE DR @ GULF FREEWAY	9823	1
POLK ST @ TELEPHONE RD	1170	2
POLK ST @ SIDNEY ST	1172	2

Bus Stop Location	Stop #	Tier
TELEPHONE RD @ DUMBLE ST	9265	2
TELEPHONE RD @ JEAN ST	9298	2
POLK ST @ WAYSIDE DR	9459	2
POLK ST @ DUMBLE ST	9475	2
POLK ST @ SUPPLY ROW ST	9488	2
WAYSIDE DR @ JAMAIL DR	9819	2
WAYSIDE DR @ LAWNDALE ST	818	3
TELEPHONE RD @ FOURCADE	9269	3
TELEPHONE RD @ DORBRANDT	9296	3
POLK ST @ BAIRD ST	9477	3

4.3 Corridor Spot Improvements

Certain locations in the study area have the potential to spark significant improvements in area mobility in exchange for only moderate and highly localized investments. Because these locations are points, they are not captured by the Corridor Recommendations; instead, they are described in this section as Spot Improvements. These locations were selected based on their capacity to improve safety and accessibility quickly. Locations that can enhance access to parks, schools, and transit were given high priority in selection. See Figures 24 and 26 for more detail.

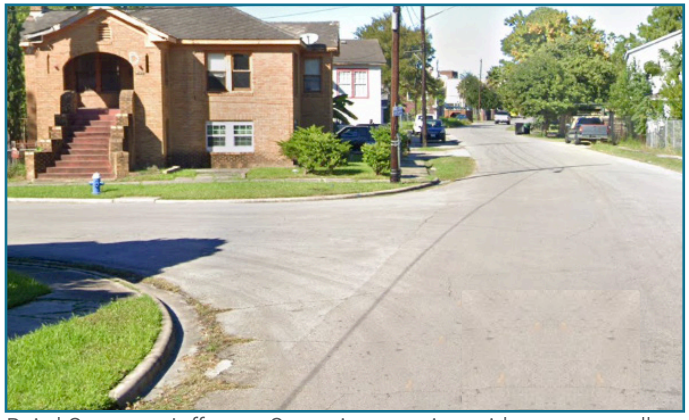
The top consideration in the selection of these locations was the potential impact on study area mobility and access. Locations where improvements would enhance access to parks, schools, and transit were given high priority in selection. Many of the locations selected are crossings of major barriers in the study area, where improvements have the potential to improve permeability across these barriers and thus improve neighborhood interconnectivity. These barrier permeability improvements typically occur at intersections or midblock crossings of major roadways.

Figure 26 Spot Improvement Locations

Location	Improvement Description
Polk St @ Lockwood Dr	Enhance for high quality bus transfers: crosswalks, curb ramps, sidewalks, bus stop amenities.
Park Dr @ Lockwood Dr	Rebuild median refuges to ramp up and down to avoid drainage problems and enhance connectivity along Park Drive and to Dumble/Eastwood Pcark from the west.
McKinney St @ Lockwood Dr	Enhance for bus access and pedestrian crossings: crosswalks, pedestrian refuge, curb ramps, sidewalks.
Telephone Rd @ Railroad Crossing	Build sidewalks to connect neighborhood to Tellepsen St across freight rail to take advantage of bridge over 45 and connect eastern part of neighborhood to UH energy campus and Brays Bayou.
Diez Park Entrances	Improve entrances on Diez, Dumble, and Munger Streets to better serve as neighborhood park when baseball fields are not in use. Access is also improved to Eastwood TC.
Eskridge St @ Wayside Dr	Crossing improvements to facilitate study area connectivity to the east and to Brays Bayou.
Des Jardines St @ Telephone Rd	Crossing improvements to connect neighborhood access across Telephone and to schools.
Altic St @ Polk St	Enhance Polk crossing to ease foot access between Navarro MS and neighborhood to north, as well as Altic stop of green line.
Milby St @ Railroad Crossing	Improve multimodal accessibility across railroad tracks.
Eastwood St @ Railroad Crossing	Improve multimodal accessibility across railroad tracks.
Baird St @ Leeland St	Provide visible crosswalks , construct new curb ramp at southwest corner of the intersection to be ADA accessible.
Baird St @ Jefferson St	Construct new ADA curb ramps at intersection, provide sidewalk extension on southwest corner to extend the pedestrian zone and increase visibility, provide crosswalks in all directions.
Jefferson St @ Railroad Tracks	Provide pedestrian accessibility across railroad tracks.

These locations can be quickly and inexpensively improved as a standalone project or as part of a corridor project such as those recommended in Section 1, or a routine city roadway resurfacing. Other barrier permeability improvements have been identified at railroad crossings. Railroads pose a major barrier to mobility in the study area, and any improvement in crossing opportunities can have dramatic impacts; however, improving these crossings poses major coordination challenges with freight rail operators.

Spot Improvement locations were also selected based on the potential speed of implementation. Implementation speed can be predicted based on the number of coordinating parties required to implement the project, as well as the scale and variety of infrastructural impacts. One major indicator that a project has the potential for rapid implementation is the absence of drainage impacts. Many improvements can be designed such that they have little to no impact on the existing street drainage system, thus improving safety without requiring reconstruction of the entire roadway. Projects with drainage impacts requiring even partial roadway reconstructions rapidly escalate in cost and time requirements.



Baird Street at Jefferson Street intersection with no crosswalk markings and no ADA accessible curb ramps
Photo: Map Data: 2019 Google

4.4 Develop Priority Bikeways

This project utilized the City of Houston's Bicycle Master Plan as the basis for planned bikeway improvements. The City's plan provides significant improvements for safe connections and options for people to bike. However, to appropriately identify the specific facilities and connections within and connecting to the study area, a separate bike plan for the District is important. An official East End Bike Plan is in the process of being developed and began in September 2020. This bike plan should coordinate with the recommended needs for bikeways identified in this plan and the proposed street types. The District's bike plan should also provide clear recommendations for bikeway type and design as well as connections to transit, schools, parks, and other community destinations.

The study area is surrounded by some of the most celebrated bikeways in Houston, including Brays Bayou Greenway, Columbia Tap Rail Trail, and Harrisburg Trail, but access to these amenities is challenging, and there are few high-quality bikeways within the study area itself. The bikeway network envisioned in this section is intended to interconnect destinations within the study area, as well as enhance connectivity with the greater regional bikeway network. Bikeway facility types were selected based on the corridor's potential to meet NACTO's "All Ages and Abilities" design standards. In addition to the overall vision network, a subset of the network has been identified for priority implementation. The priority network in Figure 27 provides the opportunity to establish the bones of a study area bikeway network which can then be built upon in the future.

4.5 Expand Houston BCycle Stations

Houston BCycle is the City's system of short-term rental bicycles and stations throughout that connects riders to destinations and recreation. In recent years, Houston BCycle has seen record growth in ridership. Much of this ridership growth has coincided with system expansions into areas with a high density of bike rental stations. Coordinating with Houston BCycle to expand the bike share network in the study area offers the opportunity to take advantage of this ridership growth and further enhance mobility and recreational opportunities. Currently there are two BCycle stations in the study area: at Eastwood Park and Gateway on Cullen. Expanding the bike share network in tandem with the roll out of the priority bikeway network can boost the impact and accessibility of each by creating a unified, legible system of bikeways and bike share stations.

It is recommended that the East End District coordinate with Houston BCylce to promote station locations within the study area and educate the community and businesses on the benefits of bike share. The District could set up a cost-sharing program or promotion program for businesses that want to pay for a station on their property.

Figure 27 shows four tiers of new BCycle station location recommendations. Tier 1, Key Connections, focuses on programmed bikeways, major transit nodes, and areas with high commercial activity. Tier 2, Additional Connections, expands to minor transit nodes and greenspace access. Tier 3, Network Densification, focuses on filling in gaps between stations, enhancing the usefulness of the network established by Tiers 1 and 2. Lastly, Tier 4, Geographic Expansion, attempts to expand the network established by the previous tiers to ensure access to the entire study area.

4.6 Provide Bike Parking at Destinations

Convenient bike parking is critical to support an increase in bike usage. Providing quality parking to people working at or visiting businesses and other destinations should be standard throughout Greater Eastwood. Bike racks provide short-term parking at a low cost. The City of Houston has developed a bike rack program through it's Go Healthy Houston initiative. Bike racks can be donated to local management districts, businesses, commercial properties, civic associations, and community-based organizations. Racks can be placed on public or private right-of-way. The placement of bike racks is key to their use. It is important to place racks in locations where they are visible to ensure safety and provide easy access to building entrances.

Photos left to right:
Houston BCycle station at Gateway on Cullen (Photo: Doogie Roux); Branded Cooper Young bike corral and bike lane, Memphis, TN (Photo: Bike/Ped Memphis); Custom bike rack in the East End (Photo: Houston Metal Works); Custom bike racks in Montrose (Photo: Montrose Management District)

Figure 27 Priority Bikeway Improvements

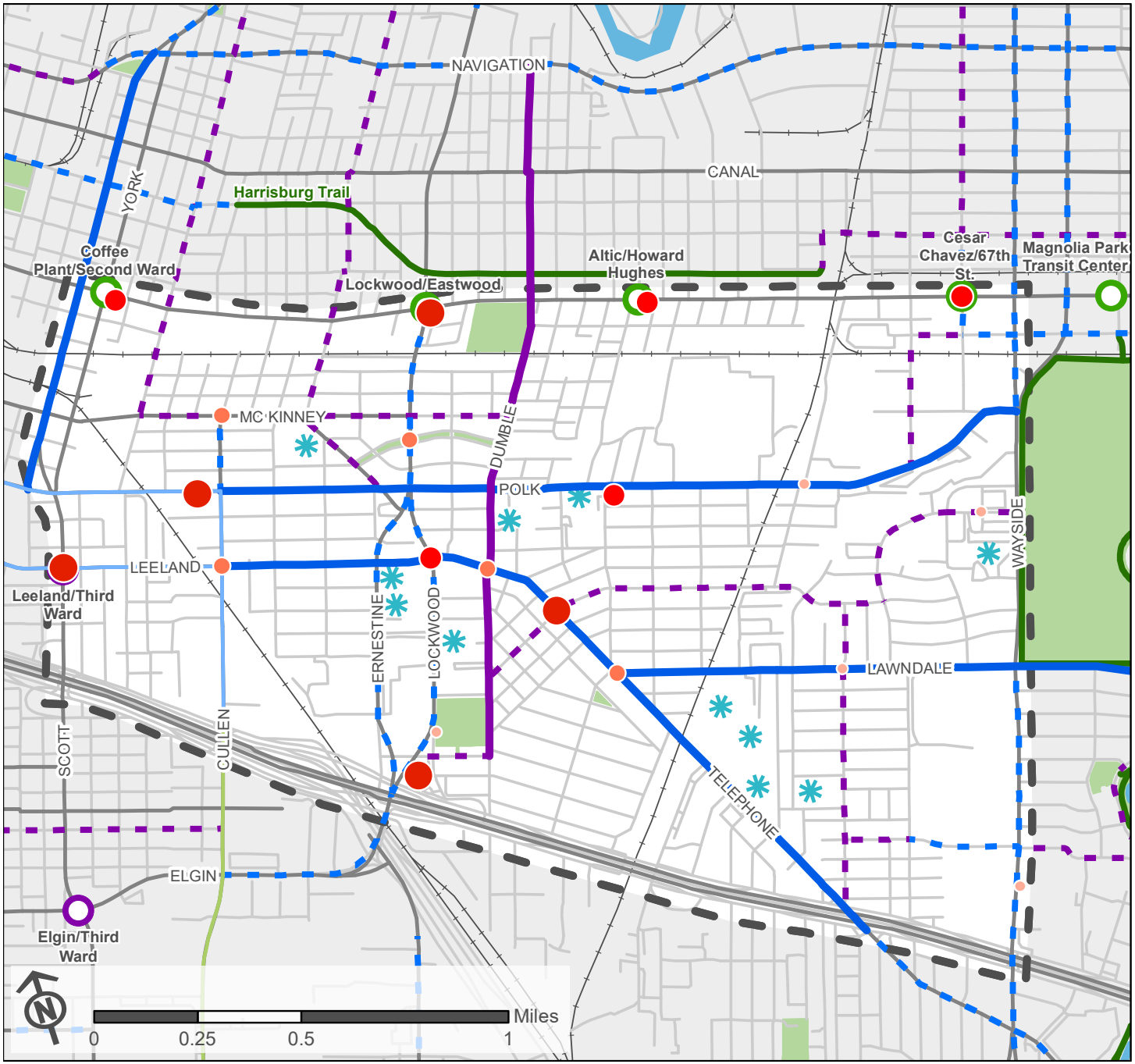


Figure 27 shows five corridors that are recommended as priority bikeways and future bike share locations. These corridors provide important connectivity to parks, schools, and other community destinations. These priority bikeways are also associated with other corridor enhancements. Details on potential design and components of the bikeways can be found in Recommendation 1 or in the Toolbox. The priority corridors are identified below.

- Lawndale St.: On-street protected bikeway
- Telephone Rd.: On-street protected bikeway, also on-street bike lane
- Polk St.: On-street protected bikeway
- Sampson St.: On-street protected bikeway
- Dumble St.: Neighborhood bikeway

Legend

- On Street - Priority
- Shared - Priority
- On Street - Designed
- Off Street - Designed
- On Street - Future
- Shared - Future
- BCycle Stations - Tier 1
- BCycle Stations - Tier 2
- BCycle Stations - Tier 3
- BCycle Stations - Tier 4
- Study Area Schools
- Study Area Boundary

5 A Place With A Strong & Vibrant Culture

The Greater Eastwood community is known for its culture and history. Incorporating these elements into new investments in public space and development projects can breathe new life into the community by showcasing the past and embracing it with placemaking and branding. Placemaking enhances the public realm through physical, cultural, and social identifiers that define a place and support its continued evolution. Through signage, gateways, public art, furnishings, and a unique material language Greater Eastwood can showcase community culture and build on it for the future.

Related Objectives

4 5 6

Recommendation Type:

Project

Program

Summary of Recommendations:

Building on Culture and Placemaking

The following placemaking recommendations establish a cultural overlay upon the other recommendations in this study. Street improvements, like those recommended for Telephone Road, and the creation of social spaces as described in Recommendation 2 are the foundation for creating healthy, culturally vibrant places. The recommendations presented here focus on the layering of the following components in various locations of Greater Eastwood to bolster and highlight the existing culture and sense of place. Figures 28 and 29 provide information on locations and application of the components in these recommendations.

Main Street Placemaking: Using an overlay to combine key placemaking and cultural components and create a vibrant Main Street feel in the community.

Signage: Branded signage and wayfinding connects the community to the larger East End area while also identifying the unique character and sense of place in Greater Eastwood.

Public Art: Public art is a great way to create highly visible and interactive landmarks of local history and culture. Public art can be developed at a variety of scales and locations, like walls of buildings, utility boxes, parking lots, sculptures, and more.

Street Furnishings: Street furnishings have both functional and cultural benefits. While supporting wayfinding, accessibility, leisure, and socializing, these elements also infuse meaning into the built environment through their aesthetic qualities.

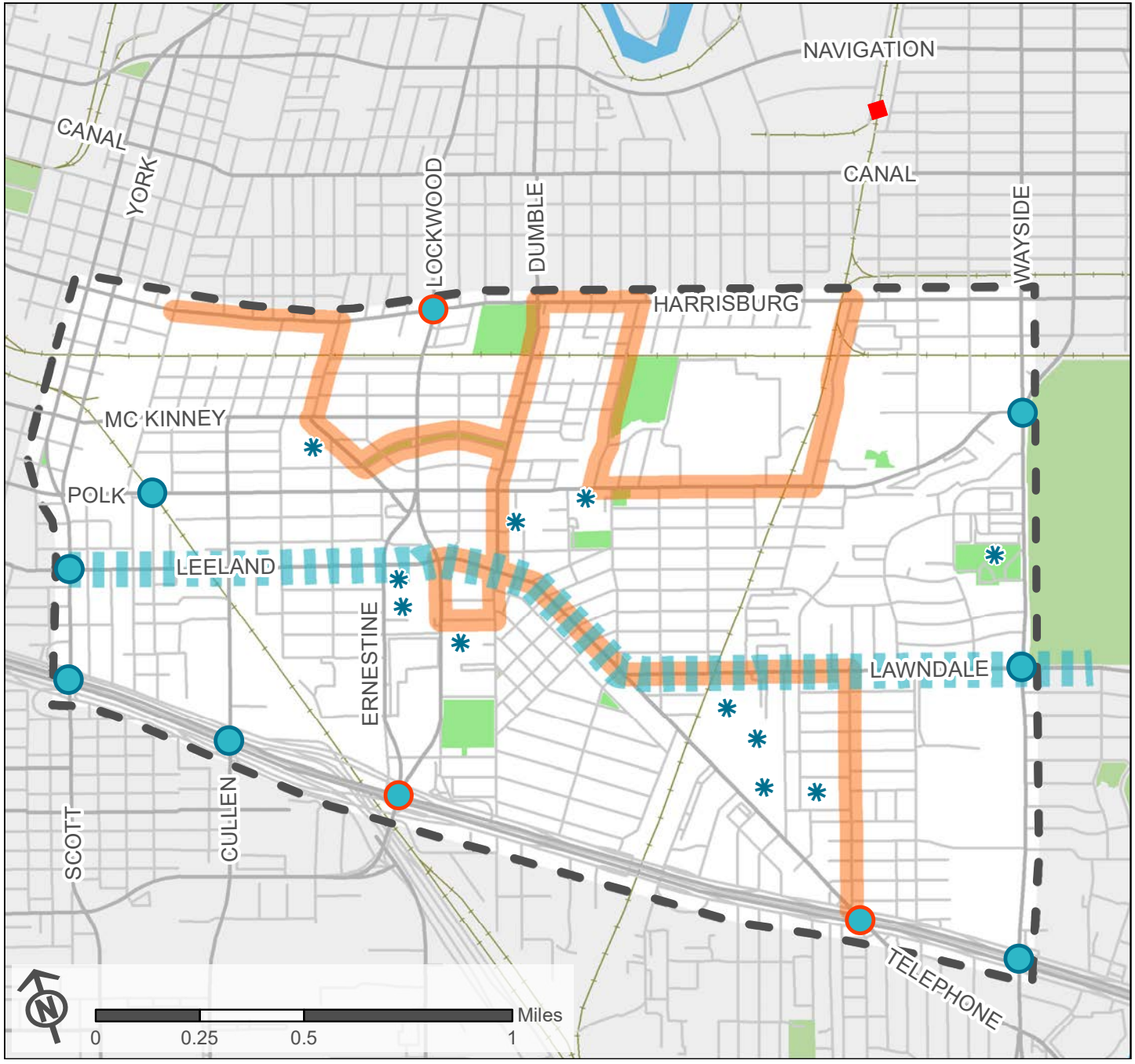
Materials and Finishings: Materials and finishings incorporate colors and textures into placemaking components. They help communicate the history or unique attributes of a community and create a cohesive feel.

Community Gateways: Gateways provide a visual cue that a person is entering a place that has unique or different community characteristics. By using gateways, the identification of the Greater Eastwood area becomes more defined and add value to neighborhoods, businesses, and the community overall.

Cultural Corridors: Cultural Corridors are opportunities to expand on other recommendations in this plan and incorporate components identified here to bring out the history and unique culture of the community.

Top: Placemaking with banners at Guthrie Green (Photo: Jonnu Singleton)
Bottom: Wayfinding kiosk at San Jacinto Plaza (Photo: David Lloyd)

Figure 28 Placemaking Overview Map



Beyond the placemaking recommendations identified in Figure 28, Figure 29 on the following page describes what placemaking elements should be applied along and within other recommendations in this study.

Legend

Gateway Class

- Primary
- Secondary
- School
- Main Street Placemaking
- Cultural Corridor
- Parks
- Study Area Boundary

5.1 Main Street Placemaking

The Main Street Placemaking recommendation consists of an overlay that provides heightened placemaking investment along the Livable Street Corridor through the center of Greater Eastwood. The purpose of this overlay is to further define the central commercial spines of Lawndale, Telephone, and Leeland as the cultural, commercial, and social hub of the district. Figure 30 illustrates this recommendation along Telephone Road.

Figure 29 Recommended Placemaking elements by Corridor and Node Type

Placemaking Site	Furnishings	Signage	Materials	Lighting	Public Art & Murals
Living Streets	Benches, Trash receptacles, Bus shelters	EED wayfinding signage, Community Kiosks, Eastwood branded signage; light pole banners, gateway elements	Special paving, lighting, furnishings, apply materials from suite of textures described in Figure B.28	Eastwood pedestrian lighting, special street lighting where recommended on map	Along expanded pedestrian streetscapes, in paving, on commercial buildings, at gateways
Connection Corridor	Benches	EED wayfinding signage	Standard streetscape with Eastwood specific benches	Eastwood pedestrian lighting, utility street lighting	At indicated gateways and adjacent private buildings
Green Corridor	Benches, LID/Green Infrastructure elements, permeable pavements	Interpretive natural systems signage, green corridor route signage	local/regional materials, minimize concrete/hard surfaces, ample/abundant plantings	Dark sky lighting	At social nodes and intersections with other corridor types
Cultural Corridor	Benches and seating at historical landmarks	Interpretive historical/cultural signage, highlighted sites should be identified by local community members	Material references to historic/cultural contexts	Standard street lighting, accent lighting can be applied to cultural landmarks	contextual art and murals that evoke localized cultural meaning
Transit Node	Benches, shelters, trash receptacles	Wayfinding signage to Eastwood destinations	The entry point for many to the district, should feature relevant, contextual materials	Adequate lighting to ensure safety, decorative lighting to brand Eastwood stops	Integrated with bus stops/ shelters, unique artistic language can create a unique feel
Social Node	Benches, movable seating & tables, trash receptacles, custom furnishings	Plaza/commercial space signage, should be included on EED wayfinding signs	Special pavings, lighting, furnishings, apply the full suite of textures described in Figure B.28	decorative & functional lighting for cultural reference and safety	Integrated with furnishings/structures, murals on commercial buildings, public sculptures
Parks	Benches, movable seating & tables, trash receptacles, custom furnishings, shade structures, amphitheaters	Park name signage, parks should be included on EED wayfinding signs	context/program dependent; Hardscape should apply materials described in Figure B.28	Decorative & functional lighting for cultural reference and safety	Integrated with furnishings, or insert iconic objects, murals on walls & park structures

5.2 Incorporate Placemaking Enhancements

Signage

While the East End District has existing, branded wayfinding signage and furnishings installed in the Greater East End, these elements have yet to be installed within the study area. Wayfinding signage should be installed along key traffic corridors such as Telephone, Lawndale, Wayside, Ernestine, Polk, and Lockwood. Key open spaces, commercial areas, and cultural spaces in Eastwood should be featured on this signage. A detailed signage project similar to the effort completed in 2017 should be undertaken in the study area. The following two types of signage types are recommended for use.

Community Kiosks: Recommended along the Main Street Placemaking overlay, these signage boards create an outdoor message platform for community members to share event fliers, artwork, and for the district to share notices, maps, and marketing. These can be a simple catalyst of cultural & social activity.

Interpretive Signage: Recommended along Green and Cultural Corridors to highlight LID/green infrastructure implementations and places of cultural and/or historical significance. For Cultural Corridors, these points of significance should be determined through a separate community engagement process to ensure that the investment reflects community values.

Public Art

As Fact Book Figure A.41 shows, there are currently only two murals in the study area. To increase the incidence of public art and the legibility of cultural expression. Public art is recommended at social nodes, existing & proposed parks, transit nodes, and along "Livable Street" corridors, such as telephone road. The current East End Houston Cultural District Strategic Plan should be concurrently referenced. Public art can include murals, sculptures, interactive art, painted infrastructure like utility boxes, and more.

Furnishings

Existing Branded furnishings unique to the East End have been installed in the northwestern area of the Greater East End District. The installation of a suite of furnishings unique to Eastwood is recommended to highlight the unique history and character of this segment of the east end. These furnishings, in concert with the existing EED signage, will ensure a balance between integration with the larger district brand and tasteful contrast to highlight the unique qualities of Eastwood. For corridor specifics reference Figure B.26 and to review a sample application, reference Figure 30.

Material Usage

The new application and formal referencing of materials, forms, and finishes encountered in both historic and cultural spaces within the district, such as the former Howard Hughes Campus, Eastwood, and Tlaquepaque Market ensure a unique, contextual, and forward-oriented design approach. This DIY/Industrial aesthetic ties to the entrepreneurial maker brand of the greater east end. Recommended finishes and materials and their sources are shown in Figure 31. The materials highlight natural and built materials within the Greater Eastwood community that reflect the history and culture.

Signage	Public Art	Furnishings
» Community kiosks	» Murals on commercial buildings	» Benches/plaza furnishings
» East End District Placemaking Signage (to match Greater East End)	» Public art in streetscape	» Trash receptacles
	» Special paving patterns, art paving	» Special street & pedestrian lighting
		» Bus shelters
		» Planters & naturalized plantings

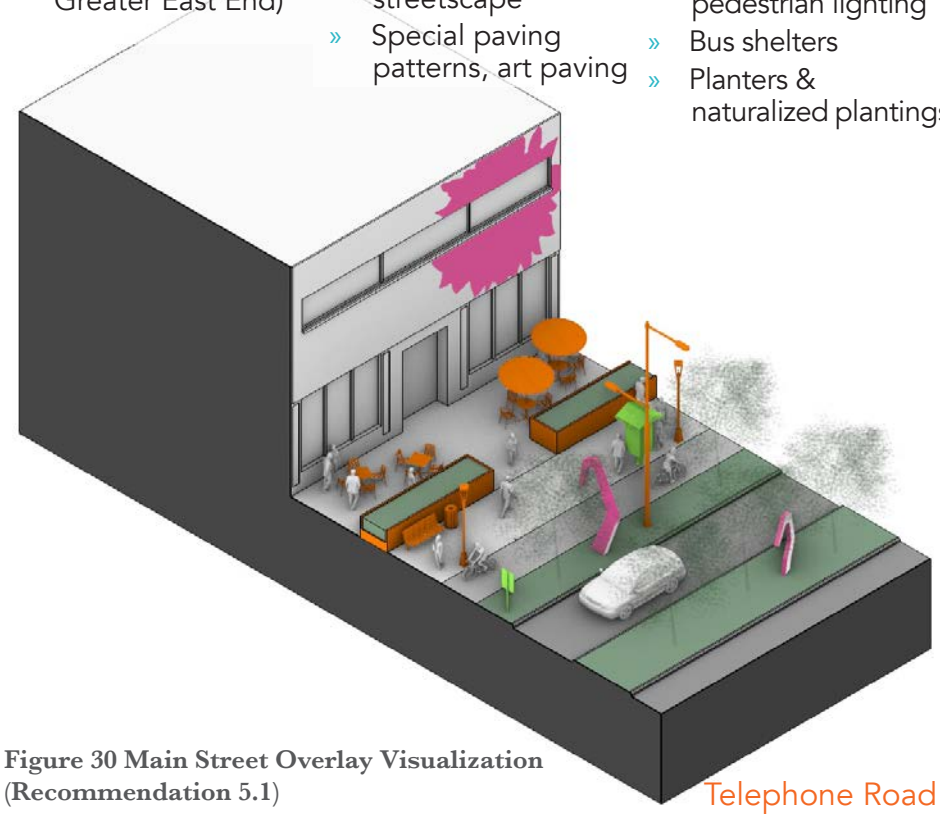


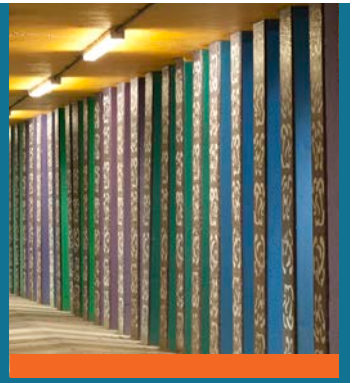
Figure 30 Main Street Overlay Visualization (Recommendation 5.1)

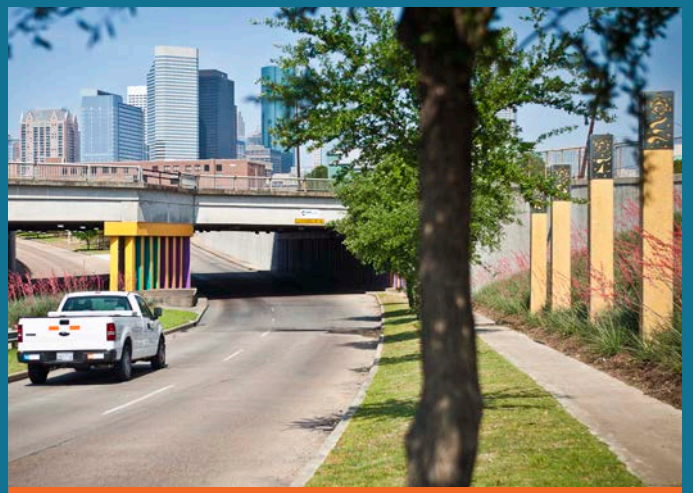
Gateway Lighting Examples

Two applicable examples of gateway projects in Houston are the Greater East End STEP Project and the Buffalo Bayou Promenade overpass lighting. These examples illustrate how lighting and placemaking elements can be applied to transform existing infrastructural crossings from purely functional spaces into interesting moments of passage and meaning.

Greater East End STEP Project

The East End District teamed with TxDOT to provide street enhancements to the East End of Houston. The District requested that the design team focus on entryways to the neighborhood with planting and architectural elements. The project consists of seven sites that received decorative pavement, new lighting, irrigation and planting.





Greater East End STEP Project

Buffalo Bayou Underpass Lighting

The lighting illustrated in the adjacent image is an example of how the addition colorful uplighting to existing infrastructure can create interesting, unique spaces. Treatments as exemplified at buffalo bayou park should be considered for less prominent gateways such as the Polk Street underpass.

Buffalo Bayou Underpass Lighting

5.3 Create Community Gateways

Building on identified opportunities for gateways and crossings in the Fact Book (Figure A.42), Figure 28 identifies recommended locations for gateways, or branded entry points into Greater Eastwood. Underpass lighting, sculptural monuments, and special intersection surface treatments are recommended to highlight passage into Greater Eastwood.

Primary Gateways: As key entry points to the district, these points represent areas with high traffic and/or transit activity and proximity to key corridors and the commercial core of the study area. These points should be designed as the main entry moments to the district and thus should reference the history, and character of the entirety of Greater Eastwood.

Recommended Elements: Sculptural entry monuments, special lighting, surface treatments & finishes, planting, and seating. The Greater East End STEP provides a model for both funding and design, described on page 76.

Secondary Gateways: Secondary gateways similarly feature high traffic and/or transit concentrations, and represent thresholds to key corridors. These gateways are secondary due to reduced proximity to the core of the study area. Secondary corridors should be tastefully enhanced, but at a lower level of investment. Underpass lighting in Buffalo Bayou Park provides an example. These entry points should reference both the character of the entire district and the immediate area in which they are situated. These local references should be tied to proximate corridor programming where applicable.

Recommended elements: Lighting, planting, furnishings, surface treatments, and contextual material finishes.

Placemaking Case Study: Indianapolis Cultural Trail

Indianapolis, Indiana

(https://indyculturaltrail.org)

The Indianapolis Culture Trail is an 8-mile urban bike and pedestrian greenway connecting various neighborhoods, entertainment, and cultural amenities in Indianapolis. Especially relevant to this study area is the placemaking program applied along the route. Elements include special path paving, furnishings, public art, path signage, and application of bioswales and stormwater planting areas throughout. This level of placemaking investment mirrors what is recommended along the Main Street placemaking corridor.

At a Glance

Project Team:Public-Private collaboration

Scope: 8 mile greenway, public art, interpretive signage

Right of Way Width: 60 feet

Timeline: 2007-2012

Cost: $55 million

Funding Structure: Public/private partnership; Local Nonprofits, Central Indiana Community Foundation, City of Indianapolis, $20 Million from the US DOT TIGER program.

image: afar

image: indianapolis cultural trail

image: united consulting

5.4 Create Cultural Corridors

Cultural Corridors are opportunities to expand on other recommendations in this plan and incorporate components identified here to bring out the history and unique culture of the community. Cultural corridors would utilize the components identified in Recommendations 5.1 and 5.2, but in a way that focuses on or also incorporates history of the community. Cultural Corridors could use historical markers or signage specific to them. It could also become a destination trail within the community and an opportunity for self-guided walking tours. These corridors will help preserve and enhance the history of Greater Eastwood. Potential Cultural Corridors are identified in Figure 28.

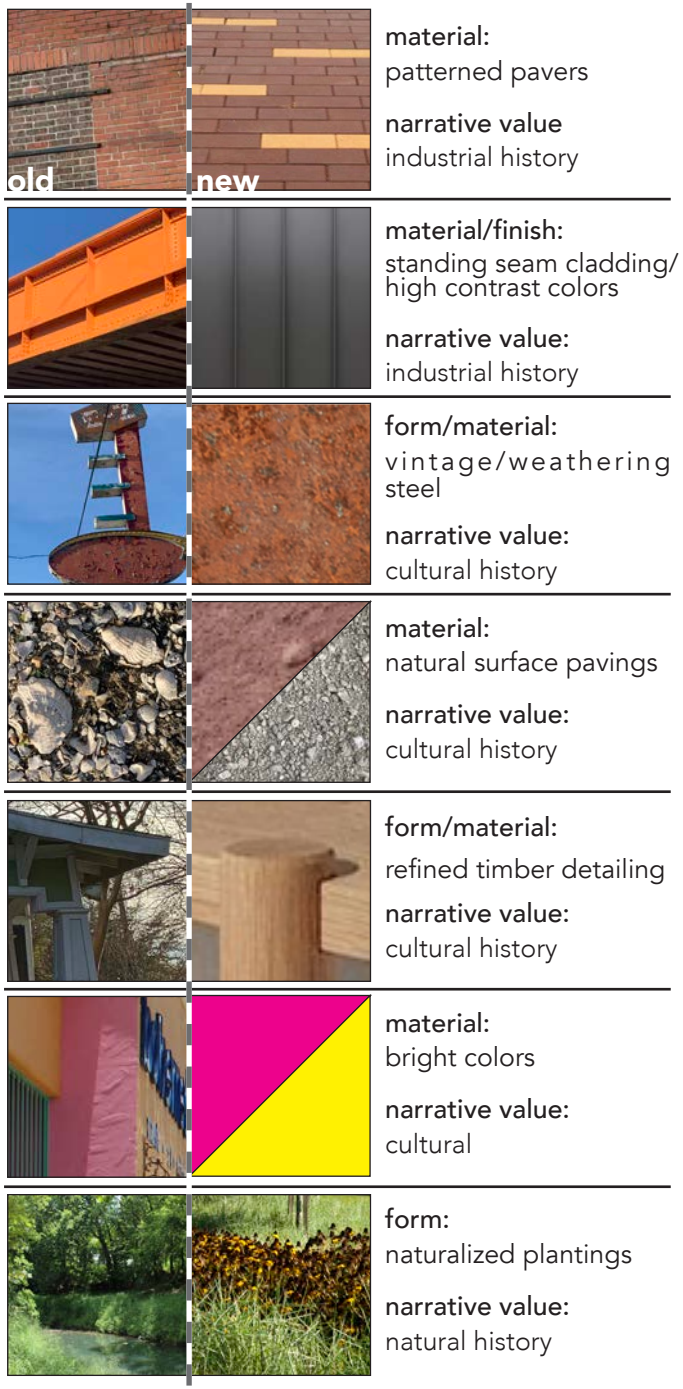


Figure 31 Recommended Materials

6 Rich with Opportunities for the Future

Greater Eastwood is prime for leveraging existing infrastructure investments in transit and street improvements that can facilitate economic development opportunities and housing choices in ways that enhance the existing community fabric. These investments can become catalytic providing job opportunities and housing options to meet the needs of the community. Greater Eastwood is rich with opportunities for new housing options, especially near areas served by high-quality transit and also rich in opportunities where large industrial tracts are likely to redevelop with potential to enhance the fabric of the community.

Related Objectives

3 4 5 6 8

Recommendation Type:

Program

Policy

Summary of Recommendations:

Transit Oriented Development (TOD) Opportunities

TOD is a way to leverage public infrastructure investments and facilitate places that are walkable, encourage transit use, and reinforce economic and housing opportunities in a more sustainable manner. TOD is traditionally developed around rail stations, but transit centers with high-quality, frequent bus access can also be a viable location for TOD. The recommendations in this section highlight the opportunities for TOD within the Greater Eastwood community and key components that could move these opportunities forward.

Facilitating Economic Development

To provide opportunities for the future, Greater Eastwood must have a strong economic foundation and environment. There are parts of the study area that house vibrant businesses that also contribute to the culture of the community. Recommendations in this section identify multiple ways for the East End District to work with developers and property owners to encourage walkable places and retail, facilitate the revitalization of commercial corridors, promote existing businesses, and coordinate opportunities and needs for the future.

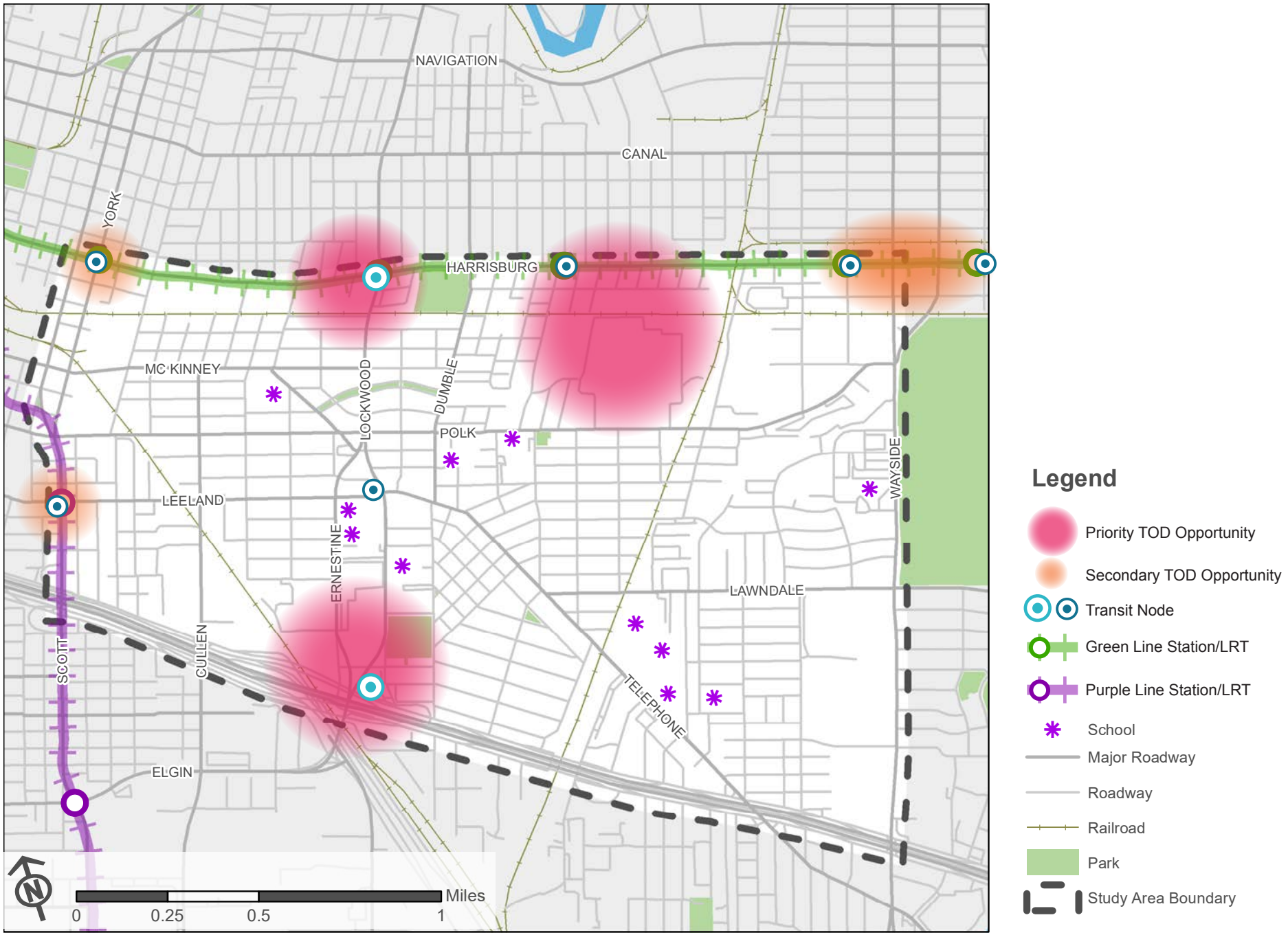
Supporting Housing Options

Housing within the study area is primarily single-family. Additionally, real and perceived pressures of gentrification along with a lack of housing choices for people of all ages and income levels have created community needs for diversifying housing options. Housing options and changes to housing within the study area should be sensitive to the history and current composition of the neighborhoods. As such, there are key opportunities to utilize changes in land uses near transit to potentially accommodate the needs of the community for housing in ways that add to the vibrancy, culture, and history of Greater Eastwood. Recommendations include supporting housing options and choices near transit, partnering with other entities in a housing study to identify specific housing needs, and promoting programs that can help homeowners repair and maintain homes to decrease the potential pressures of housing sales and gentrification.

Benefits of TOD:

- *Increased quality of life;*
- *Increased mobility options and transit ridership;*
- *Reduced regional traffic congestion;*
- *Improved air quality;*
- *Reduced household spending on transportation, resulting in more affordable housing;*
- *Supports healthy communities;*
- *Increased foot traffic and revenue for businesses; and*
- *Enhanced economic competitiveness.*

Figure 32 TOD Opportunity Map



6.1 Facilitate TOD Opportunities

Transit Oriented Development (TOD) is the creation of compact, walkable, pedestrian-oriented, mixed-use neighborhoods centered around high-quality train or bus systems. TOD is desirable for many businesses when looking to locate in an area and TOD helps to reduce congestion and support environmental resiliency. TOD has been envisioned around METRO's light rail stations, but development around stations in Greater Eastwood has not yet occurred to that scale.

Opportunities for TOD do exist in the Greater Eastwood area. Figure 32 identifies potential TOD nodes and primary areas of opportunity. The Lockwood Station area has seen recent developments and a new parking structure that can act as the underpinnings of future TOD around the station. The District should continue to work with developers and property owners in this area to encourage building successful TOD facilities and access.

Eastwood Transit Center and the surrounding area is an opportunity for TOD and a potential catalyst project. Figure 33 highlights key components of the overall area and the potential for redevelopment. As this area is well connected to Telephone Road, Diez Park, the University of Houston, and multiple schools in the area, housing opportunities for students, seniors, and families could be incorporated. Additionally, retail space, shops for emerging businesses and artists, child care, and other community businesses and services may be appropriate due to the connectivity in the area.

The figure identifies a new two-story transit center at the core of the area with an adjacent BRT station. As much of the transit use may be for park and ride services, it will be important to incorporate parking opportunities either within the transit center as a garage or off-site, but within a walkable distance. Safe and visible pedestrian crossings at intersections and pedestrian ways between potential uses are essential for any TOD. The transit center itself should be comfortable and easy to access for pedestrians and people biking. A bike hub for secure parking and repair tools are recommended to be incorporated into the transit center.

It is also recommended that Hicksfield Street be closed at the park and no longer merge with Lockwood Drive. Access for businesses/residences would be maintained. This space can be reutilized for enhanced access and connectivity north towards the schools along Lockwood and to Diez Park.

A New Two-Story Transit Center

B BRT Station

C University Line BRT

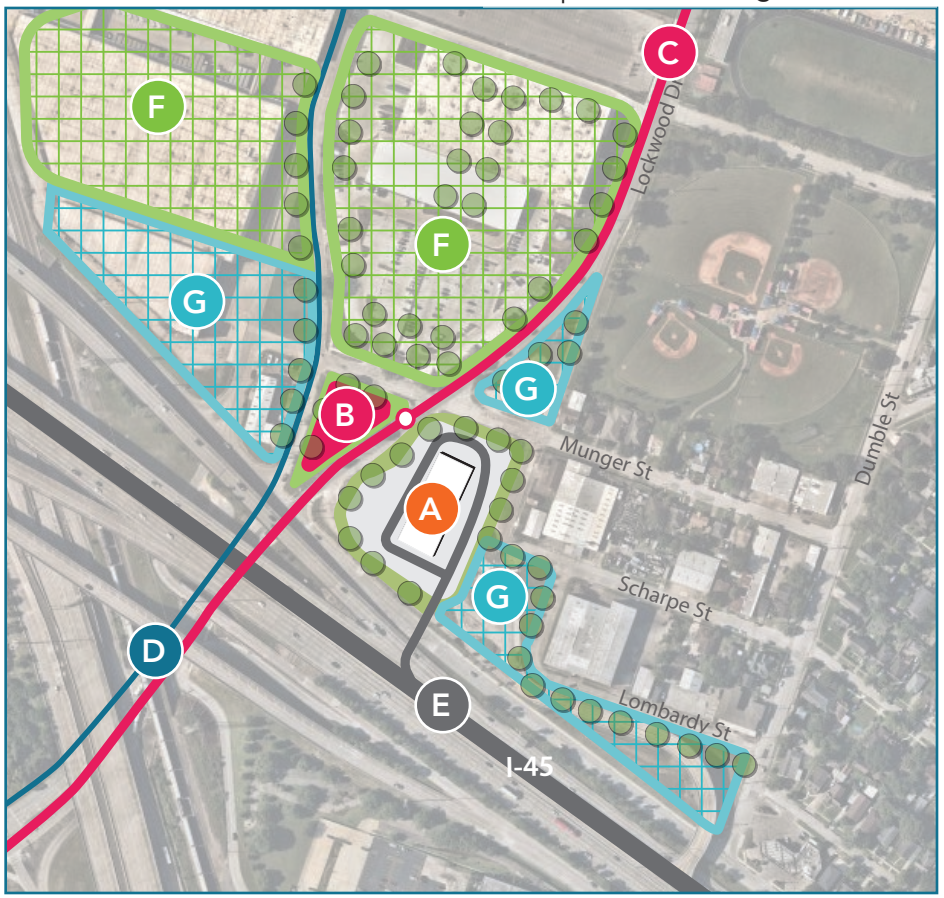
D Ernestine Cycletrack

E New Two-Way Transit Lanes

F TOD Redevelopment

G TOD Redevelopment/Flex Space for Parking

Figure 33 Eastwood Transit Center TOD Catalyst Project



Encourage Housing Options Near Transit

Housing options include a variety of housing types and rates that are designed to ensure that people in all stages of life and various income levels can live in a community. In particular, seniors and students can bee more reliant on walkable neighborhoods and transit to get to doctor appointments, community centers, daily needs, and school. Encouraging developments near transit and within TOD to incorporate housing that meets the needs of the community is important.

AARP has studied the needs of seniors and the ability to stay within their community as they transition out of traditional single-family housing into smaller apartments or senior living facilities, or aging in place. The needs of seniors in a community are important to consider. According to AARP data, transit-oriented development in walkable communities can help older adults lead independent lives by providing residents with critical connections to regional amenities, health services, and economic opportunity. Seniors rely on sidewalks, safe streets, and transit to move around their community. Coordinating with developers, the City of Houston, METRO, and non-profit organizations to incorporate opportunities to leverage infrastructure investments in walkability and transit with development that can provide for the community's needs.

Key Components of TOD:

- *Walkable design;*
- *Transit as a prominent and accessible feature;*
- *Public plazas and gathering places;*
- *A mix of uses;*
- *Integration of other modes such as bicycles and shared mobility options (e.g. bike and car share);*
- *Reduced/managed parking; and*
- *Retail and services serving commuters and local daily needs.*

Creating Walkable Places & TOD in the City of Houston:

The City of Houston has passed new ordinances aimed at encouraging pedestrian-friendly, mixed-use development with an enhanced, walkable public realm. Through an application process, places designated as "walkable places" would have more development options, tools, and standards available that facilitate creation of safe, attractive places to walk and bike. Some of these components include bringing building facades closer to the road, expanding sidewalks space, parking location adjustments, and including bike parking. This new ordinance would be particularly applicable for Telephone Road and creating a main street feel along the corridor.

The Transit-Oriented Development ordinance applies to streets within a half-mile walking distance from METRORail stations. New development and redevelopment along TOD streets would be required to expand sidewalks and include safety buffers from the roadway. The Ordinance also eliminates parking requirements on TOD primary streets and allows property owners to decide the amount of parking spaces needed. Property owners along TOD secondary streets would be eligible to opt in to the program. The primary streets apply to many corridors along and adjacent to the Purple and Green LRT lines, with secondary streets around Eastwood Transit Center.

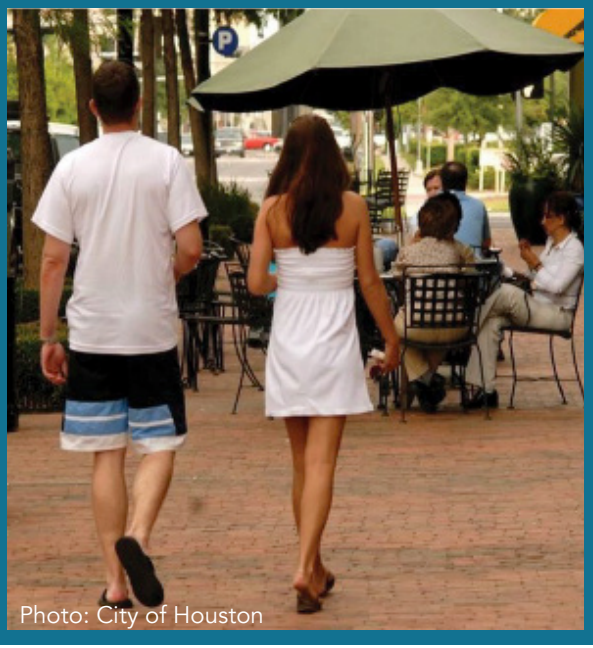


Photo: City of Houston

6.2 Create Character & Development Guidelines

In areas where new development or redevelopment is anticipated, the District can encourage design that promotes walkable places. Character and development guidelines are a tool that can be used to encourage development and redevelopment that can increase community walkability and provide a supportive context for other recommendations. Guidelines could identify and encourage building design, multimodal accessibility, and interaction with surrounding land uses. As direct regulation of development is not possible for the District, encouragement during coordination and incentivizing development that incorporates or exceeds the guidelines are key implementation strategies.

Several City of Houston Code of Ordinances chapters (42, 26, and 33), along with the new Walkable Places and TOD Ordinances provide tools that can be used to develop a more walkable, active community. The District should leverage and build on these tools and parking management strategies to increase the use of transit, walking, and biking.

Guthrie Green walkable development with placemaking
(Photo: Jonnu Singleton)

Working with developers and property owners to take advantage of flexible and reduced parking requirements, and shared parking can spur economic activity and livability by providing walkable development that places emphasis on access through multiple modes and ensuring the pedestrian realm and surrounding development are coordinated.

The following guidelines provide best practices for the District to build upon and formalize:

- Wide sidewalks adjacent to all new buildings and pedestrian-oriented building forms create a comfortable and welcoming place that encourages walking and gathering.
- Buffers between the pedestrian area and the street should be incorporated through landscaping, furniture, or other amenities.
- Shared parking should be evaluated on redevelopment sites to reduce parking area when uses have different peak parking timeframes.
- For large site redevelopments, block length should not exceed 400 feet without introducing a through-connection. The preference is for this connection to be a street, however, in some cases, an alley, pedestrian plaza, or another facility may be appropriate.
- Bicycle routes should include a mix of on-street and off-street options connecting key destinations that provide inviting options for all ages and abilities.

Belmar walkable development with placemaking in Lakewood, Colorado (Photo: Map Data: 2019 Google)

6.3 Revitalize Commercial Corridors

Successful commercial corridors are comprised of businesses that cater to the surrounding community. Accordingly, a key step in revitalizing such corridors is conducting market analyses that identify establishments suited to the needs and preferences of Greater Eastwood residents. The community survey conducted for this project asked residents about goods and services they would like to see in Greater Eastwood, providing valuable insight into the demand for different types of businesses. This information can be used to communicate with developers and potential business owners.

Improving facades and restoring buildings along commercial corridors that have suffered from disinvestments is a key element of revitalizing retail districts. Many successful revitalization projects facilitate this process through storefront improvement grants, which are administered by a coordinating agency and awarded to business owners. Similar programs can be structured as loans. In either case, making capital available to business owners improve upon storefronts helps beautify and preserve the historic character of retail corridors.

Because it is challenging to conjure a successful retail corridor out of nothing, it is a best practice to concentrate commercial revitalization efforts along blocks and streets with existing businesses. Telephone Road, Harrisburg Boulevard, and Wayside Drive are all identified as Livable Streets that show potential for revitalization, building on existing businesses, recent investments in transit, upcoming park investments, and more, to restore the history and vitality of the corridor. Enhancement of and focus on existing businesses along these and other Livable Streets can support these community businesses as anchors and catalysts for new businesses and activity.

There are many other locations within the study area where commercial properties have poor or missing sidewalks surrounding or leading to their businesses. Ensuring safe community access to existing businesses is important for developing and enhancing economic corridors as it helps build demand and stability for businesses. Great sidewalks, quality bus stops, and bicycle access and amenities

Promote Existing Businesses

Supporting new and existing businesses through coordinated promotional campaigns can help attract customers and establish emerging retail areas as interesting and exciting destinations. Art nights and events like along existing and emerging retail corridors can promote businesses within the community and beyond. Thinking beyond Greater Eastwood residents, the students and staff at the University of Houston are other potential patrons of area businesses. Creating student discount programs and distributing promotional materials at student orientation and other university events can help expand the customer base of businesses in Greater Eastwood.

Encourage Small-Scale Development

Development occurs at a wide variety of scales. While the significant transit amenities provide opportunities for TOD, there also exists opportunities for smaller-scale development within the community. This type of development is neighborhood-based and can add great community value and opportunity in a shorter period of time while being capable of adapting to changes in needs and the context around them. Additionally, promoting small-scale development can enable existing residents to participate in and benefit from the improvement of the district. The Incremental Development Alliance is an example of an organization that helps developers create small-scale projects and may provide useful resources.

Marketing poster promoting local businesses in Seattle
(Photo: Capitol Hill Seattle)

HOME Repair Program promotional poster
(Photo: East Aldine District)

6.4 Establish a Real Estate and Developer Coordination Group

Having a pulse on the real estate market and a line of communication with area realtors and developers can be beneficial for encouraging new development and coordinating desired development characteristics early. If area realtors and developers understand the investments that the District is making, the long term needs, and opportunities to partner with the District in the future, opportunity sites and redevelopment may be more likely to occur, or occur in a manner that better meets the needs and opportunities in Greater Eastwood.

6.5 Partner in a Housing Study

While this study recognizes that the community has a variety of needs for housing through data and community input. It is recommended for the District to partner with the City of Houston and local non-profit organizations to have a housing study conducted specifically to determine the specific needs.

A housing study would be able to identify the true health of the housing market in Greater Eastwood and the needs in relation to housing types, affordability, and the number of units that would be required to maintain a healthy housing balance within the community for the future. As providing or developing housing is not within the direct authority of the District, it is recommended that the District be a partner in the study and help communicate results of the study to potential developers as it correlates with public infrastructure investments and access within the community.

6.6 Promote Home Ownership Programs

A strong and stable housing market with single-family homeownership is desirable within a community; currently, the single-family market in Greater Eastwood is stable. Improving walkability, access to schools, transit, and businesses within the community helps to further strengthen the housing market. However, as homes age, it is important for homeowners to be able to keep them in good condition. This helps maintain housing values across the community and it helps keep ownership rates high, compared to rentals. While rentals are an important component of a housing market, there are many long-term benefits to homeownership that trickle down into a stable, vibrant, desirable community.

There are programs designed to help low- to moderate-income homeowners stay in their homes through rehabilitation. Keeping a home in good working order or bringing one back from disrepair promotes both sustainability and affordability in the community. When homeowners can repair their homes instead of selling them to be fixed up and redeveloped or rented out, it provides for the stability of the market and for long-term residents to stay in the community over time. This is particularly important for Seniors.

It is recommended that the District promote the City of Houston and Harris County's Home Repair program, as well as others offered through the City or non-profit organizations to the community. Ensuring that the community is aware of programs and assistance tools that can help keep homes in good condition and maintain long-term homeownership.

IMPLEMENTATION

Implementation

This plan provides a series of recommendations that support creating a livable, vibrant, connected community in the Greater Eastwood area. Success in meeting the objectives in this plan and the goals of the community can only be realized through effective implementation strategies. Implementation of this plan hinges on three central tenets: prioritization, partnerships, and funding.

Prioritization focuses on the identification of which projects to develop first, which are short term opportunities, and which are long-term moves to make significant changes. Partnerships are essential in the development and coordination of projects and help identify opportunities to leverage resources giving the East End District the biggest "bang-for-the-buck." Funding provides guidance on which potential resources and funding streams, locally and nationally, may apply to projects, helping focus grant efforts and pull together priorities and partnerships.

It is important to understand that implementation is a continuous cycle made up of initial planning, determining priority projects, implementing projects, and evaluating progress and goal attainment, as shown in Figure 34. Some of the Plan's recommendations can be pursued through existing policies or initiatives, while others will require securing additional resources. As such, the precise programs that the District pursues, in which order, and when, will, in part, be opportunity-driven, dependent on the availability of funding, staffing, and other necessary resources.

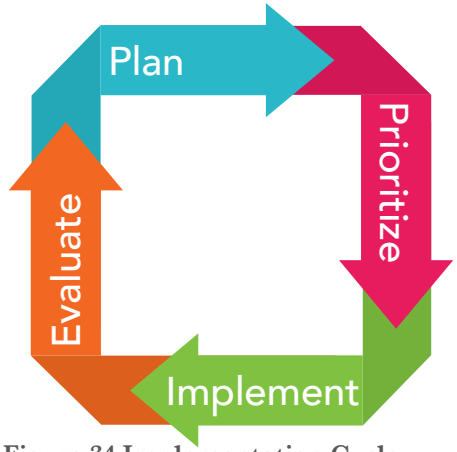


Figure 34 Implementation Cycle

This chapter is separated into the following sections that together provide a framework for implementing the Plan.

- Prioritization
- Funding & Partnerships
- Evaluation & Monitoring

Prioritization

Project prioritization is essential in determining where resources should be spent and how to allocate those resources over time. Important factors in prioritization include cost, the anticipated benefits, community support, the time required to complete, and overall ease of implementation. Anticipated benefits vary depending on the type of project. Projects were charted based on their level of benefits and ease of implementation. This resulted in delineation of projects into three tiers. Figure 35 provides the prioritization of projects identified in the recommendations chapter of this plan. The three tiers indicate the projects that can be completed as quick wins, big moves, and building blocks.

Quick wins are defined as projects that fall into the Tier 1 category. They provide both high levels of benefits as well as are lower cost or have fewer barriers to implementation. Quick wins are projects that can be a primary focus for community improvements. **Big moves** are projects that fall into Tier 2. These projects have a high level of benefit, but also have a more significant level of effort required for implementation. Big moves may need short term work for project development or coordination, but are longer-term efforts for implementation. **Building block** projects fall into Tier 3 and provide some community benefits while being less costly and fewer barriers for implementation. Building blocks are opportunities that can be implemented on an incremental basis over time as funding or staffing levels allow. Many of the building block projects support quick wins and big moves or are programmatic efforts that can be implemented by the District.

The recommendations were developed based on their ability to satisfy the objectives of this Livable Centers Study. Each of the recommendations support one or more of these objectives and, if implemented, would promote improved livability and quality of life within and around the study area and accommodate and support future development.

In order to support implementation, a prioritization table and supplemental strategies were developed. The Project Prioritization Table, Figure 36, provides a summary of key information that is essential to project development and implementation. This information includes the priority tier, magnitude of cost, potential time frame, the role of the East End District, the Ease of Implementation factor, The objectives met, and level of community support. A brief description of each of the table components follows:

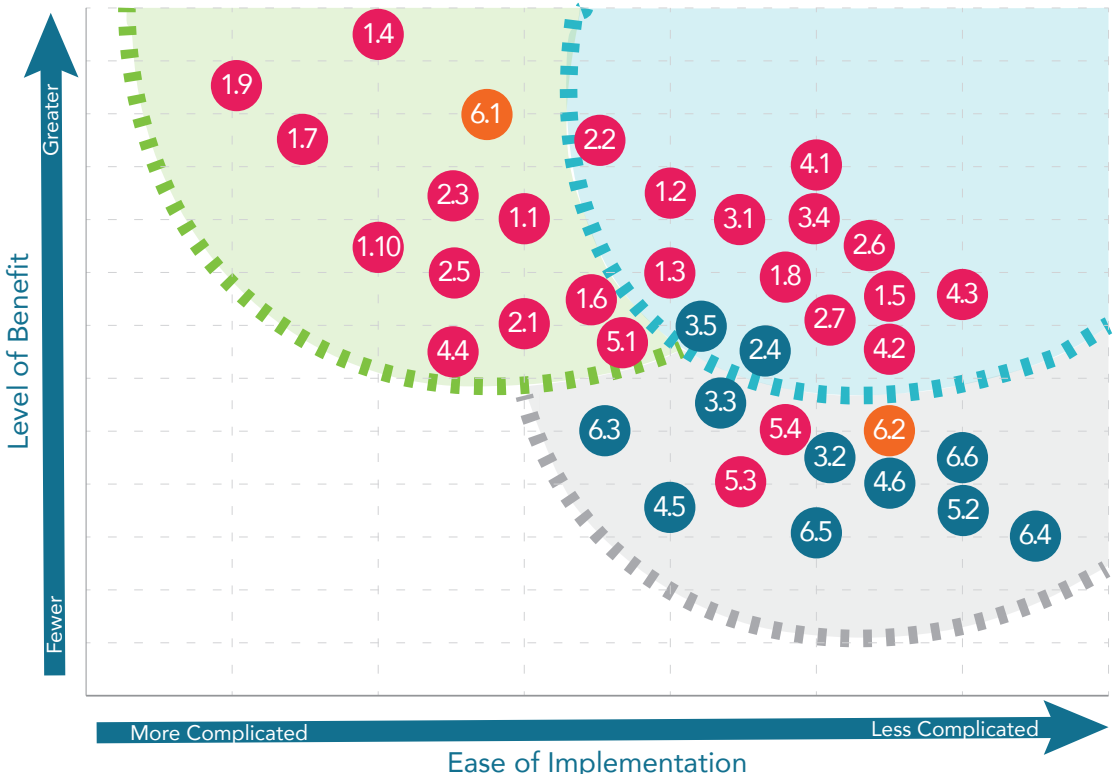


Figure 35 Prioritization Chart

TIER 1 Quick Wins
TIER 2 Big Moves
TIER 3 Building Blocks
Project
Program
Policy

- Recommendation - Identification of the recommendation number and title as defined in the Projects, Programs, and Policies section.
- Priority - Identifies the priority tier of each recommended project as determined from Figure 35.
- Cost Range - Estimated magnitude of cost of the recommendation. Cost estimates for appropriate recommendations were developed based on planning-level conceptual designs.
- Time frame - Recommendations were divided into four categories for a potential implementation time frame: short, medium, long, and ongoing. Each of these categories are defined further in Figure 36.
- Ease of implementation - A qualitative assessment of the overall ease of implementation for a project. This assessment includes consideration of cost, community and stakeholder support, right-of-way requirements, regulatory hurdles, coordination with other entities/projects, and the level of the overall project scope. A project with a high ease of implementation has a higher potential of being implemented quickly and inexpensively.
- Role - The anticipated role of project development or implementation is identified here. Some projects are expected to be led by the District, others may be most applicable for the District to encourage and play a supporting role. This could also apply to project funding in whether the District leads the effort for funding or applying for grants, or supports the recommendation with matching funds or other in-kind efforts.
- Objectives Met - Identifies the primary objectives addressed by each project as defined in Figures 1 and 2 in this plan.
- Community Support - Summarizes the level of support for each recommendation. This level of community support was identified from using project priority information from the second community survey that was conducted as a part of this project. See Appendix E for more information. It should be noted that the community generally supported all of the recommendations, but some were identified as a higher priority than others for implementation as limited funding and capacity is observed.

Figure 36 Project Prioritization Table

Recommendation		Priority Tier	Cost Estimate	Timeframe	Role	EOI	Objectives Met	Community Support
1.1	Leeland Street Enhancement	Big Move	$ 2,208,449	medium	L/P	■■□□	1 2 3 5	
1.2	Lawndale Street Safety and Access Improvements	Quick Win	$ 2,941,482	short - medium	P/A	■■■□	1 2 3 4	
1.3	Telephone Road Mobility Enhancements	Quick Win	$ 1,725,237	short	L/P	■■■□	1 2 3 5	
1.4	Telephone Road: Eastwood's Main Street	Big Move	$ 6,335,550	long	P/L	■□□□	1 2 3 4 5 6 7	
1.5	Wayside Drive Safety Enhancements	Quick Win	$$$$	short	A	■■■■	1 2 3 5	
1.6	Polk Street Accessibility Enhancements	Big Move	$ 3,719,116	medium	P	■■□□	1 2 3	
1.7	York Street Two-Way Transformation	Big Move	$ 6,300,681	long	P	■□□□	1 2 3 5 7	
1.8	Telephone Road Connections	Quick Win	$ 1,367,023	short	L	■■■□	1 2 3	
1.9	Lockwood Drive Transit Corridor	Big Move	$ 23,346,705	long	P/A	■□□□	1 2 3	
1.10	Ernestine Street Multimodal Accessibility	Big Move	$ 7,525,560	long	P	■□□□	1 2 3	
2.1	Sampson Street: A Healthy Community Connection	Big Move	$ 2,368,878	medium	L/P/A	■■□□	1 2 4 7	
2.2	Park Drive: Houston's Model Sustainable Street	Quick Win	$ 3,955,883	short	L	■■□□	1 4 6 7	
2.3	Dumble Street: Eastwood's Central Green Corridor	Big Move	$ 3,095,823	medium	L/P	■■□□	1 3 4 7	
2.4	Community Greening Initiatives	Quick Win	$$	ongoing	L/P/A	■■■□	4 5 7	
2.5	Future Green Space Opportunities	Big Move	$$ - $$$	short-long	L/P	■■□□	4 6 7	
2.6	Existing Park Improvements	Quick Win	$$ - $$$	short-long	L/P	■■■□	4 6 7	
2.7	Create Spaces for Community Interaction	Quick Win	$$	ongoing	L/P	■■■□	4 5 6	
3.1	Build Safe Streets to Schools	Building Blocks	$$$	ongoing	L/P/A	■■■□	1 2 3 5	
3.2	Data Collection Program	Building Blocks	$	ongoing	L/P	■■■□	1 2	
3.3	Walk Assessment & Encouragement Program	Building Blocks	$	ongoing	L/P	■■■□	1 2	
3.4	Walk and Wheel Skills Hub	Quick Win	$	short	L/P	■■■□	2 3 4 6	
3.5	Create School Access Plans	Quick Win	$	short	L/P	■■■□	1 2 3	
4.1	Develop a Walkability Improvement Program	Quick Win	$$	ongoing	L/P	■■■□	1 2 3 4 5	
4.2	Enhance Transit Access and Amenities	Quick Win	$$	ongoing	L	■■■■	1 2 3	
4.3	Corridor Spot Improvements	Quick Win	$ 1,404,765	short	L	■■■■	2	
4.4	Develop Priority Bikeways	Big Move	$$$$	ongoing	L/P/A	■■□□	1 2 3 4 5	
4.5	Expand Houston B-Cycle Stations	Building Blocks	$$	ongoing	L/P	■■■□	3	

Figure 36 Project Prioritization Table continued

Recommendation		Priority Tier	Cost Estimate	Timeframe	Role	EOI	Objectives Met	Community Support
4.6	Provide Bike Parking at Destinations	Building Blocks	$	ongoing	L/A	■■■■	3 5	
5.1	Main Street Placemaking	Big Move	$ 7,026,162	medium	L/P	■■□□	4 5 6	
5.2	Incorporate Placemaking Enhancements	Building Blocks	$$	ongoing	L	■■■■	3 4 5	
5.3	Create Community Gateways	Building Blocks	$$$	short	L/P	■■■□	5 6	
5.4	Create Cultural Corridors	Building Blocks	$$$	ongoing	L/P	■■■□	4 5 6	
6.1	Facilitate Transit Oriented Development	Big Move	$	ongoing	P/A	■■□□	3 4 5 8	
6.2	Create Character & Development Guidelines	Building Blocks	$	short	L	■■■■	5 6	
6.3	Revitalize Commercial Corridors	Building Blocks	$$	ongoing	L/A	■■□□	5 6	
6.4	Establish a Real Estate & Developer Coordination Group	Building Blocks	$	ongoing	L	■■■■	5	
6.5	Partner in a Housing Needs Study	Building Blocks	$	short	P/A	■■■□	8	
6.6	Promote Programs Aimed at Home Ownership	Building Blocks	$	ongoing	A	■■■■	8	

Role

L = Lead = Lead the effort, drive funding
P = Participate = Be a project partner
A = Advocate = Encourage partners and community

Objective Definitions:

1. Connect neighborhoods and destinations with multimodal networks making it easier to get around without a vehicle.
2. Improve safety for people of all ages and abilities.
3. Facilitate access to opportunities, including jobs and education.
4. Enhance quality of life through parks, open space, and community facilities that are easily accessible.
5. Encourage a vibrant economy that is accessible and provides for the variety of community needs.
6. Incorporate community culture and history in the design of public spaces.
7. Enhance the community's environmental resiliency.
8. Support housing options and a healthy home ownership balance.

Cost Estimate

Planning level cost estimates were developed for most infrastructure projects. These costs should be further developed in design. For projects where a specific cost was not developed, the following cost ranges apply. Costs within these ranges will depend on the level of desired improvement or effort.

$ = < $150,000
$$ = $150,000 - $500,000
$$$ = $500,000 - $1,000,000
$$$$ = $1,000,000 - $5,000,000

Ease of Implementation (EOI)

Level of Community Support

Time frame:

Ongoing: Programs, policies, or projects that are planning based and will require continued coordination and potentially updates over time. These may be able to be completed early, others could take longer to develop.

Short (1-3 years): Projects with lower costs or projects that do not require extensive right-of way, coordination with other projects, or may be necessary for other projects to be successful. These projects will typically be able to be implemented in a shorter time frame.

Medium (4-6 years): Projects with lower or medium costs that may require more coordination or a higher level of effort to implement. These projects could be able to be implemented in the short term, but could also stretch out due to a larger project scope or reliance on other projects to be implemented.

Long (7-10 years): Projects with typically medium and higher costs that likely have a high level of coordination necessary with other stakeholders and projects, as well as include right-of way or regulatory issues. These projects are anticipated to have longer implementation horizons due to their complexity and reliance upon other factors.

Achieving the Goals

Prioritization of projects and recommendations to meet the desired goals of the East End District is key to successful implementation. While many of the projects could be completed singularly, they also have relationships and sometimes dependencies with other projects and recommendations. Understanding how the recommendations relate to each other will help the District build successes and support implementation of the plan.

Implementation is in most cases dependent on the resources available. However, implementing projects is not that straight forward. As projects can have relationships or dependencies with other recommendations, a variety of implementation strategies may be effective. The following information highlights, three implementation strategies to help the District plan for investments, gain support, receive funding, and realize potential benefits.

Leveraging Investments Over Time

A general strategy for the District to pursue is to address the recommendations and projects, or elements of projects, that it can implement directly and with lower costs in a short time frame. Then, the District can build up to implementing recommendations that are complex, involve a multitude of partners and coordination, and that are higher cost.

Another way to leverage investments over time could be to break down a larger or more complex project into phases. Those phases could be broken down into foundational components that are important to construct first and enhancement components that make the project better, but can be done at a later time without requiring revision of the first phase. The following examples highlight how this implementation strategy could function in various contexts.

Implementation Strategy: Leveraging Investments Over Time

Example 1: Prioritizing Easier and Inexpensive Projects to be Implemented First

If the focus is on less expensive and easier to implement projects in the short term, the district could prioritize implementation of corridor spot improvements (4.3) for key intersections as well as enhanced transit access and amenities (4.2) to provide safe intersections and comfortable bus stops along Lockwood Drive. This would make improvements for the community without significant investment while a larger and more comprehensive mobility project for Lockwood Drive is developed and funded (1.9) for implementation in the longer-term and in coordination with other agencies.

Example 2: Breaking Down a Larger Project into Phases

A larger and more complex project that could be phased for implementation is recommendation 2.2 Park Drive: Houston's Model Sustainable Street. There are a lot of components within this project that, together will create an environmentally friendly community space and significant asset within Greater Eastwood. In breaking apart this project, the foundational components, or those that are important to be in place first, could be broken out. This could encompass daylighting the bayou, enhancing the roadway for proper drainage, plantings to facilitate improved drainage and soil stabilization, and improving intersections for safety and comfort. The enhancement components could then be added in time as funding allows. These could include the public art, increased plantings, social and play spaces, and enhanced materials and furnishings.

Example 3: Layering Recommendations for Short- and Long- Term Benefits

The recommendations in this plan work with and build off of each other in many instances. By doing some recommendations early, improvements can be made to the community that can bring excitement and support for longer-term projects. For example, recommendation 1.3 could provide an effective base for improving mobility and safety along the Telephone Road corridor. Building on that recommendation with 5.2 to add placemaking to the corridor would make the corridor more interesting, comfortable, and could contribute to supporting existing businesses (6.3 revitalize commercial corridors). Those improvements would create a significantly better corridor for the community while the District works toward implementation of a full reconstruction of Telephone Road (1.4) with a Main Street Placemaking Overlay (5.1)

Rapid Implementation Strategies

Rapid implementations strategies focus on reducing implementation time of a project by using lower-cost the materials and focusing the design to fit within an existing space or context opposed to fully redesigning a facility or area. Materials used in rapid implementation may require less construction effort to put in place or they may not be materials that are removable or can be altered, such as using paint and bollards instead of extending curb lines. Some of these rapid implementation strategies and materials are shown in the Toolbox (Appendix B).

The rapid implementation strategy can have multiple benefits. First, the community can see changes quicker and support for future changes can be garnered. Additionally, by implementing projects in a way to which changes can be made, it allows the District to gather input from businesses, the community, and stakeholders about adjustments in the design to ensure that it meets the needs as intended and is the best design for full construction at a later point.

There are multiple recommendations in this plan where a rapid implementation strategy could be used. Intersection improvements, bikeways, and creating social spaces are all examples of recommendations that could be done in a flexible, lower-cost manner that would benefit the community and facilitate future long-term change. The City of Houston has successfully applied this approach to projects recently for bikeways and other applications.

Building Networks

A third implementation strategy that may be useful for the District is based on the idea of building networks. This refers to developing projects at a scale to where their benefits are realized more quickly than if projects were to be built piece by piece over time. Building networks can require more investment upfront, however, being able to tie in the more significant benefits to a network of improvements can aid in eliciting funding and support from project partners or grants. There are multiple recommendations that could benefit from being built as a network of improvements within this plan.

For example Recommendation 4.1 is focused on building safe sidewalks to improve walkability. To accomplish this with an eye towards networks, the District could identify one area, perhaps the area around Eastwood Academy and Navarro Middle School, and focus on primary corridors within that area as well as the secondary corridors that help people safely access primary corridors to reach their destinations. Alternatively, improving the primary sidewalks within the community as identified in recommendation 4.1 at one time, creating the foundation of a walkability grid would be another way to implement this recommendation in terms of a network.

Other recommendations that could easily be developed within this implementation strategy include the development of priority bikeways (4.4) and building safe streets to schools (3.1). Additionally, Recommendation 3.5 is itself an example of building a network of improvements within a single area.

Case Study: Rapid Implementation & Building Network Strategies

In 2015, Calgary had just one protected bike lane that was 7 blocks long and took the unprecedented step of adding a network of protected bike lanes in a single big project. Since implementation, data shows 1.2 million bicycle trips, a 95% average increase in daily weekday bike trips traveling to and from downtown, and overall bicycle traffic into downtown Calgary up by 40% in approximately 18 months.

Funding Strategy: The network was funded as a pilot project and cost $5.45 million. The pilot project allowed the City to make changes to the final design based on real-world use and needs. It also helped garner overwhelming community support for making the changes permanent.

Key Lessons:

- Significant changes can occur quickly. Calgary's experiment and investment in has enabled safe and comfortable travel through for people bicycling of all ages and abilities. The number of women bicycling has increased from 22% to 30%.
- Building an entire network all at once produces big results, quickly. While the ridership increases seen in Calgary are fairly typical of cycle tracks installed in other cities, the impact is magnified when it involves multiple streets in a network, rather than a single street at a time. Multimodal travel works best when routes are continuous and well connected to other facilities.

Funding & Partnerships

Implementation is inherently tied to resource availability, particularly funding. It will be essential for the East End District to identify multiple funding streams in addition to their existing local funds to support implementation of the Livable Centers Study in the near term and further in the future. Recommendations have been developed at a level that will support funding opportunities.

The District will have a key role in implementing the recommendations as they will be project managers and facilitators for coordination. For some recommendations, the District will be able to fund and implement on their own, but for other projects, typically large-scale capital or complex with multiple stakeholders, the District may not have the resources available and will need to rely on being a facilitator with other agencies and stakeholders, and potentially contribute funding towards those projects. The District can also incentivize high priority projects and prime them for future, more significant public or private funding opportunities.

Existing Funding Sources

The East End District Assessment is a key source of existing funding that can be used to implement recommendations, or be leveraged against for additional funding through grant opportunities. As the District's assessment is limited and funding is prioritized for maintenance, partnerships will be important to leverage funding and be able to facilitate improvements. Additionally, the City of Houston's Capital Improvement Plan (CIP), Harris County's Precinct 2 CIP, METRO CIP, and TIRZ 23 CIP are significant resources and opportunities for coordination and partnerships for relevant recommendations.

Grant Opportunities

Grants can be an effective way to leverage local funding streams to increase the amount of projects or programs that can be implemented. Strategic use of grant funding can help focus local dollars on where they are most needed. The East End District has a history of successful grant applications from a variety of sources. Figure 37 identifies a variety of funding sources and grants that can be used in pursuing implementation of this plan.

Funding Strategies

Target Grants to be Highly Competitive

In order to be competitive in the grant process, it is important for the District to match the right project(s) to the right grant. The desired outcomes of the grant program should be achievable through the proposed project(s) and the benefits of the proposed project should be well communicated in the grant application. It may also be key to pair recommendations together that further enhance the benefits and outcomes of the projects. Additionally, taking pieces of the recommendations that are applicable to funding opportunities and moving them forward can be a strategy to provide forward movement toward implementing a recommendation, particularly for large and complicated recommendations that will ultimately require significant financial resources.

Leverage Coordination & Partnerships

Partnerships with other public agencies, developers, property owners, and businesses are key to successful implementation of projects that are supported in the community and receive grant funding. The recommendations in this plan add multimodal choices, safety improvements, parks and open space, placemaking, community development opportunities, and more, adding significant value to the community. The projects recommended here can attract investment interest from other agencies, such as the City of Houston, METRO, H-GAC, TxDOT, developers, businesses, and philanthropic/non-profit organizations. In order to coordinate and partner with other agencies, the East End District must be able to clearly identify the project and its benefits to the partnering entity. Additionally, partnerships and coordination can be utilized to provide information, drive public support, and build capacity.

Another area beyond grant funding where partnerships and coordination can be beneficial to the District is in maintenance of infrastructure and capital investments. All sidewalk, trail, and street investments include a commitment for maintenance. Collaboration with other public agencies and other organizations could allow the District to ensure maintenance of the project, and have greater flexibility in the use of their local funds for future capital project needs. Entities to collaborate with could include public agencies, advocacy entities such as BikeHouston, non-profits, and businesses. Maintenance activities could also include "adopt-a-" programs as a means to maintain project elements and build community support for future projects.

Figure 38 broadly identifies which big picture recommendations may be most applicable for various funding sources or partnerships.

Evaluation & Monitoring

Crucial to any successful implementation plan is monitoring and evaluating how well the implemented project is meeting its intended goal(s) as well as the goals of the East End District. It is through thoughtful project monitoring and evaluation that the District can continue to prioritize projects and move them into implementation.

As communities change over time, the types of projects and strategies that help strengthen the mobility and community as a whole may change as well. As projects are implemented, the District should employ efforts to monitor the effectiveness of the project, whether that is transit stop boardings, bicycle usage, or intersection delay, and evaluate whether or not that project is meeting its intended goal. From that point, additional measures to further improve the project may be necessary, or it can become a success story that helps the District build towards more project implementation.

Additionally, using data and public opinion may indicate which types of projects are likely to achieve higher support and meet set goals within the East End District, which in turn can signal which types of projects to further prioritize and invest in. For example, expanding transit options and increasing the bikeway network may provide a greater impact on overall mobility within the District than other types of projects. In that case, further investment into those types of projects first may yield the greatest outcomes for the community, while building momentum and support for other projects that may be important, but provide less obvious impacts. This type of prioritization can only happen through monitoring and evaluating implemented projects, which can help prove a track record of success

Figure 37 Grant and Funding Opportunities

Funding Program	Source	Description
Surface Transportation Block Grants (STBG)	H-GAC TIP	STBGP funds are the most flexible of available federal funding and may be used for nearly all transportation project types, including roadway and intersection improvements, safety enhancements, construction of a wide variety of sidewalk and bicycle facilities and non-construction projects such as maps, data collection and monitoring, bike share, and more. The Houston-Galveston Area Council (H-GAC) allocates this funding for the Houston region through a competitive Transportation Improvement Program (TIP) process. Within the STBGP program there is a set-aside specifically for bicycle and pedestrian. Eligible activities include infrastructure facilities, safety and educational activities, and Safe Routes to School programs. These funds are subject to the same competitive process and allocation as the overarching STBGP funds.
Congestion Mitegation & Air Quality (CMAQ)	H-GAC TIP	This program provides a flexible funding for transportation projects or programs to reduce mobile emisions. This program includes transit improvements, bike and pedestrian facilities and programs, and more as eligible projects. Funding is allocated from H-GAC and project selection is competitive through the TIP process.
FTA 5310 Funding	METRO	The Enhanced Mobility for Seniors and Individuals with Disabilities program (FTA Section 5310) provides funding for transportation services planned, designed, and carried out to meet the special transportation needs of seniors and individuals with disabilities. Eligible projects, beyond transit serive, include bus stop improvements and sidewalk enhancements providing safe access to transit.

Figure 37 Grant and Funding Opportunities continued

Funding Program	Source	Description
Safe Routes to Schools (SRTS)	TxDOT	The Texas Department of Transportation (TxDOT) administers Texas' SRTS program to make school routes safe for children while walking or cycling to school. The Texas SRTS program funds both infrastructure and non-infrastructure projects. Eligible projects may include capital improvements including sidewalks, stripping, crossing signals, and bike racks, as well as education, encouragement, and enforcement activities that inspire children to walk or cycle to school. SRTS funding for future years is uncertain, but it is expected that the program will be included and continued in future transportation legislation.
Highway Safety Improvement Program (HSIP)	TxDOT	The federal HSIP funds safety improvement projects that aim to reduce traffic fatalities and serious injuries on all public roads. A variety of projects are eligible for funding, including sidewalks, medians and pedestrian crossing islands, and countermeasure signage. Funding is allocated throughout the state by TxDOT. This funding stream has been historically underutilized for multimodal projects.
Community Development Block Grants	City of Houston/ Harris County	The City of Houston and Harris County receive Community Development Block Grant funds that can be used for a variety of purposes that benefit low-moderate income households. These include improvements to the housing stock, infrastructure, clearance/acquisition, and social services. At least 70 percent of CDBG funds must be used for activities that benefit low- and moderate-income persons. CDBG funds can be leveraged with other Federal, state, local or private funds.
Community Challenge Grants	AARP	The AARP Community Challenge provides small grants to fund "quick-action" projects that can help communities become more livable for people of all ages. Applicable projects areas include to improve housing, transportation, public space, technology, civic engagement and more. Supported project objectives include, but are not limited to increasing civic engagement; creating vibrant public places; increasing connectivity, walkability, bikeability, wayfinding, access to transportation options; accessible and affordable housing options; and more.
Environmental Education Grants	EPA	The EPA awards approximately $2 million to $3 million annually through its EE program. These grants "support environmental education projects that increase the public's awareness about environmental issues and provide them with the skills to take responsible actions to protect the environment." Projects identified in Recommendation 2 may fit well within this opportunity.
ArtPLACE National Grants Program	ArtPLACE	This grant is designed to invest in creative placemaking projects that involve cross sector partners committed to strengthening the social, physical, and economic fabric of their communities. ArtPlace provides support for projects led by the arts/artists that are integrated with a community's economic development and revitalization strategies, and have the potential to attract additional support. Awards range between $50,000 and $500,000.
Local Parks Grants	TPW	The Local Park Grant Program consists of 5 individual programs that assist local governments with the acquisition and/or development of public recreation areas and facilities throughout the State of Texas. The Program provides 50% matching grants on a reimbursement basis. All grant assisted sites must be dedicated as parkland in perpetuity, properly maintained and open to the public.
Community Outdoor Outreach Program (CO-OP)	TPW	CO-OP grants provide funding for programming that engages under-served populations in outdoor recreation, conservation and environmental education activities. CO-OP provides grants ranging from $5,000 to $30,000.

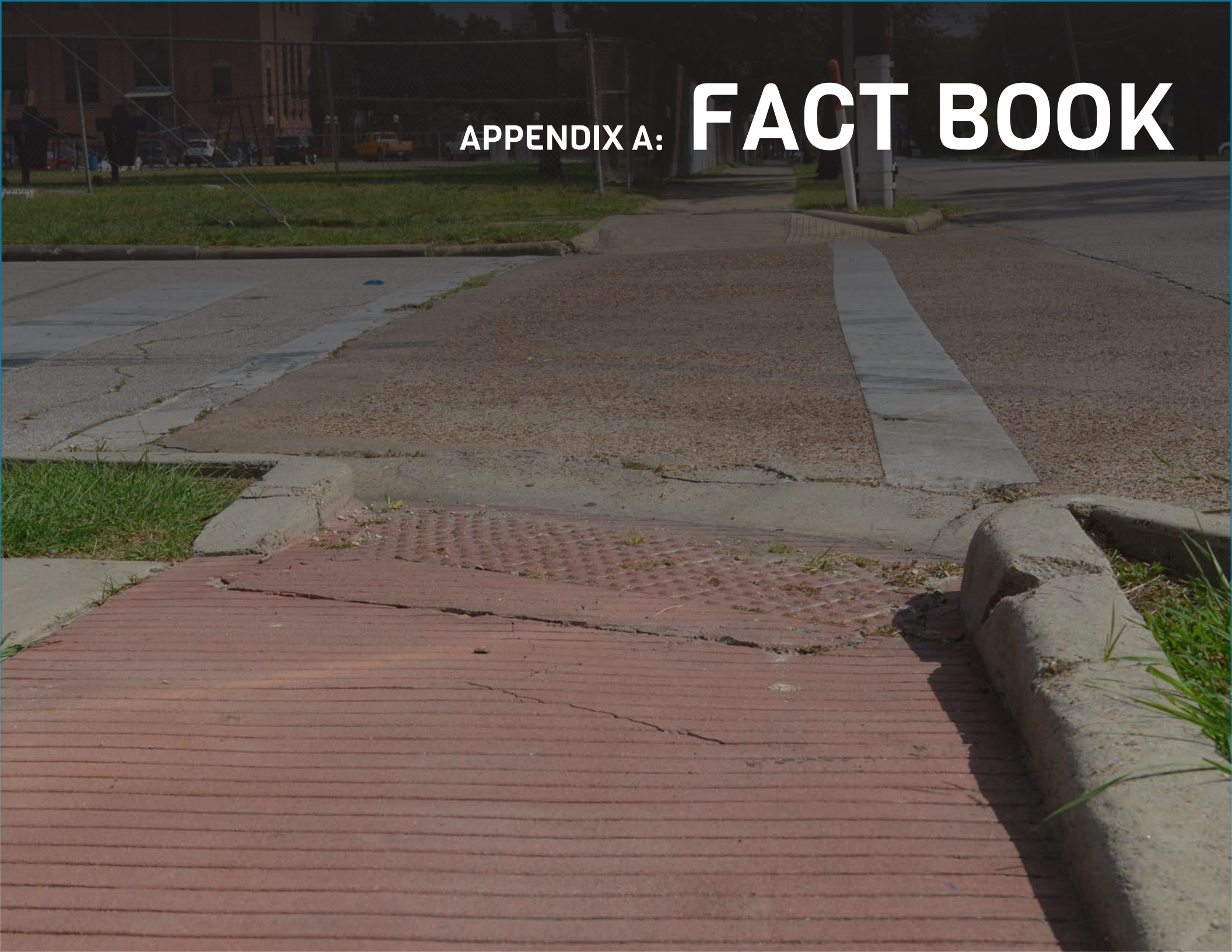
Figure 37 Grant and Funding Opportunities continued

Funding Program	Source	Description
Farm to School Grant Program	USDA	Food and Nutrition Services of the USDA administers funds under this grant to improve access to local foods and expand educational activities in agriculture and gardening for students in kindergarten to 12th grade. Grants can be used for planning, training and technical assistance, purchasing equipment, developing school gardens, building partnerships, implementing farm to school programs, and supporting operations. The grant can be used for projects that increase the purchase and consumption of locally produced fresh food and implementing nutrition education and garden-based curriculum. The significant number of educational institutions within the community paired with the development of parks and open space and green corridors may fit well within this opportunity.
Chapter 380 Economic Development Agreement	City of Houston	Chapter 380 Economic Development Agreements are tools used to encourage economic development, such as retail and commercial projects, by enabling cities to provide incentives encouraging developers to build in specific areas. These development incentives typically take the form of property tax abatements, loans or grants, commitments for infrastructure, or payments of portions of the sales tax generated by the project. The East End District could work with the City of Houston to form a 380 agreement for this purpose to revitalize commercial corridors or spur TOD investment.
Opportunity Zones	City of Houston	Opportunity Zones are census tracts generally composed of economically distressed communities that qualify for a community development program called the Opportunity Zone program, which was created under the Tax Cuts and Jobs Act of 2017. There are seven opportunity zones that are within the study area in whole or part. Opportunity Zones are designed to spur economic development by providing tax benefits to investors by deferring and reducing capital gains taxes by rolling investment earnings into Opportunity Funds. Priorities include: (a) Affordable and/or Workforce Housing; (b) Retail Development and Food Desert Mitigation; (c) Manufacturing/Distribution; (d) Innovation/Technology; and, (e) Investments with Complete Communities.
Texas Enterprise Zone Program	City of Houston	The purpose of the Texas Enterprise Zone Program (EZ) is to encourage job creation and capital investment in areas of economic distress by removing governmental regulatory barriers to economic growth and to provide tax incentives and economic development benefits. A majority of the study area is within a qualified Enterprise Zone.
Gulf Coast Economnic Development District Business Loan Fund	H-GAC	"GCEDD administers a business loan program on behalf of the Houston-Galveston Area Council. Businesses that have been unable to obtain a loan from a private lender are eligible to apply. There is a requirement that one job be generated for each $65,000 in loan funding. The program targets both existing businesses and start-ups. The interest rate is below market and the loan term is up to ten years. Loan proceeds may be used for working capital, purchase of assets, and closing costs. At least half of the loan must be used to purchase assets."
Section 108 Loan Guarantee Program	HUD	The Section 108 Program allows for the CDBG funds to be used as a pledge against the payment of loans for housing rehabilitation, public facilities, economic development, and large-scale development projects. Repayment terms can be flexible, interest rates can be set below market, and project costs can be spread over time. The funds can be loaned to a private developer or used by the City to engage in development.
Businesses/ Developers	Various	Businesses and developers can be partners to developing better infrastructure and providing amenities for people walking and biking in Museum Park. Financial assistance in connecting people on foot or on bike to their business or providing parking, other amenities, and promotion of walking and bicycling in the neighborhood bicycling are just a few ways that businesses may be partners in implementing recommendations in this plan.
Non-Profit Organizations	Various	Partnerships with non-profit organizations can demonstrate support for projects and programs beyond government entities, which can be crucial to obtaining federal funds or leveraging new local funding. The Kinder Foundation, the Houston Endowment, the Kresge Foundation, and The Robert Wood Johnson Foundation are potential resources that have supported multimodal, environmental, community development, and placemaking projects.

Figure 38 broadly identifies the funding sources identified in Figure 37 along with which broad recommendation may be applicable for funding under general project eligibility requirements.

Figure 38 Applicable Funding Programs

Funding Source	Reccomendation 1: Anchored by Great Streets	Recommendation 2: Healthy & Active	Reccomendation 3: A Hub for Education	Reccomendation 4: A Connected & Walkable Community	Reccomendation 5: Place with a Strong and Vibrant Culture	Reccomendation 6: Rich with Opportunities for the Future
Surface Transportation Block Grants (STBG)	X		X	X		X
Congestion Mitegation & Air Quality (CMAQ)	X			X		X
Safe Routes to Schools (SRTS)			X	X		
Highway Safety Improvement Program (HSIP)	X			X		
FTA 5310 Funding	X			X		X
Community Development Block Grants				X		X
Community Challenge Grants	X	X	X	X	X	X
Environmental Education Grants		X				
ArtPLACE National Grants Program					X	
Local Parks Grants		X				
Community Outdoor Outreach Program (CO-OP)		X				
Farm to School Grant Program		X	X			
Chapter 380 Economic Development Agreement	X			X		X
Opportunity Zones						X
Texas Enterprise Zone Program						X
Gulf Coast Economnic Development District Business Loan Fund						X
Section 108 Loan Guarantee Program						X
Businesses/Developers	X	X	X	X	X	X
Non-Profit Organizations	X	X	X	X	X	X



APPENDIX A: FACT BOOK

Fact Book Overview

The Fact Book, as presented in this section, provides a snapshot of existing data and conditions in the project's study area. The data identifies the current context of the community, barriers, and opportunities. This section presents key demographic data about the community followed by sections specific to mobility, parks, public spaces, housing, and economic development.

About the Study Area

The study area for this project encompasses the Greater Eastwood community, including Eastwood, Houston Country Club Place, Sunnyland, and parts of Lawndale. The study area is bound by Harrisburg Boulevard to the north, I-45 to the south, Sampson Street/Scott Street to the west, and Wayside Drive to the east. It is approximately 2.8 square miles in size and has a population of 15,874. The study area is approximately one mile east of Downtown Houston and one half mile north of University of Houston.

The demographics of the study area are highlighted in Figure A.1 and provide a picture of the types of households and individuals living in the study area. The study area has a lot of variation, partly due to the continuing changes and growth in the region and in the East End area within the last ten years. Median household income, for example ranges from $25,354 to $127,921 depending on the block group. When compared to the larger East End District, the study area has fewer households in poverty and a greater rate of homeownership. However, the poverty rate is higher than in the City and County.

The study area is predominantly Hispanic with a wide range of ages. The population over 65 is slightly less than the surrounding areas, however, it is expected to continue to grow. The study area also has similar educational attainment levels to the East End District.

Figure A.1 Community Demographic Data

	Study Area	East End District	City of Houston	Harris County
Total Population	15,874	75,460	2,295,982	4,602,523
Households	11,758	40,297	849,105	1,583,486
Average Household Size	1.4	1.9	2.7	2.9
Median Household Income	*	**	$51,203	$60,232
Below Poverty Line	19.4%	27.0%	16.9%	13.4%
% Zero auto households	11.7%	12.9%	3.9%	6.0%
% Own	43.9%	39.7%	41.9%	49.7%
% Rent	50.0%	51.8%	58.1%	41.2%
Vacancy	6.0%	8.5%	13.1%	9.0%
% Hispanic	83.6%	86.4%	44.8%	42.6%
% White (non-Hispanic)	11.2%	6.9%	24.6%	30.1%
% Black (non-Hispanic)	3.3%	5.1%	22.1%	18.6%
% Asian (non-Hispanic)	1.7%	1.2%	6.8%	6.9%
% Other (non-Hispanic)	0.2%	0.5%	0.4%	1.9%
% 17 or Under	24.3%	26.5%	25.0%	26.9%
% 18-34	27.8%	26.0%	42.5%	25.8%
% 35-64	38.4%	37.1%	22.0%	37.5%
% 65+	9.5%	10.4%	10.3%	9.8%
% No High School	23.9%	26.8%	12.8%	10.7%
% Some High School	14.6%	14.8%	8.9%	8.4%
% High School Graduate	26.5%	25.9%	22.7%	23.2%
% Some College	13.4%	14.1%	18.2%	20.3%
% Associate Degree	6.1%	5.1%	5.3%	6.5%
% College Degree	10.2%	9.5%	19.5%	19.8%
% Graduate School	5.3%	3.8%	12.6%	11.2%

2018 - 5-year ACS data
Study Area: Census Block Groups 31031-31036, 31061-31065, 31071, 31081, 31082, 31094
East End District: Census Block Groups 31011, 31012, 31031-13133,31141,31151-31163, 31171, 31183
*Varies by block group between $25,354 and $127,921. **Varies by block group between $17,225 and $250,000+

Transportation

The conversation around transportation can best be categorized in mobility and accessibility. These components are related, but provide different types of understanding as to the condition and needs of the transportation network.

Mobility encompasses the ability and ease for people to move around their community, as well as moving goods and services. It includes the connectivity of the street grid and the modal networks that enable access. *Accessibility* refers to the quality of travel and the quantity of destinations that can be reached in a reasonable amount of time. This section highlights key data in each of these categories to better understand the needs and opportunities of the study area.

Mobility

Mobility within the Greater Eastwood community is centered around the multiple networks and travel modes that are available to the community enabling them to get to the places they want to go. This section presents the street, transit, and bikeway networks that exist in the study area and other key information.

Transit passengers at Eastwood Transit Center

Mode Share

The table below (Figure A.2) lists the percentage of workers within the study area and nearby geographies who commute via different modes. The single-occupant vehicle is the predominant mode of commuting, however the study area sees higher rates of transit use than any other surrounding geography. While carpool use and walking rates are higher than the City of Houston and Harris County, they are lower than what is seen in the East End District overall.

It should be noted that the mode share data in Figure A.2 likely under-represents the actual number of people walking, biking, and taking transit within the study area because the data is only for commute trips to work and for the "primary" mode of a trip if more than one is used (driving and transit, walking and transit, etc.).

The networks identified in this section highlight the connections and facilities available to them. These networks, and how connected they are to each other and area destinations, impacts how many people commute by driving versus alternative modes.

What is a Mode?

A mode of transportation is a term that distinguishes the various ways that people make trips. For purposes of this report, a mode is defined as driving, walking, bicycling, or riding public transit (includes bus or rail). Walking, biking, and riding public transit are sometimes referred to as alternative modes as they do not make up the majority of trips historically in most cities. Driving is traditionally the primary mode of most communities.

What is Mode Share?

Mode Share is the percentage of trips that are taken by each mode. Increasing mode share means diversifying the modes used for trips in a community and increasing the share of alternative modes in relation to driving.

Figure A.2 Greater Eastwood and Comparison Area Commute Mode Share.

	Drive Alone	Carpool	Transit	Bike	Walk	Work at Home	Other
Study Area	75.3%	14.6%	4.5%	0.4%	2.0%	2.2%	1.0%
East End District	72.4%	17.0%	4.3%	0.3%	2.7%	2.3%	1.1%
City of Houston	78.1%	10.0%	3.8%	0.4%	1.5%	3.9%	2.3%
Harris County	79.7%	10.5%	2.6%	0.3%	1.4%	3.9%	1.6%

Source: 2014-2018 American Community Survey 5-Year Estimates

Key Travel Corridors

Study area streets classified as Thoroughfare and Principle Thoroughfare include York, Lockwood, Ernestine, Wayside, Polk, Lawndale and Telephone. The study area also contains two Transit Corridor Streets: Harrisburg and Scott. Notably, Sampson is classified as a Major Collector while its one-way pair York is classified as a Thoroughfare.

Lockwood and Ernestine form a one-way pair from Polk to I-45, and Sampson and York form a one-way pair from Harrisburg to Polk. Wayside from Harrisburg to Polk is part of a one-way pair with Sgt. Macario Garcia Drive but Sgt. Macario Garcia Drive falls outside the study area.

Figure A.3 reflects that Cullen from Polk to I-45 and Leeland from Scott to Cullen will soon be reconfigured from 4 to 3 lanes, with the addition of protected bike lanes.

Telephone Road near the historic Cage school

Figure A.3 Key Corridor Characteristics

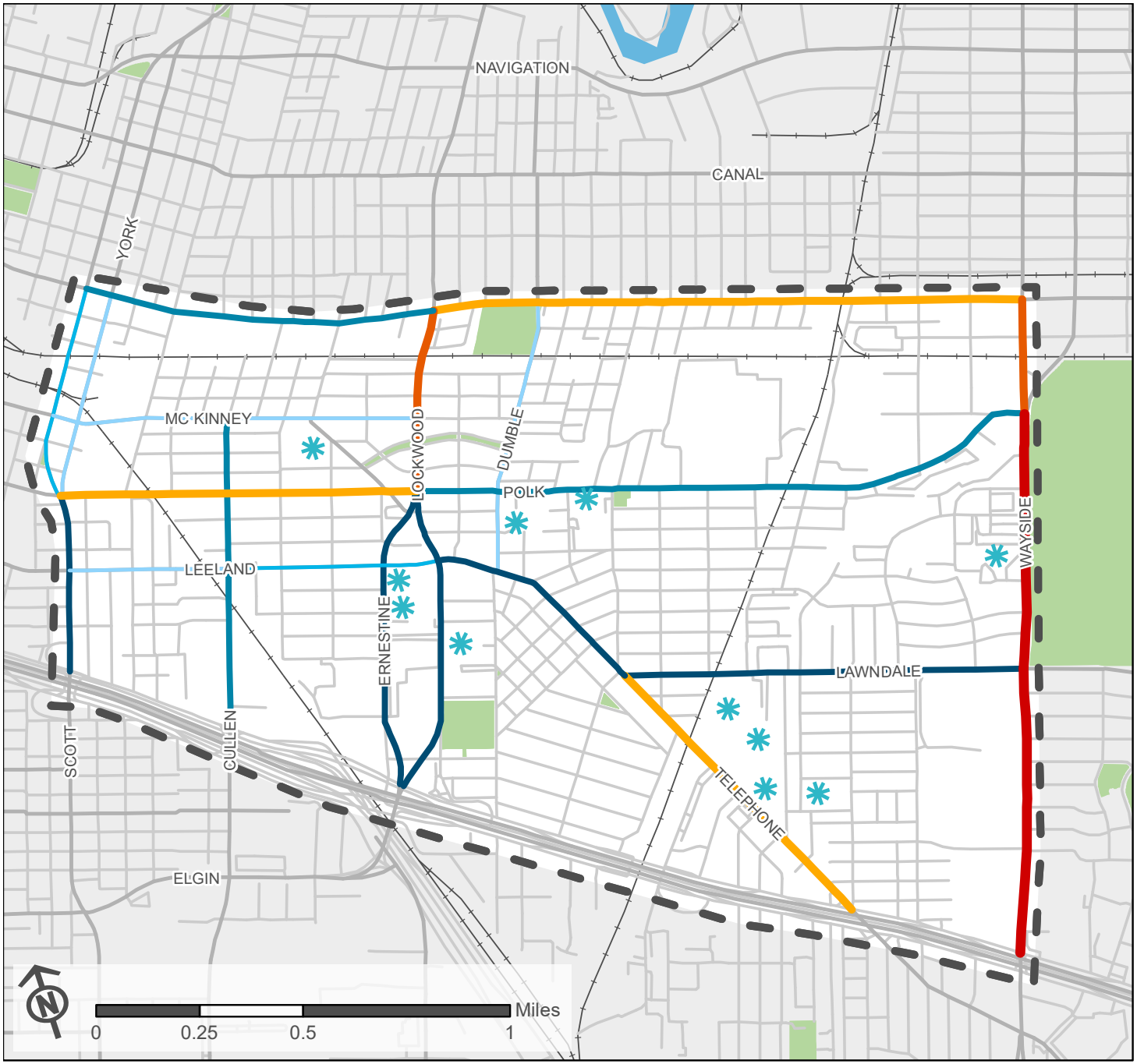
Street	From	To	Type	Projected Lanes	ROW	Current Lanes	Current Width	Median
Cullen	McKinney	Polk	Local	–	–	2	30	No
	Polk	I-45	MJ	4	80	3	50	No
Dumble	Texas	I-45	Local	–	–	2	30 - 40	No
Ernestine	Polk	I-45	P	3	70	3	36	No
Harrisburg	Sampson	Wayside	TCS	4	Varies	4	75	Yes
Lawndale	Telephone	Wayside	T	4	68	4	52	No
Leeland	Scott	Sidney	MJ	4	80	3 - 4	44	No
	Sidney	Lockwood	MJ	4	70	4	44 - 60	No
Lockwood	Harrisburg	Polk	P	6	100	4	80	Yes
	Polk	I-45	P	3	66	2 - 3	24 - 36	No
McKinney	Sampson	RR	Local	–	–	4	52	No
	RR	Lockwood	MN	2	60	2	30 - 35	No
Milby	Harrisburg	McKinney	MN	2	60	2	40	No
	McKinney	I-45	Local	–	–	2	20-40	No
Polk	Scott	Wayside	T	4	80	2 - 4	35 - 60	Varies
Sampson	Harrisburg	Texas	MJ	2	80	4	44	No
	Texas	Polk	Local	–	–	4	44	No
Scott	Polk	I-45	TCS	4	Varies	4	80-105	Yes
Telephone	Lockwood	Lawndale	T	4	80	4 - 5	45 - 52	No
Wayside	Harrisburg	Polk	P	4	70	4	52	No
	Polk	Country Club	P	4	100	5	52	No
	Country Club	Fairfield	P	4	100	8	52 - 120	Grade-Separated
	Fairfield	I-45	P	4	100	4	52	No
York	Harrisburg	Polk	T	4	75 - 80	4	44	No

MJ = Major Collector MN = Minor Collector P = Principle Thoroughfare T = Thoroughfare

TCS = Transit Corridor Street

Source: City of Houston Major Thoroughfare & Freeway Plan

Figure A.4 Corridor Traffic Volumes



Traffic Volumes

Figure A.4 highlights the demand placed on primary corridors within the study area. There are five corridors that incur the greatest amount of daily travel: Wayside Drive, Telephone Road, Lockwood Drive (Ernestine Street and Lockwood Drive are one-way pairs south of Polk Street), Harrisburg Boulevard, and Polk Street. These corridors provide travel to primary destinations within the study area and facilitate access to regional travel corridors, such as I-45. It is important to note that these primary corridors with volumes over 9,000 vehicles per day provide access to or are nearby many of the schools within the study area. A key takeaway from this data is that relative to street widths, there is not a significant amount of traffic on these primary corridors.

Traffic Volume (Weekday 24-hr Total)

- < 4,000
- 4,000 - 5,500
- 5,500 - 7,000
- 7,000 - 9000
- 9,000 - 11,000
- 11,000 - 15,000
- 24,000 +

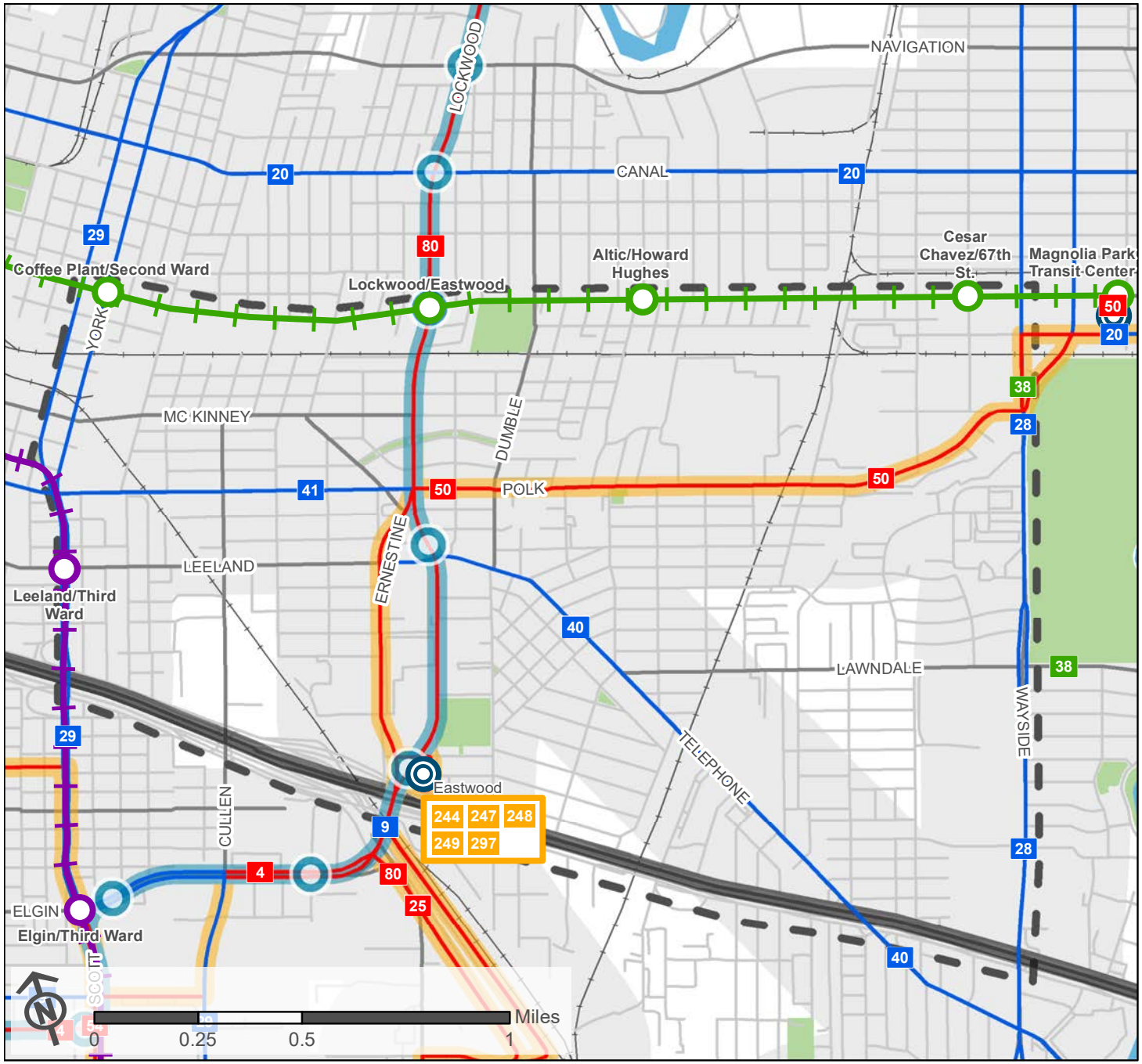
- School
- Roadway
- Railroad
- Park
- Study Area Boundary

Source: City of Houston & collected traffic counts

Existing & Future Transit

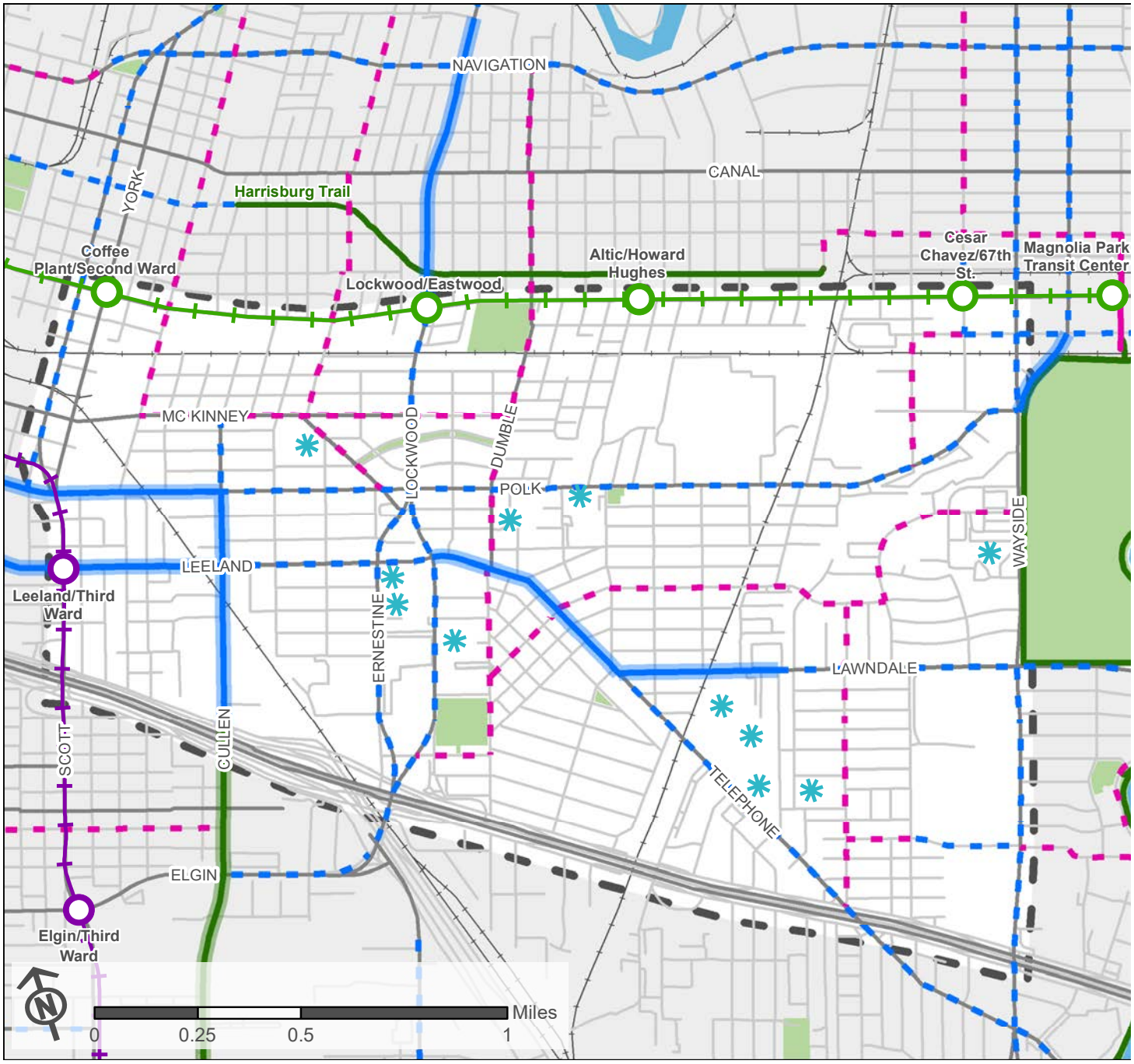
Figure A.5 shows the current transit routes in the study area and future transit service enhancements within the METRONext Plan. The study area currently has multiple transit options that connect within the study area and more broadly within the region for access to jobs, school, and more. The center of the study area (Lockwood Drive at Telephone Road) has a Transit Score of 60 meaning there are many nearby public transportation options. The gray background in Figure A.4 highlights a 1/4 mile area around each transit bus route. This indicates that a majority of the study area is within a very walkable distance to transit service. The area between Polk Street, Wayside Drive, and Telephone road has the largest area outside of the 1/4 mile access buffer.

Figure A.5 Existing & Future Transit Routes



Source: METRO data and METRONext Plan

Figure A.6 Bikeway Network



Existing & Planned Bike Network

Figure A.6 identifies the area's current bike facilities and planned network from the Houston Bike Plan. Within the study area there are no existing bike facilities. The Harrisburg Trail is just north of Harrisburg Boulevard outside the study area. Multiple on-street bike facilities have been programmed within the study area and are in advanced planning or design stages. These include facilities on Cullen Boulevard, Leeland Street, Polk Street, Telephone Road, and Lawndale Street. Schools within the study area do not have any high-comfort bike facilities providing access for students.

The bicycle network is also important for transit access as well. When safe biking routes are available with good connections to transit stops, people are more likely to combine these modes in order to travel further distances without a vehicle.

Legend

- Green Line LRT
- Purple Line LRT
- Bus Stop
- School

Bikeways

- Dedicated On-Street
- Shared On-Street
- Off-Street

Existing / Programmed / Future

Source: City of Houston Bike Plan

Left: New sidewalks and curb ramps at Sherman and Bryan Streets

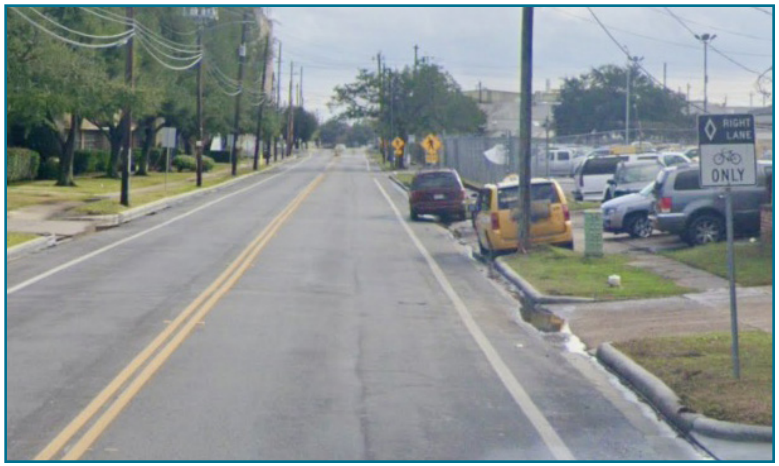
Right: Old sidewalks near Lantrip Elementary

Left: Old sidewalk along Telephone Road

Right: Sidewalks across railroad tracks along Cullen Boulevard

Left: Harrisburg Trail for hike and bike use

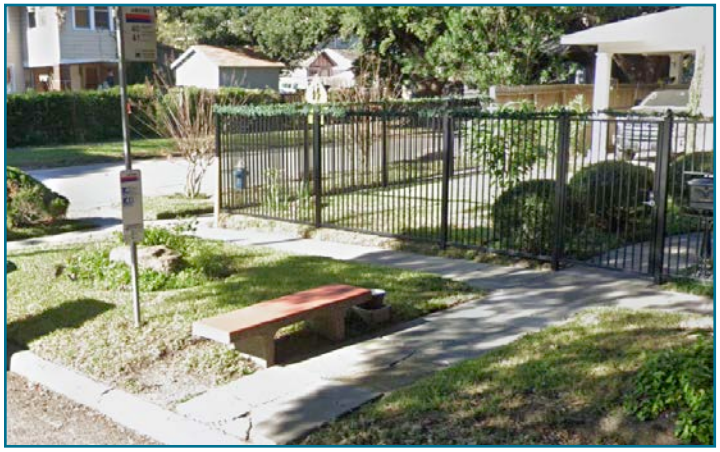
Right: Old, narrow bike facility along Polk Street with a car parked in the bike lane



Accessibility

Accessibility within the study area relates the quality of available travel facilities and how many destinations can be accessed in a reasonable amount of time through those facilities. The greater the connectivity is within a community, the more places people have to easily go. When there are more options in close proximity, it becomes easier for people to choose walking, biking, or riding transit over driving for all of their trips.

For purposes of this project, accessibility is measured by the safety and use of the multimodal transportation networks along with how connected the community is. The following information presents a variety of metrics including safety, transit use, activity and intersection density, and short trips.



Top: Altic Station on the Green Line
Bottom: Bus stop on Polk St with only a bench and bus stop sign and narrow sidewalk access

Top: METRO bus Shelter on Lockwood Dr at Harrisburg Blvd
Bottom: Bus stop on Telephone Rd at Broadmoor St with no amenities and poor sidewalk conditions

Auto Dependency

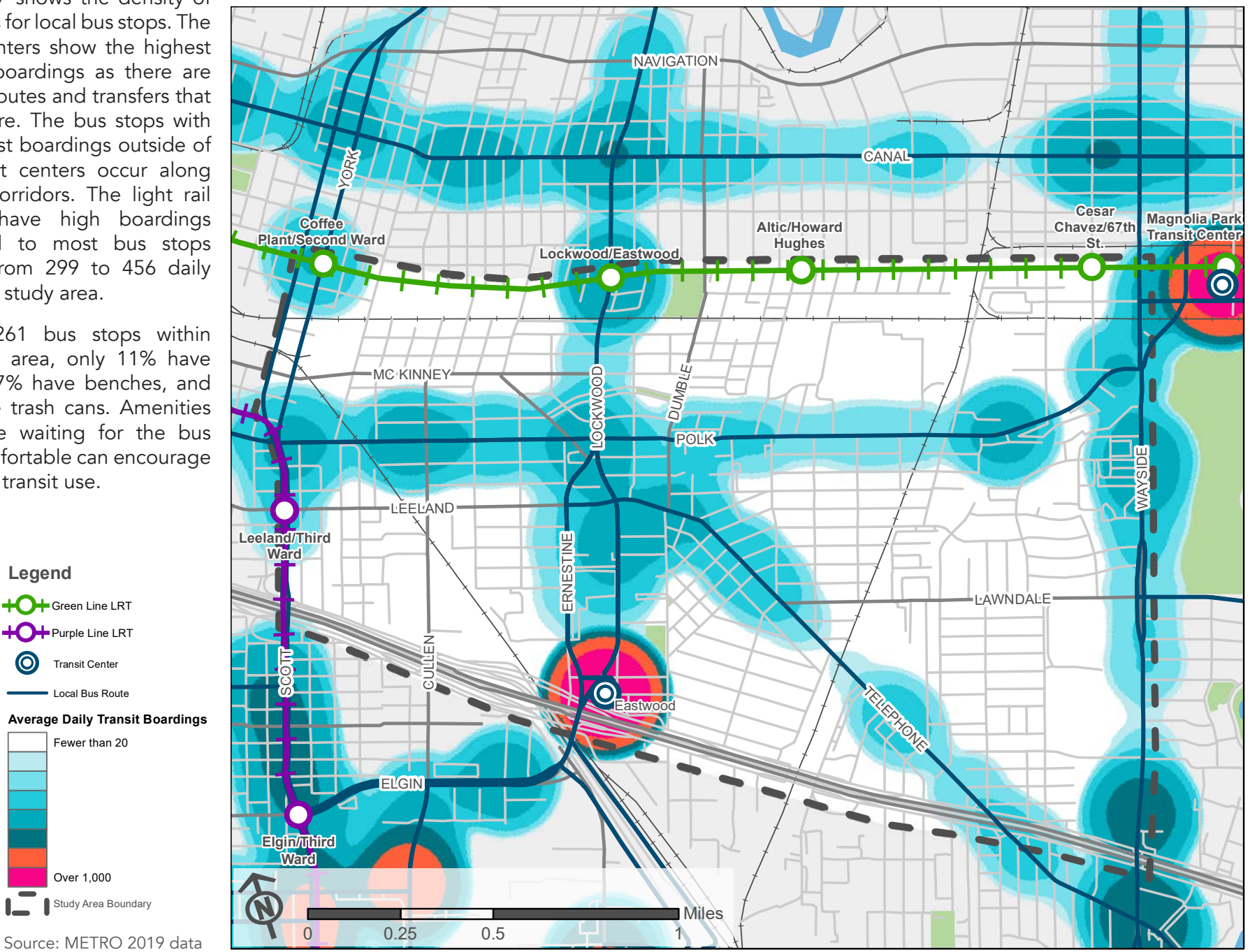
Zero automobile households typically strongly correlate with transit use and lower incomes. Millennials have become a component of zero auto household rates as they are increasingly forgoing vehicle ownership as a choice. Whether by choice or not, households with no vehicles are more reliant on public transportation, biking, and walking, and new technologies like car-share or transportation network companies (Uber, Lyft) to access jobs and services. Greater Eastwood has 11.7% of households without a vehicle, which is high compared to Harris County at 6%.

Transit Use

Figure A.7 shows the density of boardings for local bus stops. The transit centers show the highest rates of boardings as there are multiple routes and transfers that occur there. The bus stops with the highest boardings outside of the transit centers occur along primary corridors. The light rail stations have high boardings compared to most bus stops ranging from 299 to 456 daily within the study area.

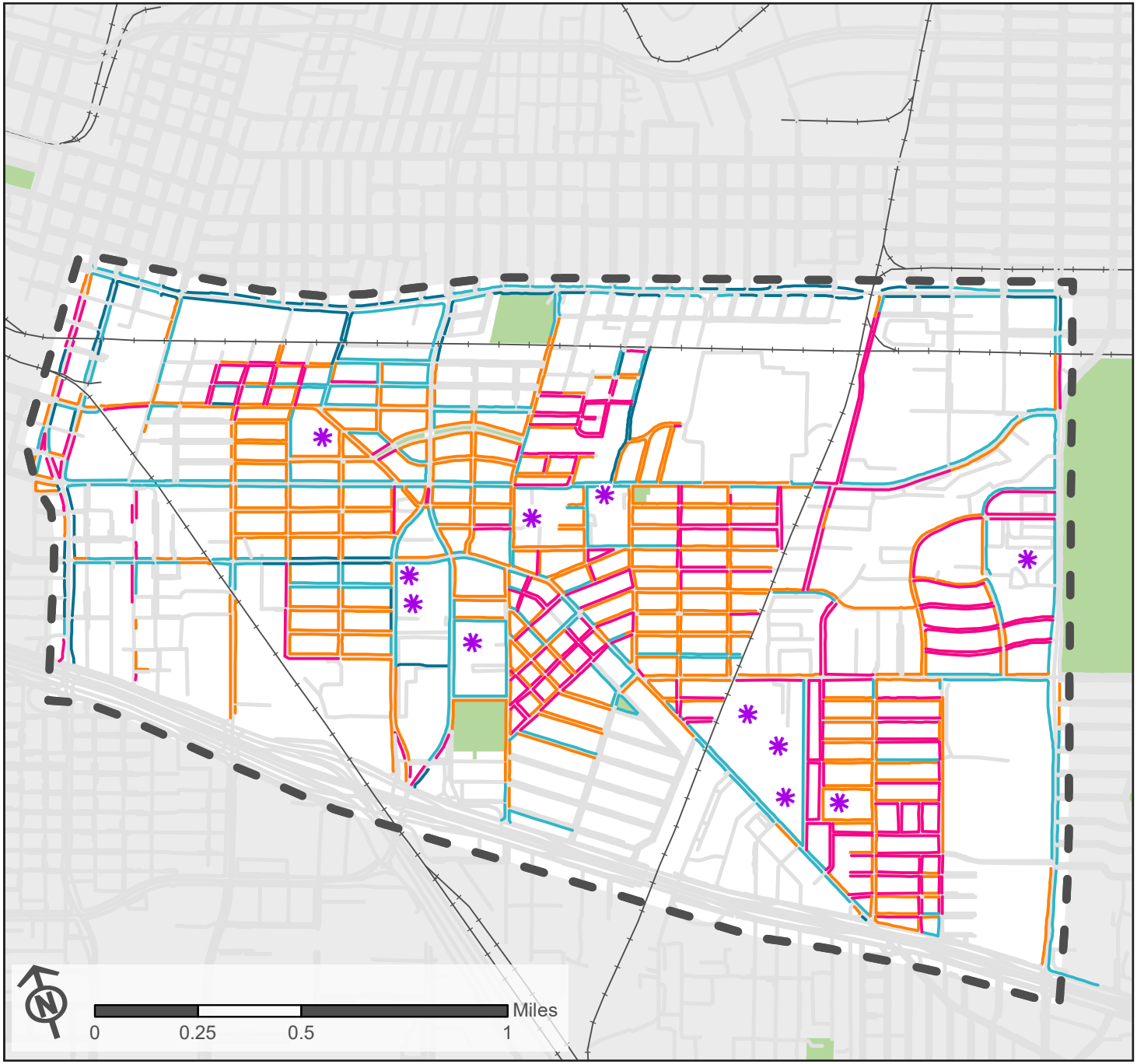
Of the 261 bus stops within the study area, only 11% have shelters, 7% have benches, and 15% have trash cans. Amenities that make waiting for the bus more comfortable can encourage increased transit use.

Figure A.7 Transit Boarding Density



Source: METRO 2019 data

Figure A.8 Sidewalk Conditions



Sidewalk Conditions

The availability of sidewalks is only one component to understanding the ability for people to safely walk to destinations within the community. Figure A.8 presents an assessment of sidewalk conditions to understand the quality of existing sidewalks. Overall, approximately 80% of corridors within the study area were assessed for sidewalk condition. Assessments were done based on google earth and windshield surveys. Sidewalk conditions were divided into four categories that range from very good and comfortable to missing. Approximately 8.3% of assessed corridors are missing sidewalks entirely and 45.3% of assessed corridors have poor sidewalks that are not in good quality or do not meet ADA standards. Approximately 35.8% of sidewalks assessed were in fair or good condition and 10.6% of sidewalks are in very good condition. Sidewalks that are in good or very good condition are primarily along transit and major corridors.

Legend

- School

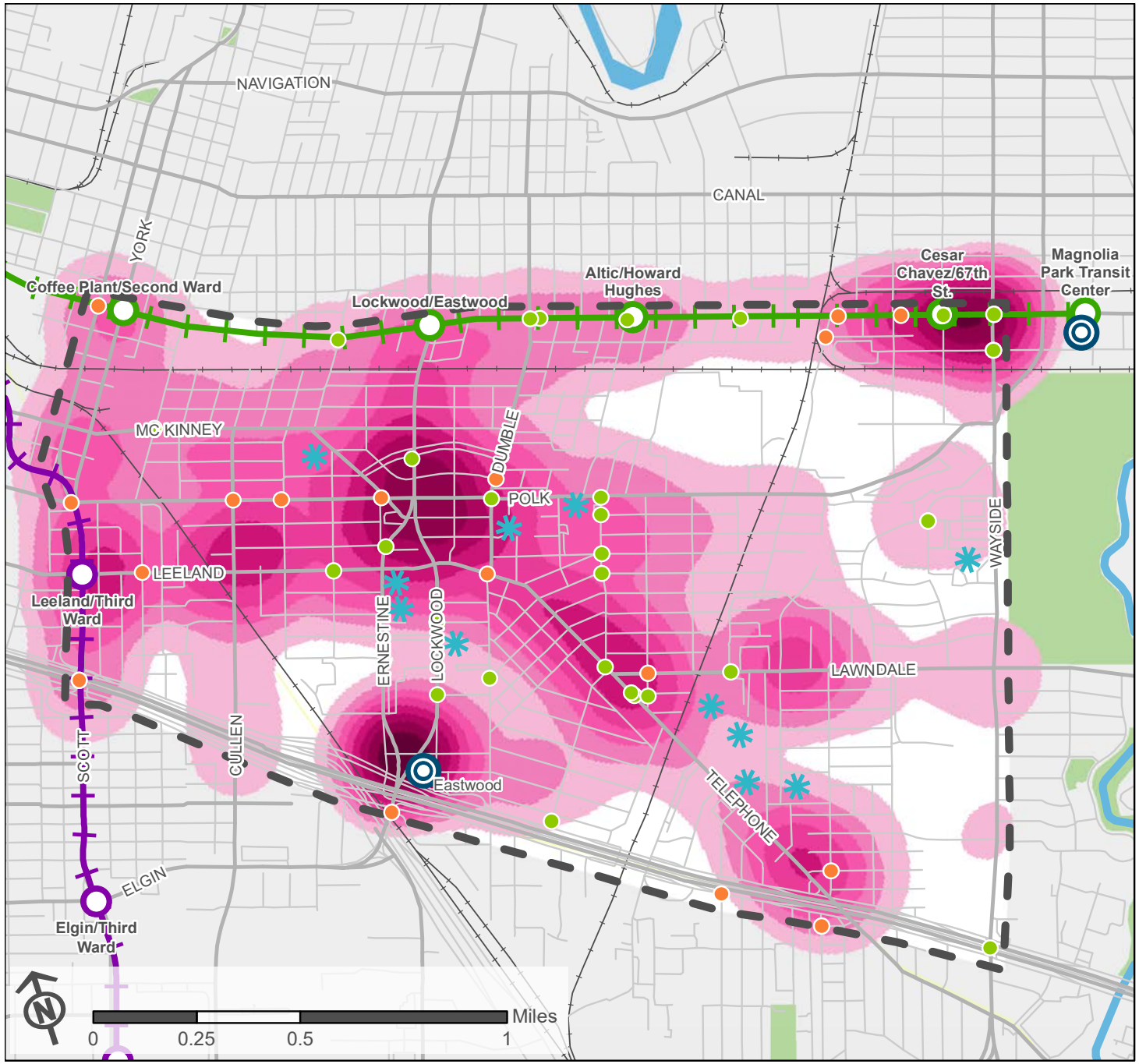
Sidewalk Condition Rating

- Unassessed
- New/Very Good Condition
- Fair to Good Condition
- Poor - Needs Improvement
- Missing

Crash Hotspots

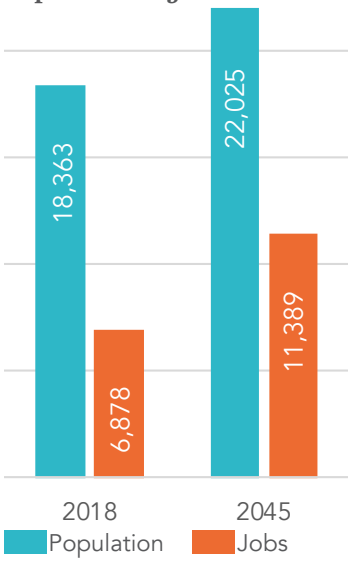
Figure A.9 shows the concentration of crashes over a span of five years. The areas around the intersections of Lockwood Drive and Polk Street, Harrisburg Boulevard and Wayside Drive, and Ernestine Street/Lockwood Drive near the transit center stand out for their especially high concentration of crashes. The map also shows locations of pedestrian and bicycle crashes. Intersection locations are where the majority of these crashes occur. Additionally, many of these crashes occur near schools, along transit routes, or commercial areas indicating a need for increased safety measures along corridors where multiple activities and trip purposes are occurring. Within the data there have been three fatalities. Two of the fatalities were pedestrian-related and occurred on Telephone Road south of Lawndale Street.

Figure A.9 High Crash Locations



Source: TxDOT Crash Records Information System 2014 - 2018 - Data excludes freeway and frontage road crashes

Figure A.12
Population & Job Growth



Source: H-GAC Forecast Data

Activity Density

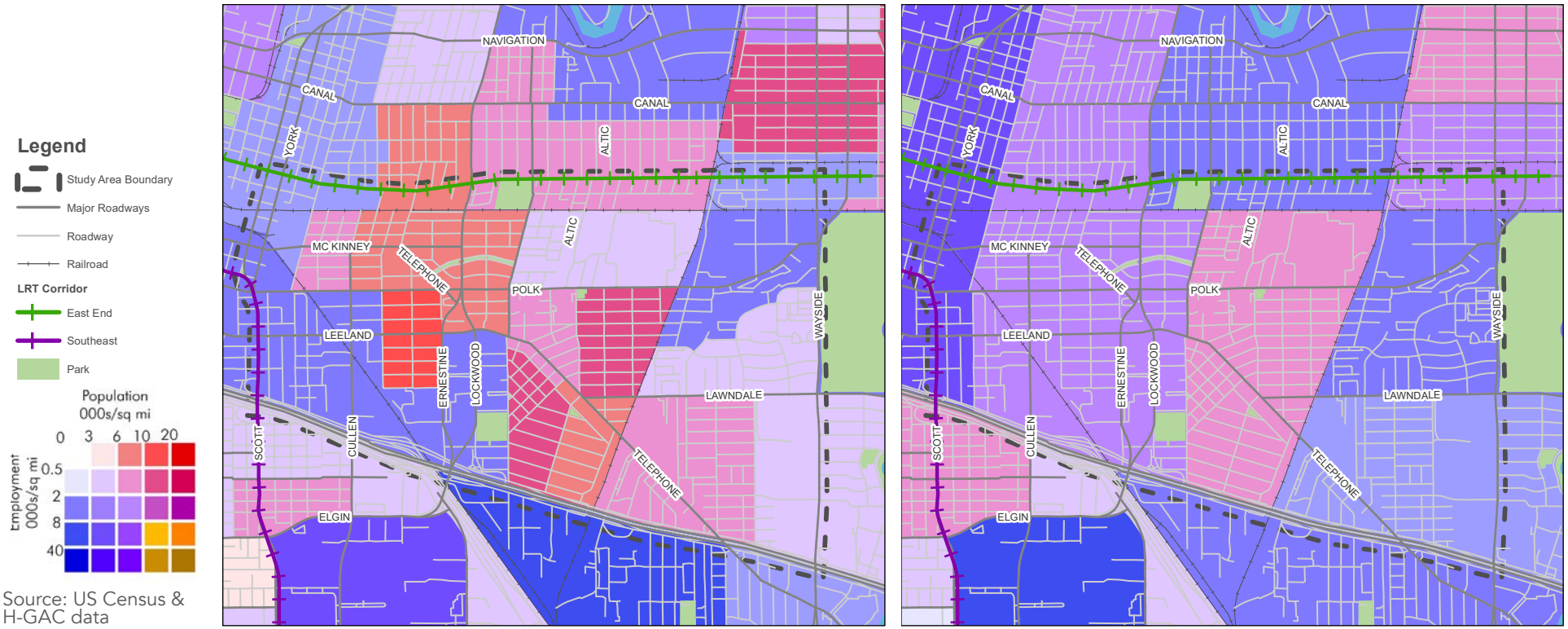
Activity density is the measure of how many combined people and jobs there are per square mile. It is a measure of how many things there are in close proximity and can indicate where short trips may be occurring or most feasible. Figure A.10 shows the current activity density within the study area. Currently there are fewer areas that have high numbers of both population and jobs indicating that areas are primarily comprised of one or the other.

Figure A.11 shows the predicted activity density in 2045 based on expected changes in development and uses. The areas are larger and more broad, but it can be seen that the study area is becoming more purple overall. This indicates more mixed use areas within the study area. Mixed use areas can encourage a greater variety of mode share and short trips.

These maps include forecasted data for job and population growth that is expected to occur. Figure A.12 highlights those changes. There is anticipated to be a 20% increase in population in the study area and a 66% increase in jobs over the next 25 years. The data is based on H-GAC's Travel Demand Model and economic forecasting using Transportation Analysis Zones (TAZs). These TAZs do not correlate exactly with the Census Block Group boundaries, which can explain variation in exact population and job numbers with those identified elsewhere in this report.

Figure A.10 2017 Activity Density

Figure A.11 2045 Activity Density



Source: US Census & H-GAC data

Corridor Connectivity

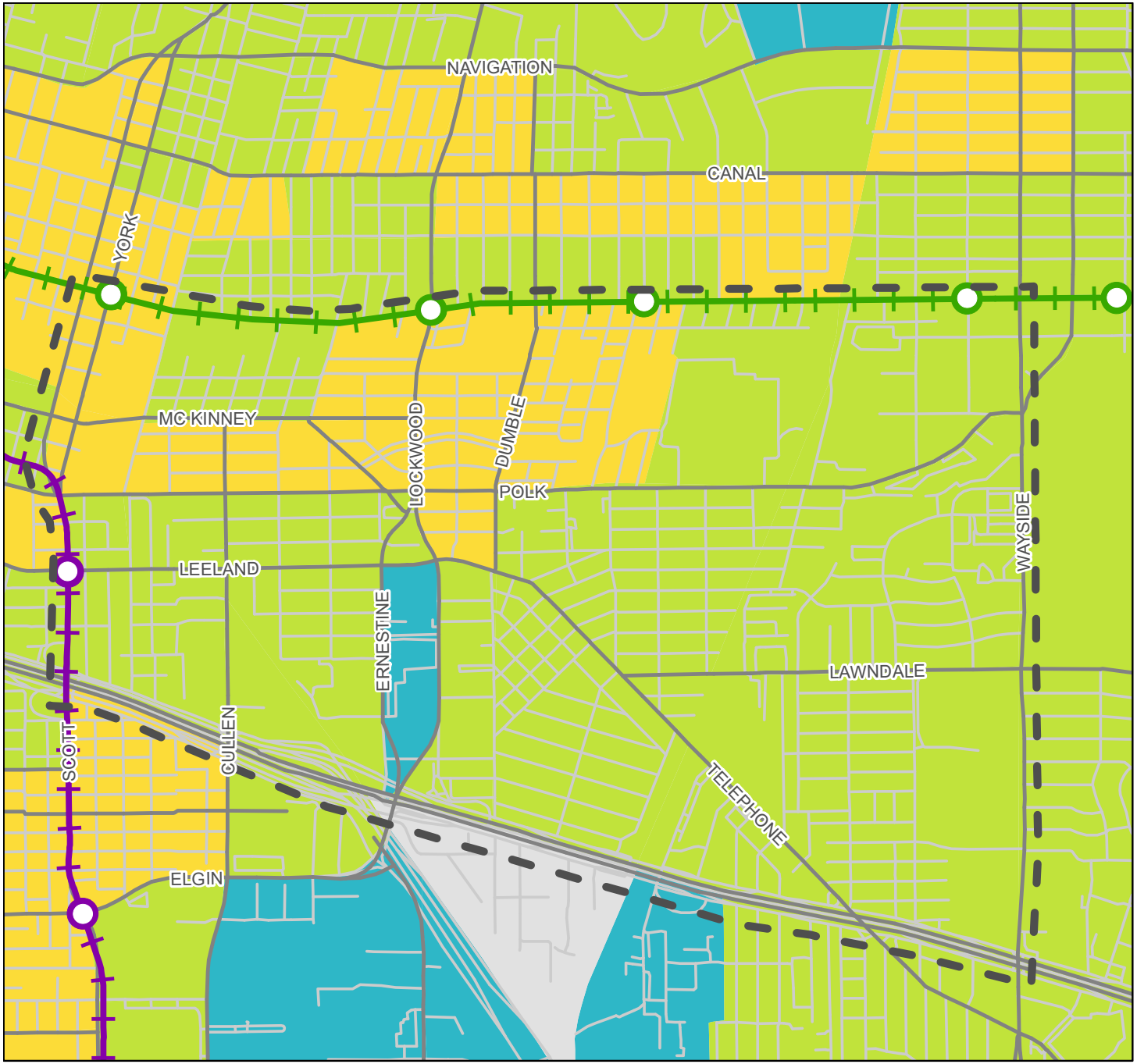
Intersection density is a useful indicator of the degree of street connectivity in an area. Neighborhoods with greater intersection density tend to have more interconnected streets that provide multiple routes to travel. If sidewalks are present and safe, a greater intersection density can make walking to destinations easier and more comfortable. Where parallel streets connect to the same sets of destinations there are opportunities to prioritize different modes. As Figure A.13 shows, the center of the study area has the greatest intersection density. Railroads and industrial areas greatly reduce connectivity.

Sidewalks of any condition exist on roughly 64% of study area public streets (excluding highway and frontage roads). The study area has a Walk Score of 75 meaning that most errands can be accomplished on foot. However, the existence of sidewalks or places to walk to does not indicate a safe or comfortable experience.

Figure A.13 Intersection Density and Sidewalk Availability

Source: H-GAC (sidewalk data)

Figure A.14 Short Trips



Short Trips

Figure A.14 shows the percentage of trips that are 3 miles or less for any type or purpose of trip within the study area. Three miles equates to an approximate 15 minute bike ride at average speed. Short trips carry the greatest potential for being completed by a mode other than driving. Shifting short trips out of cars by providing high-quality mobility choices can reduce the demand on existing roadways. Currently, 28% of trips originating in the study area are short trips. The share of short trips is predicted to increase to 34% by 2045. This is greater than the region's average of 26.4% in 2018 and 28.1% in 2045. Given the grid network and high intersection density that exists, this indicates that there may be a lack of destinations, such as grocery stores, in close proximity. Shifting a portion of the short trips from driving alone to another mode could result in meaningful impacts to accessibility.

Legend

% of Trips 3 Miles or Less

- < 10%
- 10% - 19%
- 20% - 29%
- 30% - 39%
- 40% - 49%
- 50% - 60%
- Study Area Boundary

Source: H-GAC Travel Demand Model

Computer and Internet Access

Access to information on the Internet and use of a computer is important for overall livability. We rely on the Internet and computers to learn new information and increasingly to communicate with the community around us. As shown in Figure A.16, the study area has higher rates of computer ownership (including smartphones) and households that pay for Internet access than the East End District overall. However, these rates are lower than that of the City of Houston and Harris County. Additionally, more people in the study area and East End district have a smart phone only that is used for computer and Internet access.

Housing

Housing supply and quality options are a key component for a vibrant, healthy, and stable community. This section highlights housing stock and affordability within the study area.

The existing housing stock is overwhelmingly detached single-family. However, there are other housing types available including townhouses and apartments. A variety of housing types enables people of varying family sizes and income levels to live within the community.

Having a healthy variety of housing options allows for multiple generations at different points in their lives to live in the community and continue living in the community though various life stages and changes.

This also includes the concept of "aging in place" which is where residents are able to transition to more senior-friendly housing options as they get older. This continuity is important as it contributes to the overall sense of place.

Data from Figure A.15, below, shows that the study area has fewer single-family attached housing options than the East End District, City of Houston, and Harris County. This refers largely to townhouses and can include condos. Growth in townhouses has been particularly prevalent in the region over the last decade as demand for the housing type has increased. Compared to other areas, the study area has more smaller-sized apartments with 2-9 units as well.

Photos highlighting various housing types and characteristics are identified on the following page.

Figure A.16 Computer & Internet Access

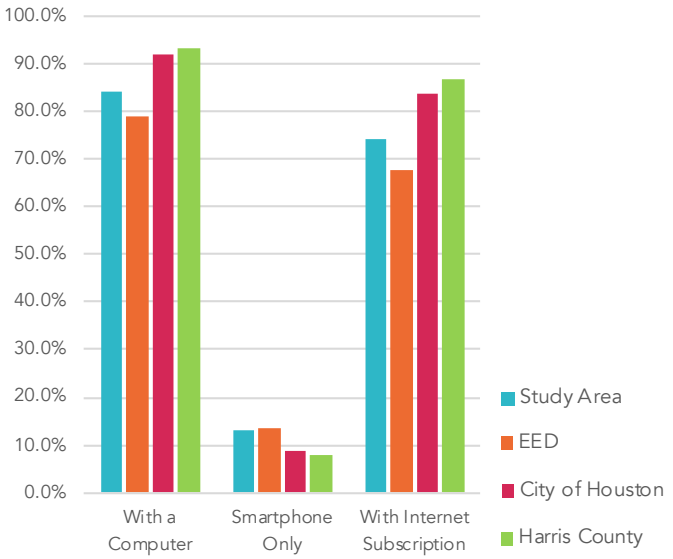
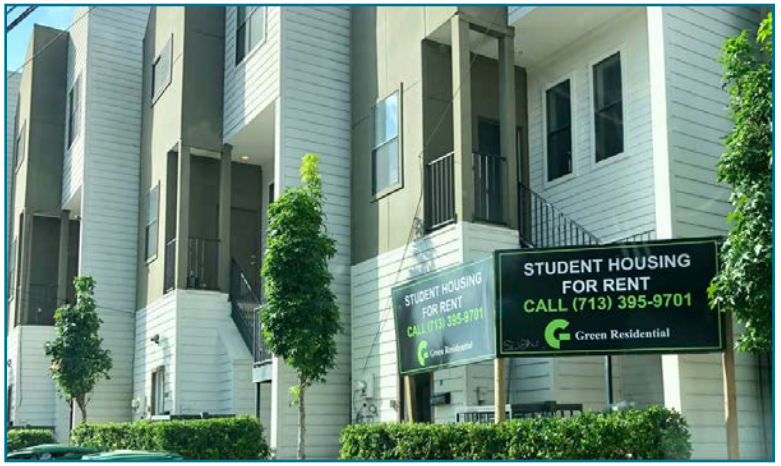


Figure A.15 Housing Characteristics

	Study Area	East End District	City of Houston	Harris County
Households	11,758	40,297	849,105	1,583,486
%Own	43.9%	39.7%	41.9%	49.7%
% Rent	50.0%	51.8%	58.1%	41.2%
Vacancy	6.0%	8.5%	13.1%	9.0%
Single-Family Detached	55.7%	57.7%	44.5%	61.6%
Single-Family Attached	2.1%	5.2%	5.3%	5.8%
Apartments 2 - 9 Units	23%	18.4%	12.9%	12.7%
Apartments 10 - 19 Units	6.7%	5.7%	13.8%	4.5%
Apartments 20+ Units	12.3%	13.2%	22.6%	9.0%
Other Housing Types	0.3%	0.5%	0.9%	6.3%

Source: American Community Survey 2018 5-year averages



Left: Eastwood Villa apartments near Leeland Street

Right: New multi-family townhouses aimed at students on McKinney Street near Lantrip Elementary

Left: Multi-family housing on Mulford Street

Right: Single-family house on Leeland Street

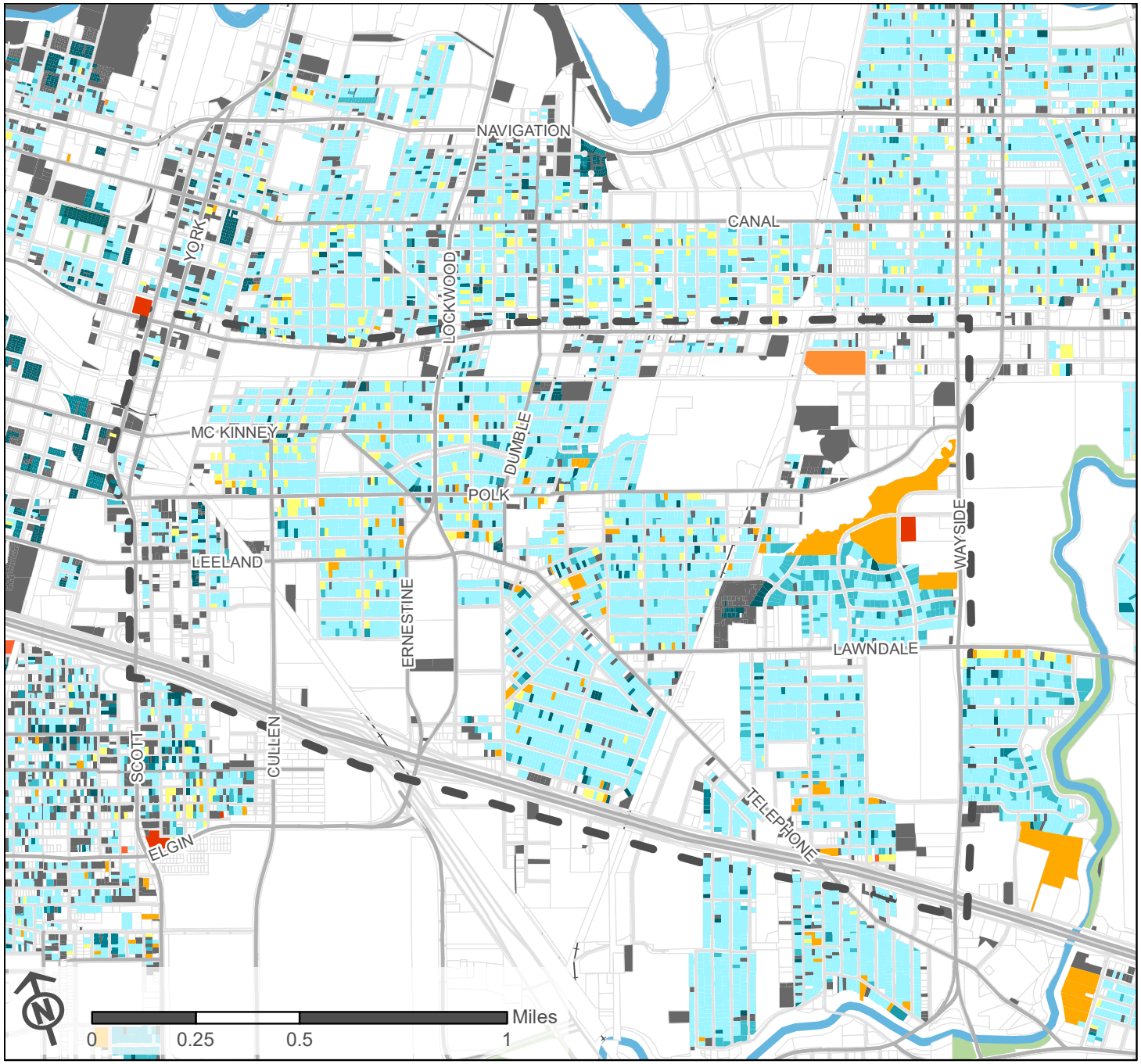
Left: Renovated house at Monroe and Pearson

Right: Single-family bungalow

Age of Housing Stock

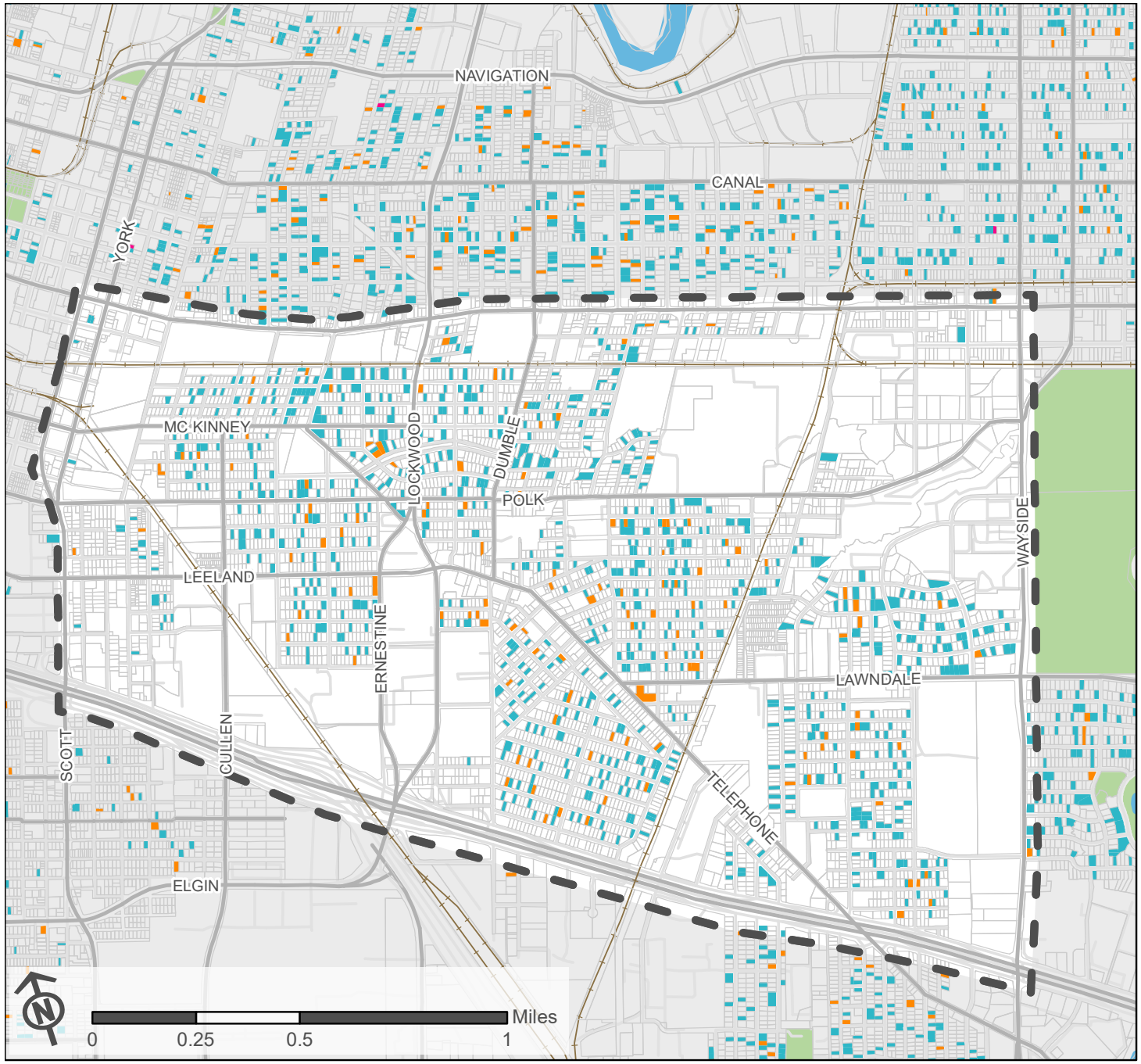
Figure A.17 shows the age of buildings for both single-family and multi-family residential properties. As a predominantly historic and residential area, a majority of housing is single family and built prior to 1950. Much of the multi-family housing stock is also pre-1950's. New or redeveloped housing can be seen sprinkled throughout neighborhoods. In contrast to areas outside the study area with more dark blues and reds, there is less new or redevelopment occurring within the study area.

Figure A.17 Single Family & Multi Family Residential Building Age



Source: 2019 Harris County Appraisal District

Figure A.18 Homeowner Exemptions for Seniors and Disabled



Source: 2019 Harris County Appraisal District

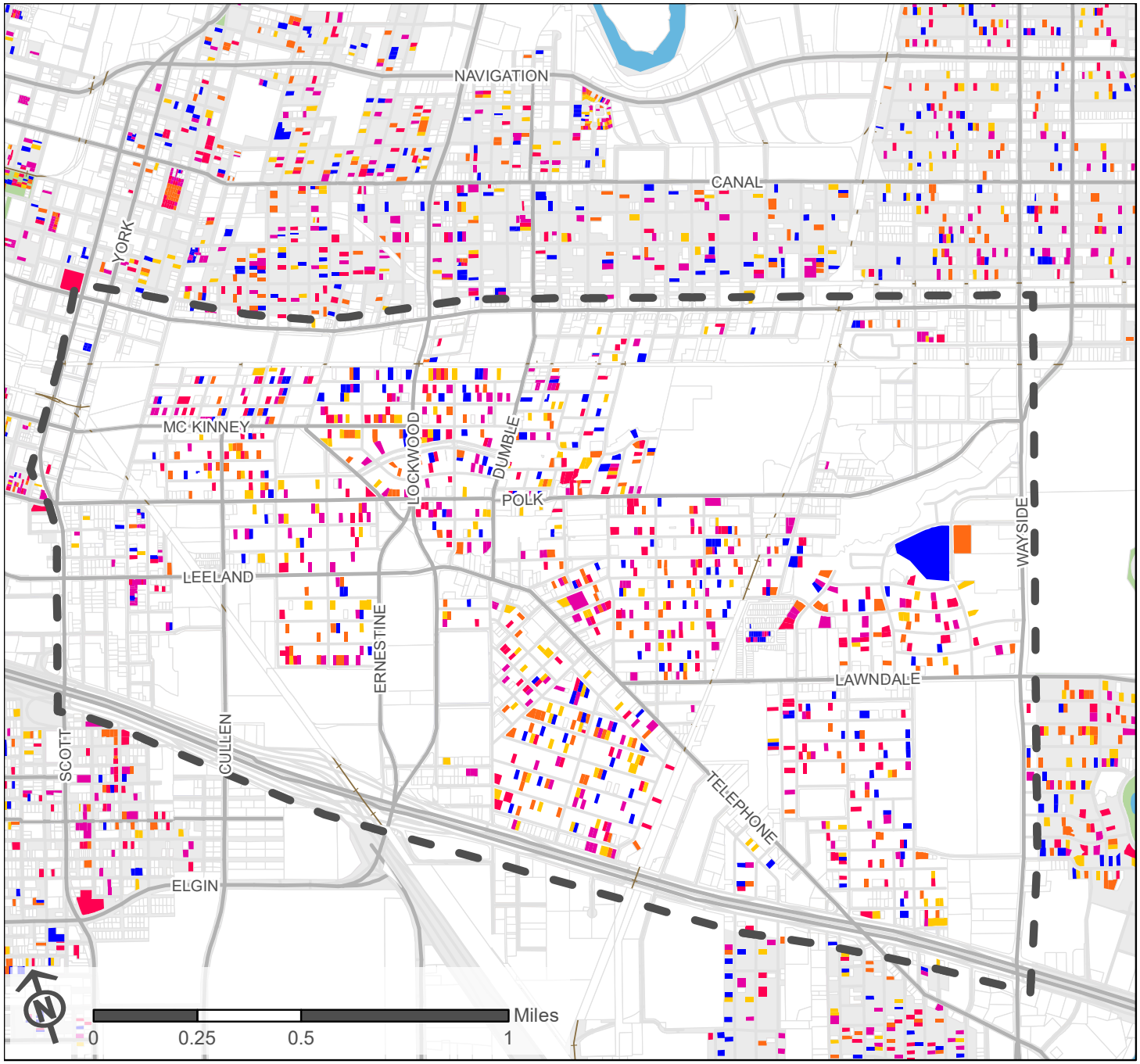
Homeowner Exemptions

Figure A.18 highlights where properties have certain types of exemptions applied. The exemptions for seniors over 65 gives a $10,000 exemptions as well as adds a school tax ceiling. The school tax ceiling means that school taxes will not increase unless improvements are made to the home. The disability exemption also applies an exemption of $10,000 on school taxes for homeowners with a disability. Within the study area, approximately 20% of homes have an Over 65 exemption applied, but only 3% of homes have a disability exemption applied. People in both of these groups have specific needs. Providing access to goods and services is important as well as ensuring the access is high quality and accommodating multiple modes as these groups may be less likely to drive.

Recent Housing Purchases

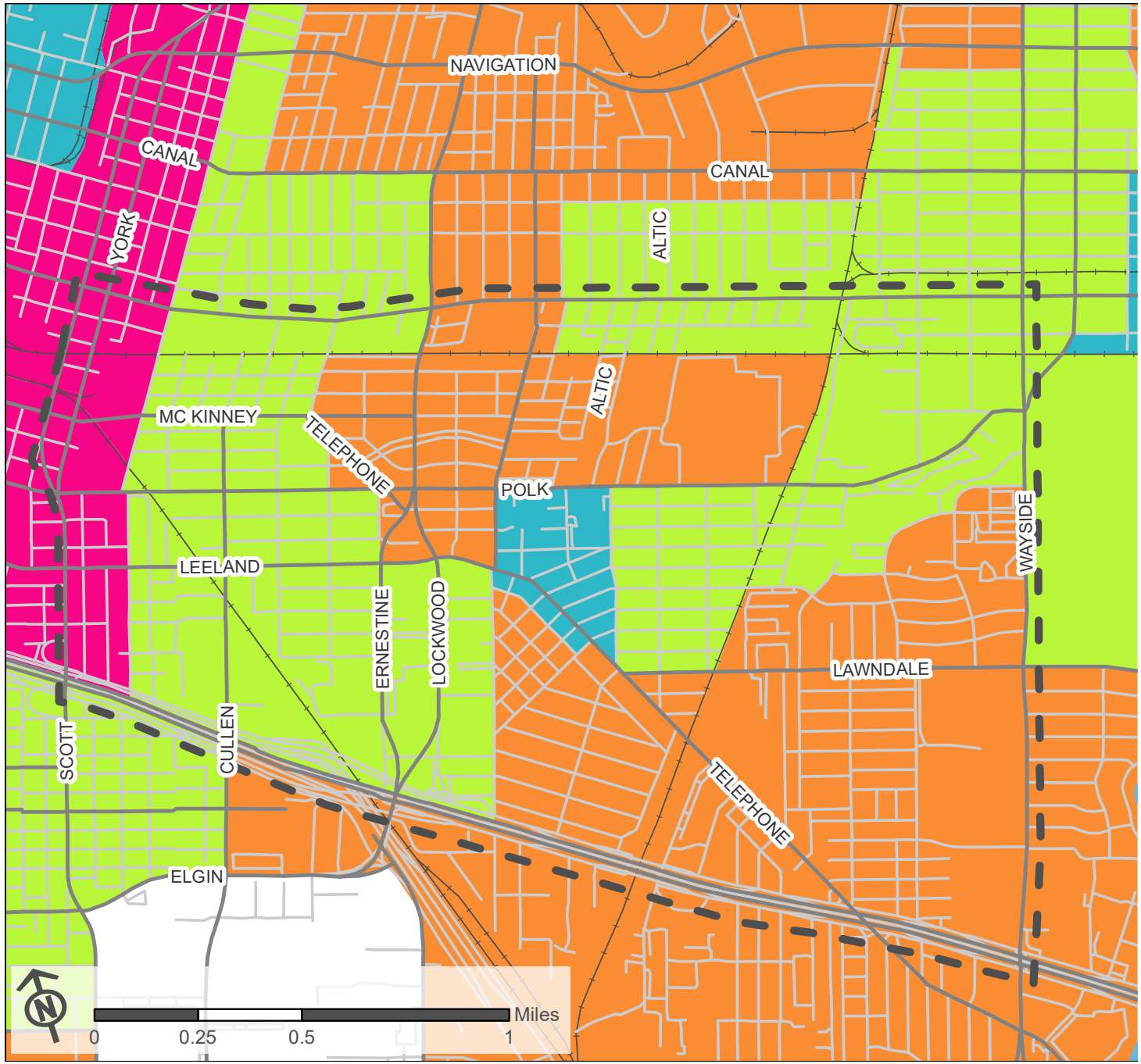
Figure A.19 shows single- and multi-family housing purchases in the study area between 2015 and 2019. The purchases indicate there is continued real estate activity within the study area, similar to the surrounding areas. It is important to understand that while there is a lot of property turnover within the study area, the important factor is whether or not the property owner is living in the property or has purchased it for rental income. Overall homeownership of residents is balanced within the study area (43.9% homeowners) and is higher than that of the East End District (39.7%) and the City of Houston (41.9%). To keep homeownership rates higher and overall property turnover rates at a healthy level, it is important to ensure residents have the tools to maintain and fix up their homes over time instead of selling.

Figure A.19 Residential Housing Purchases 2015 - 2019



Source: 2020 Harris County Appraisal District

Figure A.20 Housing + Transportation Index for Affordability



Affordability

Housing affordability is an important issue, but housing is only one component of how affordable a place is overall. Transportation costs are also important to factor into the discussion of affordability. The Center for Neighborhood Technology has developed a Housing + Transportation Index that adds together those primary costs and divides it by the region's median income at the block group level. Spending 45% or less of income on these costs is a standard threshold for identifying a location as affordable. Figure A.20 highlights the fact that different parts of the study area have differing levels of affordability. Ensuring access to multiple transportation options and reduction on the reliance of owning a vehicle can help places that have higher housing costs become more affordable. Alternatively, ensuring safe and convenient transportation options can help communities maintain affordability as well.

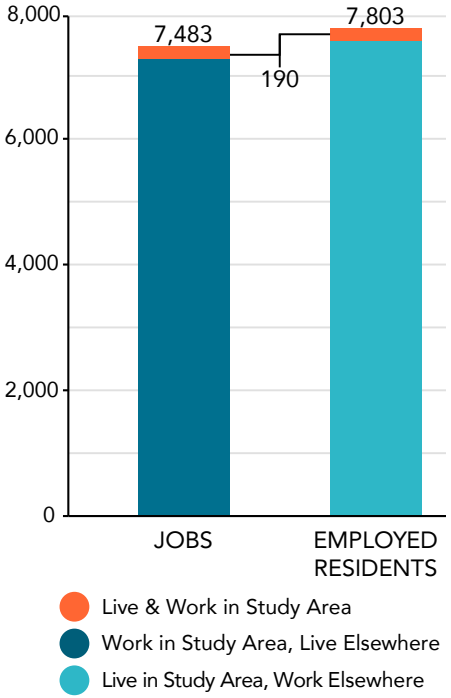
Legend

Housing +Transportation Index

- < 30%
- 30% - 35%
- 36% - 45%
- > 45%
- Study Area Boundary

Source: Center for Neighborhood Technology

Figure A.22 Inflow & Outflow



Source: US Census: On The Map

Economic Development

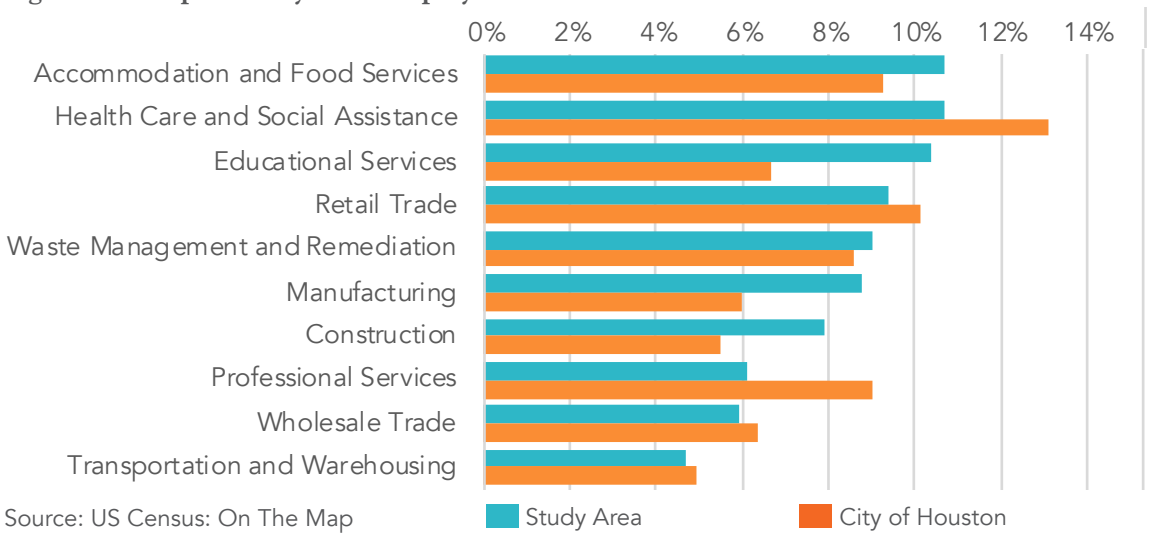
Jobs and local economic opportunities are essential for livable communities. It is important to understand the current composition of jobs within the study area and how they relate to the surrounding community. This section focuses on understanding land uses and their proximity, existing employment, commercial corridors, and land value.

Employment Industries

The study area consists of a variety of jobs and has some competitive advantages to attract businesses, including proximity to high-quality transit, Downtown Houston, University of Houston, the Port of Houston I-45, a young workforce, and a rich cultural history in the area. Access to surrounding communities and the overall region is important for businesses and employees.

Figure A.21 highlights the top ten industries within the study area and compares the share of jobs to that of the City of Houston. Overall employment characteristics vary from that of the City of Houston by comparison.

Figure A.21 Top 10 Study Area Employment Industries



Source: US Census: On The Map

Industries with the greatest percentage of jobs include Accommodation and Food Services (10.7%), Health Care and Social Assistance (10.7%), Educational Services (10.4%), and Retail Trade (9.4%). Comparatively, there are a greater share of jobs in education, manufacturing, and construction in the study area than in the City of Houston. Alternatively, there are a greater share of jobs in the Health Care and Social Assistance and Professional Services sectors within the City of Houston than in the study area.

Understanding the diversity of industry and employment within the study area is helpful to understand the dynamics of travel and commute patterns and needs. Additionally, it identifies potential opportunities to grow and diversify the local economy within the study area.

Inflow-Outflow of Travel

The Greater Eastwood area employs nearly 7,500 people across a range of industries. Figure A.22 shows that employed residents (7,803) of the study area outnumber jobs, meaning that residents are required to commute out of the study area for work. While commute into and out of an area is normal as most places do not offer all possible job opportunities, there is an imbalance within the study area. Of the employed residents, only 190 (2.4%) both live and work within the study area. The number of people commuting into and out of the study area impacts the transportation network and mode share. Of residents living in the study area, approximately 60% work within 10 miles from their home, indicating that transit and potentially bicycling may be options for commuting if safe, comfortable facilities are available. Alternatively, only 33% of study area employees live within 10 miles of their job, meaning employees are traveling further to work in the study area. Additional jobs and diversity of those jobs may help provide more options for people to both live and work within the study area.

Left: Commercial strip center on Telephone Road

Right: Commercial buildings on Stimson Street near Telephone Road

Left: Snowcone shop on Telephone Road with poor sidewalks

Right: Mural on commercial building

Left: New building development

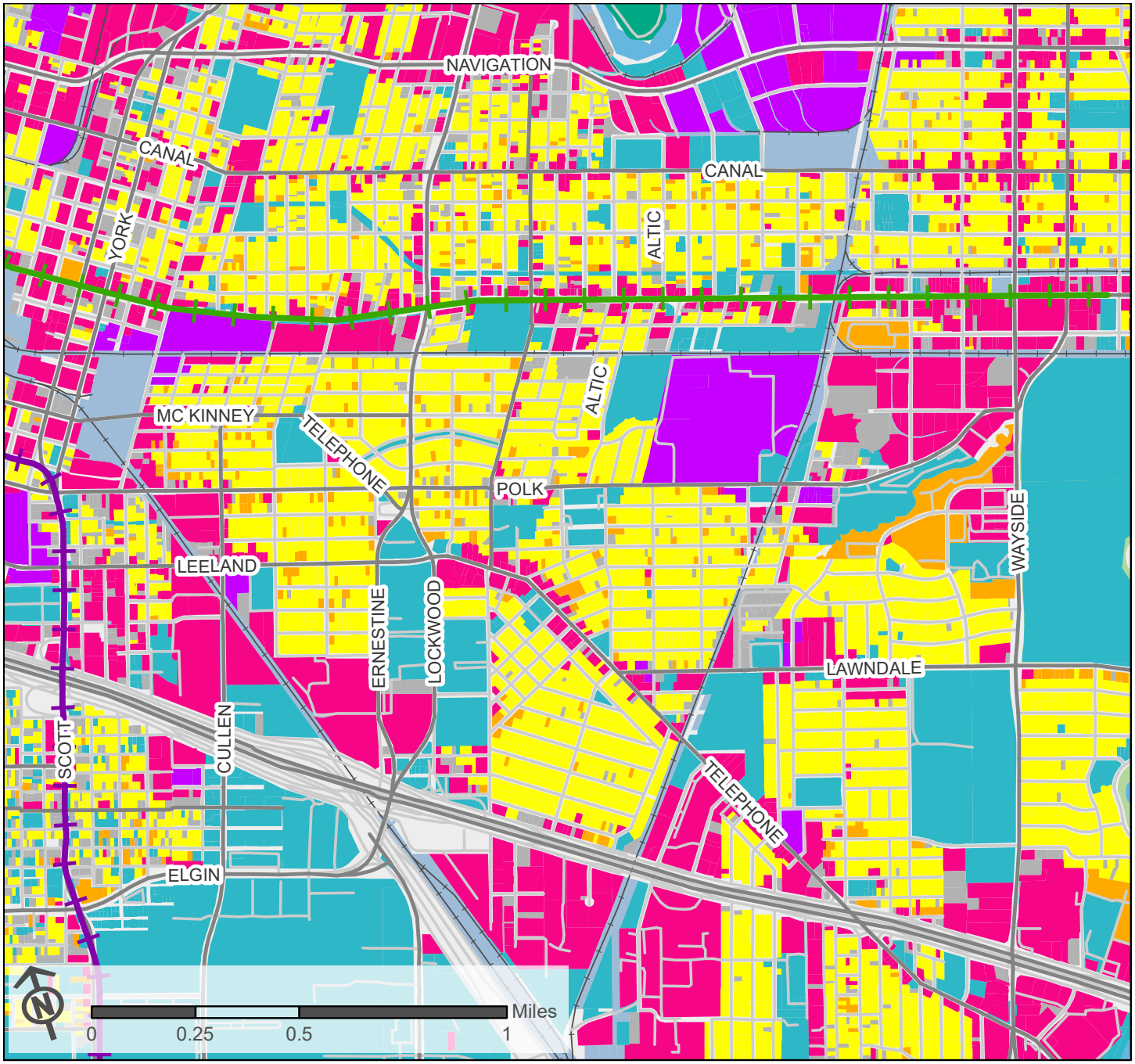
Right: Commercial building near Magnolia Transit Center

Land Use

The study area's primary land uses are residential, commercial, and civic, shown in yellow and orange, pink, and blue, respectively, in Figure A.23. Civic land uses consist of parks, open space, schools, and other tax exempt land. Residential land makes up the core of the study area, while commercial and industrial land uses are located on the outer parts of the study area and along primary corridors. The dominance of residential land use indicates a need for neighborhood retail and services to support the number of households. The percentage of land uses are shown in the map legend below.

Land use and transportation function together. When coordinated, strategies like street design and connectivity, mixed land uses, increased density and parks, and more can improve the physical, economic, and mental health in a community.

Figure A.23 Existing Land Uses



Legend

20.2%	Civic
23.6%	Commercial
6.5%	Industrial
4.6%	Multi Family Residential
33.2%	Single Family Residential
5.5%	Transportation/Utilities
6.2%	Undeveloped

Source: 2019 Harris County Appraisal District

Figure A.24 Telephone Rd Commercial Corridor

Commercial Corridors

As identified in Figure A.23, much of the commercial development is along major corridors. These "Commercial Corridors" provide important destinations for the community. Access to and along these corridors for people of all ages and abilities is important for the community and businesses. The Telephone corridor highlighted on Figure A.24 highlights many local businesses along Telephone Road as a commercial corridor. These include cafes, restaurants, and a bakery. These institutions, and this corridor makeup one of the primary social gathering points in the district.

Improved multimodal access to commercial corridors can have important community health and safety impacts. By increasing the number of places that people can walk and bike to safely, the Center for Disease Control and Prevention (CDC) has identified reduced risks of asthma, heart disease, obesity, and more.

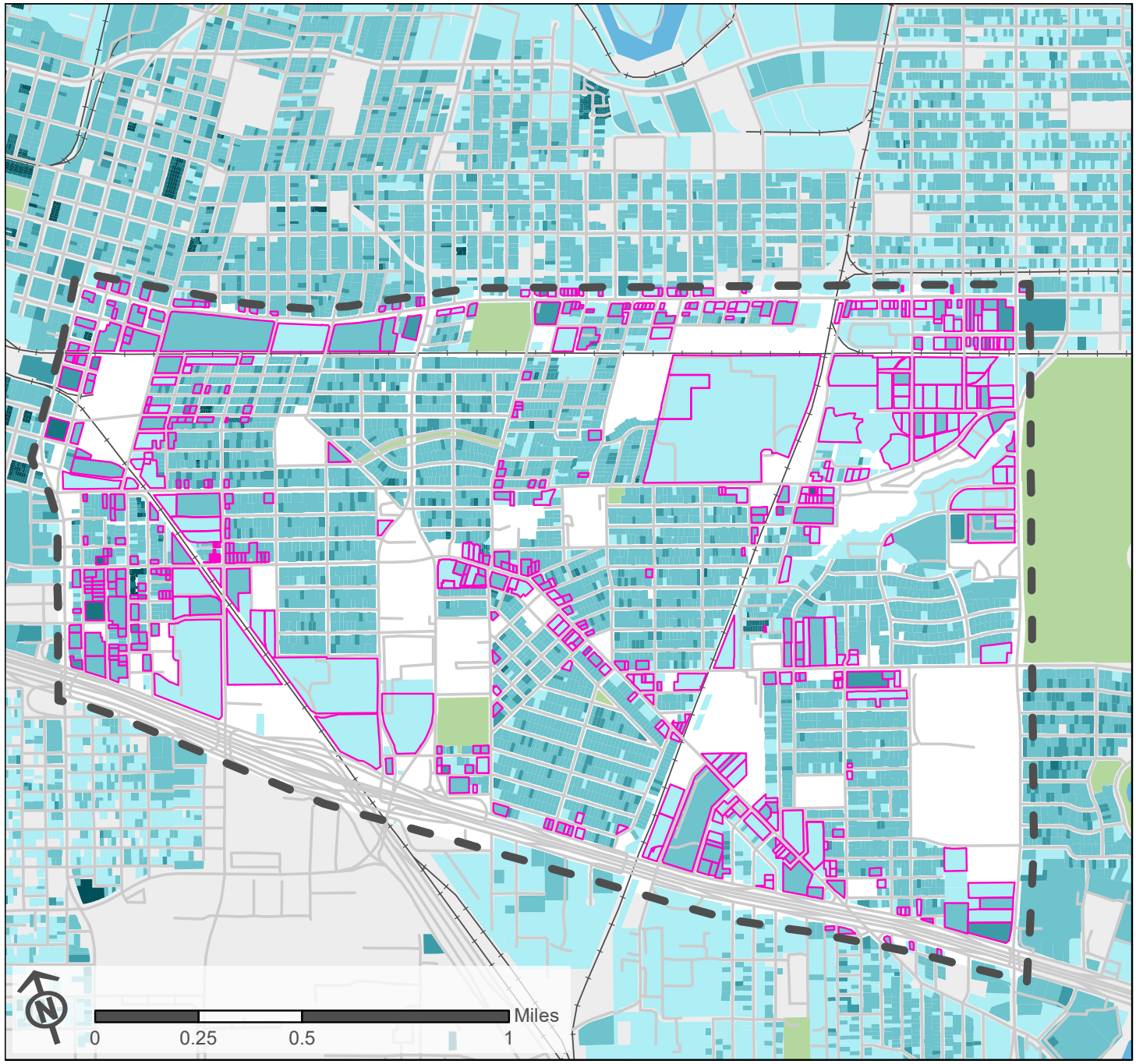
Additionally, places that have invested in safe, comfortable places for people to walk and bicycle have seen economic benefits. People who walk and bicycle to stores tend to visit them more often and spend more money over time.

Land Value

Figure A.25 shows the calculated land value per square foot within the study area. Parcels outlined in pink are commercial or industrial. What is interesting to note is that many of the commercial or industrial properties are less than the value of residential parcels on a square foot basis. Some of these parcels may be potential development opportunities. A higher percentage of commercial parcels in proximity to the Green and Purple light rail lines have higher values than those along railroad or roadway corridors alone.

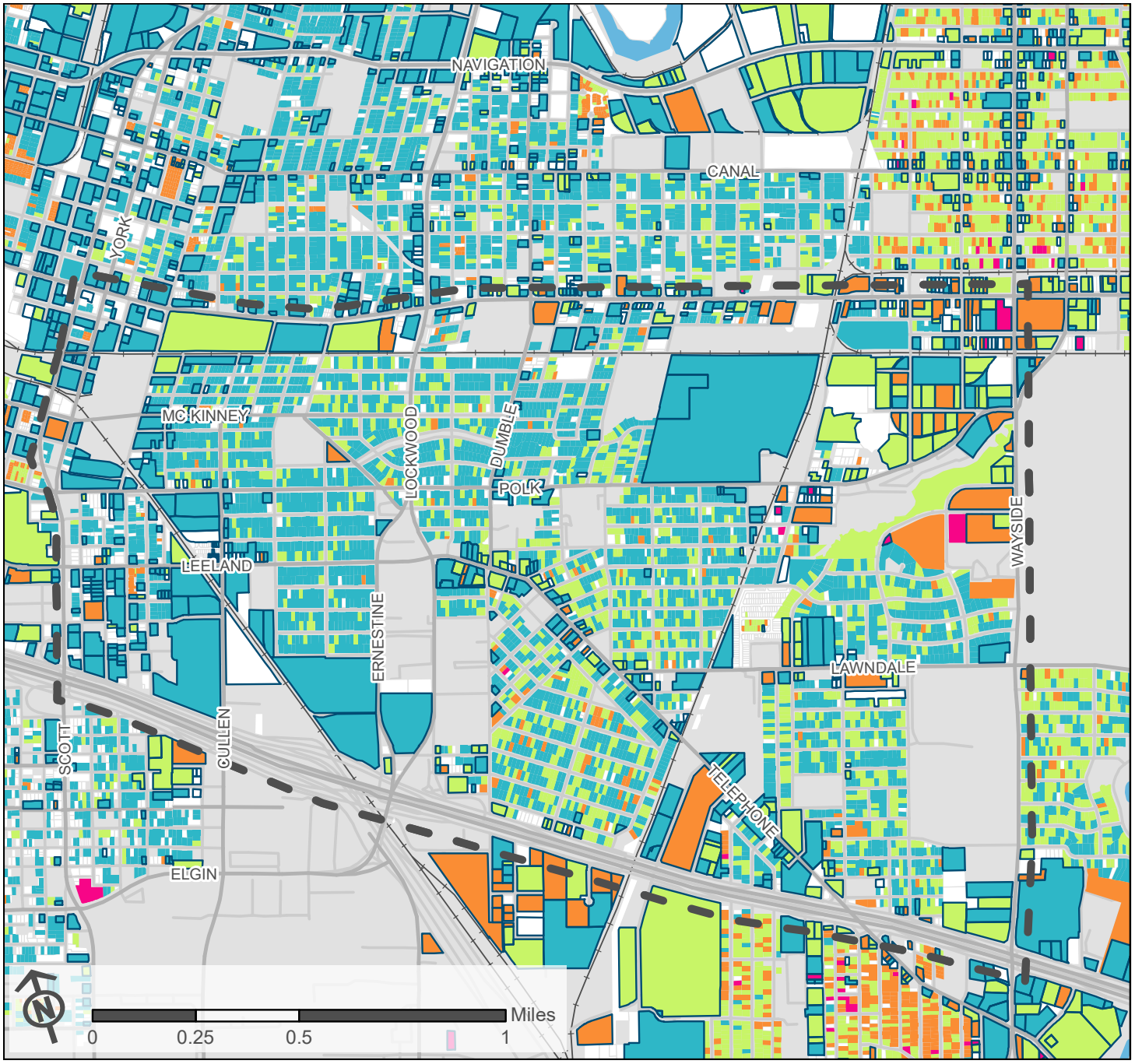
Continuing to provide improved multimodal access to commercial properties and mixing land uses where possible could help maximize and better utilize available land within the study area. Focus around existing transit nodes, like light rail stations, is one strategy to create a greater mix of uses and maximize land use within the study area.

Figure A.25 Land Value Per Square Foot.



Source: 2019 Harris County Appraisal District

Figure A.26 Improvement Value to Land Value



Improvement Ratio

Figure A.26 shows the improvement ratio of the study area. The improvement ratio highlights parcels that are potentially underutilized, from a development perspective. Within the study area, there are some larger areas with an improvement ratio of less than 1. Many of these larger areas are industrial or commercial and could be opportunity locations for future development or redevelopment of any use. Among the commercial and industrial properties there is a mix of improvement ratios, but a majority are less than 1. Additionally, Many of the neighborhoods within the study area have a mix of improvement ratios. Overall, the data indicates there is redevelopment occurring and opportunities to continue this trend. Commercial or industrial properties with low values per square foot and low improvement ratios may be the best opportunities for initial redevelopment.

Legend

Improvement to Land Value Ratio

- 0
- <1
- 1 - 2.5
- 2.5 - 7
- 7 - 24
- Industrial or Commercial
- Study Area Boundary

Source: 2019 Harris County Appraisal District

Parks & Open Space

Overview

The Greater Eastwood neighborhood currently contains nine public spaces. These spaces include plazas, publicly accessible school grounds, commercial plazas, intimate neighborhood parks, larger community parks and a cemetery. Through in-person observation and data analysis from the Houston Parks and Recreation Department (HPARD), a detailed analysis of these individual open spaces including their aesthetic, programmatic, natural, and functional qualities, along with their social utility will be assessed in the following pages.

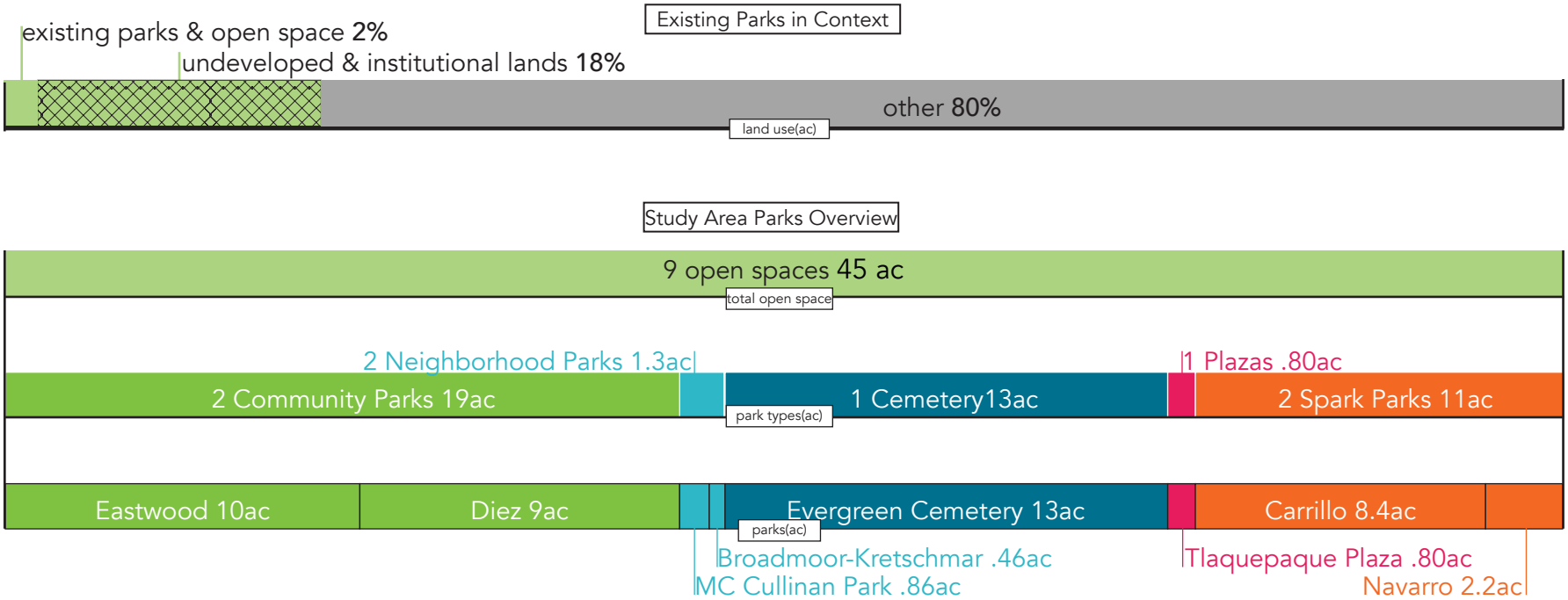
This section focuses on the overall system of open spaces and how, as a network, they are serving the community.

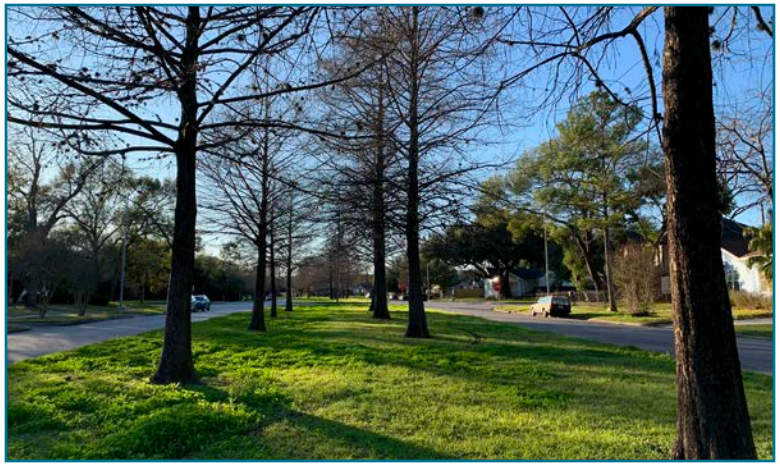
Park Metrics

The nine open spaces in the Greater Eastwood community include two community parks, three small neighborhood parks, two spark parks, and one cemetery; approximately 45 acres of total open space (Figure A.27). This existing 45 acres represents 2% of study area land use.

Approximately 18% of the Eastwood neighborhood is undeveloped or publicly owned, presenting opportunity to introduce parkway corridors/complete streets, community parks, neighborhood parks, and plazas. Using the inventory of programmatic elements and assessing their current condition will inform the type and location of recommended park elements. Figure A.28 maps the locations of the parks, plazas, and open spaces within the study area and Figure A.31 maps parks and trails near the study area.

Figure A.27 Parks and Open Space Inventory



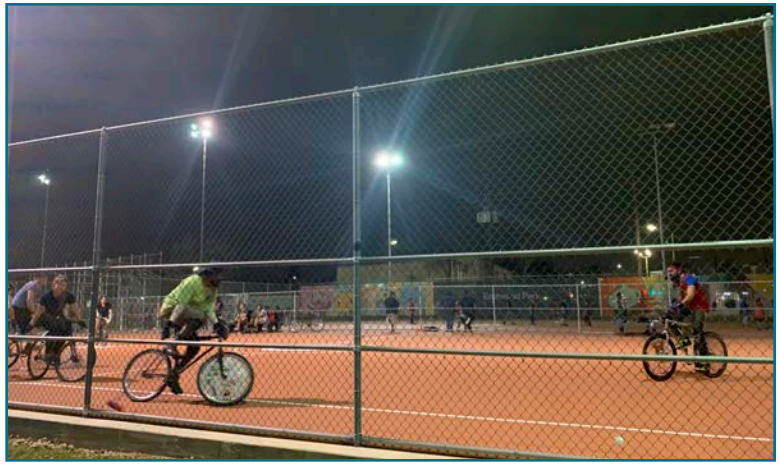


Left: Esplanade along Park Drive

Right: Bohemeos in Tlaquepaque Plaza

Left: Jenkins Garden at Lockwood Dr and Harrisburg Blvd

Right: Picnic at East End Prep School



Left: Playground equipment at Broadmoor-Kretschmar Park

Right: A game of bike-polo at the Eastwood Park small-sided courts

Community Parks

1 Eastwood

2 Diez Street

plazas

3 Jenkins Garden

neighborhood parks

3 M.C. Cullinan

4 Broadmoor-Kretschmar

cemeteries

5 Evergreen Cemetery

6 Dawson - Lunnon Cemetery

plazas

6 Tlaquepaque Plaza

spark parks

7 Navarro Middle Spark Park

8 Carrillo Elementary Spark Park

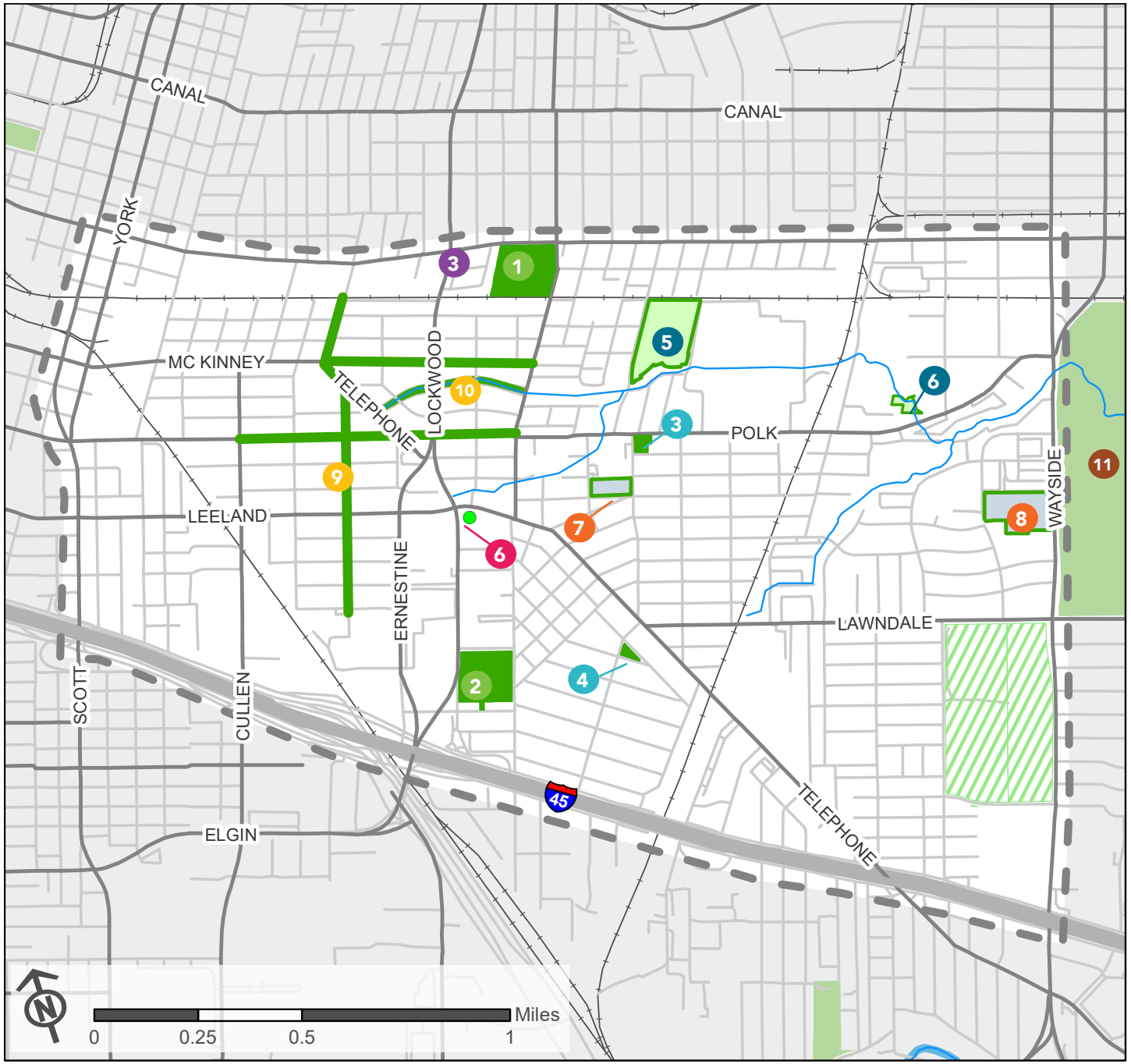
linear parks/greenways

9 Eastwood Live Oaks

10 Park Street

regional parks

11 Gus Wortham Golf Course



Park Types

The park types in the study area are defined using the same criteria that HPARD used in its 2015 report (Figure A.29). Varying sizes of parks serve different selections of users, by activity, and by what program elements they can support. Using these definitions, and the HPARD standards for persons/park we can locate gaps in park acreage and programming in the district.

All of these park types fall under the umbrella term of "greenspace" which is defined in the HPARD report using the definition created by Greenspace Scotland. "Greenspace is any vegetated land or water within an urban area."

Spaces qualifying as Greenspace according to Greenspace Scotland[7]:

- Derelict, vacant and contaminated land which has the potential to be transformed
- 'Natural' greenspaces - natural and semi-natural habitats
- Green corridors - paths, disused railway lines, rivers and canals
- Parks, gardens, playing fields, children's play area, woods and other natural areas, grassed areas, cemeteries and allotments

This definition is useful in locating opportunities for further greenspace creation, and when considering how to improve the function of existing spaces for community. As Figure A.29 shows, the study area currently lacks adequate acreage of the following park types.

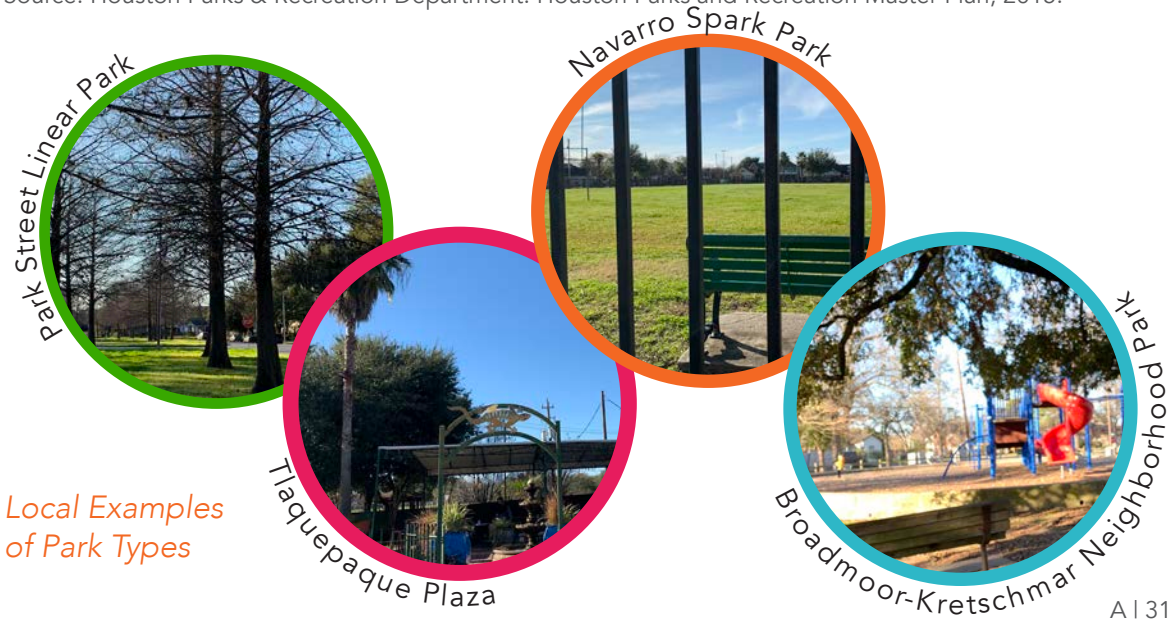
- Neighborhood
- Community
- Greenways
- Reserves/Natural Spaces

Figure A.29 Existing Parks & Open Space

Park Type	Size (acres)	Typical Program Elements	HPARD Standards (acres/1000 persons)	Eastwood (acres/1000 persons)
Pocket	<1	Playground, seating, gazebos, or gardens	0.005/1000	.028/1000
Neighborhood	1-15	Above+ open space, habitat, walking trails, multi-use courts/fields, shelters	1.0/1000	.0737/1000
Community	16-150	Above+ lighted sport fields, pool/ splashpad, rec center, group gathering spaces, dedicated parking	1.5/1000	1.07/1000
Regional	>150	Above+ lighted sports complexes, community structures/center, restrooms, golf, nature areas, horticultural centers	8.0/1000	9.13/1000
Linear/Greenway	n/a	Trails, trail amenities, screened portable toilets, habitat, parking	1.0/1000	.132/1000
Reserve/Natural	>5	Natural surface trails, wildlife observation stations, trail heads, habitat, parking	1.0/1000	.028/1000
Plazas/Squares	<10	Sculpture, monument, public art stages, shade structures, plantings	n/a	n/a
Spark Parks	n/a	Community park on public school grounds, playground, walking trail, benches, picnic tables, trees, outdoor classroom, public art.7	n/a	n/a

Source: Houston Parks & Recreation Department. Houston Parks and Recreation Master Plan; 2015.

Local Examples of Park Types



Overall Neighborhood Program

When considering the function of current park spaces, and the programmatic needs of the community, surveying the existing elements of local parks is useful to understand where the gaps, and redundancies in program exist.

Through in-person field visits an inventory of the overall programming is presented in Figure A.30 with several metrics standing out. The first is the lack of wildlife habitat and natural programming in the district. This occurs simultaneously with the majority of parks possessing large open lawn areas. Additionally, cultural programming; spaces for performance, public art, and community events are only present in two spaces.

Figure A.30 Existing Programming in Parks

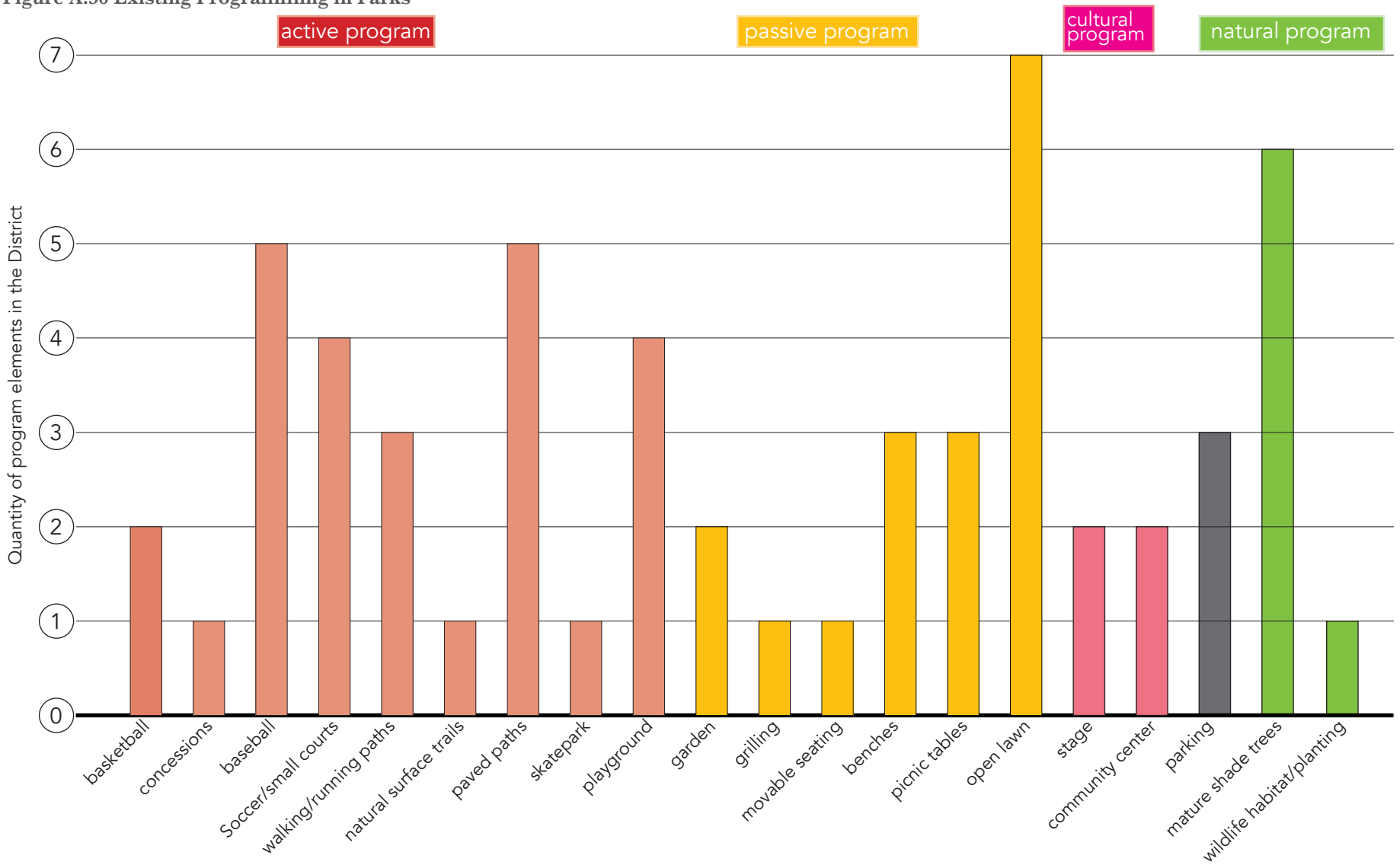
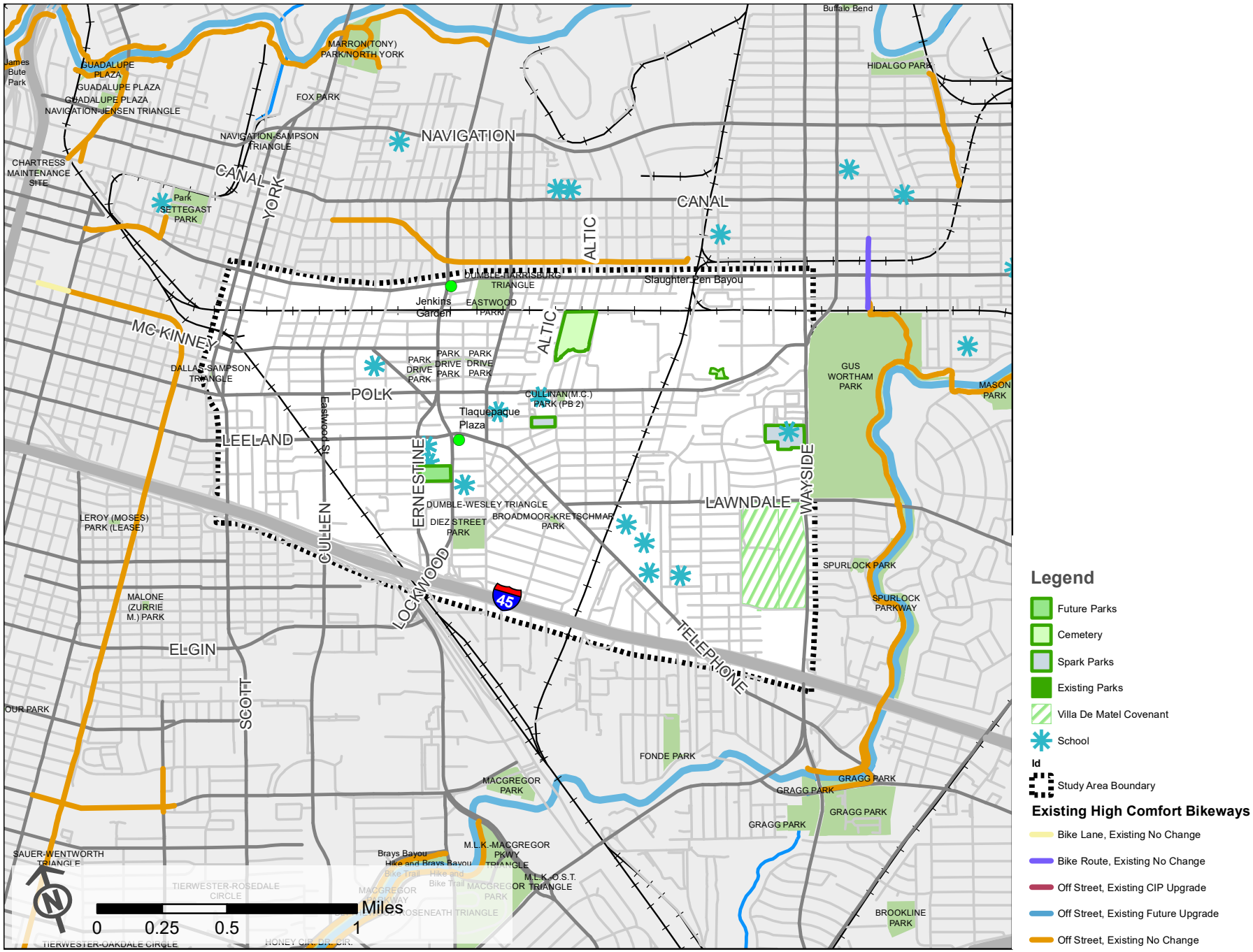


Figure A.31 Existing Open Space - Nearby Parks



Case Study

Shaping Neighborhoods: For Local Health and Global Sustainability by Hugh Barton, Marcus Grant, and Richard Guise

Geographic Accessibility Thresholds

In the book Shaping Neighborhoods: For Local Health and Global Sustainability the following geographic accessibility thresholds are defined. These thresholds and categories allow detailed evaluation of the existing Eastwood open space network. The categories defined in the book are as follows.

Local Area of Play (LAP) - 300'

The National Playing Field Association recommends a local area of play for children up to 5 years old. These are small informal open space areas for low-key games sited within one minute's walking time of every home(300'). These playspaces may be integrated with neighborhood streets, but safety should be prioritized. These spaces should be "green in character, and overlooked by dwellings."

Local Equipped Area of Play - 1000'

Local equipped areas of play are built/equipped playspaces for children 4-10 years old. These spaces may include typical playground equipment such as swings seesaws and slides, as well as small-sided courts. These spaces should be within a 5 minute walk (1000') of every home.

Local Park/Greenspace - 1000'

Neighborhood and community parks with an accessible open space component additional elements may include, but are not limited to, wildlife habitat, courts, seating, shelters, gardens, and playgrounds. These spaces are not solely dedicated to sports.

Green Network Access - 2000'

The linkages; green corridors in the park network of open spaces. Includes trails, trail amenities, and often capitalizes upon local landscape character of a district, featuring the natural landscape features that define a region. These networks also provide ecological services, by creating connected wildlife habitat, mitigating flooding, and increasing air quality to name a few benefits.

Playing Fields - 3280'

Parks dedicated to, or featuring, fields for large-sided sports.

Building a Network

Beyond the scale of the individual park a network should be formed that includes as many of these spaces as possible "percolating through the urban area" as one connected green system that increases the well being of the community and provides diverse and equitably distributed opportunities for recreation.

Open Space Accessibility

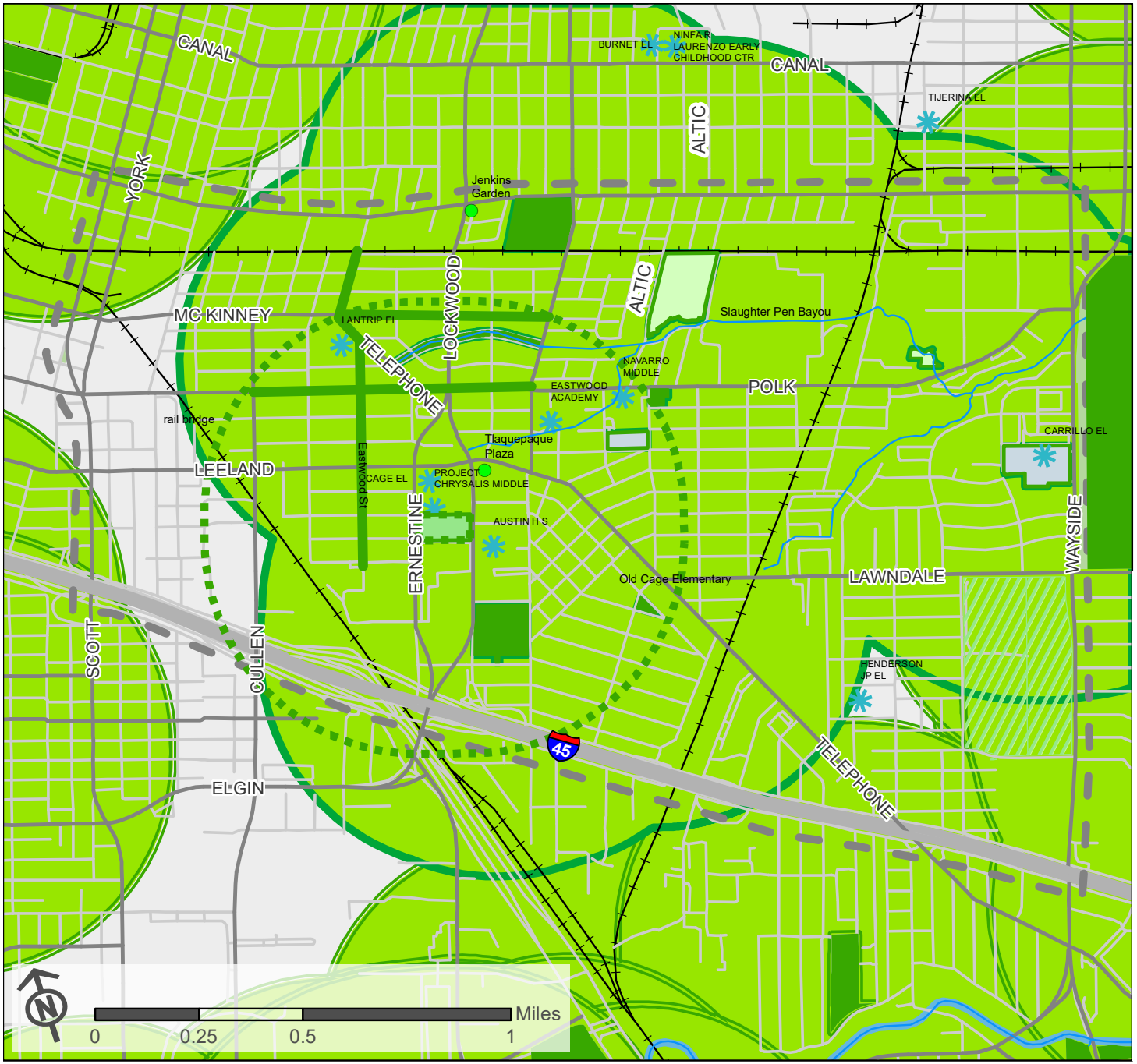
When focusing on the local provisioning of open space, the book Shaping Neighborhoods: For Global Health and Local Sustainability, emphasizes that "the key factor is not the scale of specific land allocation, but quality, use, access, and safety." The following inventory detailed below, and in Figure A.32, identifies gaps in access in the Eastwood study area.

Basic Accessibility - The 10-Minute Walk

The accepted standard of the 10 minute walk (1/2 mile) is applied in the following pages to identify gaps in open space accessibility within the study area. The areas greater than 1/2 mile from a park lack adequate access and should be prioritized for greenspace establishment.

To consider a more comprehensive picture of how the current network of open spaces is serving the community a case study of the more nuanced geographic accessibility thresholds described in the book *Shaping Neighborhoods: For Local Health and Global Sustainability* was performed. The standards described in this case study were developed in the UK, in a different set of conditions, and as such should not be taken as directly translating to the needs of the Greater Eastwood community. What these thresholds do provide is a suggestion of how the open spaces in the community might be considered in more detail; prompting the consideration of where specific types of open space program should be located.

Figure A.32 Existing Open Space Accessibility - 1/2 mi Buffer With Nearby Parks



Access to Open Space

Figure A.32 shows areas of the community covered by the 1/2 mile buffer achieve the minimum accessibility threshold of open space within a ten minute walk.

A majority of the study area is within approximately 1/2 mile of a park. However, the ability to safely walk or bike to neighborhood parks is dependent on sidewalks and corridors being safe and available. Additionally, the parks in the study area do not all provide the same types of programming, so access to specific activities within parks is also variable.

Legend

- Plazas
- School
- Existing Parks
- Spark Parks
- Cemetery
- Villa De Matel Covenant
- High Quality Canopy Corridors
- .5mi Open Space Buffer
- Nearby Parks .5mi Buffer

Lack of Open Space Access

Figure A.33 highlights areas that are 1/2 mile or more from an accessible open space. These areas should be prioritized for open space creation. Tactical approaches to opening existing inaccessible open spaces should be considered to expedite the provision of these amenities where they are lacking.

The Spark Park program is one example of a tactical approach to park creation.

As the map shows, the need for open space in the southwestern portion of the study area extends beyond the study area limits. Creating space for recreation in this area has potential widespread utility for adjacent communities and the Greater Eastwood community.

Figure A.33 Areas With No Accessible Open Space Within 1/2 Mile

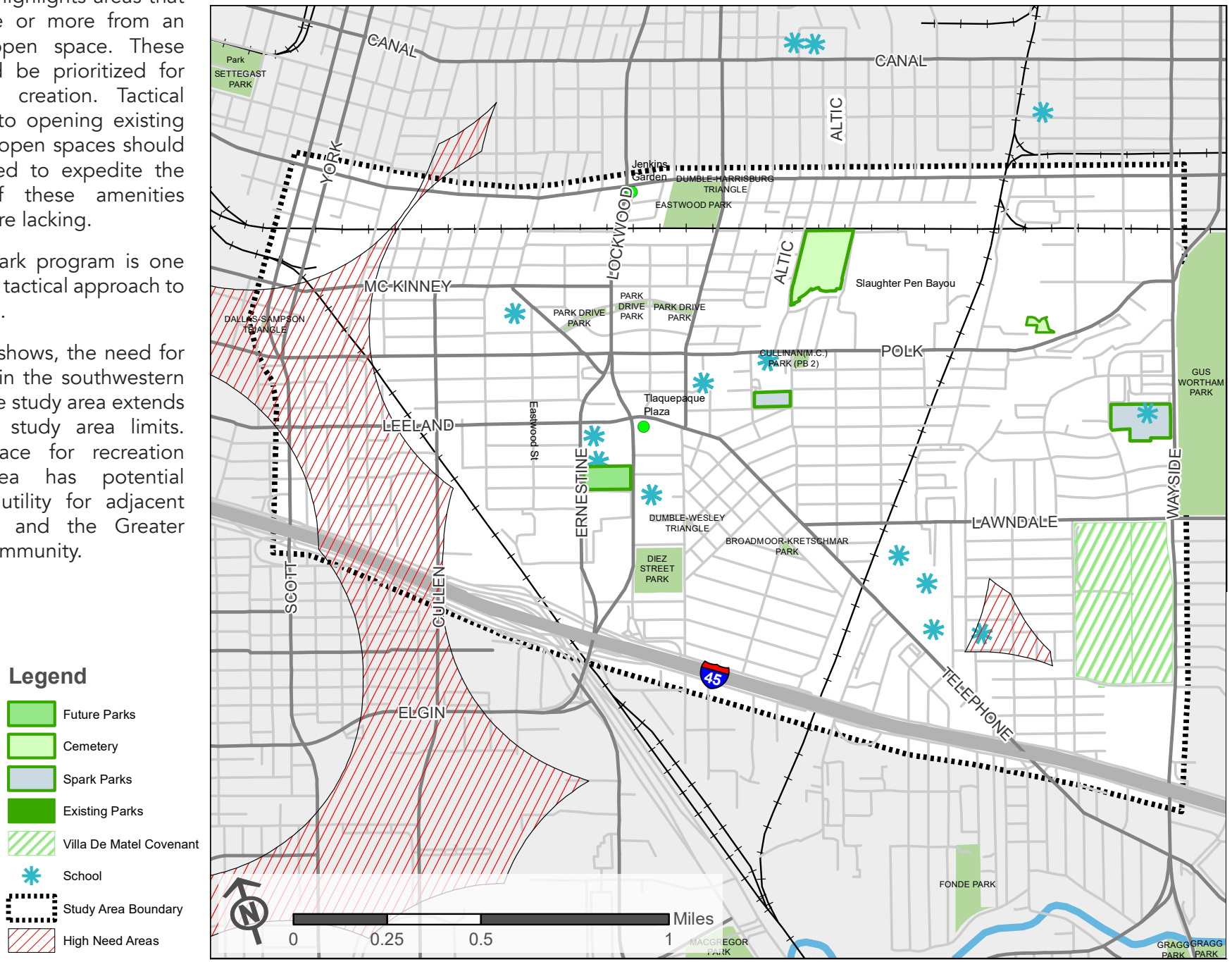
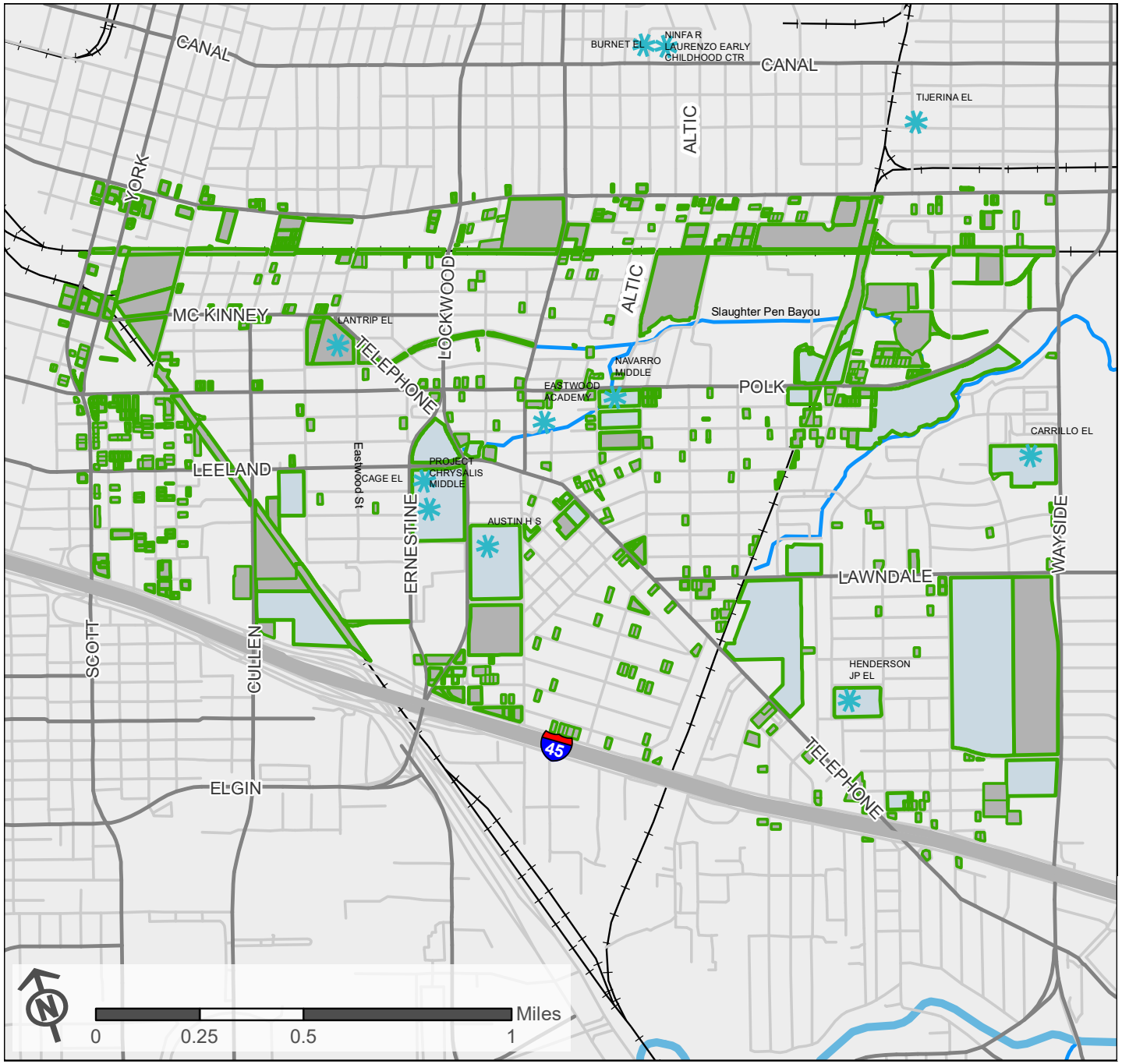


Figure A.34 Opportunities for Open Space Creation - Vacant, Undeveloped, and Public Lands



Opportunities for Open Space

Figure A.34 shows the 18% of the study area that is currently vacant, publicly owned, or owned by institutions. Many of these parcels are undeveloped, minimally developed, or underutilized. They present an opportunity for tactical open space generation.

Legend

Vacant Lots - Residential

Undeveloped Space & Public Lands

Open Space Opportunities

Public & Institutional

Undeveloped

Case Study: Local Area of Play (LAP) - 1 Minute Walk (300')

In the UK national agencies recommend a local, unstructured area of informal play for children up to 5 years old. These are small open space areas for low-key games sited within one minute's walking time of every home (300'). These playspaces may be integrated with neighborhood streets, but safety should be prioritized. These spaces should be "green in character, and overlooked by dwellings."

Due to the informal nature of these spaces, Figure A.35 shows our prediction of what officially recognized open spaces might fit into this category. Ultimately the community will be the only source to identify where their kids play close to home.

Figure A.35 Case Study - Local Areas of Play- 300' Buffer

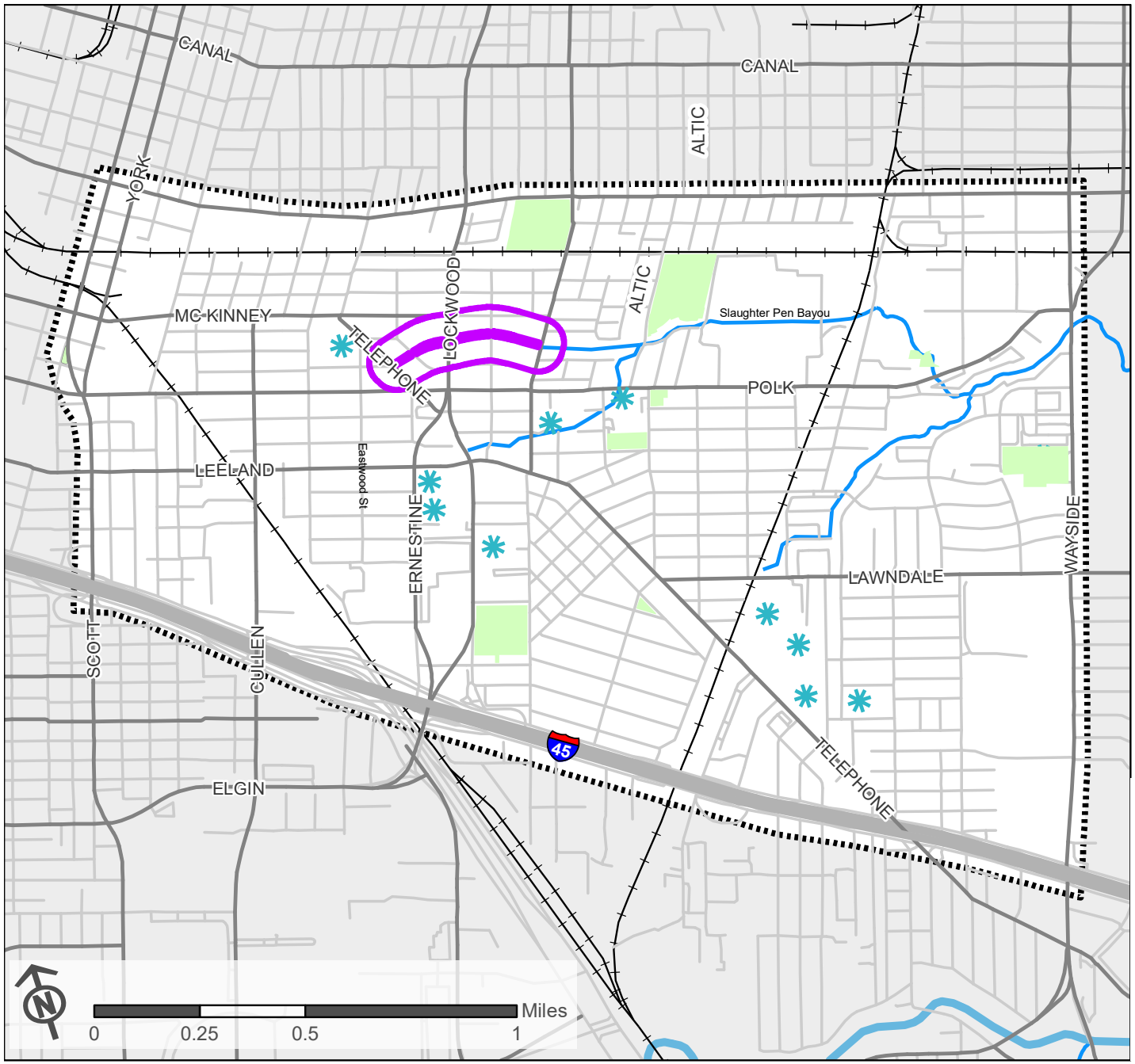
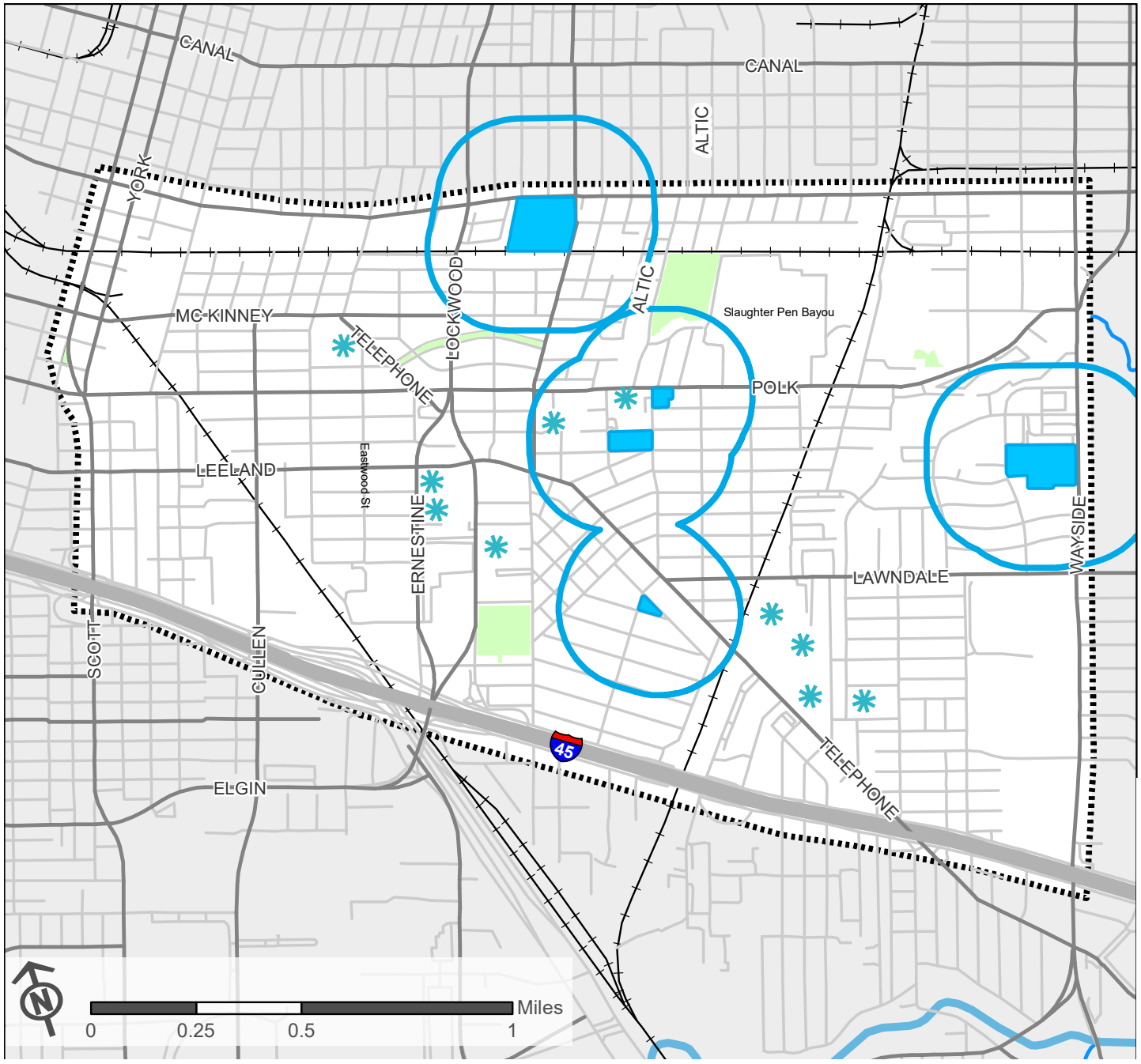


Figure A.36 Case Study - Local Equipped `Areas of Play- 1000' Buffer



Case Study: Local Equipped Area of Play - 5 minute walk (1000')

Figure A.36 identifies Local equipped areas of play within the study area. These spaces are built/equipped playspaces for children 4-10 years old. These space may include typical playground equipment such as swings seesaws and slides, as well as small-sided courts. These spaces should be within a 5 minute walk (1000') of every home. The western portion of the study area and much of the eastern portion fall outside of a 5-minute walk to these places.

Case Study: Local Park/ Greenspace - 5 minute walk (1000')

Figure A.37 shows neighborhood and community parks with an accessible open space component. Additional elements may include, but are not limited to, wildlife habitat, courts, seating, shelters, gardens, and playgrounds. These spaces are not solely dedicated to sports.

The southern and western portions of the study area have a noticeable lack of access within a 5-minute walk to parks with an open space component.

Figure A.37 Case Study - Local Green Space- 1000' Buffer

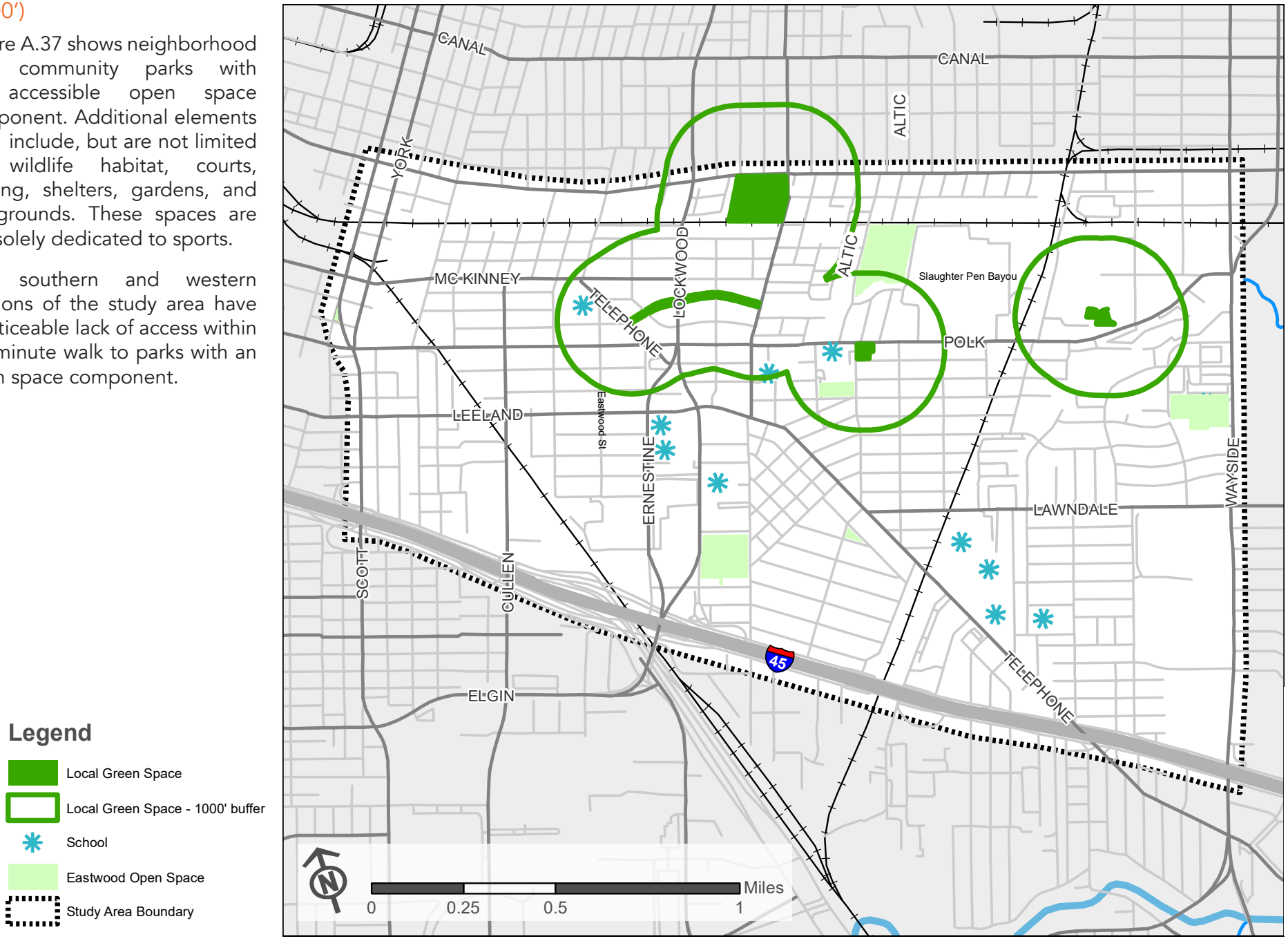
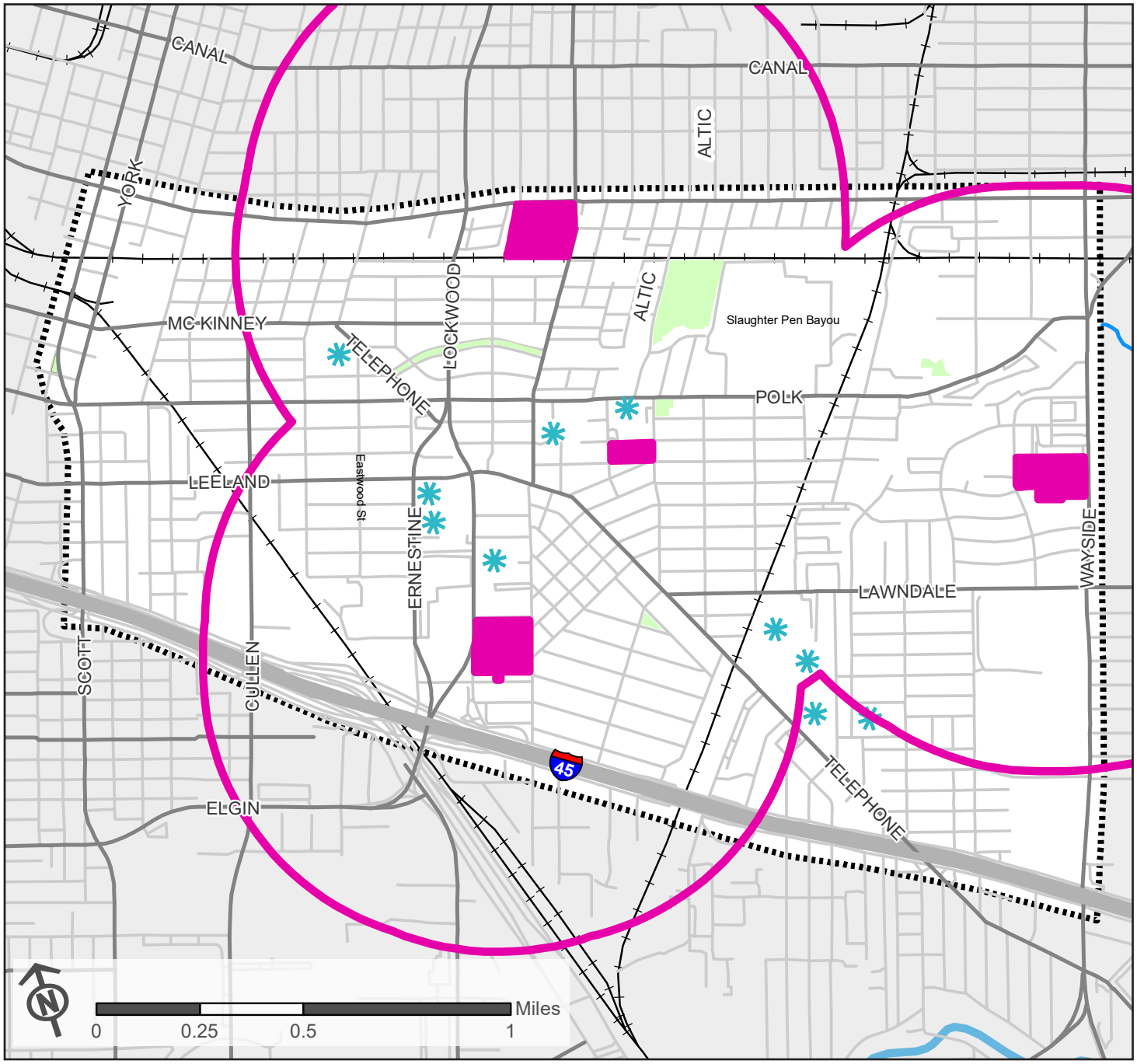


Figure A.38 Case Study - Athletic Fields- 3280' Buffer



Case Study: Playing Fields - 15 minute walk (3280')

Figure A.38 shows the parks dedicated to, or featuring, fields for large-sized sports. Eastwood park, Diez park and both of the study area Spark Parks feature these facilities. The Spark Parks greatly expand the access to athletic fields within the study area. Most of the study area has access to these fields within a 15-minute walk.

Legend

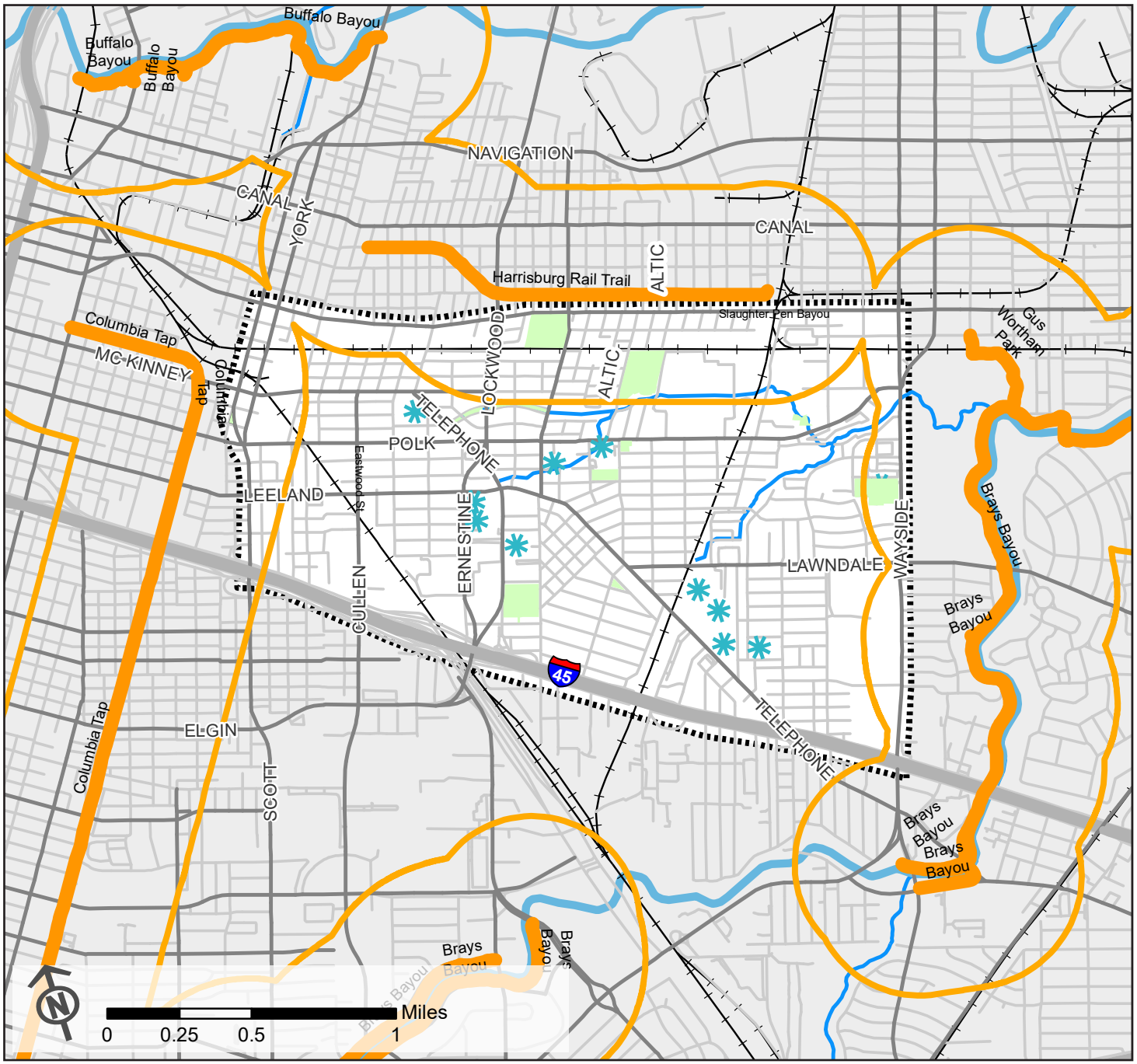
- Athletic Fields
- Athletic Fields - 3280' buffer
- School
- Eastwood Open Space
- Study Area Boundary

Case Study: Green Network Access - 10 minute walk (2000')

Figure A.39 shows the linkages of green corridors in the park network of open spaces. This includes trails, trail amenities, and often capitalizes upon local landscape character of a district, featuring the natural landscape features that define a region. These networks also provide ecological services, by creating connected wildlife habitat, mitigating flooding, and increasing air quality to name a few benefits.

As the adjacent map shows, access to these green networks within the study area is exclusive to the edges of the district. The planned bikeway network can be used as a starting point for building green network access within the community.

Figure A.39 Green Network Access- 2000' Buffer



Natural Systems

Overview

Natural systems are expressed in the qualities of the vegetation, wildlife, and human behavior in a place and the environmental behavior that the physical structure of a place influences. The unique environmental behavior of a locality is represented by the interactions between natural resources such as water, soils, and biodiversity, and the environments Humans alter to create homes and livelihoods. Different development patterns produce varying outcomes for the continued availability of resources. Developments that are highly energy intensive, that employ large amounts of hard surfaces often produce unsustainable patterns of energy and water consumption.

Positive Health Outcomes

Many studies link the quality and quantity of green space in communities and population health. From a review of research studies the American Society of Landscape Architects has concluded that access to nature is linked to positive outcomes related to the following ailments[13]:

- Alzheimer's and Dementia
- Asthma & Respiratory Disorders
- Cognition
- Depression
- General Health
- Heart Health
- Hospital Recovery
- Obesity
- PTSD
- Stress
- Stroke
- Type II Diabetes
- Well-Being

Key elements of natural systems in urban environments include urban canopy coverage and the amount of hard surfaces. Permeable surfaces ensure that the natural water cycle is sustained and with it the clean water we depend on. Thus, green space and urban trees can be perceived as a form of infrastructure that increased the quality, and quantity of life.

Green Infrastructure

These natural features are commonly referred to as 'Green Infrastructure.' In a report on green infrastructure in Seattle, the Green Infrastructure Foundation Describes these amenities and their benefits:

> Living green infrastructure (also known as green stormwater infrastructure, or GSI) such as street trees, bioswales, green roofs, living walls, and rain gardens help manage stormwater while providing a myriad of other benefits. These include improved water quality, reduced stress on gray infrastructure, ground water recharge, improved air quality, greenhouse gas sequestration, improved biodiversity, reduced urban heat island, and reduced energy use.

Types of green infrastructure include:

- Green Roofs
- Living walls
- Bioswales
- Rain Gardens/ Bioretention
- Wetlands
- Planting Beds
- Trees
- Soft Surfaces (Naturalized and active turf)
- Permeable paving

Greater Eastwood Natural Systems

The following pages describe the existing conditions of natural systems in the Greater Eastwood study area. From this consideration of existing states, informed decisions can be made to bolster and establish green infrastructure for the public health, and environmental benefit of the community.

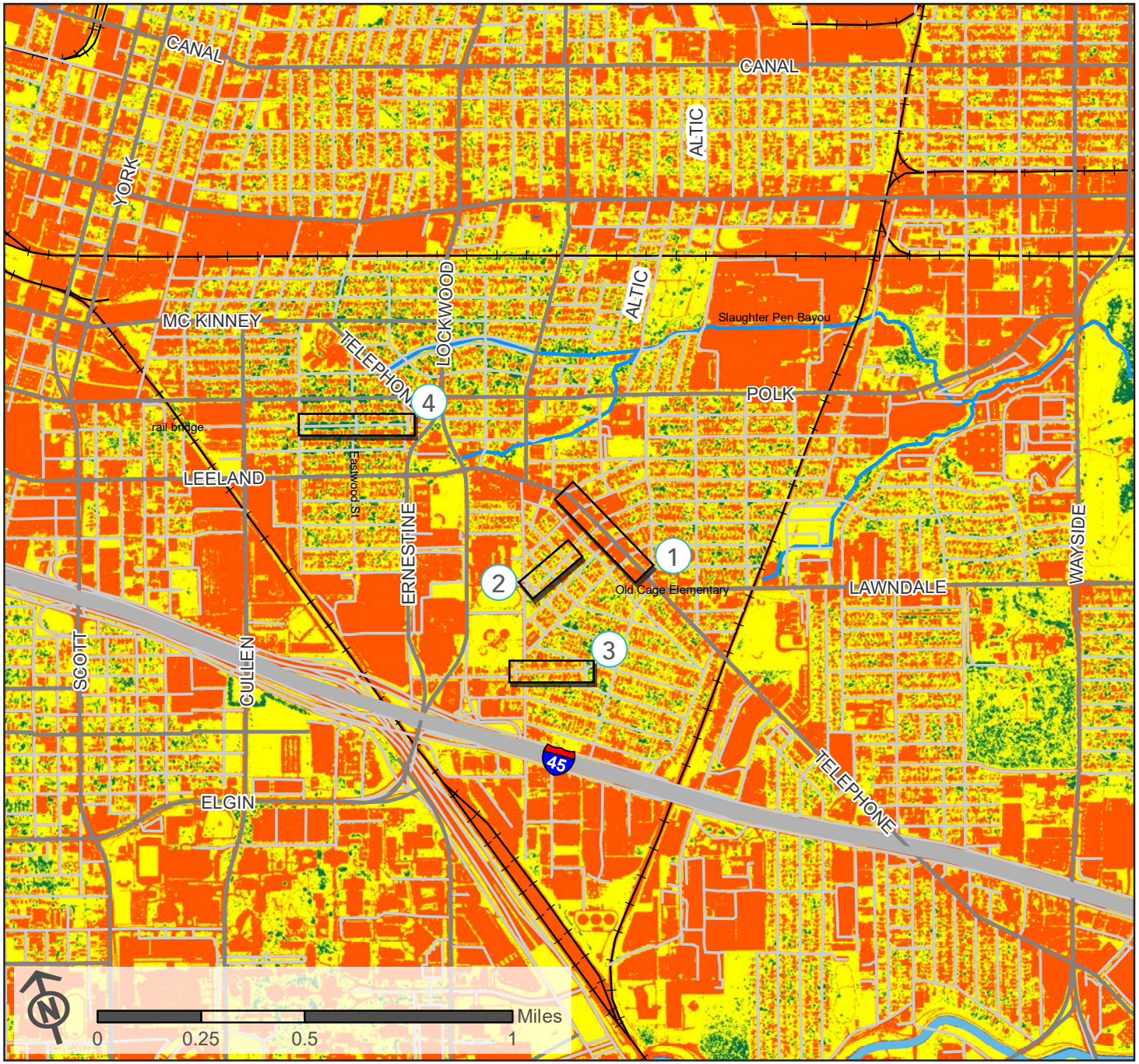
A robust urban canopy provides a myriad of benefits, from microclimate to mental health.

Urban Tree Canopy

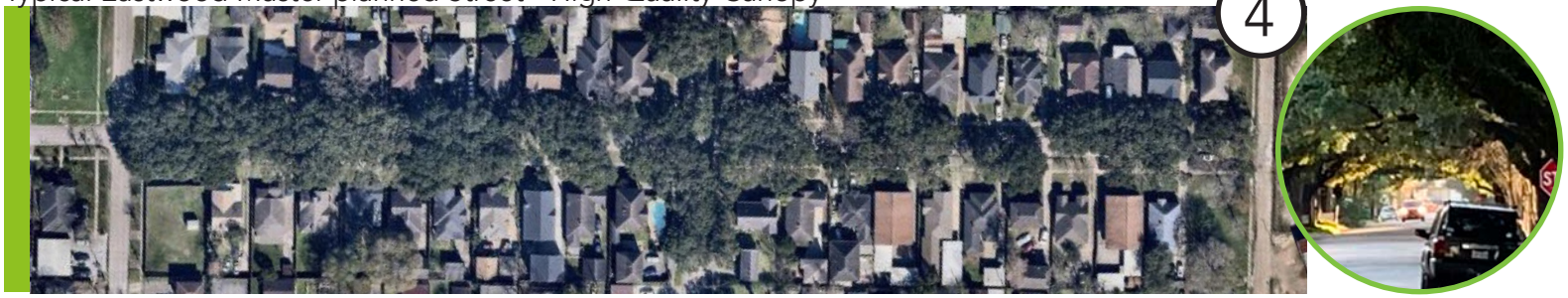
Figure A.40 shows the tree canopy coverage within the study area. The urban tree canopy has moments of strength - primarily in the historic Eastwood planned community, but falls off elsewhere. The community forest can be enhanced to improve the environmental quality, resilience, and sense of place of the district.

The tree canopy also helps create comfortable places for walking and biking. Enhancing the tree canopy along with infrastructure improvements could increase the number of people who choose to walk and bike to destinations in the study area. The numbers on the map relate to typical sections identified on the following page.

Figure A.40 Tree Canopy Coverage & Surface Conditions



Typical Eastwood Master-planned Street - High Quality Canopy



4

Typical Neighborhood Street - Low Quality Canopy

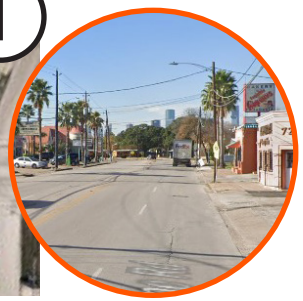
3

Typical Neighborhood Street - No Curb/Median

2

Typical Commercial Corridor - Minimal Canopy

1

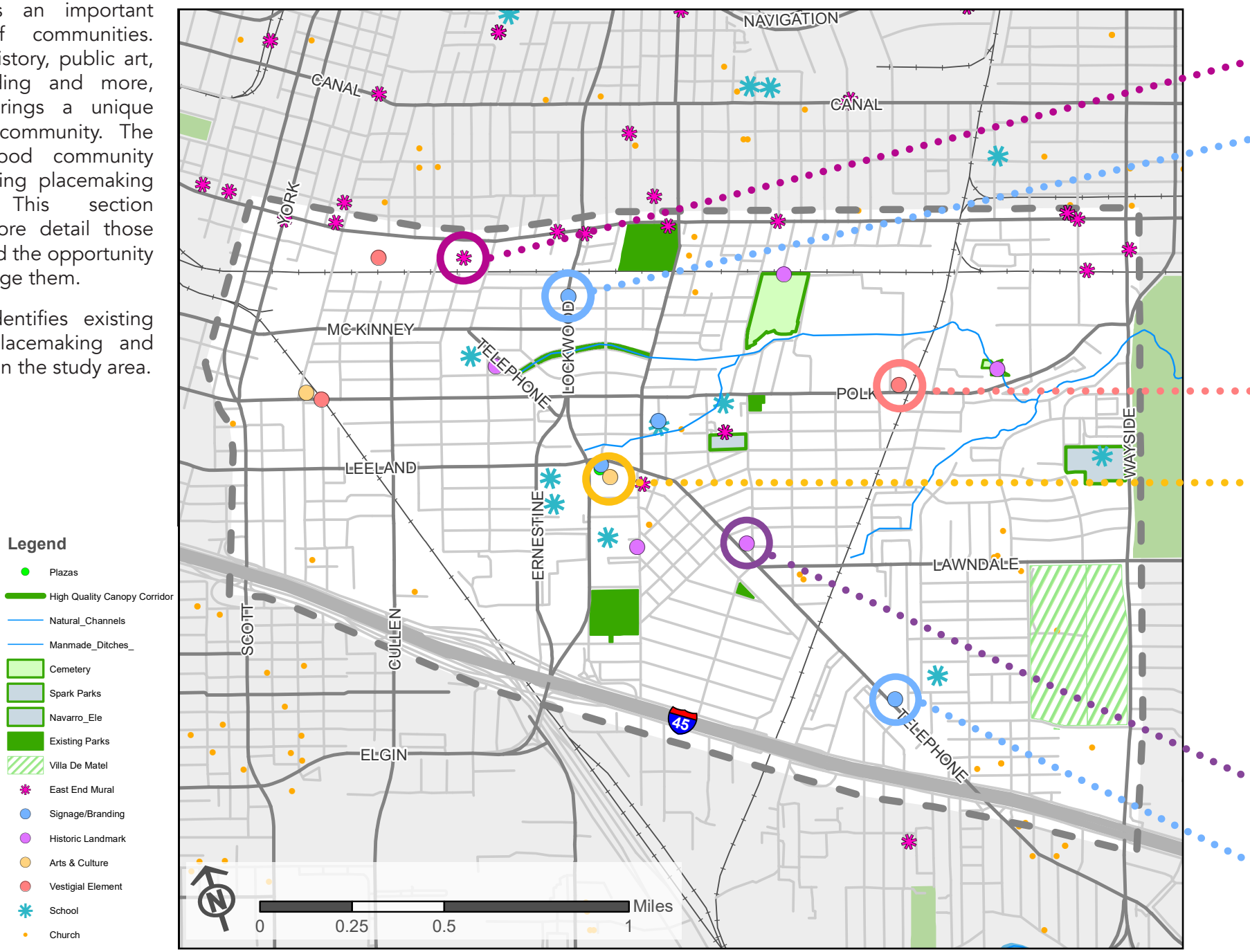


Placemaking

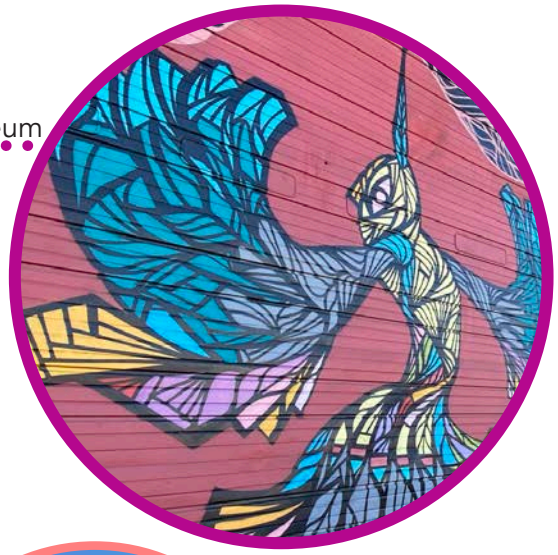
Placemaking is an important component of communities. Incorporating history, public art, signage, branding and more, placemaking brings a unique identity to a community. The Greater Eastwood community has many existing placemaking components. This section identifies in more detail those components and the opportunity to further leverage them.

Figure A.41 identifies existing elements of placemaking and wayfinding within the study area.

Figure A.41 Existing Placemaking and Wayfinding Elements



Harrisburg Art Museum
East End Murals



Eastwood Sign
signage/branding

Former Hughes Tool Co. Site
vestigial element

Tlaquepaque Market
arts & culture

Old Cage Elementary School
Historic Landmark

Retro Sign
signage/branding

What is Placemaking?

Placemaking is a multi-faceted approach to the planning, design and management of public spaces. Placemaking leverages a community's assets, inspiration, and potential, with the intention of creating public spaces that promote people's health, happiness, and well-being. It inspires people to collectively reimagine and reinvent public spaces as the heart of every community. More than just promoting better urban design, placemaking facilitates creative patterns of use, paying particular attention to the physical, cultural, and social identities that define a place and support its ongoing evolution.

Source: Project for Public Spaces

East End District Wayfinding Signage

Directional sign Trail marker

Gateway sign

Source: East End District

Placemaking Characteristics

The Eastwood study area is rich in physical characteristics possessing unique traits. These elements range from historic architecture, to places of memory such as cemeteries and factories, to signage and branding elements. These elements were broken into four key categories: signage and branding, landmark elements, historic buildings and urban areas, and public art. Detailed descriptions of these categories follow.

Public Art

Public art in the east end is primarily expressed in the form of murals created by local artists and students. These public cultural amenities that express the vibrancy of the district ca be found on many buildings and transit stops in the neighborhood.[8] Figure A.42, shows the locations of these murals in relation to the study area and its current open space amenities. Current murals are primarily concentrated along the Harrisburg corridor.

Signage/Branding

Typical neighborhood signage is present, but not highly prevalent. The instances that do occur are located in close proximity to the historic Eastwood neighborhood, including a sign branded in reference to the craftsman style buildings and early suburban character of this micro-district within the greater study area, and a large printed "EASTWOOD" in the windows of the recently completed Eastwood Academy campus.

These more traditional branding elements are complemented by the other placemaking elements listed in this section, such as the historical architecture and remnants of manufacturing centers which contribute to the history and culture of the district. Other signs that exist and are indicative of the district character, but not necessarily dedicated to the mission of branding, include historic neon signs along the telephone corridor, and the colorfully painted Tlaquepaque Plaza. The East End District recently implemented a wayfinding and district signage project. This is an opportunity to continue coordinated branding and signage to enhance the existing sense of place.

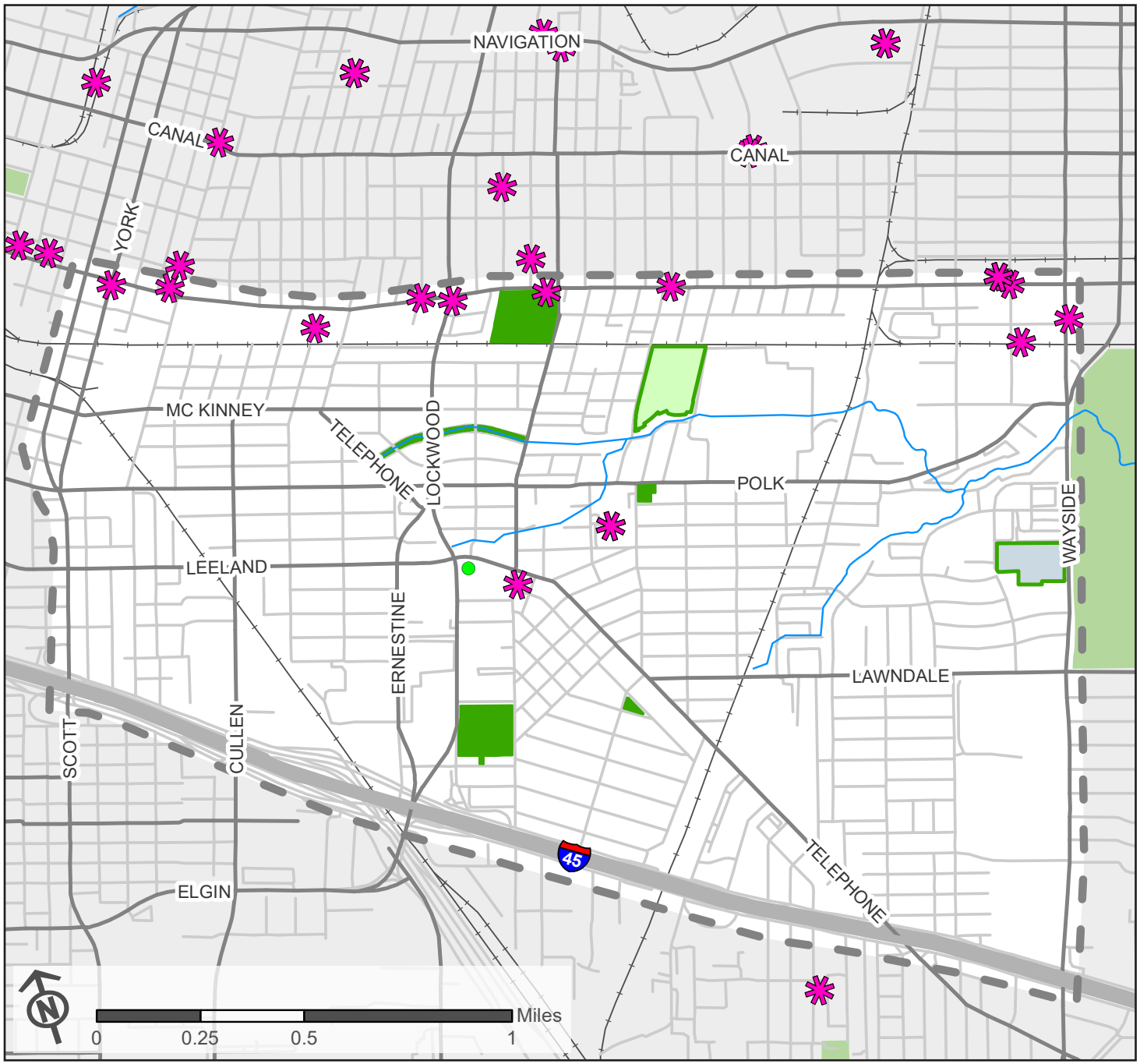
Historic Architecture

Historic architectural features abound in the Eastwood Community. From the historic, high quality single family craftsman bungalows, to complementary early 20th century public schools, churches, and open space amenities. The Historic Cage Elementary School site stands out, along with the Austin H.S. building. Additional elements tell interesting stories about the former spatial forms of the district. Efforts should be made to preserve and document the history of notable structures and landmarks.

Landmark Elements

Landmark elements are features leftover from former states that help tell the story of the District. Historical landmarks like the craftsman bungalows of the district, former bayou and stream corridors, traces of different street layouts, and varying corridor design all tell the story of a district developed in stages. Capitalizing upon these elements, or using them as points of departure for the contemporary aesthetic of the district can ensure that this history isn't lost. Additionally, many of the former industrial sites may be considered for redevelopment opportunities. In this case, the historic qualities of these places should be integrated into plans.

Figure A.42 Public Art Inventory



Public Art

The East End is rich in public art and murals. The adjacent map shows their distribution throughout the study area and it's immediate context.

The images on page A.41show examples of the typical public art media in the district.

Efforts should be made to implement more murals and public art within the study area, to express its unique cultural qualities, and creative community members.

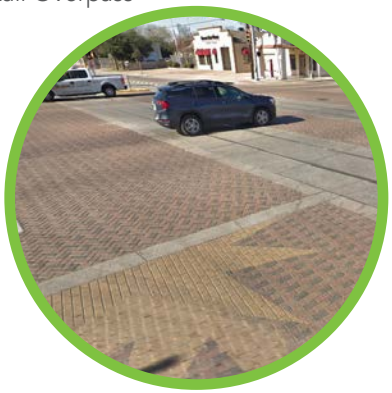
Legend

- Cemetery
- Vacant Lots - Residential
- Spark Parks
- Existing Parks
- East End Mural
- Study Area Boundary

Gateways

Gateways represent entry points into the community. Many are defined by infrastructural crossing points, primarily I-45 to the south and at grade rail crossings and underpasses. Currently these crossings largely exude a utilitarian aesthetic; finished in unpainted concrete, or steel. Opportunities exist at these entry points to create gateways that re-frame the unique concentration of infrastructure as a placemaking element.

Rail Overpass



Branded Intersection

Figure A.43 Gateways and Crossings

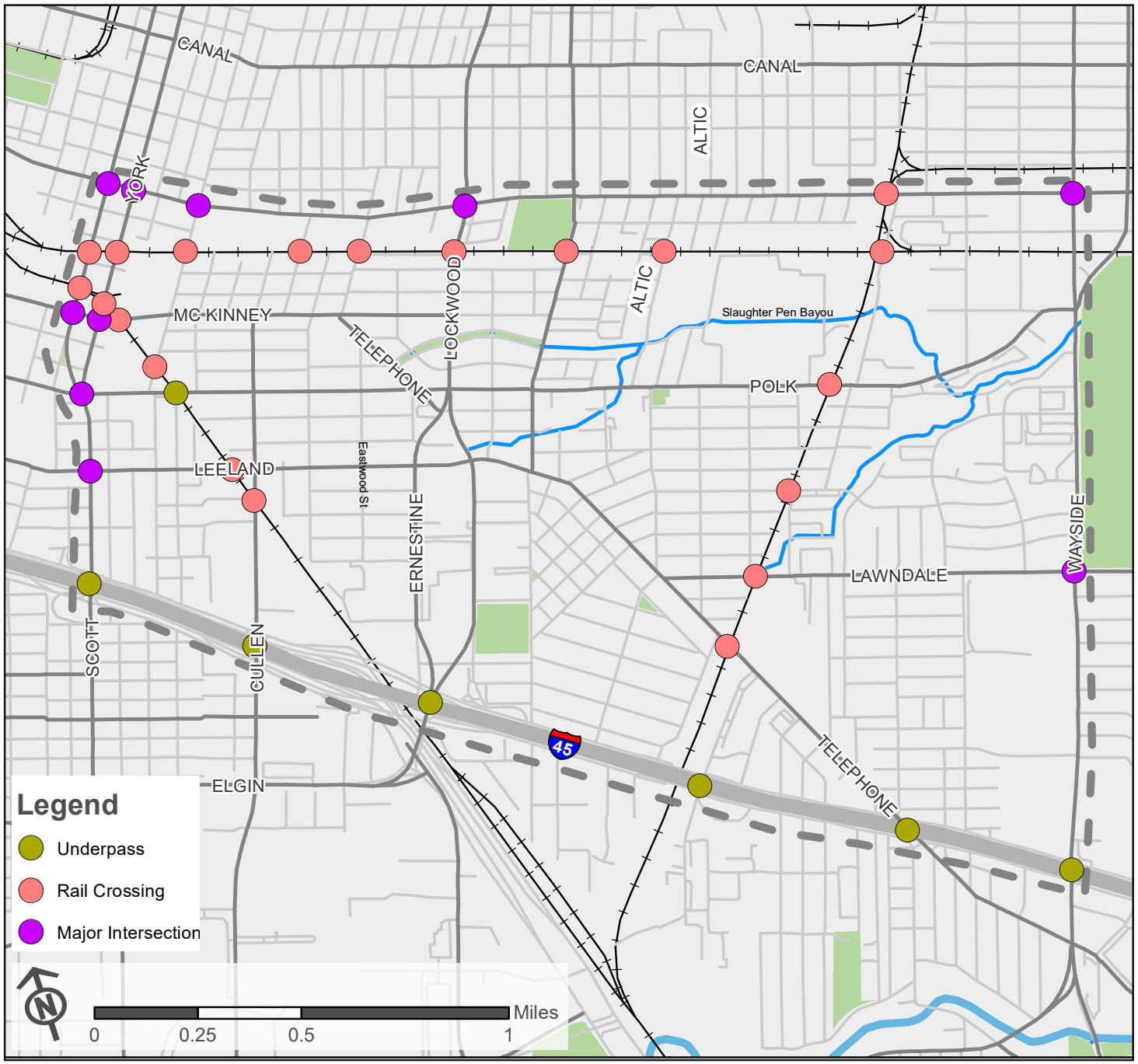
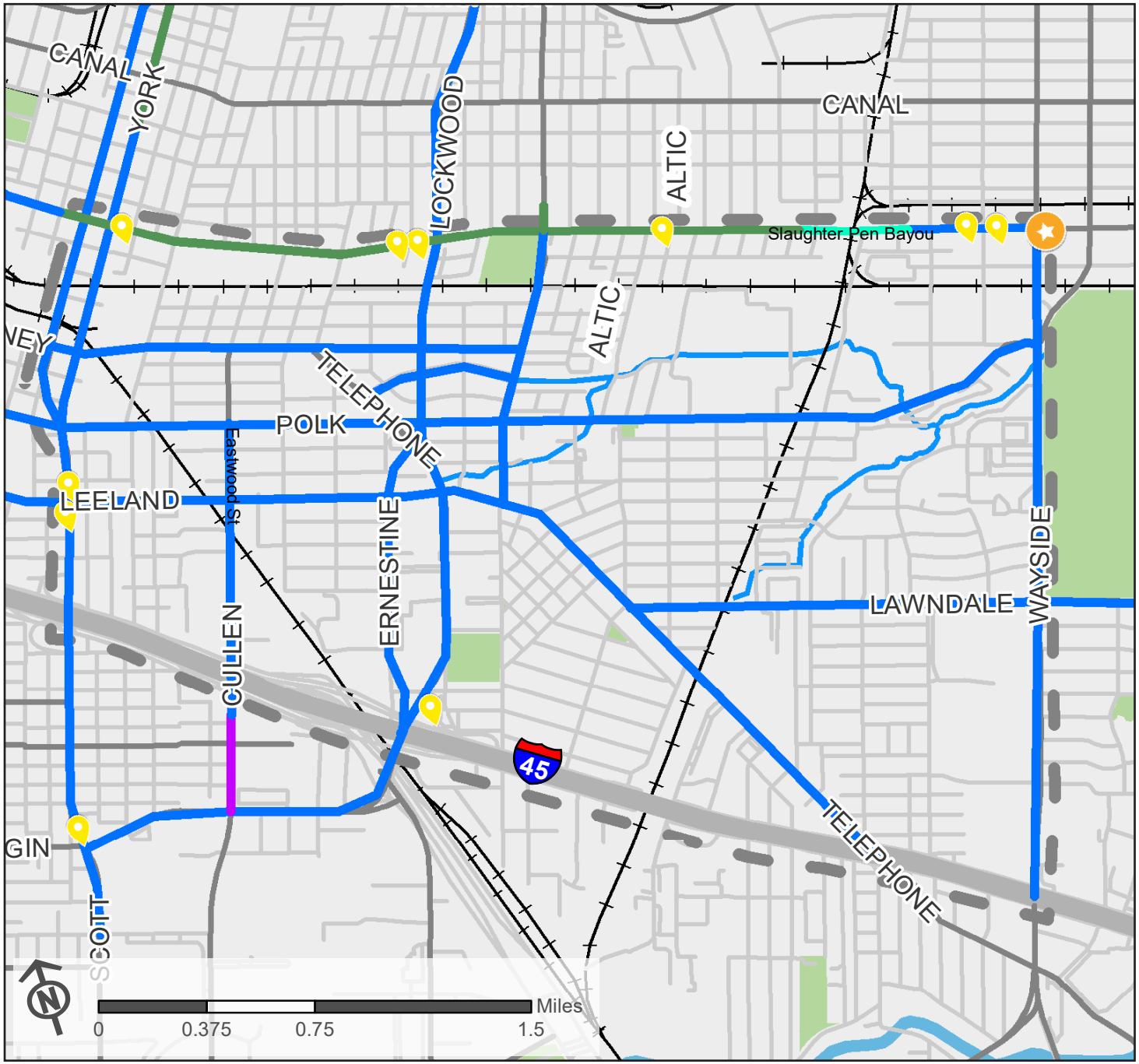


Figure A.44 Lighting



Community Lighting

Lighting is a functional and cultural consideration. The current lighting in the district, as displayed in Figure A.44 is utilitarian in nature. The East End District has installed branded pedestrian lighting along the Harrisburg corridor and at key intersections and thresholds.

Lighting at a pedestrian scale is an important consideration in developing safe, comfortable, multi-modal corridors. Continued lighting improvements that coordinate with placemaking will help encourage people to walk and bike more in their community.

Legend

Points

- METRO Lighting
- Light Sculpture

Polylines

- Branded Lighting/Streetscape
- Special Utility
- Utility
- Utility & Branded Pedestrian

Community Furnishings

The East End District has installed branded furnishings and wayfinding signage in the northwestern area of the East End, primarily outside of the study area. Figure A.45 identifies the types and locations of these furnishings. Custom furnishings deployed by the district include:

- Benches
- Trash Receptacles
- Shade Structures
- Pedestrian Lights

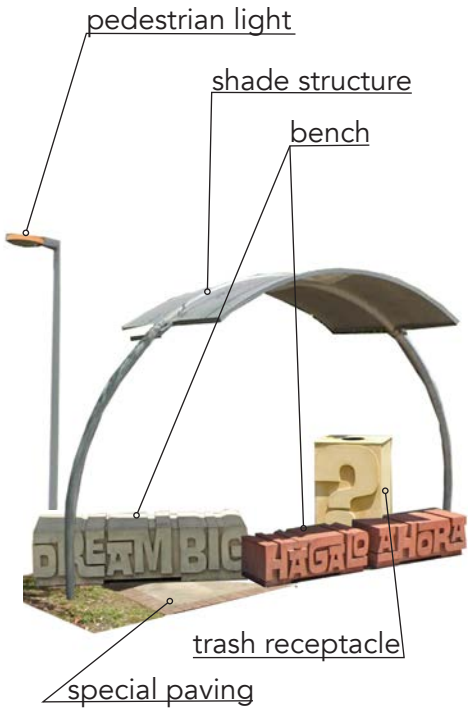
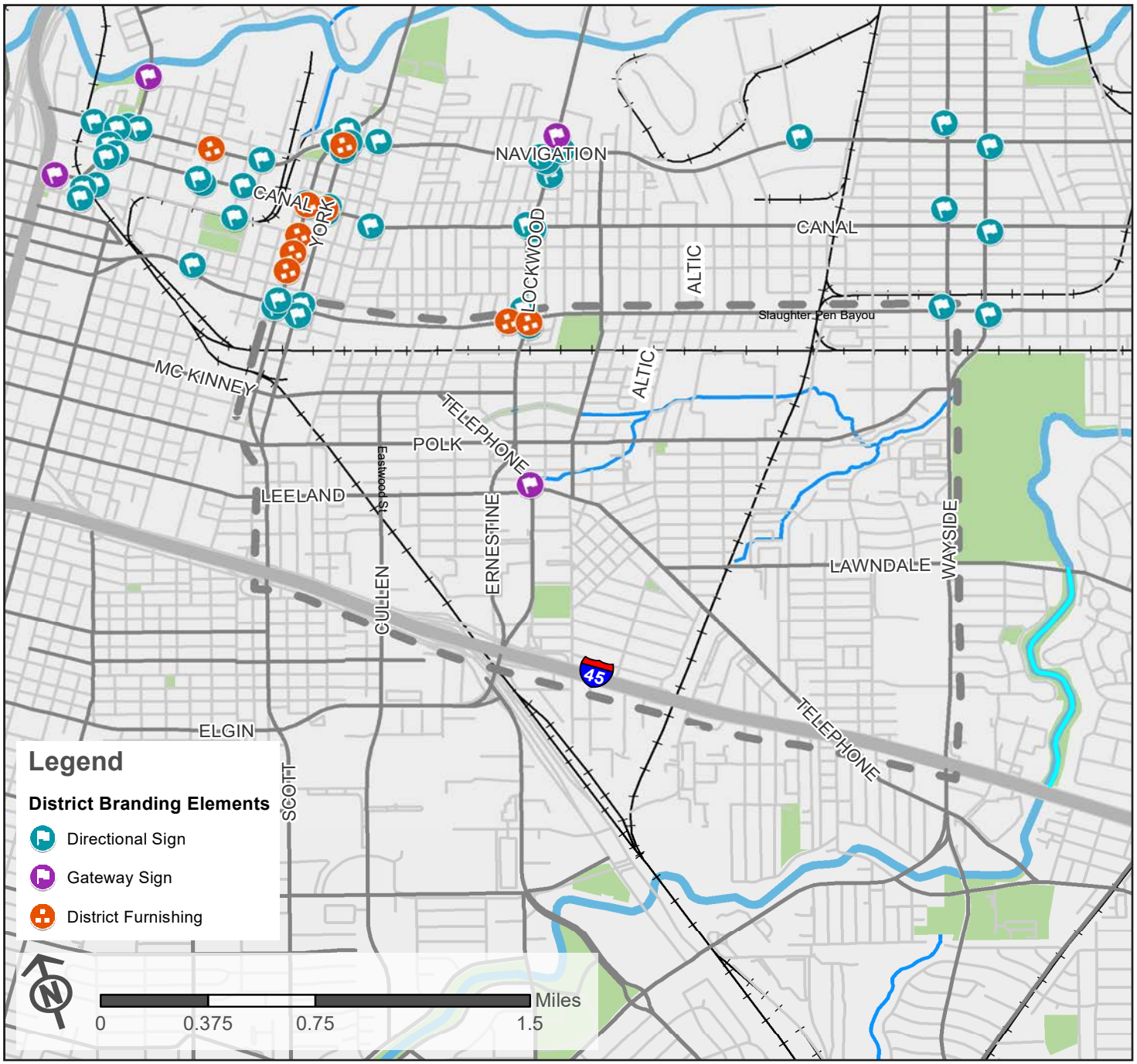
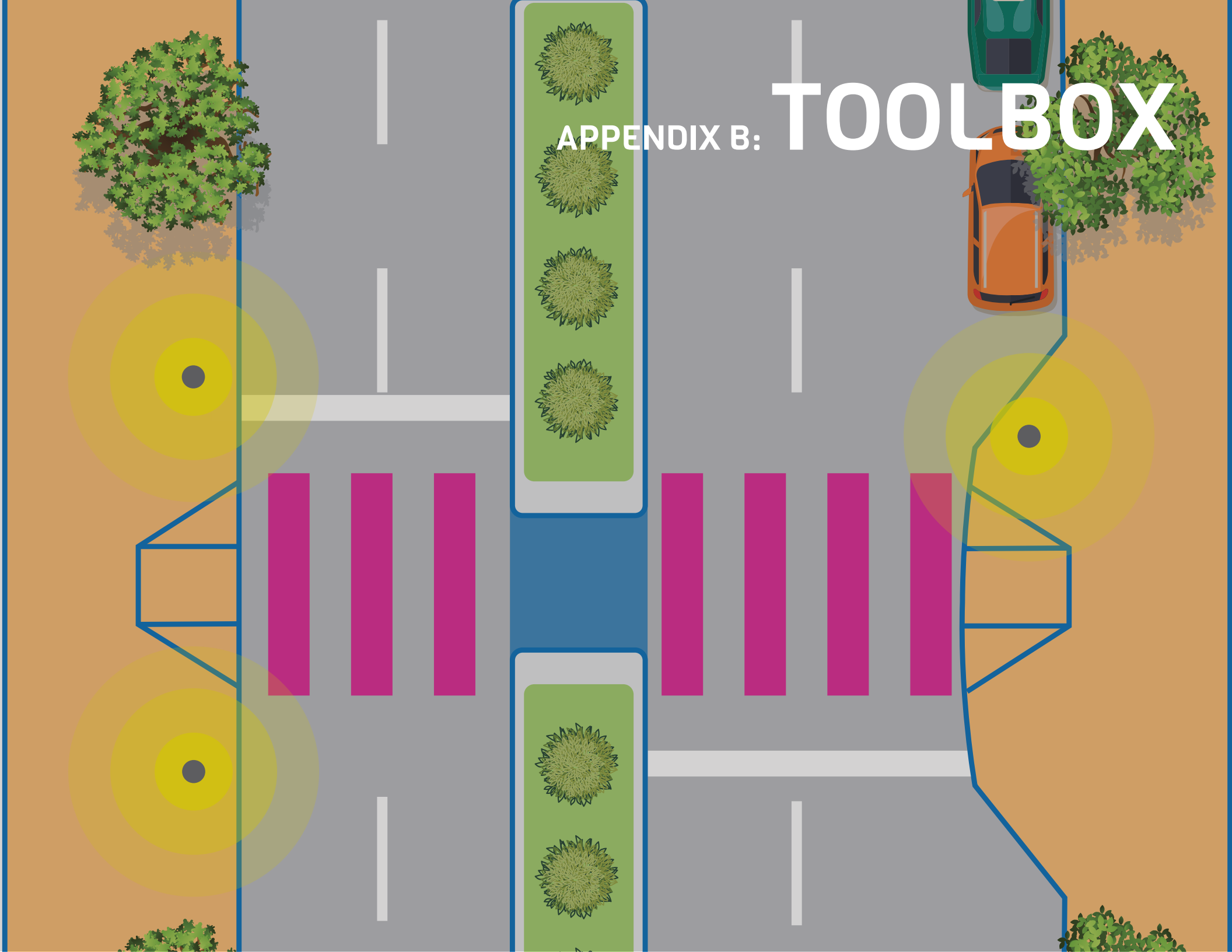


Figure A.45 East End District Furnishings



APPENDIX B: TOOLBOX



Design Toolbox

Great streets are made from individual streetscape components deployed with sound planning and knowledge of best practices. This appendix provides definitions and context for some of these common components, as well as references to resources and design guides where the reader can find more detailed information (Figure B.1). Knowledge and application of these streetscape components will be critical to creating safe, lively, and equitable streets in the Greater Eastwood area.

This toolbox is divided into the following six areas:

- Safe Streets/Traffic Calming
- Sidewalks & Crossings
- Bikeways
- Transit Enhancements
- Green Corridors & Urban Ecology
- Walkability Assessment Program Guide

The components in this toolbox relate to many recommendations and are designed to provide reference to best practices and specific design treatments as projects are moved forward in the implementation process.

Figure B.1 Document Reference Table for Best Practices

Resources and Best Practices to Reference		
2012	H-GAC	Pedestrian Pathways Guide
2014	NACTO	Urban Bikeway Design Guide
2015	H-GAC	End of Trip Facilities Guide
2016	H-GAC	Instant Impact Guide
2016	H-GAC	Designing for Impact: A Regional Guide to Low Impact Development
2016	Transportation For America	The Scenic Route: Getting Started with Creative Placemaking and Transportation (http://creativeplacemaking.t4america.org)
2016	NACTO	Transit Street Design Guide
2016	FHWA	Workbook on Incorporating On-Road Bicycle Networks into Resurfacing Projects
2017	NACTO	Designing for All Ages and Abilities
2017	FHWA	Proven Safety Countermeasures
2017	ITE	Implementing Context Sensitive Design on Multimodal Corridors: A Practitioner's Handbook
2019	NACTO	Don't Give Up At The Intersection
2020	City of Houston	Infrastructure Design Manual (IDM)

Safe Streets / Traffic Calming

Safety is the critical element that should inform the deployment of all streetscape components. The City of Houston's Vision Zero statement sets the goal of zero roadway deaths by the year 2030. The design approaches outlined in this section can help achieve this goal by reducing vehicle speeds and neighborhood cut-through traffic, thereby reducing the chance of severe crashes and conflicts between travel modes.

Speed Management

Planners and engineers oftentimes speak of the concepts of design speed and posted speed: design speed refers to the speed that a street is physically designed to accommodate, while posted speed is the speed limit itself. In many cases, a street's design speed is much higher than the posted speed, a scenario which enables speeding. The speed management approaches in this section change design speed and posted speed to address speeding-related safety concerns.

Volume Management

Frequency of vehicle passes is one of the key factors limiting comfort amongst hesitant cyclists, and neighborhood cut-through traffic is a common concern amongst residents. The devices in this section address both of these problems. With proper design, these devices serve a dual function: to cut vehicle volumes on neighborhood streets, and to make walking and biking a more comfortable way to get around.

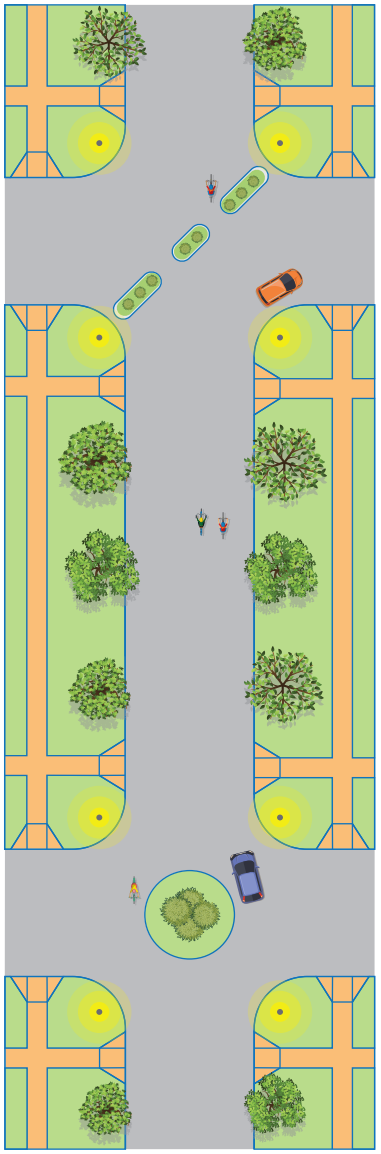


Figure B.2 Visualization of neighborhood traffic circle and diagonal diverter

The photos above highlight how paint and inexpensive treatments can transform an intersection to increase visibility and space for pedestrians. This is particularly important where intersections are not at typical angles, similar to Telephone Road at Baird Street and Lawndale Street. Photos: Map Data: 2020 Google

Reduced Speed Limits

The speed management devices in this section lower a street's design speed, but simply lowering the posted speed also has an impact, especially if implemented simultaneously with physical changes to the street. Speed limit reductions oftentimes pose bureaucratic challenges, but if successfully adopted they can be a rapid and inexpensive approach that can cause diffuse safety benefits across an area.

Speed Management Devices

Along a corridor, vertical deflection can be introduced in the familiar form of **speed humps**. These can be designed in various shapes and sizes for different sized vehicles, and each form comes with a different name: some common ones are bumps, lumps, and tables. In all cases, it is preferable to design them with cut-outs such that bikes may avoid the deflection.

At an intersection or crossing, vertical deflection can be introduced in the form of a **raised crosswalk or intersection**, which slows vehicles and also increases the visibility of people crossing the street. Contrasting pavement material in these locations can help to communicate to drivers that they are crossing through a pedestrian space.

Curb extensions modify the curb to extend out to meet the edge of the travel lane, typically taking the space dedicated to parking elsewhere on the corridor. This is a broad category of approaches, as a curb extension can be paired with a crossing (see curb extension crossing) or at an intersection or combined with many of the other approaches in this Toolbox. All of these individual approaches benefit from the speed management benefits of curb extensions.

Corner radius edits both physically and subconsciously redefine the speed at which a driver should take a turn. Large, sweeping radii on corners facilitate fast turning movements dangerous to pedestrians, while tight corners force slower, more careful turns. Corner radii can be shrunk through the use of temporary materials to improve safety at an intersection. The same philosophy and approach can apply to dedicated turn lanes (slip lanes), which can be closed in the interest of safety. Corner radius edits can be particularly effective at intersections with irregular angles such as those along Telephone Road.

Neighborhood traffic circles slow vehicular traffic by forcing it to deflect from a straight path. They also can serve as landscaping or other neighborhood beautification opportunities. These

Volume Management Devices

A **diverter** is a broad category of designs that restrict certain vehicle turning or through movements while permitting the passage of bicycles. Like midblock crossings, diverters and median refuge islands can be implemented with or without **cyclist/pedestrian-activated signalization**, depending on traffic volumes.

Diagonal diverters restrict through movements and left turns for people driving, while allowing people biking or walking to make all movements. Implemented in a neighborhood with a consistent street grid, this intervention can give people walking and biking a more direct path to destinations than those driving, encouraging walking and biking trips and reducing neighborhood cut-through traffic. This reduces vehicular volume along the corridor while promoting through bicycle traffic.

A **partial closure and median refuge island** is a median refuge island as described in the discussion of midblock crossings, but placed at an intersection such that it allows through bicycle and walking travel while disallowing left turns onto the neighborhood bikeway from the major roadway. This provides a volume reduction benefit in addition to a crossing enhancement.

Sidewalks and Crossings

Sidewalks are the base on which strong communities are built. When sidewalks are rebuilt, they should be built to the highest possible standard to encourage a safe and comfortable pedestrian realm. This includes the physical details of the sidewalk itself, but extends to the the full back-of-curb public right-of-way. When the District undertakes a sidewalk project or addresses a community concern about pedestrian safety, this section of the Toolbox can serve as a guide. Additional guidance can be found in Scenic Houston's Streetscape Resource Guide.

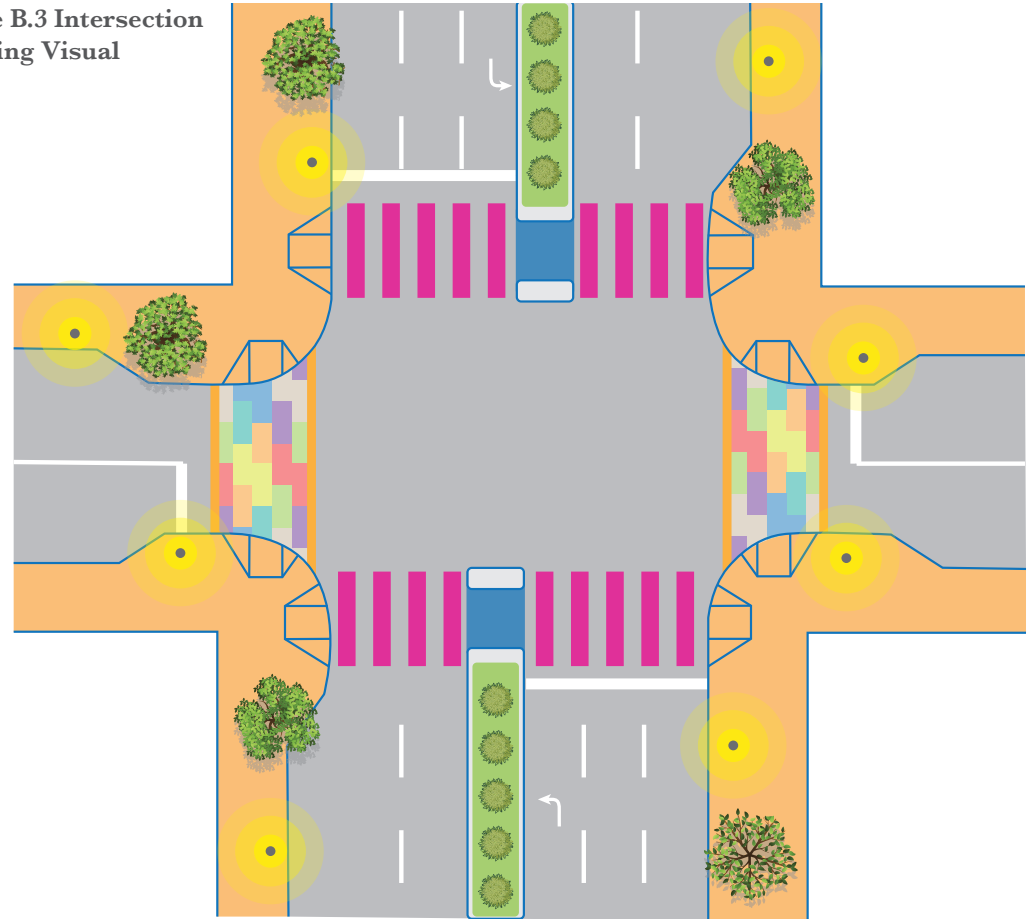
Intersection Crossings

Intersections are typically the parts of the street network with the most complex movements and interactions, and therefore are oftentimes the locations where crashes occur. People walking are at their most exposed when crossing the street; treatments to enhance pedestrian safety at crossings are crucial to the pursuit of continuous and safe pedestrian networks.

Midblock Crossings

Midblock crossings are crossings for people walking or biking at any location other than an existing intersection. The introduction of midblock crossings can be advantageous in locations with high pedestrian activity that fall far from an existing intersection. Midblock crossings can be particularly effective on corridors like the Living Streets identified in this report which aim to facilitate pedestrian commercial activity. Midblock crossings can also be a powerful intervention near very active transit stops, especially when blocks are long making crossing opportunities scarce. Depending on the traffic speed, traffic volume, and geometry of the street that the trail crosses, a variety of treatments may be necessary to make midblock crossings safe.

Figure B.3 Intersection Crossing Visual



Trees and Shade

Trees in the public and private realms provide shade and dramatically reduce summertime temperatures on the sidewalk, making walking more safe and comfortable year-round. In addition to their shade benefits, street trees have been shown to have a traffic calming effect by creating a rhythm of large vertical objects close to the street, giving drivers a better sense of their own speed. The ecological and social benefits of trees are detailed in the Green Streets section of the Toolbox.

Where trees are infeasible due to space constraints or other factors, shade structures are a desirable alternative. These can be standalone structures or attached to buildings. The city's recently adopted Walkable Places Ordinance has the potential to relax certain restrictions on setbacks and overhangs to make larger shade structures possible.

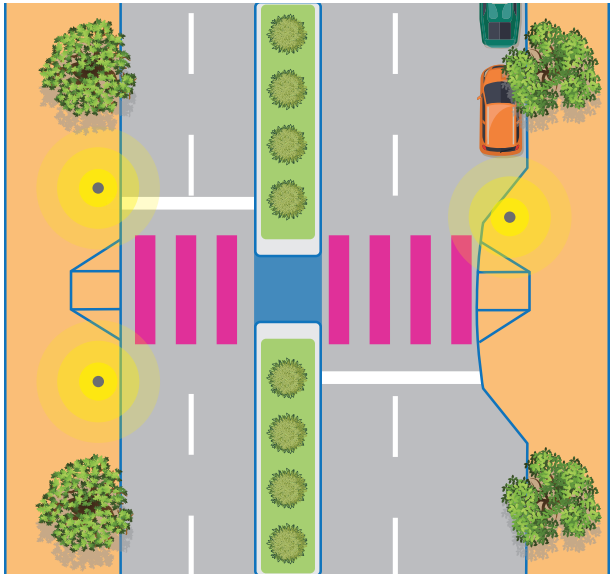


Figure B.4 Midblock Crossing Visual

Intersection Crossing Devices

Curb extension crossings are a set of curb extensions, where the curb is brought out to meet the edge of the travel lane (typically taking up the space dedicated to parking elsewhere on the corridor), with a crosswalk. Pairing a crosswalk with curb extensions gains all the normal benefits of curb extensions alone and also grants additional visibility to the crosswalk user. This enhanced visibility is particularly important on corridors with heavily utilized street parking; the curb extensions clear an area of parked vehicles such that the visibility of crosswalk users cannot be blocked. Curb extension crossings can be implemented at intersections (in which case the intersection also can receive the safety benefits of a curb radius reduction) or midblock. They can be constructed from temporary or permanent materials.

Raised crossings at intersections or midblock introduce vertical deflection traffic calming and further increase visibility of crosswalk users. This element can be paired with any of the other devices in this section. Implementation of raised crosswalks varies in difficulty depending on site drainage characteristics.

Pedestrian prioritizing signalization can be implemented at signalized intersections to enhance safety and comfort for crosswalk users. Such approaches include Leading Pedestrian Intervals (in which pedestrian signals activate first, giving crosswalk users a head start enhancing their visibility), Pedestrian Recall (in which pedestrian signals activate every signal cycle regardless of pushbutton activation, as is currently the case in downtown Houston where the presence of pedestrians is assumed), and audible pedestrian signals (which enhance comfort and accessibility for the visually impaired).

All intersections and midblock crossings should include **ADA-compliant ramps** in order to safely and comfortably accommodate wheelchair and other mobility device users.

Midblock Crossing Devices

At midblock crossing locations on streets with low traffic volumes and speeds, active traffic control may be unnecessary. When appropriate, **warning signage and crossing pavement markings** may be a viable and less costly alternative. The core elements of this treatment are signage to warn drivers of the crossing, and white and green shared crossing pavement markings to highlight the crossing location.

The **pedestrian hybrid beacon** (also known as a **HAWK**) is the most intense (and costliest) signalization option for a midblock crossing. It pairs all the elements of a signage and pavement marking midblock crossing with a mast arm equipped with yellow and red lights which will cycle on when a person crossing presses a button. The advantage of this system is that its red lights provide a consistent experience to drivers, who should know how to act when given a red traffic light.

The **rectangular rapid flashing beacon (RRFB)** has all the elements of a signage and pavement marking midblock crosswalk, with the addition of flashing yellow lights on the crosswalk warning signs. These yellow lights are activated when a pedestrian pushes the button to cross, and draw the attention of people driving. This solution has a much lower cost and simpler implementation than pedestrian hybrid beacons. However, they do not provide drivers with a definitive red stop signal.

Median refuge islands can be paired with either of the above active traffic control methods to enhance safety. By creating a wide raised island with a pedestrian cut through, this design element gives a person crossing the street a safe place to wait in the middle of the roadway. This makes crossings safer and more comfortable by simplifying the risk assessment tasked to the crosser, in that they only must cross one direction of traffic at a time. It also shortens the overall crossing distance, decreasing the time that the crosser spends exposed to traffic. Median refuge islands are a relatively low-cost intervention with significant impacts on crossing comfort, and should be implemented wherever feasible when creating a midblock crossing.

Bikeways

This section serves as an introduction to the key corridor design elements that make up a safe bikeway network. The Recommendations chapter includes many projects that make use of these elements to facilitate safe and comfortable cycling throughout the study area. Much of the legacy bikeway infrastructure in the Houston area has been designed primarily for use by highly confident and skilled cyclists; recent bikeway projects have sought to serve a broader audience and encourage more people to try cycling by placing user safety first. The design elements recommended in this study are in keeping with this recent citywide initiative.

More specific guidance can be found in the resource table at the end of this chapter, as well as in the East End Bike Plan, which is slated to be created shortly after the release of this report.

Intersection Considerations

Intersections are where most bike-related crashes happen and are oftentimes the factor limiting safe and comfortable cycling on a corridor. Design elements intended to limit vehicle turn speeds and volumes across the bikeway should be deployed at intersections and driveways. Intersections between multiple bikeways require special attention and design approaches to accommodate high volumes of bicycle turns.

Retrofit vs. Reconstruction

When a bikeway project uses existing roadway and drainage infrastructure, it is a bikeway retrofit. When a bikeway is included as part of a rebuild of the street and its drainage system, the bikeway is only one component of a street reconstruction. Street reconstructions open up more possibilities for bikeways by allowing for the relocation of the gutter flow line, but opportunities for these reconstructions are rare. Far more common are retrofit opportunities: these are the design approaches that are described in detail in the bulk of this report. If in the future a street with a bikeway retrofit is reconstructed, that bikeway should be redesigned and reconstructed according to latest design standards. If a street is to include a bikeway in its reconstruction, that bikeway should be designed to the highest possible standard, including such elements as grade-separation and protected intersections.

Protected Bikeways

Protected bikeways separate cyclists from motor traffic with a physical barrier. They may be designed as paired one-way facilities or as two-way facilities. In retrofit scenarios, protected bikeways can reallocate road space to bikes and use barrier materials that do not change existing drainage patterns, but in reconstruction scenarios, altered drainage patterns that do not place the gutter in the bikeway are preferred.

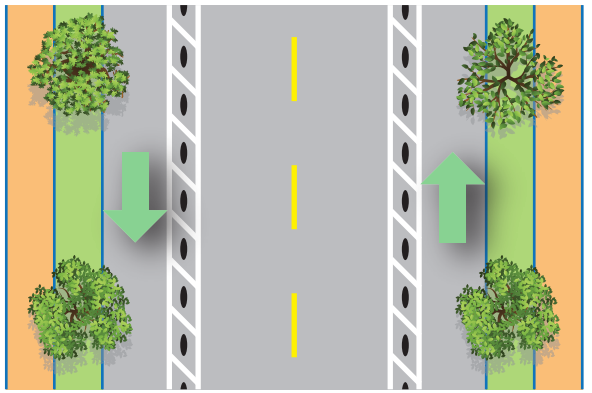


Figure B.5 Protected Bikeway - Retrofit Scenario

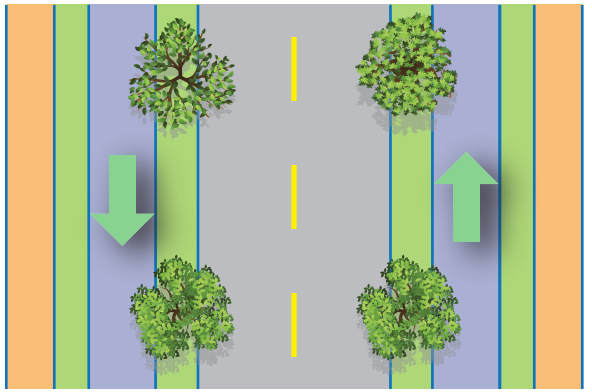


Figure B.6 Protected Bikeway - Reconstruction Scenario

Shared Street

Neighborhood bikeways are roadways with low traffic volumes and speeds where bicycles share the roadway with other vehicles. Their core elements are signage and wayfinding; however, when necessary they can include interventions that will reduce vehicular traffic speeds and vehicular traffic volumes.

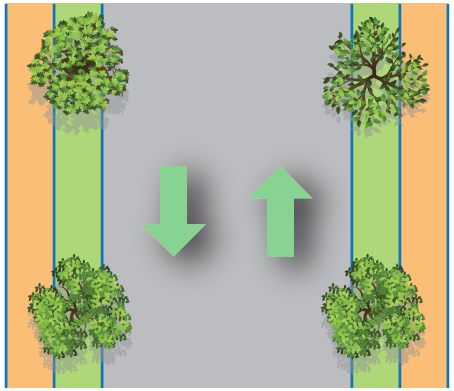


Figure B.7 Shared Street

Painted Bike Lanes

This approach designates road space for cyclists but lacks physical protection. Painted bike lanes can be appropriate when traffic volumes are relatively low or when space is constrained, but generally protected bikeways are preferred for their safety and comfort benefits.

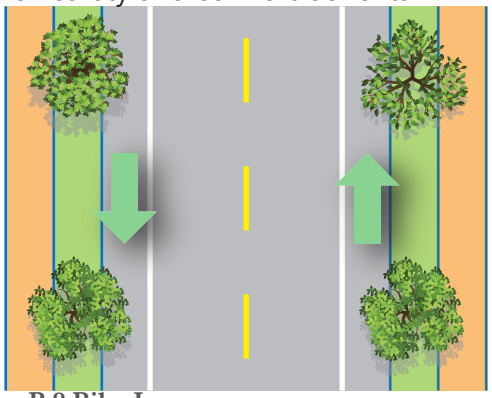


Figure B.8 Bike Lane

Shared-Use Sidepaths

Shared-use sidepaths are a back-of-curb design solution that create a wide pathway to be shared by people walking and biking in place of traditional sidewalks. They can be designed as one- or two-way bike facilities, with the expectation that people walking will always travel two ways.

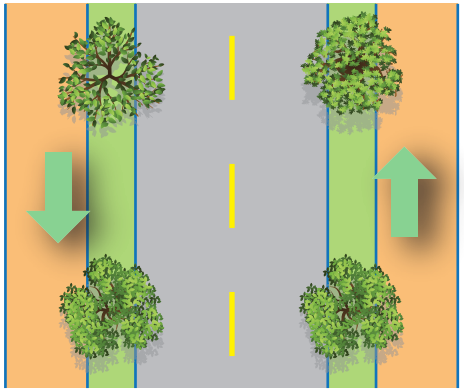


Figure B.9 Shared Path

End of Trip Facilities

To accommodate and encourage cycling as a mode of daily transportation, facilities must be provided at destinations welcoming cyclists. These facilities include secure bike parking; bike share stations; and changing rooms, lockers, and showers for employees.

Images: H-GAC End of Trip Facilities Guide

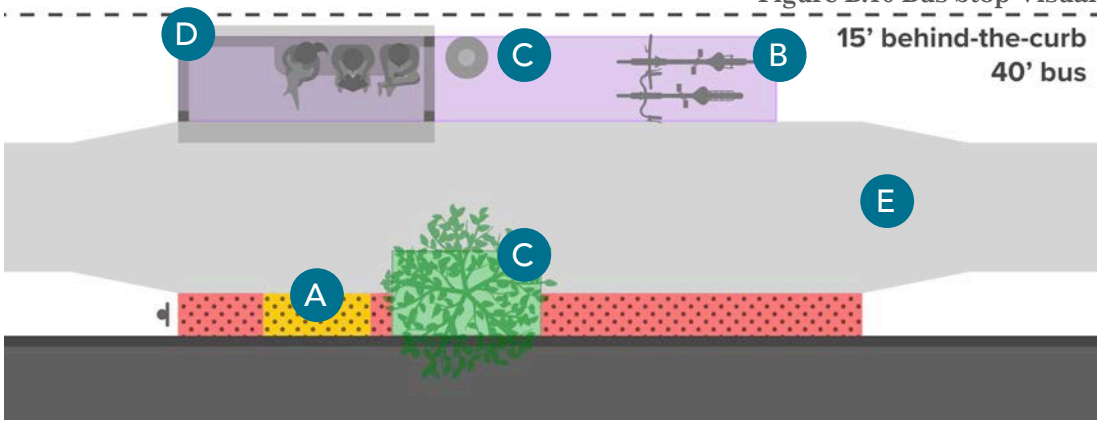
Transit Enhancements

Bus stops are an integral part of multimodal travel as transit users typically access the bus or train by walking or biking. ADA accessibility, the placement of bus stops, and interaction with bike facilities are key components identified in this section that can significantly improve accessibility and comfort of bus stops to increase ridership. Bus stops also provide important opportunities to incorporate art and placemaking into transportation infrastructure.

Key Components

- **A** ADA standards require specifics for surface type, dimensions, and placement for access to buses for boarding and alighting. In general, it is necessary to have a clear width of at least 5' to the bus loading area.
- **B** Incorporating end-of-trip facilities with transit stops can facilitate increased transit use. These should be incorporated in locations that are outside of pedestrian walkways and be highly visible for safety concerns.
- **C** Bus stops are locations where placemaking and art can be incorporated and lead to increased comfort.
- **D** Shelters should be provided where feasible for protection from weather and comfort waiting for the bus.
- **E** Pedestrian walkways should be clear from obstructions.
- **F** Pedestrian crossings of bikeways should be clearly identified

Figure B.10 Bus Stop Visual

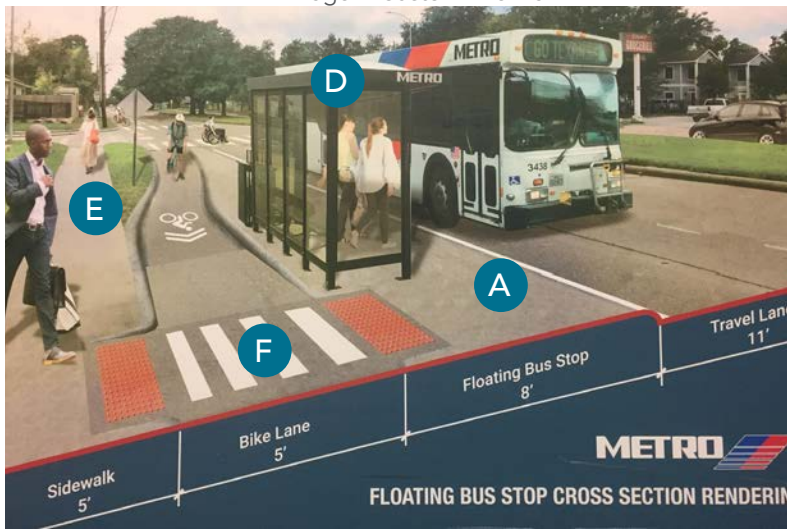


Pedestrian Access

Bus stops are directly related to pedestrian roadway crossing. Accessing a bus stop safely via sidewalks and appropriate street crossing locations is key to improving safety and reducing crashes. Roadway crossings can be made safer using; marked crosswalks, median crossing islands, warning signs, and pedestrian signals. Bus stop placement is important when considering pedestrian crossings. Near-side placements (upstream) or far-side placements (downstream) both have certain advantages and disadvantages. Upstream bus stops allow for passengers to access the bus closest to the crosswalk. Downstream stops encourage pedestrians to cross behind the bus. However, both may create sight distance problems for pedestrians crossing the street.

Coordination with METRO and utilizing best practices in pedestrian and bus stop design can help the East End District enhance safety around transit stops, particularly for vulnerable users.

Figure B.11 Floating Bus Stop Visual
Image: Houston Bike Plan



Green Corridors & Urban Ecology

Recommendation 2 outlines the benefits, justifications, and recommended study area locations of green corridors, Low Impact Development, urban forestry, and green infrastructure. This section of the toolbox describes key considerations in the implementation of these ecologically robust urban strategies. By applying strategies described here, Greater Eastwood can harness many benefits, including greater sustainability and ecosystem function, an increased quality of life, reduced flooding, and enhanced, distinctive aesthetics.

The adjacent illustration shows an example condition with LID and GSI (Green Stormwater Infrastructure) strategies applied in residential, commercial, and open space environments. To meaningfully improve the sustainability and resilience of the district, LID and GSI strategies should be incentivized in all district contexts; from public roadways, to open spaces, to private residences.

Sustainability Strategies: Neighborhood Streets

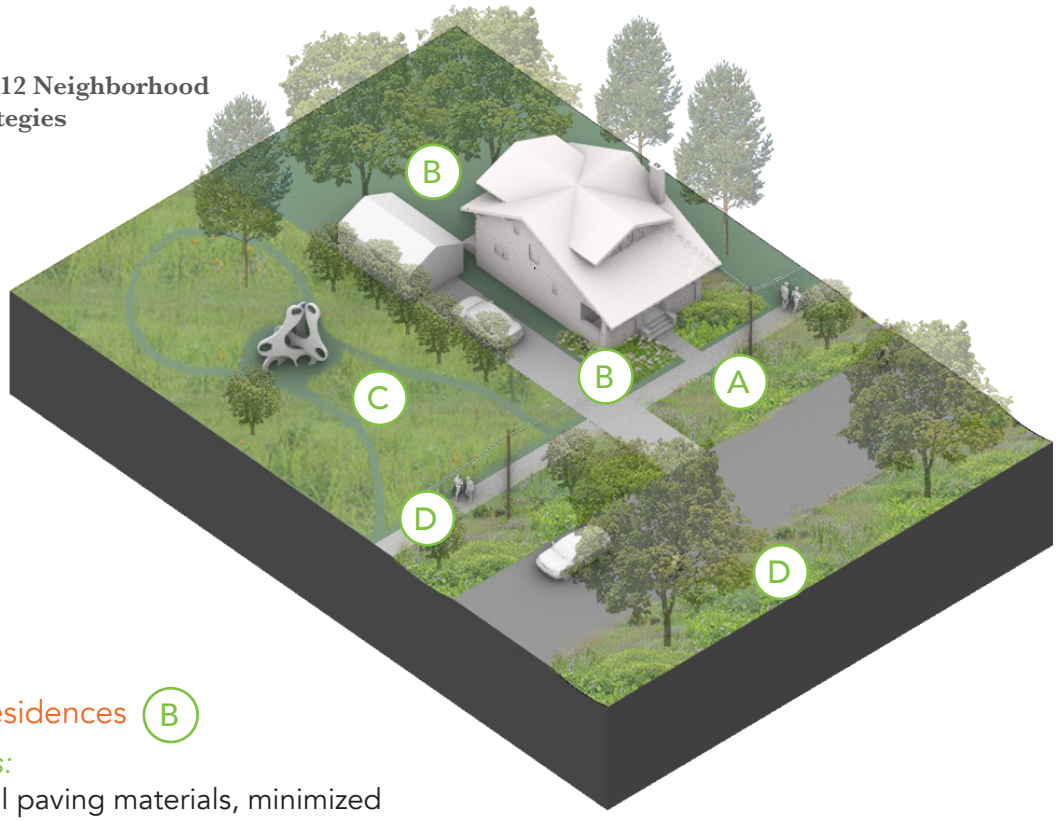
Utility Conflict Points (A)

Above ground electrical distribution networks represent an obstacle to establishing comprehensive canopy coverage. The following strategies are recommended.

Strategies:

- undergrounding utilities (may be cost prohibitive)
- naturalized understory planting areas
- no planting of canopy trees within 20' of utility lines, use small trees, ornamental trees, edible trees instead.

Figure B.12 Neighborhood LID Strategies



Private Residences (B)

Strategies:

- natural paving materials, minimized concrete, or asphalt
- replacing turfgrass with no-mow lawns, micro-prairies, and planted swales
- canopy tree planting
- edible landscaping

Outcomes:

- reduced flooding
- wildlife habitat
- water quality improvements
- increased aesthetic interest

Open Space (C)

Strategies

- naturalized planting areas
- vegetated swales
- canopy tree planting
- natural paving materials, minimized concrete, or asphalt

Outcomes

- reduced flooding
- wildlife habitat patches
- opportunities to engage with nature
- water quality improvements

Rights-of-Way (D)

Strategies

- naturalized planting areas in roadway landscaping areas
- vegetated swales
- curb cuts to facilitate roadside infiltration in vegetated swales
- canopy tree planting

Outcomes

- increased aesthetic interest
- connected habitat corridors
- reduced flooding

Sustainability Strategies: Commercial Corridors

Commercial Right-of-Way – Canopy (A)

Strategies

- canopy tree planting with adequate soil volume and informed species selection
- structural soils
- silva cells
- suspended pavements
- roadside bioretention swales
- direct drainage from roadways through curb-cuts
- naturalized planting communities

Outcomes

- sense of place
- increased urban comfort
- water quality improvements
- enhanced infiltration
- reduced flooding
- pollutant filtration
- aesthetic enhancement
- wildlife habitat

Surfaces (B)

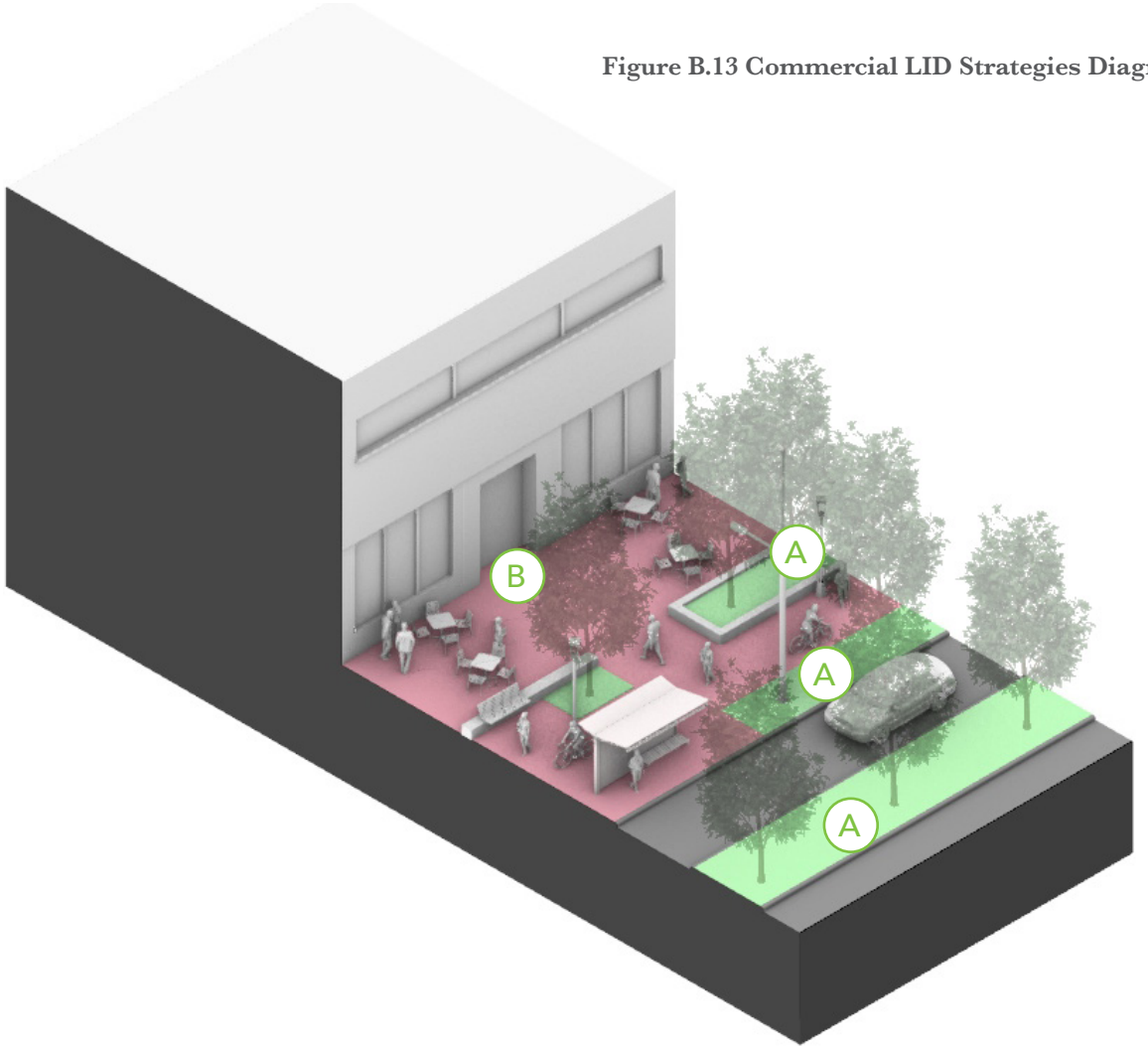
Strategies

- natural paving materials at low traffic areas and plazas
- drainage to roadside bioretention swales

Outcomes

- enhanced infiltration
- reduced flooding
- pollutant filtration
- aesthetic enhancement

Figure B.13 Commercial LID Strategies Diagram



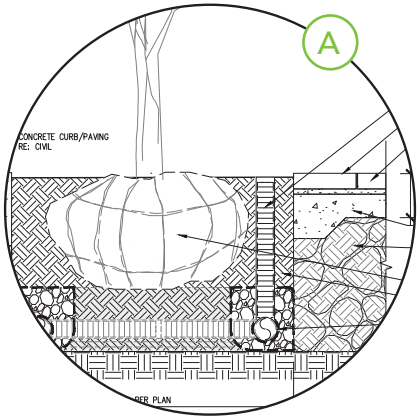


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image: Pedestrian & Bicycle Info Center

Softscape Elements

District-wide application of planting materials informed by the principles of low impact development, ecosystem health, and green infrastructure, in both public and private spaces will catalyze beauty, comfort, health, sustainability, and resilience in Greater Eastwood(further information about the benefits of robust natural systems available on page B16) . Understory plantings and tree planting strategies are outlined below.

The Understory: Naturalized Planting Strategies

The application of naturalized plantings composed largely of native grasses and flowering species enables the harness of benefits of aesthetic, experiential and functional character.

Functional benefits of these strategies, in contrast to traditional turf landscapes include: reduced water use, increased water quality, decreased runoff, flood mitigation, wildlife habitat, continuous blooms, and, once established, reduced maintenance costs. Composing plantings in this way is a best practice in creating a more resilient, beautiful, ecologically functional, and environmentally compatible Greater Eastwood.

The aesthetic and experiential impact of these strategies, while in contrast to traditional, turfgrass planting, can be profound. When effectively designed, naturalized plant communities can provide aesthetic interest throughout the year. Native species, planted in drifts and matrices, reference and evoke endemic natural systems. Establishing these unique planting compositions is a further opportunity to define the district while concurrently harnessing ecosystem services.

Tree Planting

Composition & Context

In the historic Eastwood master-planned community powerful Live Oak alles shelter and define the setting. This compositional uniformity should be replicated along key corridors and in direct connection with existing high quality canopy streets such as Leeland and Polk in the western region of the study area. To establish a consistent spatial vocabulary the Main Street Placemaking Overlay(See section 5), consisting of the Lawndale, Lockwood, and Leeland corridors should be treated with a Live Oak alle.

To foster resilience to canopy loss, a diverse selection of canopy trees should be planted. Blocks and contiguous corridor segments should be planted uniformly for spatial composition, with alternating streets varying in species, thus achieving compositional uniformity and biological diversity in concert (see neighborhood canopy composition diagram- Figure B.14)

Tree Planting in Urban Spaces

According to the USDA Forest Service, the majority of urban trees have a life-span of no-longer than 10-years. The primary driver of this high tree mortality is improper planting; without adequate soil volume and drainage, prospects for tree survival plummet. Two critical components in ensuring long-lived street, and urban trees, that foster high-quality, high functioning environments, are soil volume and species selection.

James Urban, FASLA, an expert on urban tree planting recommends soil volumes of 1000 cubic feet per tree. When trees run out of soil volume, they stop growing. With a volume of 1000 cubic feet, trees can be expected to grow to a robust mature diameter of 16" with a canopy spread of 32.' Where open, contiguous planting areas are not available, such as along commercial streets, or in urban plazas,

What not to do - rooting soil volume is directly proportional to tree longevity and mature size.

Recommended strategy - large planting beds featuring naturalized plant mixes and ample space for tree rooting. Use of silva cells, structural soils, or suspended pavements should be considered in locations with area constraints.

A thriving roadside bioretention swale featuring a well-composed naturalized planting mix.

Case Study:

Pinehurst Green Grid

Seattle, WA

https://nacto.org/case-study/pinehurst-green-grid-seattle/

The Pinehurst green grid project, in Seattle, Washington added green storm-water infrastructure (GSI) to a section of the city with unimproved right-of ways. Many of the streets, similarly to Greater Eastwood lacked curbs, formal drainage infrastructure or sidewalks. The project is a relevant precedent for implementation of LID and GSI strategies in Eastwood nieghborhoods.

The goals of the project focused on stormwater management, water quality, and placemaking. The project successfully treats stormwater runoff from 49 acres, enhancing water quality, while reducing water volumes, peak flows, and local spot flooding. Also, residents appreciate the aesthetic impacts of the naturally planted drainage system; streets are now seen as open spaces.

At a Glance

Project Area: 49 Acres/12 city blocks

Drainage System Area: 2.3 acres

Right of Way Width: 60 feet

Participating Agencies: Seattle Public Utilities

Timeline: Design & Engineering: 2003-2005

Construction: 2005-2007

Cost: $4.6 million ($2.71 million for construction)

images: Seattle Public Utilities

subgrade soil volume expansion strategies, such as Silva Cells, structural soils, or suspended pavement details should be considered to maximize the benefits of planting.

Tree species selection is similarly imperative to the establishment of a healthy, long-lasting urban canopy. By selecting species that are naturally adapted to environments similar to urban spaces the chances of survival are increased. Recommended species can be reviewed in Figure B.15.

Characteristics of Well-Adapted Urban Trees

- Drought Tolerance
- Tolerance of Inundation
- Ability to withstand heavy winds without breaking
- Tolerance of urban heat islands
- Branching structure conducive to pedestrian and vehicular traffic
- Minimal fruit litter
- Distinctive aesthetic features such as blooms, fall color, or evergreen foliage

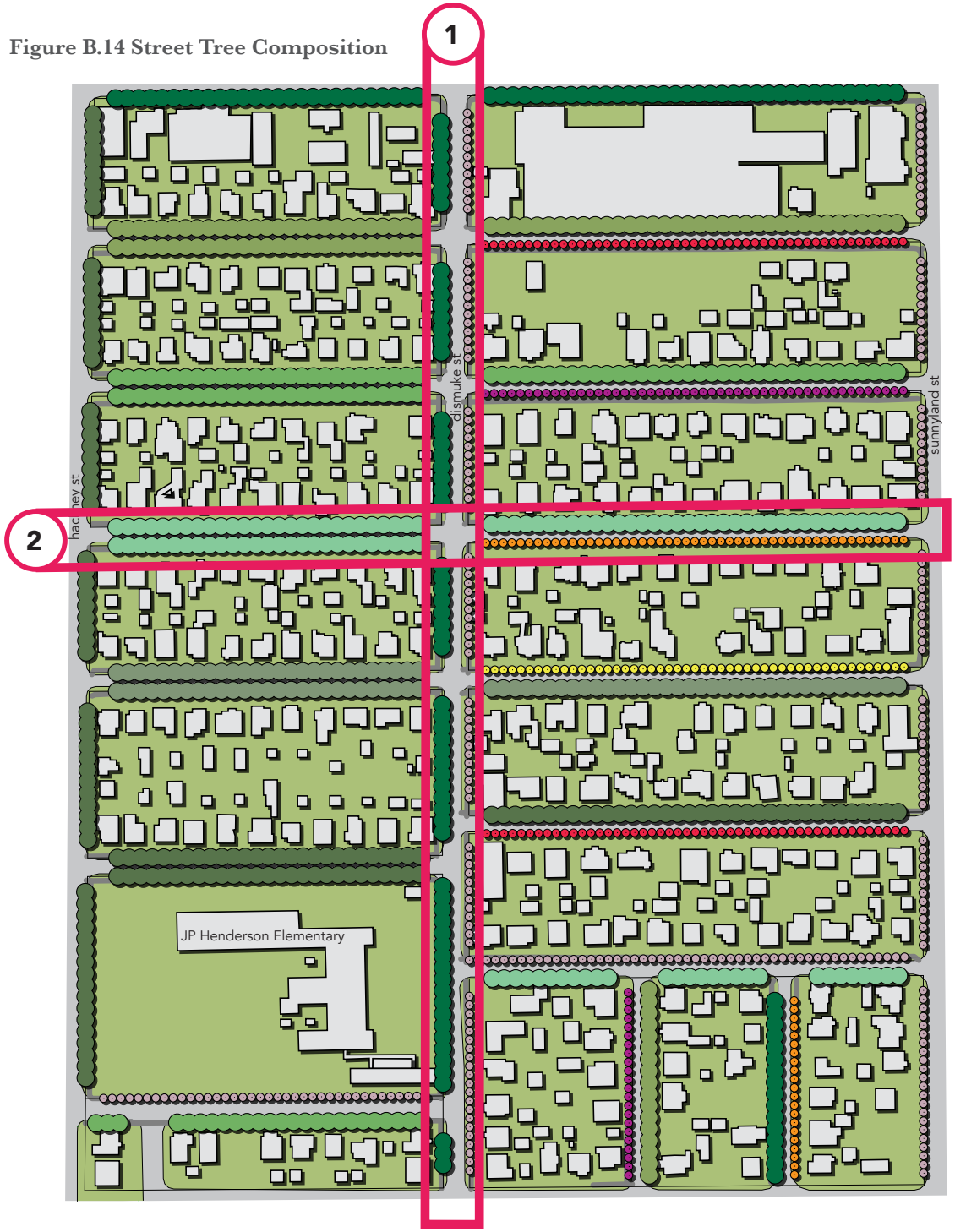
Houston LID Resources

Harris County Low Impact Development & Green Infrastructure Design Criteria for Storm Water Management

HGAC Low Impact Development Resources
http://www.h-gac.com/low-impact-development/resources.aspx

City of Houston: Houston Incentives for Green Development

Figure B.14 Street Tree Composition



Street Tree Composition

Figure B.14 shows the composition for neighborhood street tree planting. It is important to note that this diagram is a simplified model for composing tree plantings by street. Locations of existing trees, driveways ,other street features, and median widths should all be considered when planting.

In contexts where medians prove too narrow for tree planting (planted medians should be 3' wide at the absolute minimum), the encouragement of canopy tree planting in private lots adjacent to rights of way should be used to achieve canopy coverage.

Neighborhood Street Approach

1 Primary neighborhood thoroughfare

Primary through streets, such as Dismuke, Sunnyland, and Hackney Streets should be planted continuously with one species of shade and/or ornamental tree. The species should vary per corridor.

2 Residential streets

Each residential street should feature a consistent planting of one species of shade tree. Ornamental trees should also follow this logic.

Tree Types

Small/ornamental tree

- Minimum spacing - 15' on center.
- Plant in locations with overhead power lines or spatial limitations

Shade tree

- Minumum spacing - 25' on center.
- Plant where no overhead spatial constraints exist
- Minimum median/tree pit width - 3'

Figure B.15 Recommended Street Trees

Shade Trees

2.5" - 3" caliper, measured 2' above natural grade

Botanical Name	Common Name
Magnolia grandiflora	Southern Magnolia
Pinus taeda	Loblolly Pine
Platanus mexicana	Mexican Sycamore
Quercus acutissima	Sawtooth Oak
Quercus alba	White Oak
Quercus falcata	Southern red Oak
Quercus lyrata	Overcup oak
Quercus nuttalli	Nutall Oak
Quercus polymorpha	Mexican White Oak
Quercus shumardii	Shumard Oak
Quercus virginiana	Live Oak
Taxodium distichum	Bald Cypress
Taxodium macronatum	Montezuma Cypress
Ulmus americana' Princeton'	Princeton Elm
Ulmus crassifolia	Cedar Elm

Ornamental Trees

30 gal. minimum

Botanical Name	Common Name
Aloysia virgata	Sweet Almond Verbena
Asimina triloba	Pawpaw
Chionanthus virginicus	Fringetree
Sophora secundiflora	Texas Mountain Laurel
Diospyros virginiana	Texas persimmon
Ehretia anacua	Anacua
Fraxinus texensis	Texas Ash
Ilex opaca	American Holly
Ilex vomitoria	Yaupon Holly
Lagerstroemia indica	Crape Myrtle Species
Magnolia virginiana	Sweet Bay Magnolia
Magnolia soulangeana	Saucer Magnolia
Magnolia stellata	Star Magnolia
Tecoma stans	Esperanza
Vitex agnus castus	Chaste Tree

Live Oak
Robust live oak plantings make a significant contribution to the environmental quality of eastwood. The compositional strategy of creating streets composed with singular species is a nod to similar gestures successfully executed in Eastwood.

Fringetree

Mexican Sycamore

Star Magnolia

Walkability Assessment Program Guide

Eastwood Residents Walk

Eastwood residents walk. There is a demand for safe, comfortable, and connected walking infrastructure that allows for Eastwood residents to get to the places they want to go and support this thriving community. Building safe and comfortable sidewalks will not only meet the existing demand for better walking conditions, but will also encourage more people to walk.

Sidewalk conditions within Eastwood varies greatly with some new segments of wide comfortable sidewalk and other areas with aging and narrow sidewalks. There are many segments of missing sidewalk limiting access for people walking and making a trip likely impossible for any person with mobility challenges. Dangerous sidewalks and intersections leave large gaps for people walking to local destinations. The District can make major improvements to connectivity by building sidewalks to the current standards or better, so that people of all ages and abilities have access to key destinations within their neighborhood.

Program Overview

Safe sidewalks are a sign of a vibrant community and can be a key ingredients in the enhancement of thriving commercial corridors. Better sidewalks give visitors and residents a reason to walk. To provide the best walking experience it is necessary to understand the baseline conditions. One segment of poor sidewalk can make a whole block completely inaccessible, particularly for people with mobility challenges or pushing a stroller. The disconnected network of passable sidewalks presents challenges for connectivity; however, it also presents opportunities. Short, smaller projects along one or two blocks can have massive impact if constructed in the right area by improving access for a variety of corridors. In addition, as parcels redevelop, improvements will continue throughout the network.

Understanding the existing conditions can inform decision making by the District. This report included a preliminary assessment (Factbook Figure A.8) focused along key corridors and around schools. While this preliminary assessment has been a useful input into recommendations developed for this report, a more detailed assessment can help the District as it plans for future projects focused on enhancing walkability.

A detailed understanding of the existing infrastructure will allow the District to "right-size" projects. Understanding the existing conditions, while also updating regularly will also allow for a detailed infrastructure asset management tool for the District. Having this tool in a geographical software, like ArcGIS, allows for this data set to be cross-reference with other data sets to showcase a variety of factors that are critical to building successful grant applications and finding creative funding sources to continue the District's mission of becoming the most walkable area within Houston.

Therefore, it is recommend that the District develop a robust data set of existing walking infrastructure that can be utilized to define capital projects in the future. This program is developed to be a tool for assessment management, used in defining future projects, and as a method for public engagement.

Program Methodology

The backbone of the program is the development and maintenance of a detailed sidewalk inventory for all corridors within the District. This inventory should be collected by field inspection and cataloged within a geo-coded dataset within a GIS program, like ArcGIS. The creation of this data set is a large under taking but if done in an organized and thoughtful way it will create much value for the District in both the near-term and long-term as the District continues to invest within the community.

The District is a vibrant community home to multiple schools with strong communities. Safe routes to school has been a priority and there is no better resource for understanding a walking experience to school than by working with the students to understand their experience. It is recommended that this program include a collaborative component with area schools to build a curriculum about roadway safety that can both be a key educational component for them but also an input into this Walkability Assessment. Working with students strengthens this programs ties to the community and develops community ownership of the walking infrastructure within Eastwood.

Sidewalk Inventory

Every block within the District should be walked to assess condition, comfort, perceived safety, and feasibility of future sidewalk improvements. This process will give the District a robust data set of both quantitative data and qualitative assessments. All data should be recorded in GIS mapping software to be cataloged and used by the District into the future for capital project planning. The sidewalk inventory should include three areas of assessment:

- Parcel assessment
- Block assessment
- Intersection assessment

Parcel Assessment

The parcel assessment include the evaluation of sidewalk condition for each parcel within the District. There are many ways to assess sidewalk condition, and the District should refine a system that aligns with their community. The information on page D19 provides a recommended condition assessment methodology that based on both width and state of repair includes five sidewalk categories. The five condition categories recommended are based on City of Houston (COH) standards that require sidewalks to be a minimum of 5 feet on local and collector streets and without vertical deflections more than one inch (tripping hazards and barriers for people with mobility challenges). This methodology can be modified if desires by the Distinct to match the context of the community.

For corner or full bock parcels, each side of the parcel should be assessed independently of the other(s). Often one segment of a parcel is vastly different than another segment, due to a variety of factors including trees, drainage conditions, maintenance, and redevelopment. If the condition varies along a parcel, the parcel should be scored based on the segment in poorest condition. A sidewalk is only as traversable as its worst segment, especially for someone with mobility challenges.

Block assessment

Well-designed sidewalks are an integral part of creating an enjoyable walk; however there are other factors that can greatly impact a walking experience. The block assessment is where these elements can be evaluated by conducting a qualitative evaluation of attractiveness and safety. Attractiveness and safety can be measured on a scale based on the experience of the assessor from strongly agree to strongly disagree. The accessors should answer the following two questions for each block face walked within the District:

- "I feel safe walking along this block"
- "This block is attractive for walking"

Safety should be measured in terms of comfort, not of security. These assessments align with sidewalk assessments that have been conducted in other neighborhoods (Third Ward and Montrose), providing continuity across studies within Houston.

This block-level analysis should also included an assessment of existing physical obstructions along the block that could present challenges for sidewalk construction in the future. The feasibility assessment should be a qualitative assessment of the perceived ease of construction of a 5-foot or wider sidewalk along that block face. Cataloging blocks that present challenges for building a 5-foot or wider sidewalk will be a useful input into project selection and cost estimating. It also provides high-level data on areas where "quick-win" projects are possible where an easy to build, short segment can open up connectivity for a large area of the community.

Intersection assessment

Intersections are a key component of a walking experience. A block may have traversable sidewalks, but an intersections may either lack curb ramps or be unpleasant to cross, restricting connectivity and access. To ensure a connected sidewalk network, improvements to the safety and comfort of intersections is an essential component.

Field assessments should included an assessment of curb ramp condition at all corners. For all corners, ramp type and condition should be recorded, based on the categories presented on page D20. As shown in the photos, differentiating between directional and diagonal

ramps provides utility in assessing intersection comfort and accessibility especially for persons with mobility challenges.

Comfort and safety should also assessed for all intersections to better understand the crossing roadway experience for a person walking. To do this, the accessors should answer the following two qualitative questions for each intersection crossed within the District:

- "I feel safe walking along this block"
- "This block is attractive for walking"

Prioritization Methodology

The sidewalk inventory will allow for the District to have a detailed assessment of the needs of the walking infrastructure within Eastwood. The amount of data may appear overwhelming and the need for improvements may seem insurmountable. Therefore, identify the most important projects that have the largest impact can help with defining projects to focus on within the near-term. Also, a data driven approach focused around project utility and impact can help tell the story of why one street will get new sidewalks versus another street.

There are a variety of methodologies that can be implemented to prioritize which blocks are most critical for improvement. One recommended method is through community engagement based on "crowd-sourced" preferences via an online forum. A more data driven methodology is based on a measure of "network-utility" for every block faced based on the proximity (walk shed calculations) to destinations served by that block segment. ArcGIS software Network Analyses can be conducted based on destination and walk-sheds to calculate a value of network utility for every block. Destinations can be weighted to provide priority to key community destinations like schools, parks, and community centers.

A sidewalk inventory supported by a prioritization methodology to create a robust Sidewalk Assessment Program gives the District a powerful tool to determine where to invest in sidewalk repair and construction within Eastwood. Using these tools the District can data a data driven and community supported approach to project development than can take the miles of sidewalks that need improvements and divide them into projects with manageable scale and that make a noticeable impact on the community's sidewalks. As the District prioritizes projects each year, this Program can be used to right-size projects for the available funds at the time as well as to prioritize projects based on feasibility and network-utility.

Maintaining the inventory is an asset for grant writing. As each grant application will require an assessment of the proposed projects and their projected benefit, this tool can used to communicate the existing need for improvements, and the District's overall progress, two criteria often necessary in successful grant submissions.

Program Utility for Future

The Sidewalk Assessment Program should be maintained and updated regularly. Working with students from area school provides a unique opportunity to both work with students to maintain data for the program but to also enhance the program by working with students to capture their experiences and understand the immediate needs and wants of the community. Working closely with area schools also provides and opportunity to build-on existing STEM programing or create a STEM focused curriculum based the real-world applications of design and engineering.

Public Engagement

The GIS based inventory can be used as a public information and public engagement platform to inform the public about upcoming projects. The tool can be converted to an interactive online GIS resource, adding to the ways the District can gather input from the public about their needs and priorities to inform project development.

As the District builds out the walking network within Eastwood, an online resource can be developed to share planned projects and updates for projects in development. This will be a useful tool for organizing and sharing information, including the methodology used for project prioritization (network utility) providing transparency in the project development process and for residents and business owners to understand why projects in one area are being prioritized over another area.

Using the tool to gather input from the public can also be a helpful way to define projects, prioritize projects, and to build project momentum for future projects. Public input can also be a useful input for grant applications for project funding.

Additional considerations for collaboration

Additional considerations recommended to keep the program active and useful include the following guidelines to ensure the most up-to-date data is available for analysis:

- The District should monitor/review permitting requests made to the City of Houston to know when new development, residential or private, is to occur within the study area. This will allow the District to ensure new construction is being build proper standards.
- When new development is completed, the Sidewalk Inventory should be updated.
- A bi-yearly assessment for the entire Study Area
- When roadway construction occurs, the Sidewalk Inventory should be updated.
- If the inventory becomes public facing, public input can be used to update the inventory.

Sidewalk Condition Classifications

Five classifications of sidewalk condition

Condition A: Flat and 5+ Feet Wide

These sidewalks are flat (traversable) and allow people to walk side-by-side. This should be the minimum standard for new sidewalks on all local streets or collectors, with wider than 5 feet where possible.

Condition B: Flat and Less than 5 Feet Wide

These sidewalks are flat and traversable (no vertical deflections over 1-inch), but built to the prior COH 4-feet standard. These are too narrow for people to walk, or use a wheelchair side-by-side.

Condition C: Poor condition and 5+ Feet Wide

Although these sidewalks meet minimum width standards, they are in poor condition and non traversable, making it difficult for people with mobility challenges.

Condition D: Poor Condition and Less than 5 Feet

These sidewalks are both too narrow and in poor condition. They present physical barriers, especially for those with mobility challenges.

Condition E: No Sidewalk Present

Segments with no sidewalk create major barriers to connectivity. Often "goat tracks" are present along these parcels.

Ramp Condition Classifications

A detailed assessment of ramps for all intersections

Ramp assessment recommendations are based on City of Houston (COH) and American with Disabilities Act (ADA) curb ramp standards.

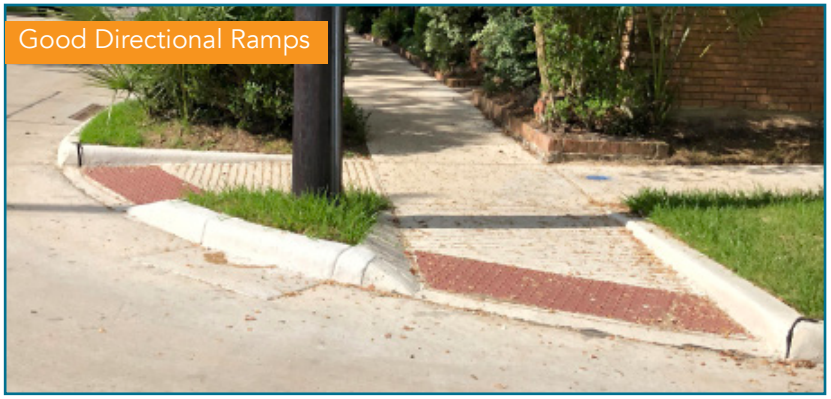
Directional vs Diagonal

Directional ramps are ideal in most circumstances. Directional ramps direct the person walking to cross the intersection along the crosswalk, even if not marked, instead of directing them into the middle of the intersection. Directional ramps provide benefits to all people walking but their benefit is more impactful for people who are rolling or people who are visually impaired.

Diagonal ramps are shared by two converging sidewalks and typically require a change of direction to follow the crosswalk. At one point, these ramps were a standard, and are prevalent within the District. They are also typically lower cost to construct than directional ramps. Ideally, diagonal ramps should only be used if constructed in areas where physical constraints make a directional ramp infeasible.

Ramp Condition

COH standards for ramp slope are 1:15. The District should create an assessment of ramp condition that aligns with content of the sidewalk infrastructure. An assessment could include a detailed review of slope and adherence to COH standards. Or the assessment could be via visual inspection.



APPENDIX C: COMMUNITY INPUT

Photo submitted by Abby Fernandez as part of a photo contest for "What Greater Eastwood means to me"in Round 2 of Community Engagement.

Live/Viva Greater Eastwood Community Input Summary Round 1

Introduction

Development of the Greater Eastwood Livable Centers Study incorporated community feedback to identify needs and issues most relevant to the community. The feedback was utilized to assess existing conditions along with data analysis, and inform the project of potential recommendations. This summary memo highlights the engagement methods used, overall engagement received, and key findings from the community.

The Greater Eastwood Livable Centers Study kicked-off just as COVID-19 became a known pandemic in the United States. Accordingly, in the interest of public safety, all in-person meetings and events were canceled. However, to continue the community engagement process, online tools utilized to ensure the Greater Eastwood Livable Centers Study not only met engagement requirements but incorporated difficult to reach groups including Spanish speakers and young people. The project embraced using Facebook, Twitter, traditional email, phone calls, the Stakeholder Advisory Committee, and HISD Wrap Around Specialists to encourage the community to learn more about the project and provide feedback. All engagement tools and outreach were provided in both English and Spanish formats to ensure inclusivity. The HISD Wrap Around Specialists provided a link to students within the study area encouraging participation from this important, and often underrepresented group.

Community Engagement tools used included an online survey, interactive map, recorded webinar, project information, and social media. The project information and recorded webinar were used to inform the community about the project, the survey and interactive map were primarily used to gather detailed information from respondents, and social media was used to promote the project to diverse groups and create a sense of excitement around the study. The following information provides a summary of the feedback and highlighted information received. Full engagement comments and results are provided as an appendix to this summary.

Stakeholder Advisory Committee Assistance

The project's Stakeholder Advisory Committee (SAC) provided valuable input to the needs of the study area and opportunities to explore. As members of the community, organizations, and agencies that work or provide services in Greater Eastwood, the SAC also provided valuable input for engaging with the community and sending out information about engagement opportunities through their networks. This assistance facilitated a robust community engagement effort, particularly given the difficulties of working within the COVID-19 situation, which required all online or virtual interaction with the community.

Online Survey

The survey was provided online from March 9, 2020 to May 17, 2020 (70 total days). Of the 158 responses, seven were completed in Spanish, 31 were under the age of 18, three were 65 years or older, and 63% of respondents were female.

There were 59.2% of respondents that live in the study area, followed by 31.2% of respondents who live nearby and 24.8% who work in the study area. 21.6% of respondents reported going to school in the study area. Categories provided to understand the connection to the study area were not presented as mutually exclusive options and provided the opportunity for respondents to select multiple answers. For example, a person could select that they both work and live in the study area.

The online survey included four overarching topics: transportation, parks, economic development, and housing. Additionally, general questions to capture "big ideas" or other pressing matters were incorporated with four open ended questions with broad parameters. Demographic or compositional questions including age, gender, and time having lived in the neighborhood were used to ensure diversity of survey participants. The following information highlights key takeaways from each of the topic areas.

Transportation Questions

How We Move

Respondents were asked to categorized how frequently they used different transportation options listed below in Figure C.1. Rarely was described as 1-3 times a month, occasionally, 1-3 times a week, and frequently being 5 or more times a week. Driving and walking among all age groups were the transportation options used most frequently. The bus was the least frequently used option.

Getting to School

Special attention was paid to the way students get to and from school within the study area. For respondents who were students themselves or had a student in their household, the majority of responses (nearly 68%) indicated students were either driven or drove themselves to school compared to walking (13.6%), biking (3.2%), or transit (14.7%). The predominant use of vehicles to transport students to the multiple schools in the neighborhood underscores the need for safer infrastructure and programmatic interventions to increase families' mobility options. 65% of applicable respondents expressed they would utilize sidewalks, a bike, or transit to get to school if it were safer or more convenient.

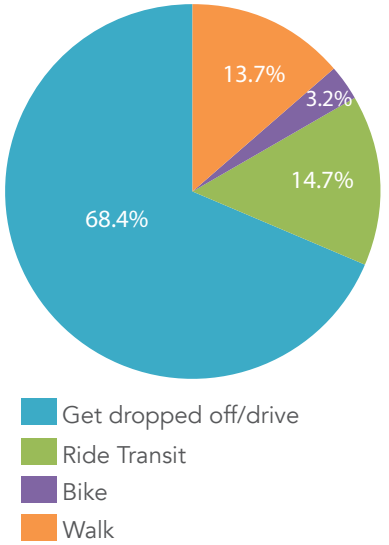
The graphics in Figure C.2 illustrate the distribution of how students get to school first from all applicable respondents and secondly from Eastwood Academy, a local "school of choice" that may attract students from a wider range of Houston's neighborhoods. The proportion of students utilizing a vehicle, whether driving themselves or getting dropped off by an adult is much higher (83%) than the reported 68% of students using a car to get to school in the same area. Attention should be paid to the catchment of local schools to understand which schools may be serving students from various neighborhoods rather than a school primarily serving kids within or near the neighborhood.

Figure C.1 Rates of Use by Mode of Transportation

	Walk	Bike	Ride the Bus	Ride the Train	Drive	Rideshare/Other
Never	21.4%	42.4%	68.5%	55.7%	6.9%	45.7%
Rarely	26.7%	22.0%	17.7%	27.5%	12.3%	30.7%
Occasionally	29.0%	21.2%	5.44	11.5%	17.7%	12.6%
Frequently	22.9%	14.4%	8.5%	5.3%	63.1%	0.1%

Figure C.2 How Students Get to School

Online Survey Responses



Eastwood Academy Parent Survey
(data provided by Eastwood Academy)

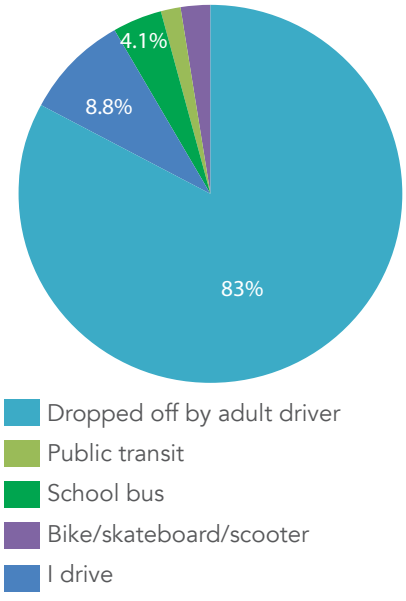
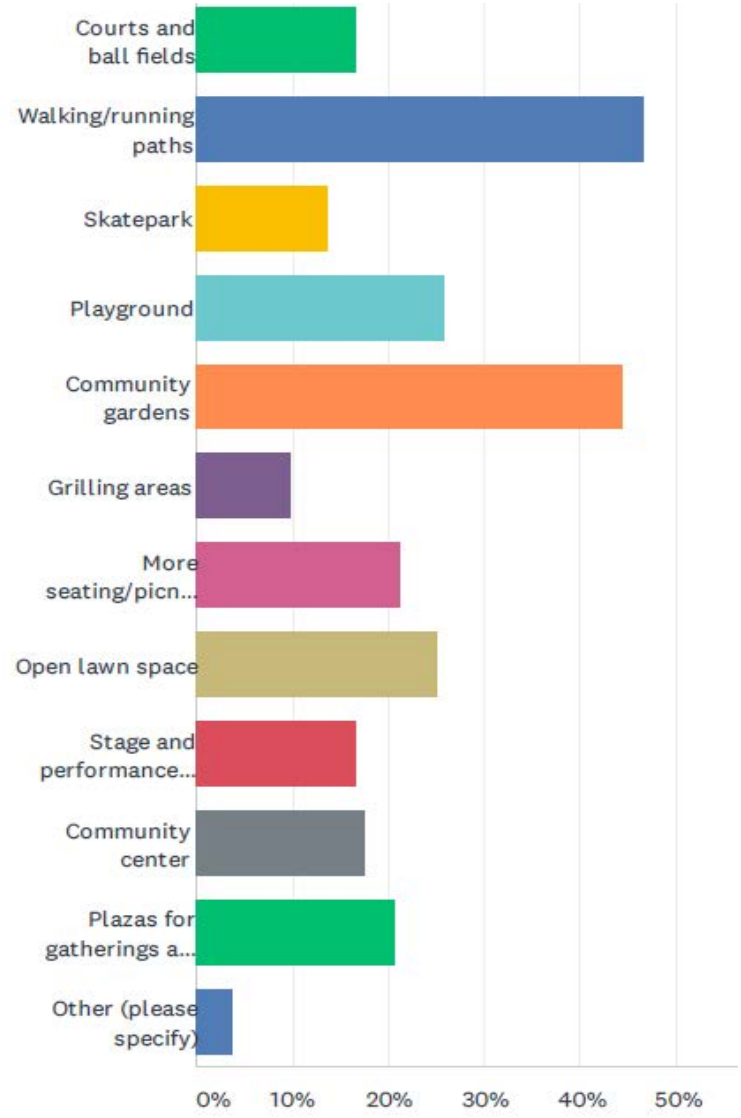


Figure C.3 Desired Park Programs or Facilities



Barriers to Mobility

Barriers to mobility revolve around a lack of connectivity, poor quality infrastructure, and safety concerns. The top mobility barriers for all respondents include:

1. Lack of sidewalks or trails connecting to my destination
2. Condition and quality of existing sidewalks
3. Intersection crossings do not feel safe or visible
4. Lack of trails or bikeways connecting to my destination
5. Freight rail crossing

Parks & Open Space Questions

Our Parks

Parks and open spaces are important assets to the Greater Eastwood community. Currently, the most heavily used park facilities include: walking and running paths, playgrounds, and open lawn space. Eastwood Park was reported as the most heavily utilized park followed by Navarro Middle School Spark Park, and Tlaquepaque Plaza.

Survey respondents were asked about what types of park programs or facilities would they would like to have available in the community and were allowed to choose their top 3 options. Figure C.3 shows the distribution of the community responses. The diverse interests of the neighborhood are reflected in park facility preferences. The most desired amenities are walking and running paths selected by 46.5% of respondents. Interestingly, both kids under 17 and adults ranked walking and running paths highly. Community gardens take a close second as 44.27% of respondents tallied it as an amenity they would like to see available.

Approximately 16% of respondents reported not using any parks or public spaces at all. Further analysis shows safety concerns as the top reason why respondents are not using the parks more, followed by difficulty walking or biking to the park, and time of day restrictions.

Economic Development Questions

The data continually reflects the need for more grocery store and retail options. Among all age groups, neighborhood tenure, and gender, retail described as grocery stores and pharmacies were a priority for respondents. Based on the survey, nearly 47% of respondents are traveling 5 miles or more to reach these goods and services. Not only does this have immediate consequences in convenience and accessibility for residents, but driving farther for goods has a negative impact on air quality, health, and dollars invested back in the neighborhood.

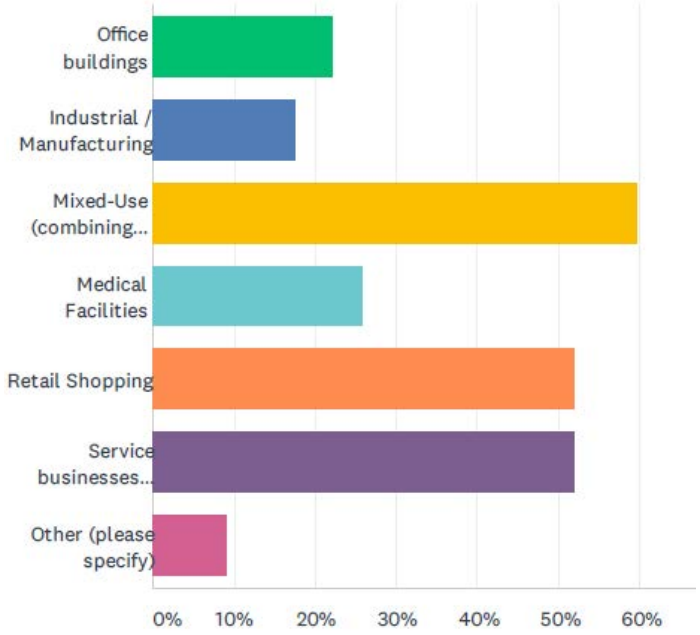
When asked what type of development would be attractive to residents bolster jobs and provide services, the majority of respondents preferred mixed-use development with the possibility of added housing along with a range of retail, and service business options (Figure C.4).

Housing

More than 64% of respondents reported living in a single-family detached home, followed by 16.28% living in apartments, and 6.9% in townhomes. When asked if the current supply of housing was adequate 56% responded yes and 43% responded there was not an adequate housing supply in the neighborhood. Of respondents who felt more housing was needed, single-family homes were the preferred housing type, followed by apartments. Reaching back to the "big idea" question earlier in the survey. Housing options were among the top 2 categories of comments received equaling thoughts on more parks and open space.

The top recurring words in respondent's ideas for housing were "affordable," "community," and "options."

Figure C.4 Desired Types of Development



Access to neighborhood services, retail, restaurants, and entertainment is limited within the study area according to how far people travel to access those needs.

15%
of respondents living in the study area travel 1 mile

45%
of respondents living in the study area travel 5 miles or more

Open Ended and General Questions

Open-ended questions were asked within the survey to allow respondents to highlight items they feel most strongly about and capture the sentiment and voice of the community. Responses are highlighted below and detailed on pages 13 - 22 of this appendix.

Our Big Ideas

Reoccurring themes from respondents include better and safer transportation options, parks, recreation, and open space needs, and community development opportunities. The largest category of ideas centered around transportation improvements which also relate to many of the other "big idea" categories. For example, respondents used the words "sidewalks," "bike," and "traffic" repeatedly throughout their catalog of ideas. Initiating a sidewalk improvement project around one of Eastwood's favorite places which incorporates a community-led initiative would satisfy multiple wishes of respondents.

Our Favorite Places

Greater Eastwood loves their local parks and restaurants. More than 42% of comments collected report parks as their favorite place to go in the neighborhood, with Eastwood Park the overwhelming favorite. 23% of comments mention restaurants and coffee shops like Bohemeos, Tampico, and Coral Sword as their favorite places to go. Other favorite places to note include home and school, two places where the foundation of community take place.

Our Needs for Accessibility

When asked where they wished it were easier to get to. The data revealed respondents would like better access to: trails and parks, a high quality grocery store, and local schools and Universities. A general need for better connectivity around train tracks and rail crossings within the neighborhood was also evident.

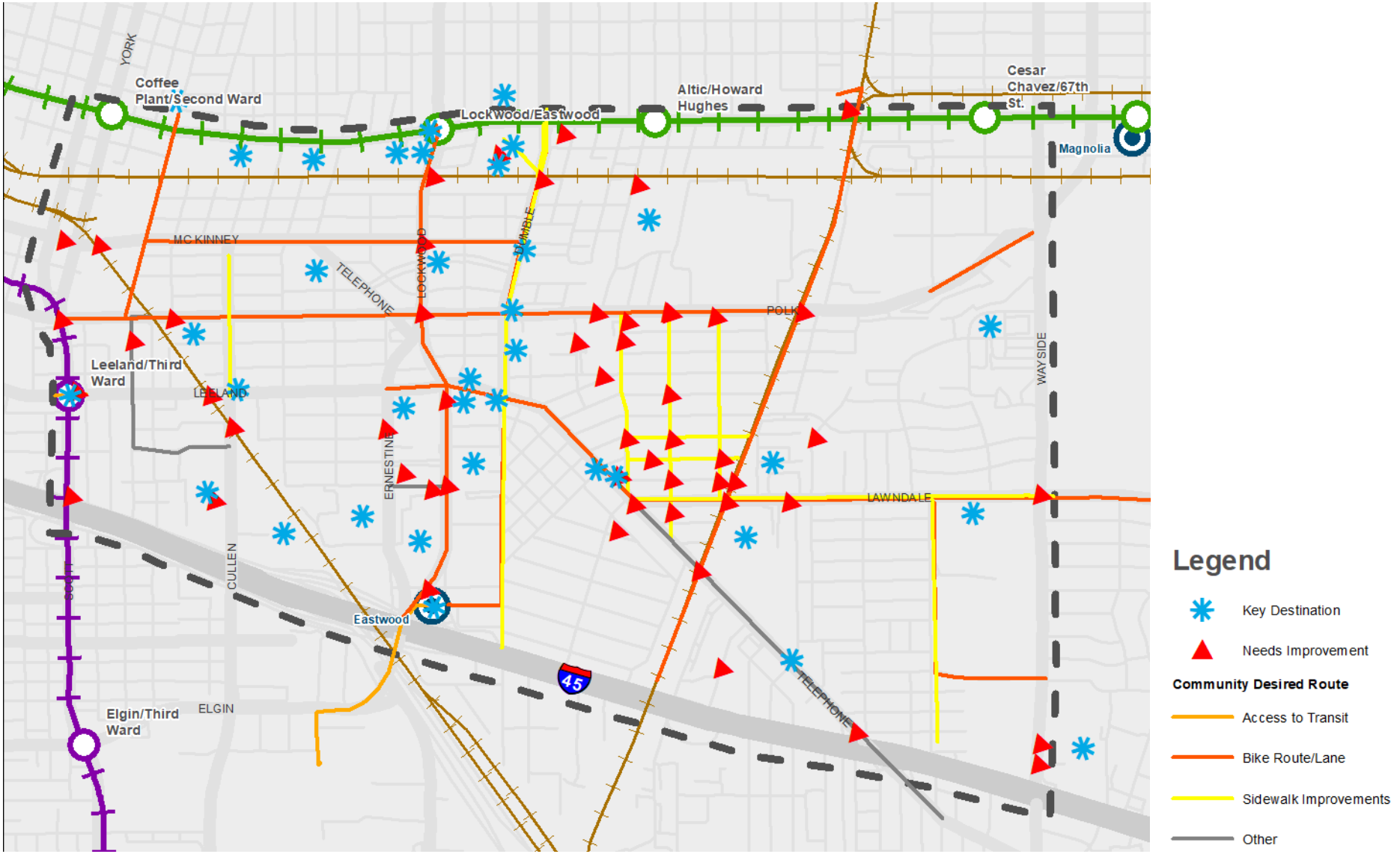
Our Assets and Challenges

Greater Eastwood's strong culture and history was reported by approximately 34% of respondents as the community's greatest asset followed by the schools. The greatest reported challenge was a bit more even in opinion with none of the single options capturing more than 20% of respondents. From the data collected, 19.87% of respondents selected the availability of adequate amenities including parks and trails as the biggest challenge, 19.21% selected providing safe mobility options (walking, biking, accessing transit), followed by 17.22% of respondents pointing to railroad crossings as the biggest challenge. The data suggests consensus on the community's assets but more variety of opinion or experiences when it comes to challenges.

Assets	*Challenges*
34% Strong culture & history	19% Availability of adequate amenities (parks, trails, recreation, etc.)
23% Schools	19% Providing safe mobility options (walking, biking, accessing transit)
11% Sense of community	18% Railroad crossings as barriers or safety concerns
10% Transit & transportation options	13% Protecting the history and culture of the community

Interactive Map

An interactive map was available online where community members could place locations and routes on the map in response to various prompts. The three prompts were: Identify a key destination or great place in the community; Identify a location where an improvement is needed; and Draw a route that is new or needs improvement to take you to the places you want to go. A total of 119 comments were identified on the map. Those comments are shown on the map below and on the following tables.



Category	Comment
Identified Great Places & Key Destinations	
Great Place	I love Eastwood Park!
	Tlaquepaque - great stuff here! Just wish it was more like a pedestrian plaza and less like a parking lot.
	Coral Sword / Barbershop
	Maga's Restaurant
	Mandola's Deli
	Harrisburg Trail -- AMAZING community asset! It needs to be easier to get to! And i love the trail lights that are provided.
	A beautiful and historic cemetery in the heart of our area. So important and also gorgeous.
	Monchys is a wonderful taqueria and a great place to eat for all people in the neighborhood. They also have a bus line that runs to Mexico. This is an important part of our neighborhood and our neighborhood's history: tacos and bus lines.
	Villa de Matel Convent
	Oaks of Lawndale
	Catholic Charismatic Center
	Tacos
	Voodoo Queen
Key Destination	School
	Eastwood Park is a great community resource. It could also be significantly improved, and it could be easier to bike/walk to it.
	Lantrip Elementary
	Cage Elementary
	High School
	Kroger / Grocery Store
	Eastwood Transit Center
	Leeland Station
	Lockwood/Eastwood Light Rail Station

Category	Comment
Key Destination	CVS - neighborhood pharmacy. can be hard to get to because trains block the road
	Redevelopment of Old Fingers Site?
	KIPP Academy
	Walmart
	Lil' Danny Speedo's Go Fly A Kite Lounge
	Fiesta
	Atlantic Coffee Solutions
	BakerRipley Central
	Amazon Distribution Center
	Amazon Distribution Center
	Macy's Distribution Center
	Autobuses Lucano
Other	Turn the Park Drive esplanade into a park with trails and other amenities
	Opportunity to enhance the Rufus Cage property. It can be a new education learning hub for youth.

Category	Comment
Identified Location/Area that Needs Improvement	
Development & Housing	Revitalization of Telephone Rd
	Would love to see old Fingers site turn into mixed use, walkable development that emphasizes walking/transit instead of cars
	a need for grocery store which can bring in employment.
	Possibility of Gateway Space for neighborhood.
	Housing along rail transit

Category	Comment
Identified Location/Area that Needs Improvement	
Parks & Public Spaces	Park needing updates and regular maintenance.
	Updated playground equipment needed
	Is a baseball field the best use of space here? Lots of baseball diamonds at Diez Park near Austin HS
	It would be interesting to look at an opportunity to close S Lockwood from Munger to Telephone. You can make Ernestine a two way traffic and use S. Lockwood as a pedestrian/bike route. It would provide a safe and walkable path for students at schools
Transportation	speeding cars
	Stalled train during high traffic times
	Stalled Train during high traffic hours.
	Speed bumps needed on Baird, frequent speeding down the entire stretch of Baird
	Sidewalks in terrible shape on Henninger and every side street except Mulford which was recently repaired
	Claremont street pavement, curbs, and sidewalks in erterrible shape; frequent ponding of rainwater that does not drainat
	No sidewalks at all on Henninger north of Jefferson!
	Sidewalks on Collier and adjacent streets are deplorable
	Speed bumps needed on Henninger
	Speed bumps needed on Collier
	Lockwood from Polk to Harrisburg needs to be repaved
	The bike lane on Polk is a joke - narrow, dangerous, lots of traffic, and often parked cars in the way.
	Lockwood/Ernestine look like highways in the middle of a residential neighborhood! How can we make them more friendly for residents?
	There is a lot of pedestrian/bicycle/transit activity at this intersection, but it is really big and dangerous.
	Trains block the tracks!

Category	Comment
Transportation	Trains block the road, and this is an important biking route
	This intersection is dangerous. People use it as a detour for McKinney when there is a train, but visibility isn't good.
	Milby is a detour for the railroad on Cullen, but it is a residential road that is not built for major traffic volumes.
	sampson/york are huge intersections with not much traffic. lots of bike traffic on mckinney
	Train blocks road
	Light rail causes problem for traffic in the morning rush hour
	This signal can take FOREVER, even when there is no train or anybody else at the intersection.
	Do Lockwood/Ernestine need to be 1-way streets? 2-way streets may slow traffic a little bit and make it easier to get around the neighborhood.
	This intersection can be dangerous.
	This road is used when trains block traffic at Telephone.
	Roadway has seen panel replacements but a longterm fix is needed.
	Agreed! Need safed bike routes!
	Add bike route or pavement marking? Unsafe currently for bikes
	Traffic signal may be warranted. Very dangerous! Many near misses and ped/car accidents!
	Very dangerous crossing! Considered traffic signal analysis!
	Skewed Intersection. Needs improvement. Visibility and safer crossing for peds.
	Stalled train!!! There is a VERY busy school here which use Lawndale to line up during the AM and PM hours. This train causes MAJOR issues during work/school commuting.
	Major Drainage Issues
	Speeding during school hours. Lack of speed bumps.

Category	Comment
Other	Speeding during school hours.
	Speeding during school hours. Lack of speed bumps.
	Eyesore; frequent illegal dumping
	Old elementary school needs to be renovated; frequent site of overgrowth and garbage
	Lots of trash gets dumped along the tracks
	Site of frequent illegal dumping, multiple tires, trash, etc.
	Eyesore - green space, but overgrowth and garbage
	Empty lot - possible green space? Usually overgrown.
New or Improved Transportation Routes	
Transit Access	Better access from UH to Eastwood TC
	Not a pedestrian friendly stop; dangerous intersection, poor access. Doesn't look safe at night, there's nothing around it!
Bike Route/Lane	Milby wide enough for a bike lane
	Lawndale wide enough for a protected bike lane connected to the Brays Bayou trail
	Streets wide enough to have protected bike lane
	Dumble probably isn't wide enough, but its directly in between two green line light rail stations, Eastwood Park, both bus lines on Polk and Telephone, Diaz Park, Transit Center, and less traffic than Lockwood make it a logical bike route
	Telephone should be a Main Street for the East End, with street trees, bike lanes, and sidewalks
	Can we use Lockwood/Ernestine for protected bike lanes to get to UH, Eastwood Transit Center, and the Eastwood light rail station?
	Bike lanes are being worked on from East Downtown to about Scott Street. This bike lane has several issues from no clear paint lines, debris and uneven road.
	Need clear path with paint
	This is a great street to connect bike lanes east/west
	Bike Route

Category	Comment
Sidewalk Improvements	Sidewalk in terrible shape all along Henninger
	Sidewalk improvements needed on Collier
	Sidewalks broken and missing
	Terrible sidewalks
	Dangerous pedestrian / bike crossing at intersection
	This sidewalk isn't wide enough -- lots of joggers! The rest of the trail is in pretty poor condition too.
	Families use Dumble as a main road for walking/biking through the neighborhood to get to Eastwood Park. It needs sidewalks and bike accommodations.
	The sidewalks through the oak trees are all broken up. Could these be replaced with a jogging trail like the one around Rice University?
	This is a street with no sidewalk. It is an opportunity to connect a neighborhood to a major thoroughfare with a possible bike lane.
	Sidewalks are narrow and several broken up sidewalk
	Opportunity for streetscape
Other	Detour for railroad -- not in good condition, and residential section not designed for traffic volumes
	Would be great to break up this huge block with a few more streets to help improve access in the area
	Streetscape with sidewalks and bike route

Social Media Comments

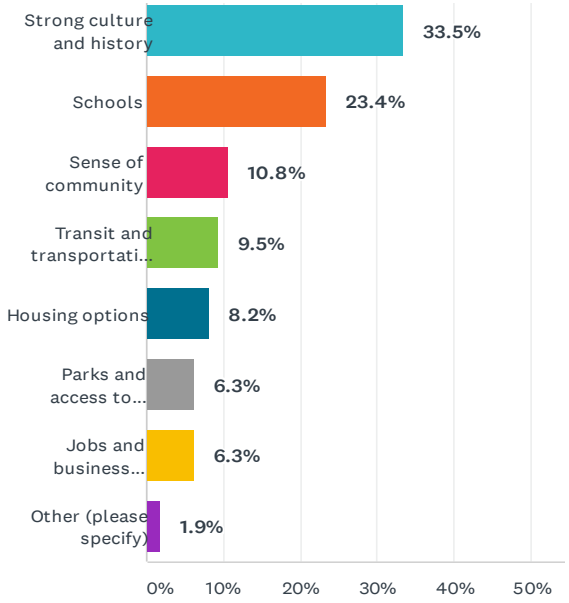
Social media comments were collected through the East End District's Facebook page. Comments reflect an enthusiasm for riding bikes, a sense of pride around preserving the neighborhood's character, and a desire for more places to congregate and be active as a community.

Content or Prompt	Comment
Dog on bike GIF; Have you been riding around a little more lately? Tell us about your favorite places to ride by marking up our interactive map and taking the survey here: website	We ride the Harrisburg bike trail a lot now!
	The bike trails used to be nice till the gangs and homeless started hanging around them.
	Take the streets! Ride everywhere!
	Around bridges of east side
Graphic: Fun Fact 84% of housing in Eastwood was built before 1950. What do you like most about living in an older house or apartment in Greater Eastwood?	Because I own my house and was raised in Segundo not like The new people trying to move in our neighborhood
	Ya'll need to move around and leave things the way they are enough said
	The big lot w front/backyard, not living like sardines!
What types of park programs or facilites would you like to have available? (Choose top 3) A. Courts and ball fields B. Walking/running paths C. Skatepark D. Playground E. Community Gardens F. Grilling Areas G. More seating/picnic areas H. Open lawn space I. Stage and performance spaces J. Community Center K. Plaza for gatherings and events L. Other, please specify	C. E. J (Skatepark, Community Gardens, Community Center)
	A huge Community Center in the heart of Precinct 6 where we can host up to 1000 of our Seniors so they don't have to be transported to other areas out of Precinct 6. Our Seniors Are the red heart Of Our Home! It could also be used for Conferences, a Training Facility, etc. The Warehouse at 5900 Canal Street would be an awesome location; it would just need renovation. It could be a partnership between the county and the city. It is my understanding the county owns all that property thru Navigation. All that area could be cleared for parking for the Community Center. The First Floor could house ALL of our Precinct 6 Deputies. instead of having us on the Second Floor. Precinct 6 has never had a Roll Call Room/Training Room. It could house a Justice of the Peace Office, Tax Office, etc. Funding could come from the JP's Office, the Precinct 6 Office, the Tax Office, joint efforts between city and county, etc. Let's Do This! Si Se Puede!
	B,D,E (Walking/running paths, Playground, Community Gardens)

Online Survey Detailed Responses by Question

The online survey had a total of 32 questions. Each question and all responses are identified on the following pages.

Q1: What is the community's greatest asset?

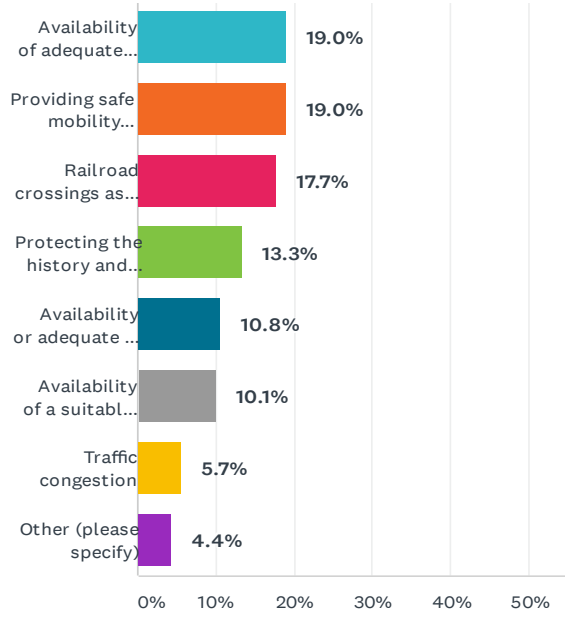


Strong culture and history	33.5%
Schools	23.4%
Sense of community	10.8%
Transit and transportation options	9.5%
Housing options	8.2%
Parks and access to recreation	6.3%
Jobs and business opportunities	6.3%
Other (please specify)	1.9%

Other:

- The longtime residents who make this community what it is
- Convenience of location, lack of traffic
- Close to downtown, lots of trees

Q2: What is the community's greatest challenge?



Availability of adequate amenities (parks, trails, recreation, etc.)	19.0%
Providing safe mobility options (walking, biking, accessing transit)	19.0%
Railroad crossings as barriers or safety concerns	17.7%
Protecting the history and culture of the community	13.3%
Availability or adequate job opportunities	10.8%
Availability of a suitable range of housing options	10.1%
Traffic congestion	5.7%
Other (please specify)	4.4%

Other:

- Affordable daycare availability
- Gentrification's threat of displacement.
- Quality of public middle & high schools
- Too close to refineries / bad air
- Access to grocery stores, gyms, restaurants, etc.
- Lack of grocery stores
- Availability of a range of businesses

Q3: My favorite place to go in the Greater Eastwood area is:

Comment
Bayou trails
BBVA
Bentkeys store , Eastwood Park, & My House
besides home and other properties I own. I like the local owned restaurants
Bohemeo's
Bohemeo's
Bohemeo's
Bohemeo's Coffee Shop
Bohemeos
Bohemeos
Bohemeos
Chamba Coffee at Ser Jobs
coffee shops
Coffee Shops
Commerce St trail
Coral Sword
Coral Sword
Coral Sword
D&W Lounge
Dinner Bell Cafeteria on Lawndale and Wayside
Diy On Harrisburg and Eastwood park
downtown
Downtown
East end bar district
Eastwood neighborhood
eastwood paek
Eastwood park

Comment
Eastwood park
eastwood park
Eastwood park
Eastwood park
Eastwood park
Eastwood Park
Eastwood Park
Eastwood Park
Eastwood park
Eastwood park
Eastwood Park
Eastwood park
Eastwood park
Eastwood park
Eastwood Park
Eastwood Park and Tlaquepaque Market
Eastwood skate park & love food
Everywhere on a bicycle
For walks
Golden Gate Bridge
HAM
Harrisburg
Harrisburg bike and hike trail
Harrisburg hike and bike trail; Eastwood park; metro rail into downtown
Home
Home!
Home!

Q3: My favorite place to go in the Greater Eastwood area is: (continued)

Comment
Houston Zoo
I don't have a favorite place
I don’t really have a favorite place. Honestly, Eastwood isn’t safe and it’s amenities are garbage. Every chance I get, I go to Hermann Park because it has beautiful gardens, public spaceA, and there is always something going on. We don’t have anything like that in Eastwood.
I like to visit the Eastwood Swimming Pool.
Idk
idk
khg
Kroger
Lawndale
Lil Danny Speedo's
Mandola’s
Mason Park
Mason Park
Monchy's Taqueria
My home
My home
My house
My house
My house
My neighborhood coffee shop, Bohemeo’s
Nancy's Hustle, East End Hardware, my house
Navarro middle school
Navarro middle school
Navarro MS
Navigation

Comment
Navigation
Navigation Esplanade
Navigation Explanade
Park
Park
Park
Park
Park to walk
parks
Parks
parks
parks
Parks
Parks
Parks to explore exercising
Parks, bike trails, community centers
parque
parques
Playgrounds
Quiet Streets
Restaurants
Restaurants
Restaurants
Restaurants. We have so many options!
School
Settegast park
Settegast senior center

Q3: My favorite place to go in the Greater Eastwood area is: (continued)

Comment
skate park
Small restaurants
tampico
tampico
Tampico's on Harrisburg
The Esplanade
the hike and bike trail by the bayou on lawndale
The Mall
the park
The park
The park
The park
the park
The park
The park
The park in Idylwood
The park in Idylwood
The parks
The patks
the post office
The school ' Navarro ms '
The school ' Navarro ms '
The school ' Navarro ms '
The skatepark y la lavenderia
The small business food and drink options like Bohemeo's, La Reynera Panaderia Bakery, and Taco Keto. Supporting small businesses in the area :D
The track at Austin HS
this is jessica

Comment
Tlaquepaque center
Tlaquepeque market
Trails
Treats of Mexico
Unfortunately nowhere because there are not any available recreational areas.
Villa Arcos
Visit Family and the greenspace/trail connection
Waking through the neighborhood
Walk the bayou
Walking around Lantrip
Walking in neighborhoods
Walking McKinney area
Walking my neighborhood, Polk Street to north, around Lantrip ES area
Walking through the neighborhood
Walking trails
walking/biking neighborhood streets
Xela coffee & Eastwood park

Q4: I wish it were easier to access or get to:

Comment
ninguna
Las escuelas sin atravesar via de tren
los parques
Cualquier lugar; any place
Las comunidades cercanas como third ward, fifth ward, midtown; nearby communities like Third Ward, Fifth Ward, Midtown
Golden Gate Bridge
train
hospital, doctors, dentist
More walking trails
Help out
Uncles
My house
My uncles
More libraries.
Cross the roads
Far locations
Technology
Wify
more sociable and friendly with each other. Do not harm
school
The park
UCLA
eastwood
Bike trails
The parks
University of Houston
my classes faster

Comment
the pool
Lawndale to/from Eastwood
pass traffic
a school withougt getting crossed off by a train and get late to school
School on time
Midtown and Montrose
Guadalupe Park
Grocery store
More thing to do with the children
Fun activities
Money
The store
Famous people
consolidated community events in a shared calendar
work or school
The park
Work
Grocery store
The longtime neighborhood bars/restaurants
Anything arts related
a better / more interesting options grocery store
The area schools
Harrisburg St.
Down Polk Street without potholes
East of wayside
Bus stops
parks, bike trails

Q4: I wish it were easier to access or get to: (continued)

Comment
Skateboard parks
A grocery store. Local Kroger is small.
Greenspace/ Parks
High quality grocery store.
The other side of Harrisburg without first waiting 10 min for traffic light to change.
skate park
Parks
Restaurants and shops
The freeway or different parts of the area where you come across train tracks
Wayside ave
Linked and city-wide bike and pedestrian trails.
Parks
Grocery stores with an adequate selection
The diy and the skate park
A good grocery store. I don't understand why is there only 1
The bayou trails.
Schools
Good shopping centets
Parks and other bike trails
The outer loop
Bike trails & light rail
Midtown, Montrose, Rice Village, and Western/South-Western neighborhoods
Schools
Grocery stores and other conveniences
Metro rail
Bike trails

Comment
parks
from where we are its all pretty good
Across the neighborhoods w/out trains parking
A grocery store
A good grocery store
past the rail lines
Parks
The green line
small business like coffee shops, hair salons, plant stores, Target, walk-able and well-light parks, running/walking trails, yoga, etc.
59 N, less trains stopping
parks, community center, the rail line (I live closer to wayside)
Range of stores, grocery stores
A good grocery store
north and south or east and west being blocked by trains
Quality retail shopping
UH
Park access
Better grocery stores
Grocery stores
parts of East End without train blocking
The Brays bayou trails directly from Austin High School area
East sector Buffalo Bayou
Wish there were real bike lanes for commuting into town.
Kroger
45
Metrorail corridor business
Walking, sidewalks deplorable

Q4: I wish it were easier to access or get to: (continued)

Comment
Walk across railroad tracks
Grocery
Trails
Green line when freight trains go through
Trails
downtown
Harrisburg hike and bike trail, buffalo bayou via bike, brays bayou via bike
Bike trails and light rail
Groceries. We need more and better options.
Restaurants
Telephone Road by Foot (and walk along their without fear of getting hit by traffic crossing the sidewalk trying to park)
Cross the railroad track on Telephone Rd.
Parks
Anywhere walking. The side walks are terrible and dangerous
N/A
Gus Wortham Park

Q5: My big idea for improving livability and the community in Greater Eastwood is:

Type	Comment
Transportation Options & Safety	Improving their transportation
	Safety for people who walk or ride
	To make it more safer to get to place to place.
	I think it should be easier to walk or bike to the University of Houston.
	Grade separation is needed at railroad & Telephone, Lawndale, and/or Polk. Also, the crossing of the railroad & Leeland needs grade separation due to future loss of Downtown access through Polk in the NHHIP. Also, METRONext Proposes a BRT Corridor on Lockwood. Connections to light rail and Eastwood TC should be safe and quick. Also, traffic calming, dedicated bike lanes, and improved sidewalks are needed on Lawndale, Telephone, Wayside, and Lockwood, where many people walk and bike.
	less traffic
	just the traffic
	The public transportation isn't safe.
	Fixing all the roads and sidewalks.
	improve streets and sidewalks
	fixed sidewalks so families without cars can more easily and safely move around,
	Walkable sidewalks and crosswalks.
	Sidewalks on all the streets
	Closing side streets to car traffic, making business district on Telephone and Lockwood walkable with SIDEWALKS, reconfigured parking (could be the best shopping area in inner Houston).
	Closing Streets to car traffic. Cutting down big streets from 4 to 2 lanes.
	Making sure trains don't stop on the tracks for so long. They block main thoroughfares, increase traffic and traffic speeds in neighborhoods, and can make it difficult to access areas safely.
	More access to school and jobs for the community
	More pedestrian and bycicle friendly.

Type	Comment
Transportation Options & Safety	Improving roads & sidewalks, including having a designated and protected bike lane
	Control traffic
	Investment in walking and biking
	More transportation options for bikes, walking, and public transport.
	more public transportation
	Dealing with the RR companies
	Quiet trains. Easier access to bike paths
	Traffic control. Speed bumps in residential areas
	Better sidewalks, more crosswalks, more covered bus stops
	Improving transportation to encourage more pedestrian traffic, access to East End businesses/amenities, nightlife, and entertainment by members of the neighborhood as well as non-Eastenders.
	Fix the streets and sidewalks
	adding sidewalks that comply with the ADA, making sure the whole neighborhood has sidewalks (some streets don't have any side walks at all).
	Consistency of shade and sidewalks throughout area
	Quiet zones for all the trains and a way around stopped trains.
	Get public and private entities to invest in improvements to the entire infrastructure and the retail sector. Our wonderful area has been overlooked for decades.
	Safer paths
	Oh and usable sidewalks.
	and more ease to walk or bike
	Fixing streets and sidewalks
	Better sidewalks, bike trails, removing eyesores
	Increase public transit that links up to the rail system in the area. increase the amount of restaurant and bar areas that could be walkable from one to another.

Q5: My big idea for improving livability and the community in Greater Eastwood is: (continued)

Type	Comment
Transportation Options & Safety	Better buses
	Shareable bicycle lanes, bigger sidewalks and handicap accessible. Better roads.
	Cycle lanes, pedestrian improvements
	Improve the sidewalks and expand protected bike lanes to help link the residential neighborhoods to the bike trails, bus, and light rail stations. The light rail is a useless amenity, I live in Lawndale and would need to walk over dilapidated sidewalks or bike around speeding traffic for 1-2 miles to get to the nearest stop.
	Better contiguous sidewalks and higher quality crosswalks - especially in areas with higher car traffic
	Add bicycle lanes that will Increased Safety and walk-ability for pedestrians. Bicycle lanes should also be added around schools to encourage students to use bicycles as a form of transportation.
	Sidewalks
	Repave streets and sidewalks. Add bike lanes and repair the Polk Bike lane
	Bridges or tunnels under railroad
	Reimagine Leeland/Telephone/Lawndale as a walkable, bikeable main street for the Great Eastwood Community supported by redevelopment focused on adaptive reuse
Parks, Recreation & Open Space	better lighting in residential streets for walkability easy access to area events- community postings
	Fixing up Leeland in a similar way attention has been paid to Navigation.
	To make more parks for the community.
	Having low cost, but clean and nice community and recreation centers like I've seen in other states. Pools, gyms etc.
	More bike trails
	more bike trails
	Concrete skateboard park.
	fixing the skate park

Type	Comment
Parks, Recreation & Open Space	Eastwood needs more "pocket parks" The few parks that exist are too spread out, run down, and uninviting.
	Save place for recreation
	We need a bigger park
	Converting railroad lines into bike trails for better connectivity to neighboring communities such as Columbia Tap.
	More parks and green spaces for families.
	and opening up more green space.
	More recreative activities with the family
	More trails and outdoor options.
	more green space and connectability to Buffalo Bayou via bike/ walking corridors with lighting and signage south to north. Bayou water activities Barges/Tours, boat rides, water taxi's, fishing warfs.
	More open recreational areas,
	We need better amenities. And there is real gathering places where all the people can go to hang out and mingle.
	More public spaces, such as parks and attractions while still being pedestrian friendly.
	a couple more cafe and dining options, ideally combined with a green space / park space; a place to gather and hang out with friends and family
	A community garden or community center would also be cool
Community Development	I also have always wished someone would purchase the old Church of the Redeemer building (which is derelict), year it down and build a park in its place.
	Teach people not not trash our community.
	better enforcement of illegal dumping
	Clean up abandoned housing
	Clean up the neighborhoods
	removing eyesores

Q5: My big idea for improving livability and the community in Greater Eastwood is: (continued)

Type	Comment
Community Development	my big idea is for everyone to come together to an agreement with the community and participate in stuff like giving to the poor helping build road school things
	To build up the community together
	Being able to work all together to build up this community to bring it up
	work together to do something useful and make the community better
	Make it a better community
	Provide for the needs of people
	The community
	Money
	To help others by doing what I can
	Diversity
	Connecting with community members
	More information for community members on the neighborhood and housing values.
	Community-driven industry and stuff for kids
	The area is strong and doesn't need a complete overhaul; instead, emphasize its existing strengths and fill in some of the gaps.
Housing	Is giving the community better places to live or even making things for the homeless like shelters and able for them to get sober and get jobs
	Making houses more affordable to live in for lower class citizens
	I also think we should limit lot sizes to slow down the rate of gentrification.
	Making houses a little cheaper for people who can afford
	Bring in housing options and food that is affordable to our current neighbors; in hopes this would help push less people out and retain the beautiful community and culture within.
	Maintaining affordable housing options
	Hoping they don't charge a lot of rent. It makes it difficult for locals. Eastwood is a community.
	Rent and real-estate price control

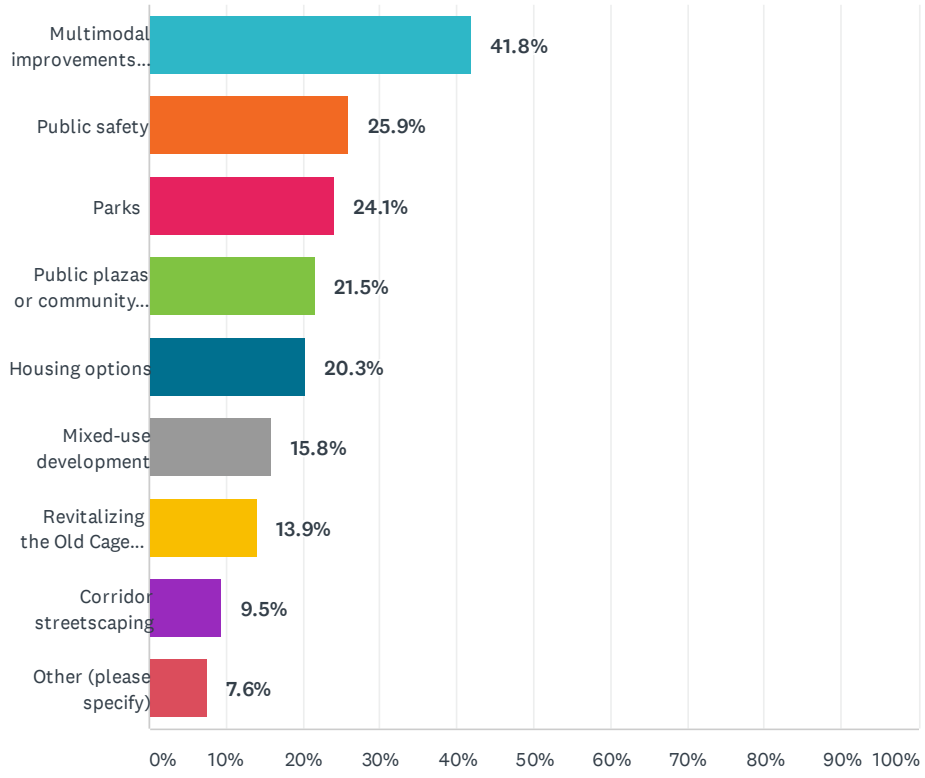
Type	Comment
Housing	And a program to help rehab the multi-family units, they are such a gem to this neighborhood. Something very nice with the old church! I heard it will convert to 48 housing units, I hope some units will be affordable so the working class have a better chance of remaining in their community.
	More suitable housing options as some older buildings get renovated.
	Livable housing
	It is important to have housing options, so that folks that were born and raised in the area can continue to enjoy development of the East End.
	Affordable single family housing
	Affordable housing so that families are not displaced
	Keep the older homes in the neighborhood
	Historic designation!
	More celebrations to honor the Hispanic culture
Retail/Dining	Get public and private entities to invest in improvements to the entire infrastructure and the retail sector. Our wonderful area has been overlooked for decades.
	more shopping centers
	More businesses
	Grocery stores, verity cuisine/Restaurants
	greater access to produce and healthy affordable food options
	Bring in housing options and food that is affordable to our current neighbors; in hopes this would help push less people out and retain the beautiful community and culture within.
	With major grocery stores instead of just a few we have.
	More dinning options.
	We need a grocery store!! H-E-B please!
	Improved food options
	A good grocery store
	More restaurants and bars.
	More supermarket options, with newer buildings and fresh produce.
	More restaurants
	More retail re: New Kroger in exsiting location.

Q5: My big idea for improving livability and the community in Greater Eastwood is: (continued)

Type	Comment
General Safety	and better adherance to leash laws
	better animal control
	stray animal situation
	Spray and neuter pets
	a better effort to enforce and deal with loose animals in the neighborhood.
	lower the amount of stray dogs
	Reducing the use of drugs unless its recommended by a doctor.
	Less use of arms
	Less use of guns
	less vilence
	police presence
	safe areas with adequate lighting and police presence
Maintenance	clean
	no trash dumping
	To help clean up.
	Eastwood just looks so run down and old. The buildings are falling apart. Parks are filled with old equipment and trash. We need so much work here.
	Picking up trash
	Picking up trash dont waste it and throw it on the floor
	Home improvement loans and government assistance programs for updating existing single family homes
	Continue funding to our Greater East End graffiti removal team
	Beautification

Type	Comment
Other	trees and plantings
	Cleaner air water
	Better air quality. State monitoring of emissions from refineries. Human centered standards.
	Get local parents to send their kids to the local schools here instead of sending them across town to the various magnets.
	Quality magnet schools
	To get more people to put it on social media or like in tv
	your not the same
	Second Ward Space

Q6: What types of infrastructure or land use improvements would you prioritize in your community? (Choose top 2)



Multimodal improvements (sidewalks, bikeways, transit stops)	41.8%
Public safety	25.9%
Parks	24.1%
Public plazas or community gathering places	21.5%
Housing options	20.3%
Mixed-use development	15.8%
Revitalizing the Old Cage School	13.9%
Corridor streetscaping	9.5%
Other (please specify)	7.6%

Other:

I would rather maybe save the land and save our planet and grow new tress or maybe trails through the forest we need to improvise and also keep our world green and not smoke and black

if I had to choose a pacifice infrastrcture that are most important to me the answer is to important to just choose 2, I believe housing, mixed used of development, I would have to add to my concerns

Safety, a student was shot waiting for a metro bus. All these other options are irrelevant when safety isn't maintained.

fixing skate park

Environmental improvement

Quiet Trains

Grocery Store

Better grocery stores

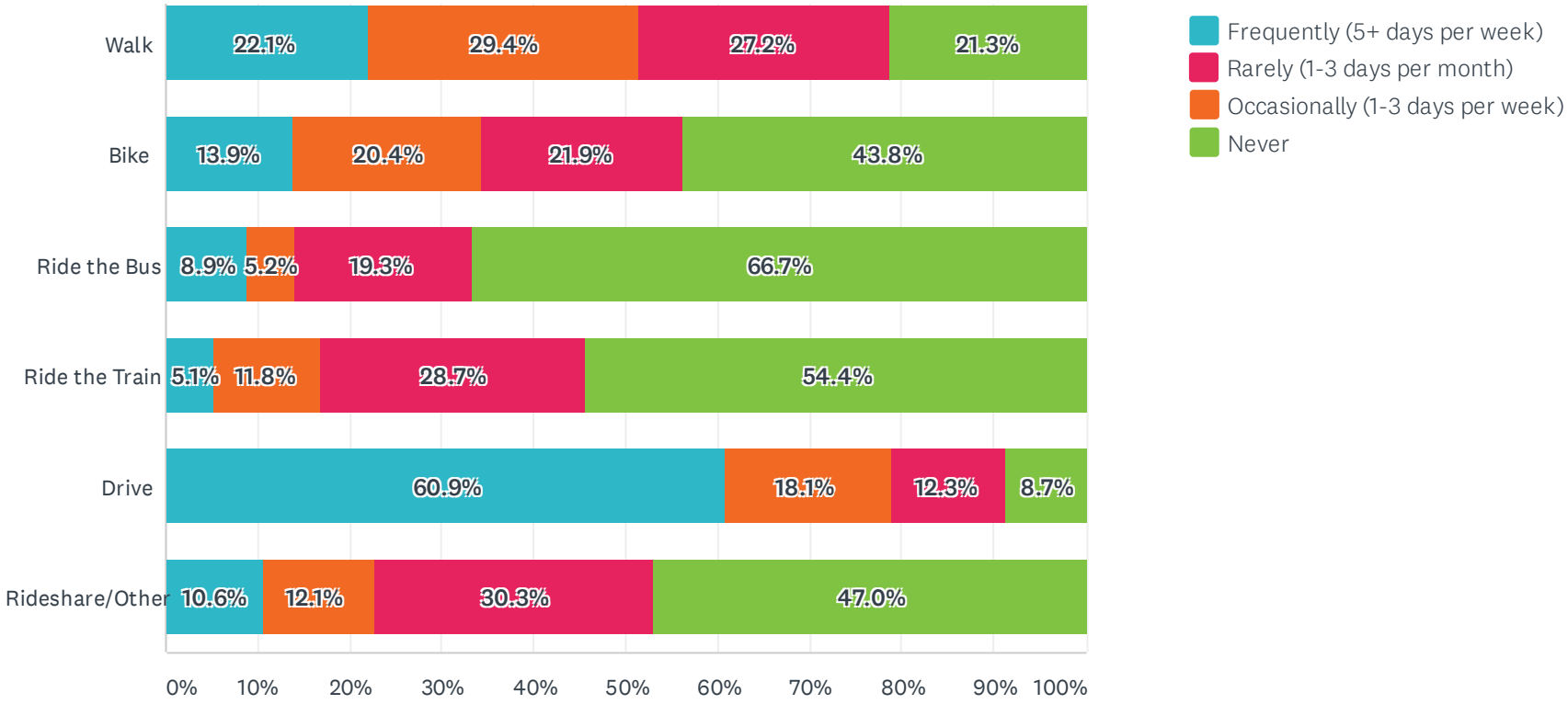
Quality retail, including grocery stores, restaurants (not fast food chains). No more cheesy pawn shops, nail salons, check cashing, dollar stores! dollar stores, etcl salons

Grocery stores

New Grocery store Kroger or HEB

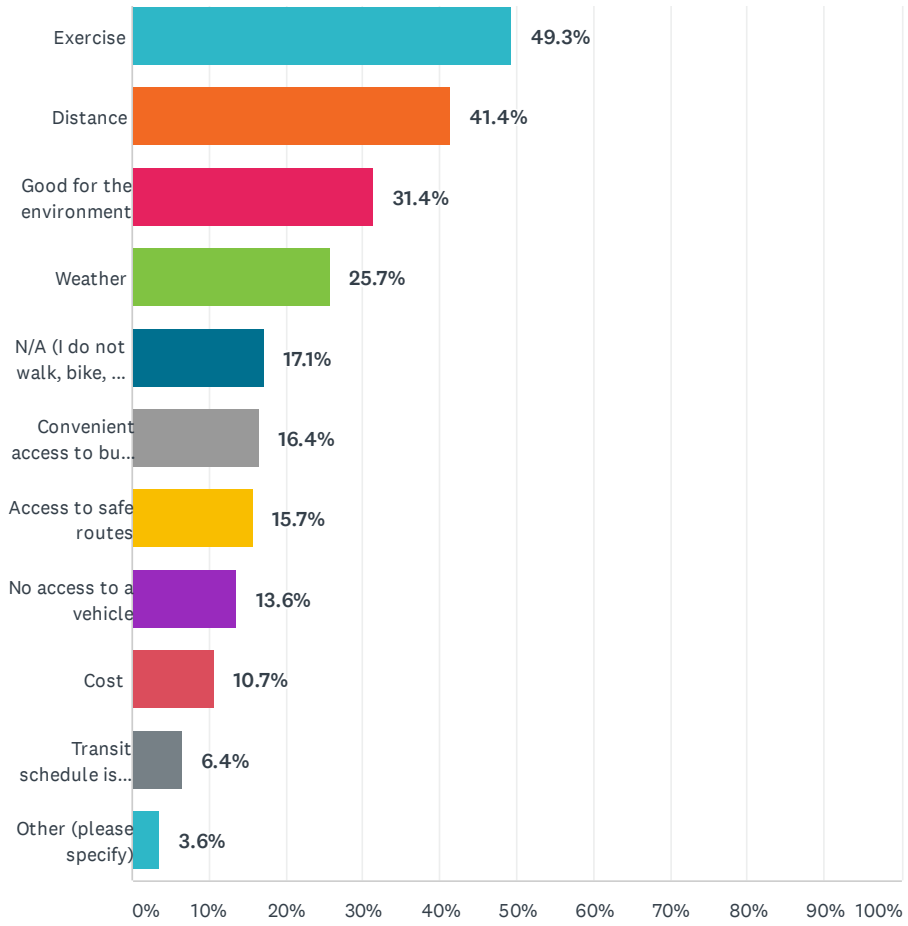
Childcare options for families.

Q7: When traveling within, to, or from the Greater Eastwood area (work school, shopping etc.) how often do you:



	FREQUENTLY (5+ DAYS PER WEEK)	OCCASIONALLY (1-3 DAYS PER WEEK)	RARELY (1-3 DAYS PER MONTH)	NEVER
Walk	22.1%	29.4%	27.2%	21.3%
Bike	13.9%	20.4%	21.9%	43.8%
Ride the Bus	8.9%	5.2%	19.3%	66.7%
Ride the Train	5.1%	11.8%	28.7%	54.4%
Drive	60.9%	18.1%	12.3%	8.7%
Rideshare/Other	10.6%	12.1%	30.3%	47.0%

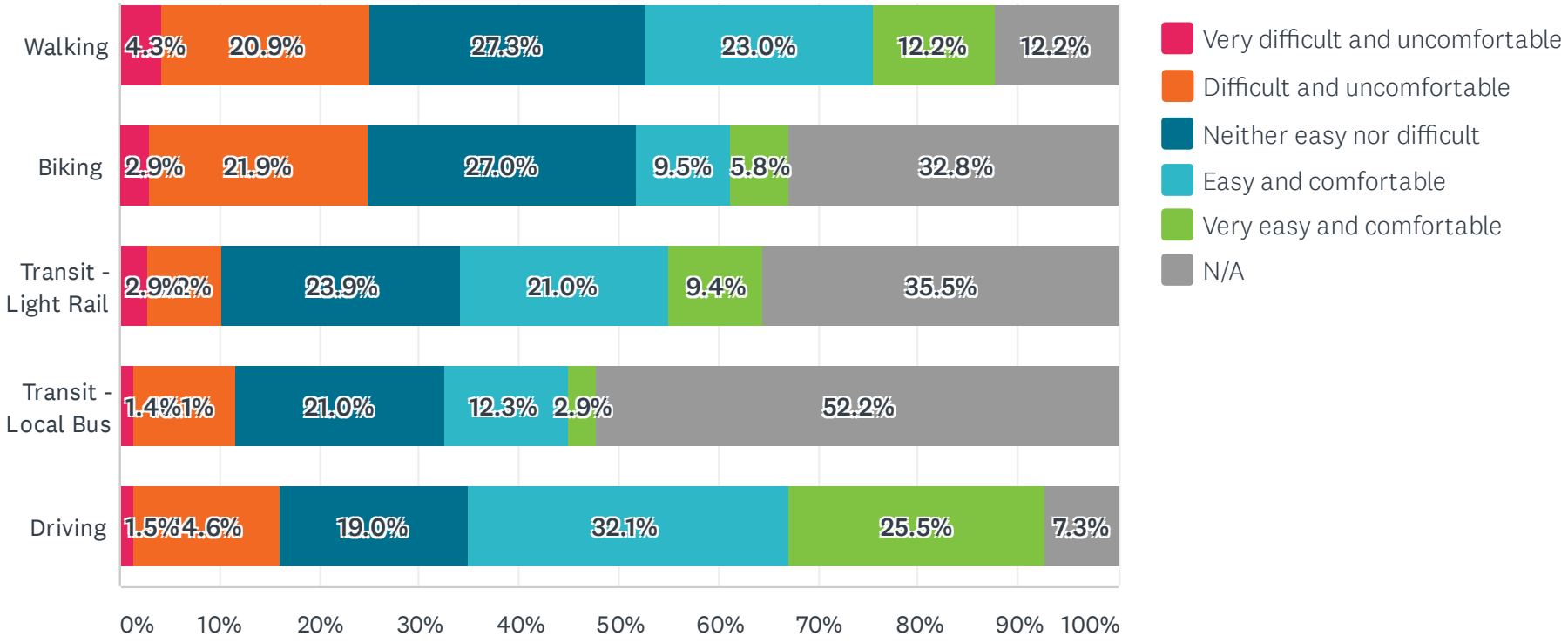
Q8: If you walk, bike, or ride transit for your trip, what are the primary reasons? (Choose up to 3)



Exercise	49.3%
Distance	41.4%
Good for the environment	31.4%
Weather	25.7%
N/A (I do not walk, bike, or ride transit)	17.1%
Convenient access to bus stop and/or destination	16.4%
Access to safe routes	15.7%
No access to a vehicle	13.6%
Cost	10.7%
Transit schedule is frequent or meets my schedule needs	6.4%
Other (please specify)	3.6%

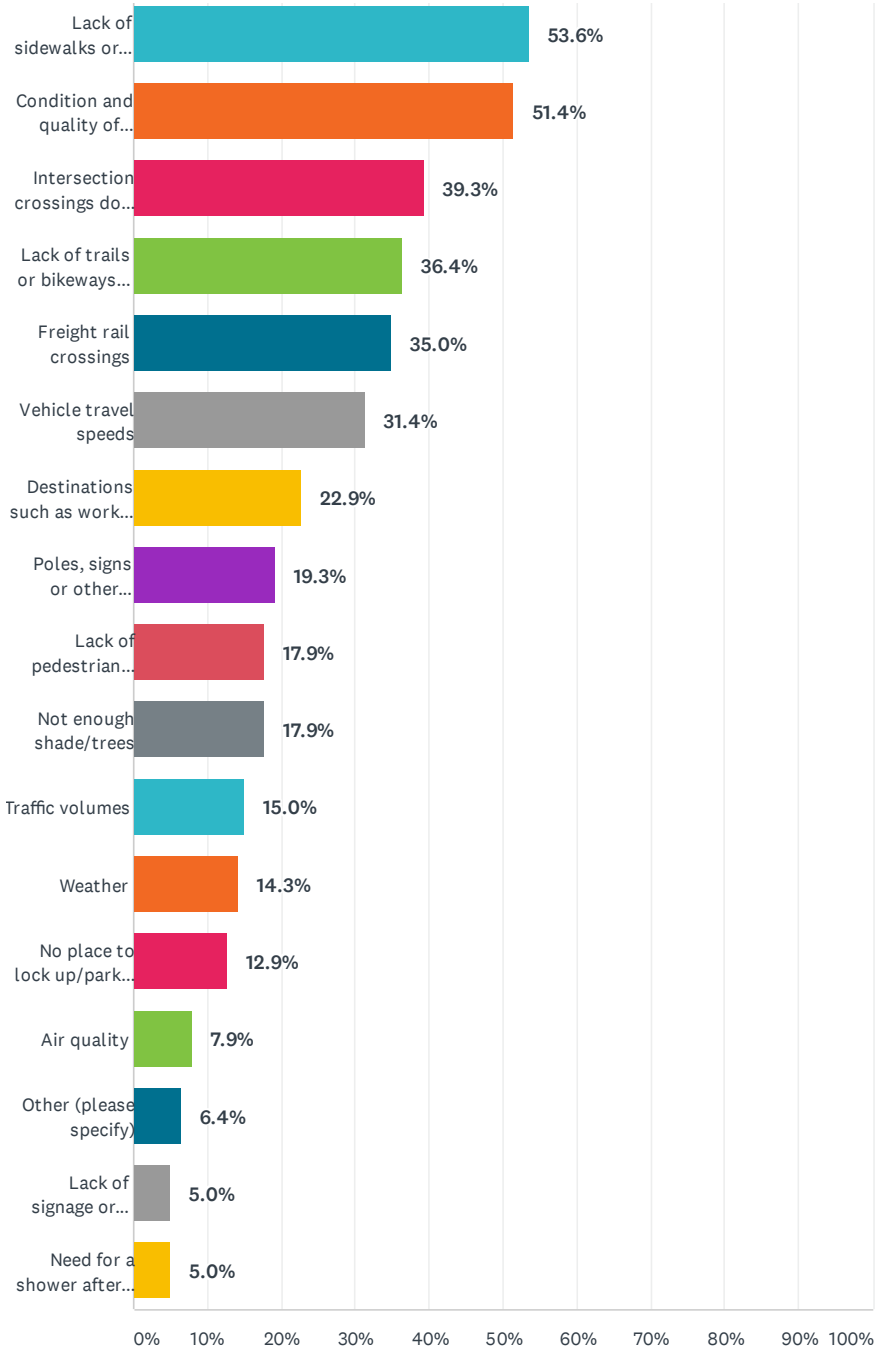
Other:
Need a designated driver
Pleasure
To connect with community
I would only drive or use ride share. I would only walk to get exercise.
1 car family

Q9: Thinking about recent experiences for each of the following means of transportation, please rate on a scale of 1-5 how easy/comfortable it was for you to make your trip (1 being very difficult/uncomfortable and 5 being very easy and comfortable).



	VERY DIFFICULT AND UNCOMFORTABLE	DIFFICULT AND UNCOMFORTABLE	NEITHER EASY NOR DIFFICULT	EASY AND COMFORTABLE	VERY EASY AND COMFORTABLE	N/A
Walking	4.3%	20.9%	27.3%	23.0%	12.2%	12.2%
Biking	2.9%	21.9%	27.0%	9.5%	5.8%	32.8%
Transit - Light Rail	2.9%	7.2%	23.9%	21.0%	9.4%	35.5%
Transit - Local Bus	1.4%	10.1%	21.0%	12.3%	2.9%	52.2%
Driving	1.5%	14.6%	19.0%	32.1%	25.5%	7.3%

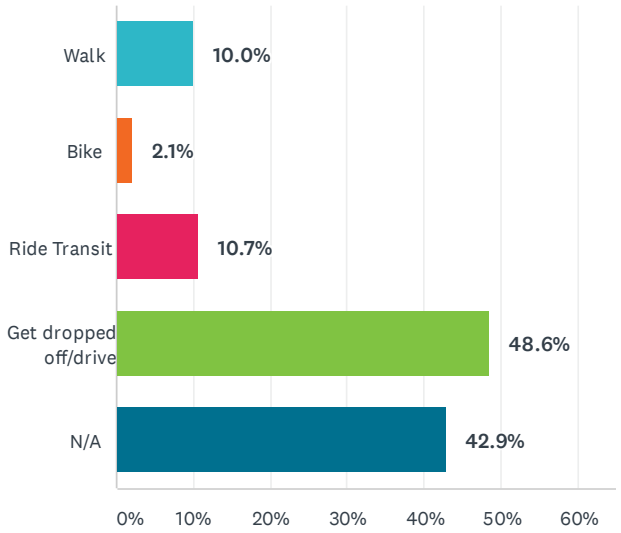
Q10: Which of the following are the largest mobility barriers you experience in Greater Eastwood? (Select up to 5)



Lack of sidewalks or trails connecting to my destination	53.6%
Condition and quality of existing sidewalks	51.4%
Intersection crossings do not feel safe or visible	39.3%
Lack of trails or bikeways connecting to my destination	36.4%
Freight rail crossings	35.0%
Vehicle travel speeds	31.4%
Destinations such as work, school, and stores are too far	22.9%
Poles, signs or other impediments in the sidewalk	19.3%
Lack of pedestrian lighting	17.9%
Not enough shade/trees	17.9%
Traffic volumes	15.0%
Weather	14.3%
No place to lock up/park bikes	12.9%
Air quality	7.9%
Other (please specify)	6.4%
Lack of signage or wayfinding	5.0%
Need for a shower after ride	5.0%

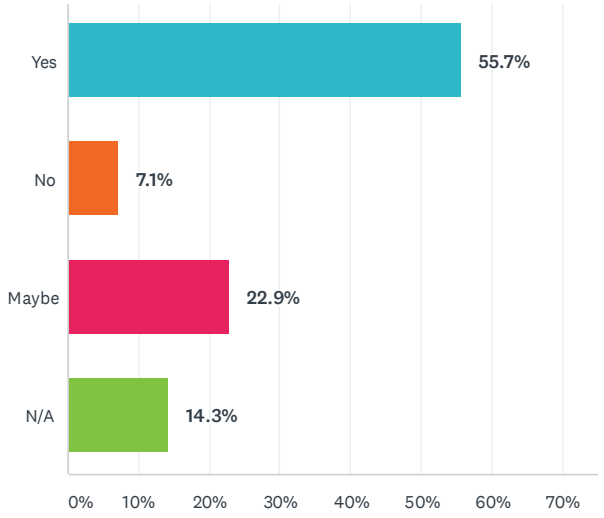
Other
idk
stray dogs are a very frequent problem, worse in certain areas for some reason
Cars and tons of debris in bike lane!
Street condition (potholes, etc.) for biking
Certain areas especially Columbia Tap Trail are consistently dangerous because of robberies and assaults
Condition of streets not safe for riding or even driving
Safety of robbery or stray dogs
I'm a senior citizen with impared mobility, but can't walk far due to poor sidewalks!
Flooding areas.

Q11: If you or a person in your household are a student, how do you primarily get to school? (Select all that apply)



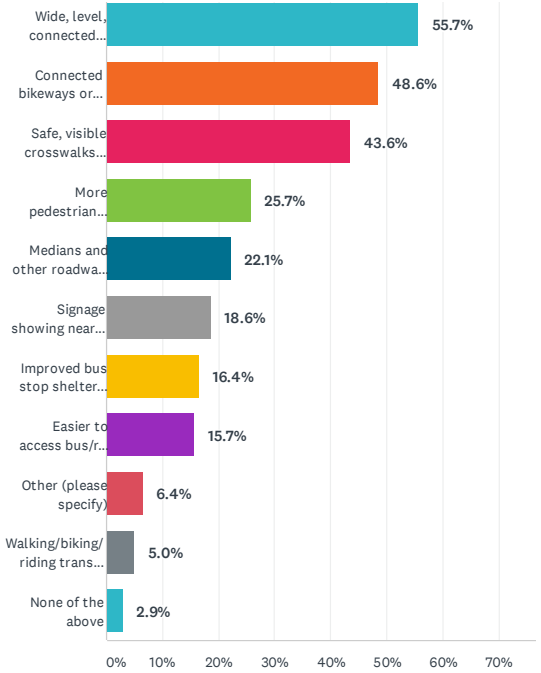
Walk	10.0%
Bike	2.1%
Ride Transit	10.7%
Get dropped off/drive	48.6%
N/A	42.9%

Q12: If you drive or get dropped off, would you walk, bike, or ride transit if it were safer or more convenient?



Yes	55.7%
No	7.1%
Maybe	22.9%
N/A	14.3%

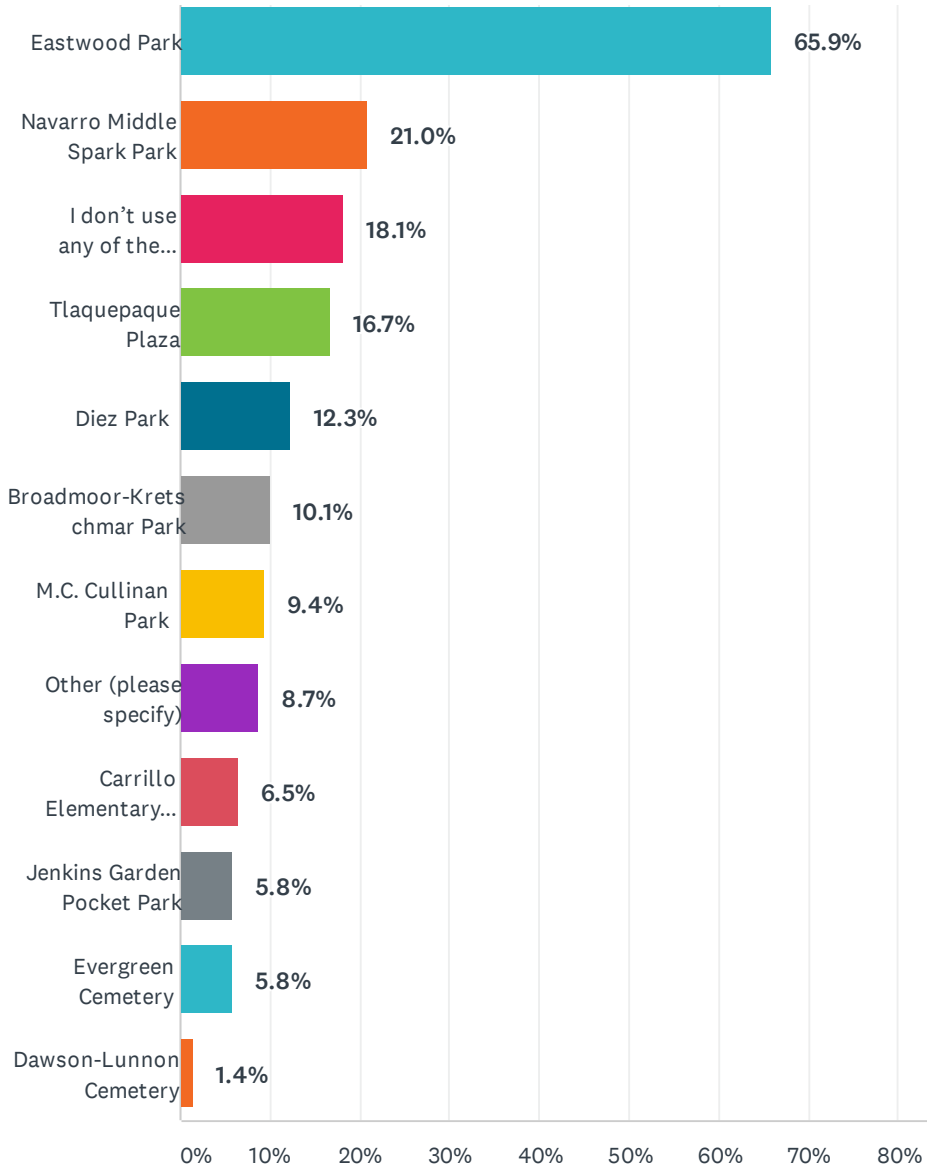
Q13: What would make walking/biking/riding transit to school or other community destinations easier? (Select top 3)



Wide, level, connected sidewalks	55.7%
Connected bikeways or trails (designated or protected facility)	48.6%
Safe, visible crosswalks (appropriate signal timing, clear signage and striping)	43.6%
More pedestrian lighting along sidewalks and trails	25.7%
Medians and other roadway crossing improvements	22.1%
Signage showing nearby destinations, bicycle, and transit routes	18.6%
Improved bus stop shelters and benches	16.4%
Easier to access bus/rail stops	15.7%
Other (please specify)	6.4%
Walking/biking/riding transit should not be a priority	5.0%
None of the above	2.9%

Other
stray dogs are a danger for our children
Better streets/bike lanes
More available parking at train
Relationship between Metro & HISD for more direct routes to schools
Buses that come more often, reliably
We do sometimes walk our son to school, and it is convenient. It usually takes too much time in the morning.
Not applicable
Easier access to and improved all weather bus/rail shelters
My child often walks home from school but I drop him in morning

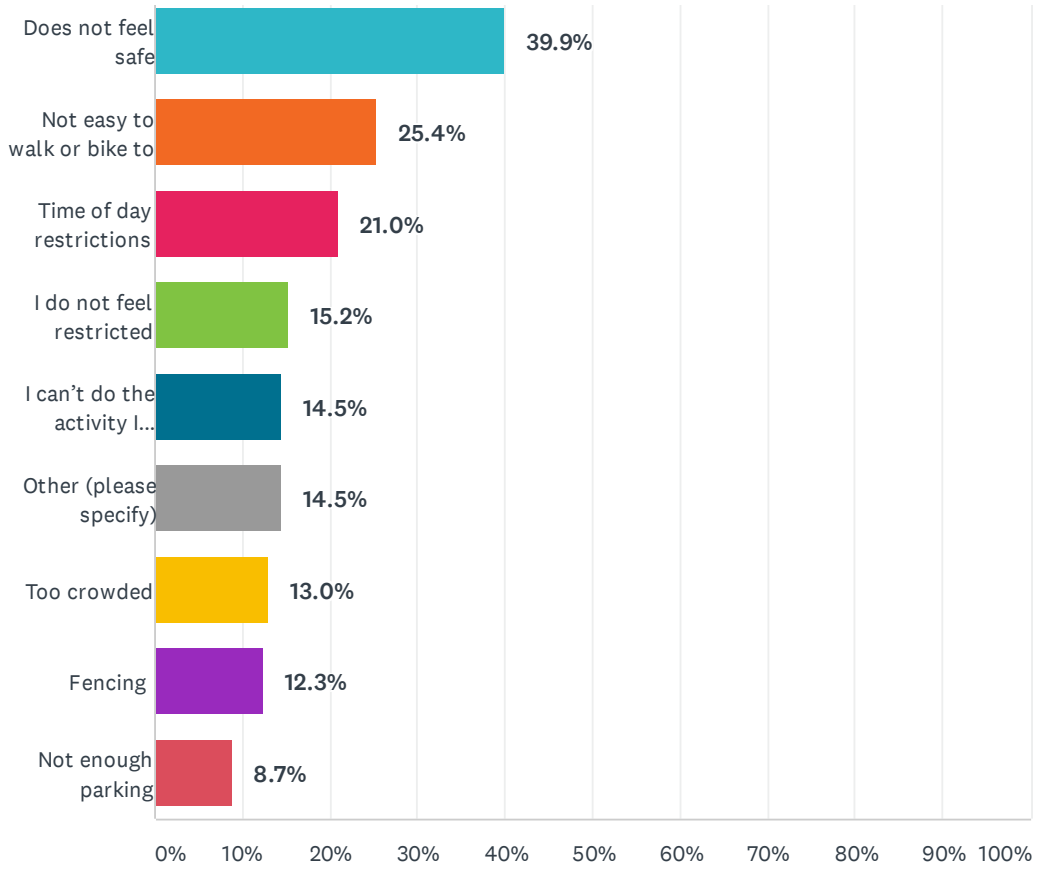
Q14: Do you currently use any of the parks or public spaces in the study area? (Select all that apply)



Eastwood Park	65.9%
Navarro Middle Spark Park	21.0%
I don't use any of the parks or public spaces	18.1%
Tlaquepaque Plaza	16.7%
Diez Park	12.3%
Broadmoor-Kretschmar Park	10.1%
M.C. Cullinan Park	9.4%
Other (please specify)	8.7%
Carrillo Elementary Spark Park	6.5%
Jenkins Garden Pocket Park	5.8%
Evergreen Cemetery	5.8%
Dawson-Lunnon Cemetery	1.4%

Other
DIY Skatepark next Coffee Plant
Tony marron park and Ripley house
Mason Park
Tony marron
Diy on Harrisburg (skate/ Art spot)
Eastwood Academy track
Settegast park
usually go to the golf course outside of the neighborhood on wayside
Polk shared bike lane
Not safe.
I wish there was a Park by Lantrip
Tony Marrón

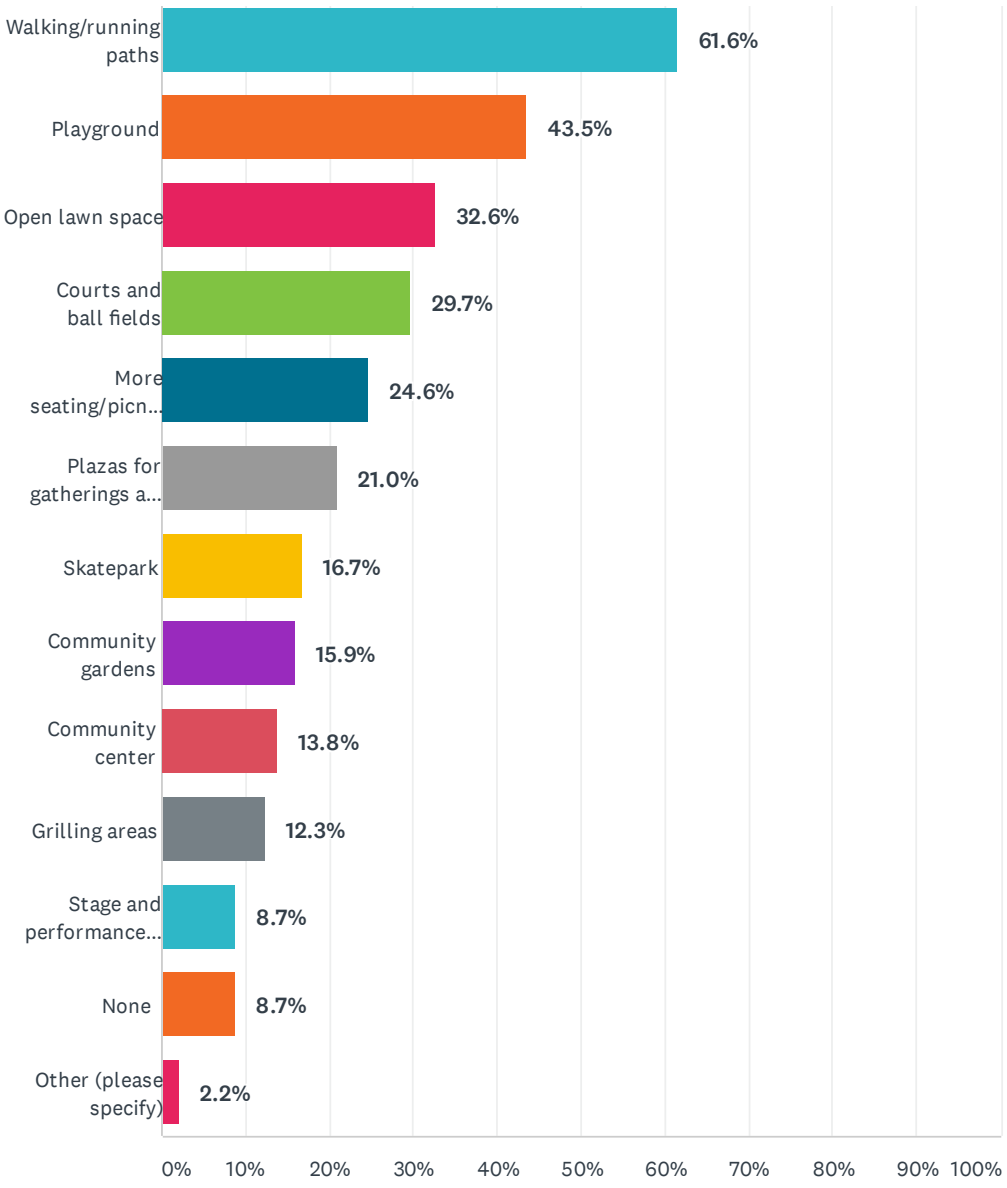
Q15: What keeps you from using current parks or public spaces available in the study area? (Select all that apply)



Does not feel safe	39.9%
Not easy to walk or bike to	25.4%
Time of day restrictions	21.0%
I do not feel restricted	15.2%
I can't do the activity I would like to	14.5%
Other (please specify)	14.5%
Too crowded	13.0%
Fencing	12.3%
Not enough parking	8.7%

Other
Safety comment for Broadmore
I don't really live around that area.
I'm not allowed
I'm not allowed
NA
Too much trash/litter
Eastwood Park is probably the closest to us, but it is dirty, and uninviting to my children.
The grass is usually nasty , weedy, thick, itchy.
Walking to the park with my dogs is stressful. A lot of aggressive dogs in the neighborhood
Condition/quality of public space
We need lights at the eastwood park skate park area.
Some of the spark park facilities are no longer well maintained
They are simply not that appealing
I guess just personal reasons?
Don't know where the parks and public spaces are
Dirty. Trash needs to be picked up more regularly
Trash needs to be picked up more regularly
Ride my bike through, but usually do not stop
not too attractive
The parks could be more attractive and welcoming.

Q16: What types of park programs or facilities do you already use? (Select all that apply)

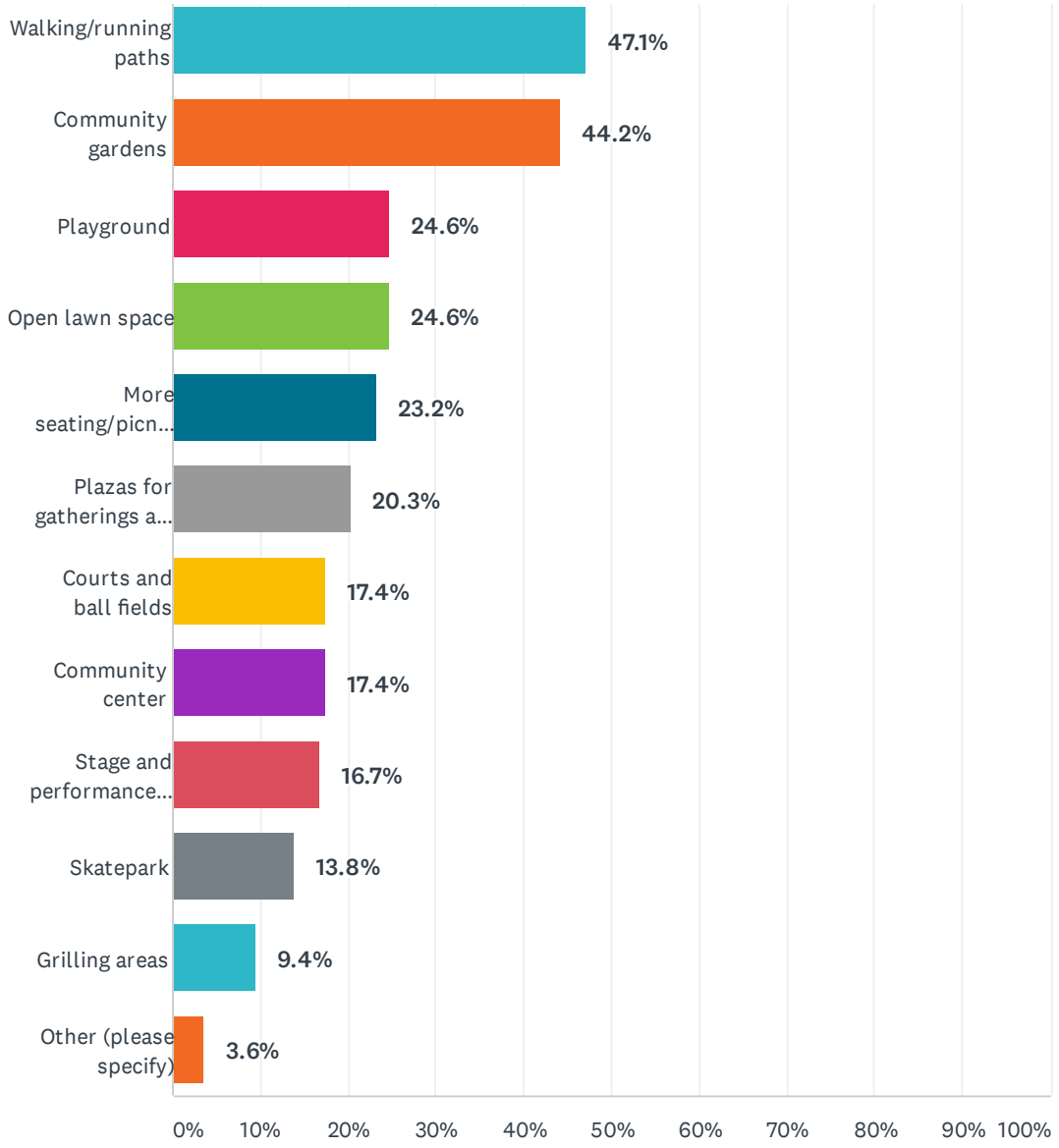


Walking/running paths	61.6%
Playground	43.5%
Open lawn space	32.6%
Courts and ball fields	29.7%
More seating/picnic tables	24.6%
Plazas for gatherings and events	21.0%
Skatepark	16.7%
Community gardens	15.9%
Community center	13.8%
Grilling areas	12.3%
Stage and performance areas	8.7%
None	8.7%
Other (please specify)	2.2%

Other
Diy*
Mainly Skate park!
More trash cans and signage in English and Spanish encouraging visitors to dispose of their waste properly.

* DIY (do it yourself): a skatepark at Harrisburg Art Museum built by local skateboarders.

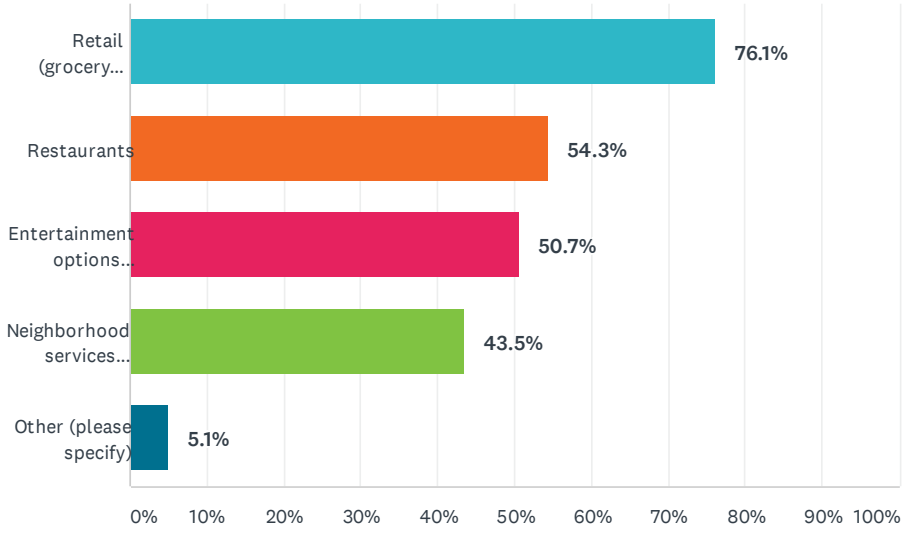
Q17: What types of park programs or facilities would you like to have available? (Choose top 3)



Walking/running paths	47.1%
Community gardens	44.2%
Playground	24.6%
Open lawn space	24.6%
More seating/picnic tables	23.2%
Plazas for gatherings and events	20.3%
Courts and ball fields	17.4%
Community center	17.4%
Stage and performance areas	16.7%
Skatepark	13.8%
Grilling areas	9.4%
Other (please specify)	3.6%

Other
DIY Skatepark next Coffee Plant
Tony marron park and Ripley house
Mason Park
Tony marron
Diy on Harrisburg (skate/ Art spot)

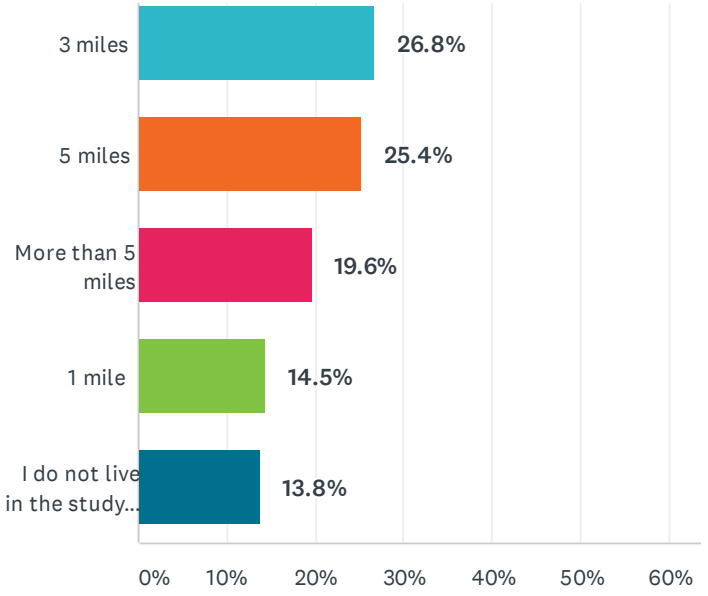
Q18: What types of goods and services are most needed in Greater Eastwood? (Select all that apply)



Retail (grocery stores, pharmacies, etc.)	76.1%
Restaurants	54.3%
Entertainment options (festivals, community gatherings, theater, art venues, etc.)	50.7%
Neighborhood services (repair shops, cleaners, day care, etc.)	43.5%
Other (please specify)	5.1%

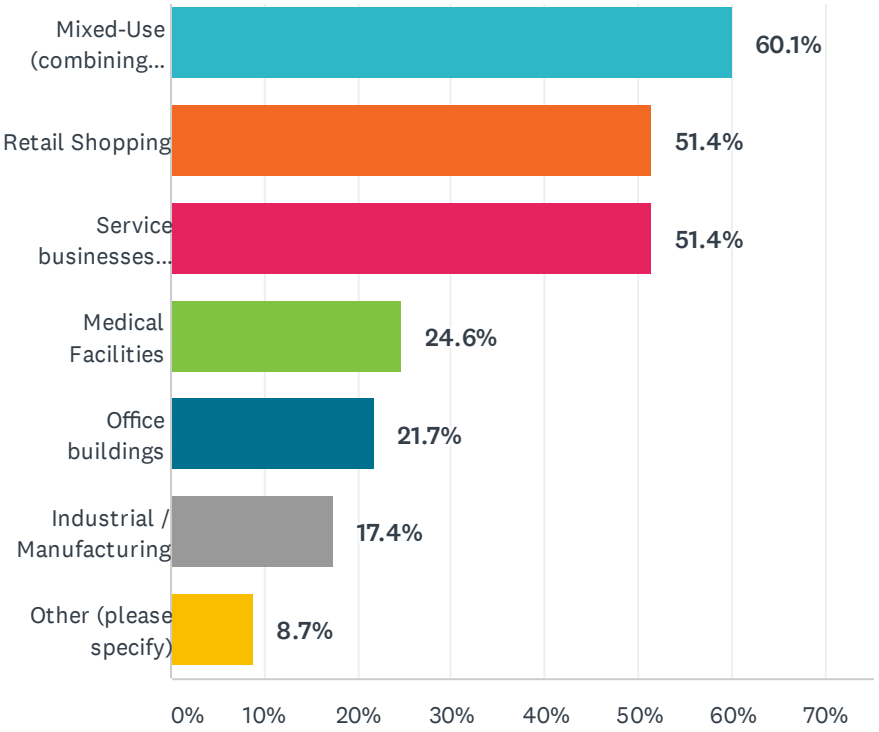
Other:
Verity cuisines
Community spaces . Theaters for local groups centers etc
Restaurants other than Mexican food
The diy on Harrisburg
HEB
Activities specifically for seniors--Tai Chi, Silver Sneakers, chair yoga (or similar). NOT bingo or other mind numbing time wasters!
Movie theaters, shopping plaza

Q19: How far do you currently have to travel to get to those needed goods and services?



3 miles	26.8%
5 miles	25.4%
More than 5 miles	19.6%
1 mile	14.5%
I do not live in the study area	13.8%

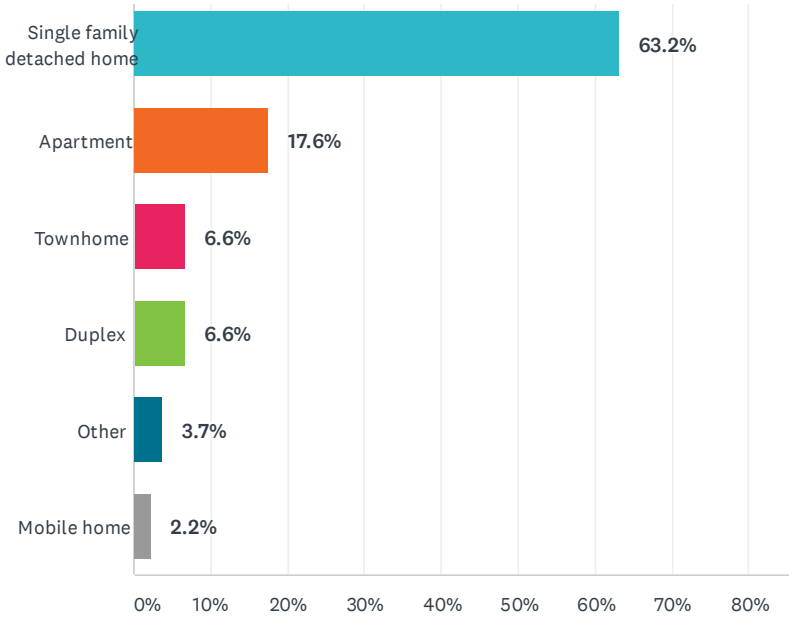
Q20: What type of development would produce jobs or provide other services that would be attractive to Greater Eastwood residents? (Select all that apply)



Mixed-Use (combining multiple types of uses together, potentially housing too)	60.1%
Retail Shopping	51.4%
Service businesses (repair, day care, cleaners, etc.)	51.4%
Medical Facilities	24.6%
Office buildings	21.7%
Industrial / Manufacturing	17.4%
Other (please specify)	8.7%

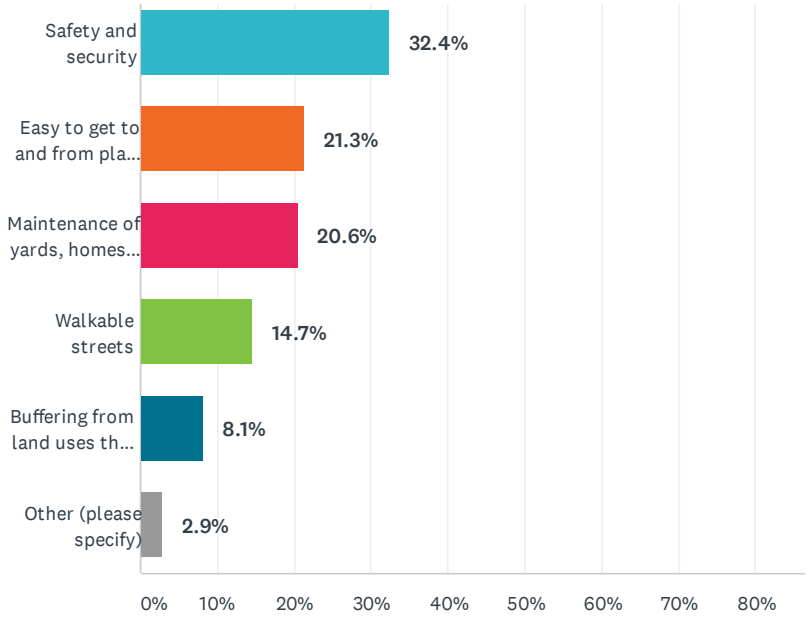
Other
Restaurants
Recreation Center
Anything but a strip mall, please no more Houston strip malls
Not sure
Shared community spaces
Diy
Restaurants, coffee shops
HEB, Target, Costco?
Night life
bars and coffee shops bakeries
Grocery store
Grocery store employs many

Q21: Which best describes your primary residence?



Single family detached home	63.2%
Apartment	17.6%
Townhome	6.6%
Duplex	6.6%
Other	3.7%
Mobile home	2.2%

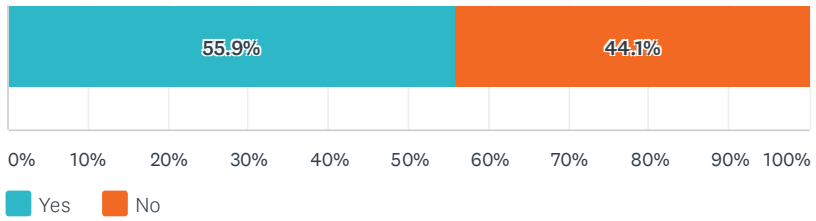
Q22: What is the most important feature of a livable, thriving, and desirable neighborhood?



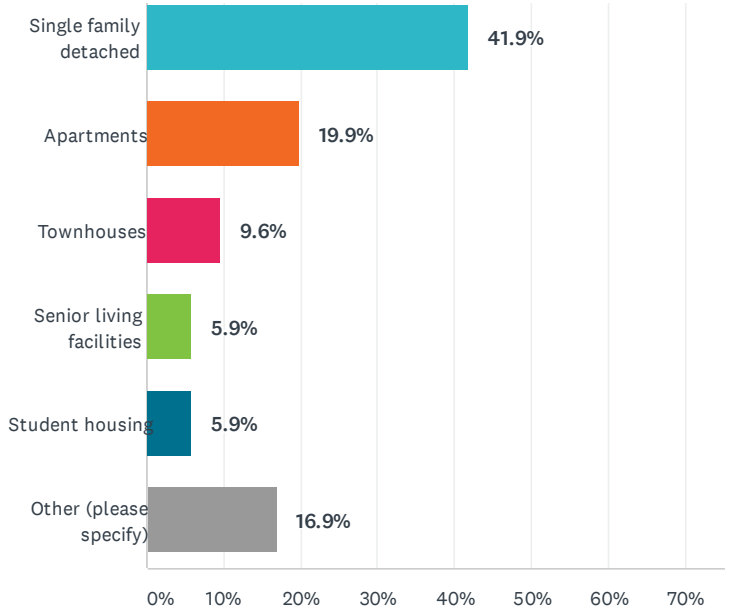
Safety and security	32.4%
Easy to get to and from places along attractive routes	21.3%
Maintenance of yards, homes, and buildings	20.6%
Walkable streets	14.7%
Buffering from land uses that are not residential and from excessive traffic	8.1%
Other (please specify)	2.9%

Other:
Low cost as well
Kind, thoughtful neighbors, and newcomers who respect the place and its history
All of the above!
stop gentrification!

Q23: Do you feel there is currently an adequate supply of housing options to meet the need of the community?



Q24: If you do feel there is a need for more housing options, what type of housing is most needed?



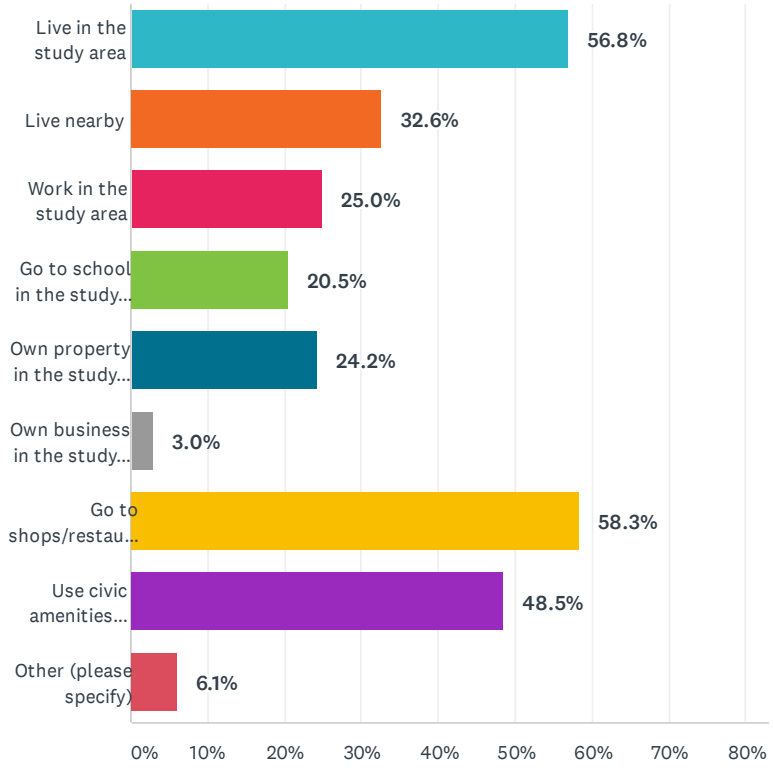
Single family detached	41.9%
Apartments	19.9%
Townhouses	9.6%
Senior living facilities	5.9%
Student housing	5.9%
Other (please specify)	16.9%

Q24: If you do feel there is a need for more housing options, what type of housing is most needed?

Other
Affordable housing option for families being pushed out due to rising cost of living in this area.
High density
None
Affordable housing for families living at or below the poverty line
fixing up the abandoned or run-down housing/buildings
Type is not as important as affordability and smart, community-oriented design
Affordable
Co-housing
N/a
Apartments targeted at young professionals who work downtown
Affordable rent apartment
N/A
Na
I do not feel that there is a need for more housing options, only a need for affordable homes.
Affordable Housing for families under 80% AMI
na
Public housing
None
Not applicable
I think we have adequate housing
I believe there's enough housing options already available. We need pharmacies, grocery stores, more retail options.
Both single family detached and senior living facilities.
NA

The following questions highlight demographic characteristics about the survey respondents. Some information has been condensed for analysis.

Q25: Please tell us your connection to the Greater Eastwood area. Select all that apply.



Live in the study area	56.8%
Live nearby	32.6%
Work in the study area	25.0%
Go to school in the study area	20.5%
Own property in the study area	24.2%
Own business in the study area	3.0%
Go to shops/restaurants in the study area	58.3%
Use civic amenities (parks, churches, community centers, etc.) in the study area	48.5%
Other (please specify)	6.1%

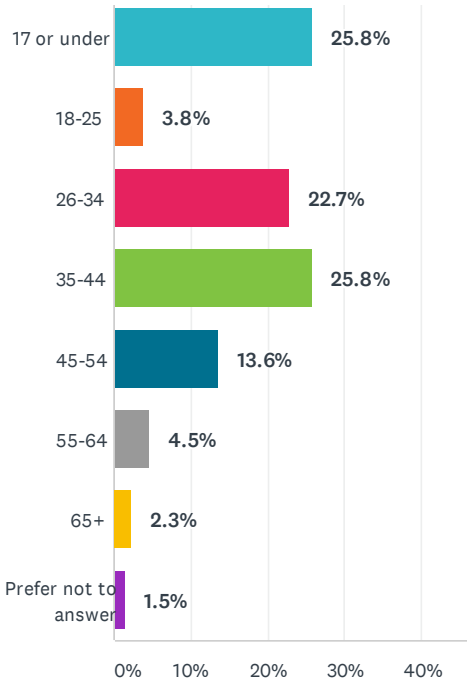
Other
Fuera; outside
Bike / drive / ride transit through the study area
Grew up in study area, family lives in study area, husband and husband's family also grew up in and live in study area
Born and raised in Greater East End. Recently bought a home in Eastwood.
Historic neighborhood preservation and improvement.
Child goes to Eastwood Academy
Work in local government

Q26: Please enter the zip code where you live:

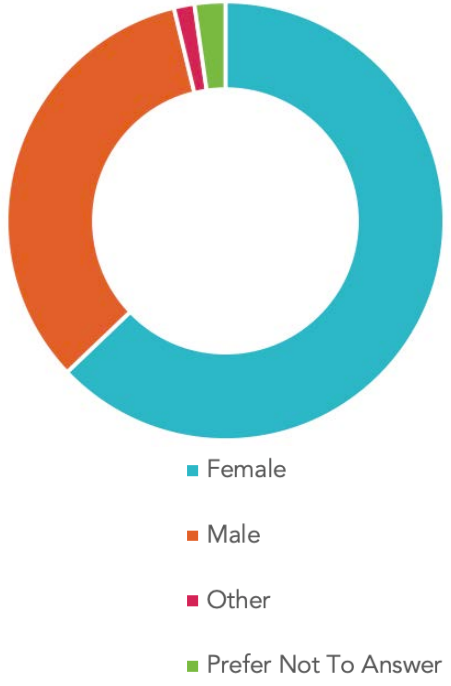
Zip Code	Number of Responses
77023*	72
77003*	19
77011*	7
77021	5
77012	3
77009	2
77004	2
77001	1
77002	1
77007	1
77015	1
77030	1
77048	1
77051	1
77061	1
77077	1
77084	1
77087	1
77088	1
77098	1
77338	1
77478	1
77502	1
Don't know	3
Error/Invalid Number	2
Total	131

* Zip code is partly within the study area

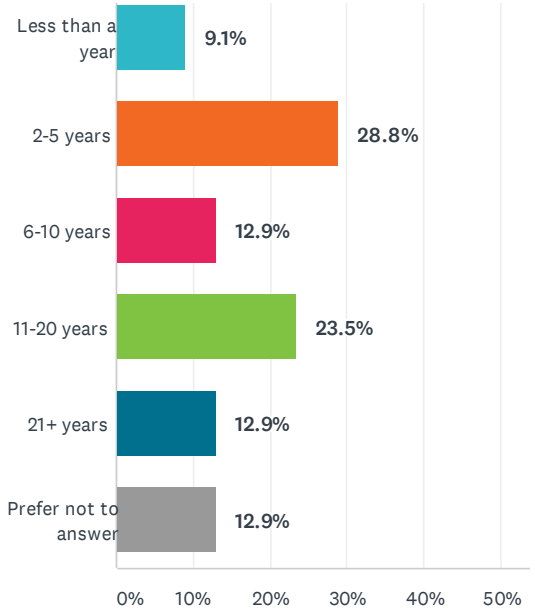
Q27: What is your age?



Q28: What is your gender?



Q29: How long have you lived or worked in the Greater Eastwood area (in years)?



Live/Viva Greater Eastwood Community Input Summary Round 2

Introduction

The Greater Eastwood Livable Centers Study prioritized community centered planning to develop a full picture of the needs, challenges, and priorities of Greater Eastwood residents, students, and workers for the future. This document is a summary of the second round of community engagement focusing on community preferences for improvements to provide additional direction for investment priorities.

As COVID-19 continued to present a public health challenge, meetings were kept in a virtual format. However, a small scale canvassing effort was incorporated to capture Spanish speaking community members.

Community engagement tools used include an online survey, three live-streamed virtual public meetings, robust social media planning and content development through Facebook and Twitter, website and social media integration, canvassing and distribution of paper flyers, traditional email, and a presentation at Navarro Middle School virtual community meeting. Full engagement comments and results and provided as an appendix to this summary for detailed examples of what went out to the community and how the participants responded to a variety of questions.

Online Survey

Framework

The second public survey for this project was offered online from August 31- September 18 (31 days). The survey focused on building on community feedback from public survey #1. Where the first survey captured needs, challenges, and big ideas around transportation, housing, economic development, parks, and open space, the second survey packaged recommendations to meet these needs, challenges and ideas in six recommendation concepts framed as "goal statements."

Respondents were able to provide feedback by allocating dollar amounts, ranking goal statements, selecting photos that represented their vision for a specific goal, and provided open ended comments throughout the survey.

Respondent Demographics

The survey was offered both in English and Spanish and started questions with an option to take the survey in one language or the other depending on comfort levels.

144 people living, working, shopping, or using amenities in the Eastwood area responded to the survey. The age of respondents was primarily between the ages of 26- 34 (30%) and 35-44 (37.5%). Nearly 80% (112 individuals) of survey respondents took the English survey, and 22% (32 individuals) took the survey in Spanish.

Separating the surveys allowed for deeper insights into the needs and preferences of what it means to have a livable community for those who may not speak English or prefer to use Spanish.

Spanish and English speaking respondents connection to the study area is different in three primary ways: place of residence, place of work, and property ownership. Of respondents who took the survey in English nearly 70% reported living in the study area, 17.5% work in the study area, and more than 49% own property in the study area. On the other hand, 52.2% of Spanish speaking respondents live in the study

***144** total survey responses*

***22%** taken in Spanish*

"I like that the buffer is between the cars and the bikes in addition to the bikes and the pedestrians. I really love the lights and the flex space. Would love to see the flex space being used for art exhibitions, seating, restaurants, etc."

-Survey respondent

area, 56.5% work in the study area, and no Spanish speaking respondent reported owning property in the study area.

From this sample we are able to piece together that Spanish speaking community members may be slightly less likely to live in the study area, but if they do, are more likely to also work in the area as well. This information can help target active transportation educational and encouragement campaigns and lead to more understanding of what types of infrastructure or improvements might benefit one group over the other in an effort to reveal and address inequities.

Considering both English and Spanish respondents, about 21% of people live in the study area, 23.63% go to shops and restaurants in the study area, and more than 20% use civic amenities like parks and community centers.

Recommendation 1: Great Streets

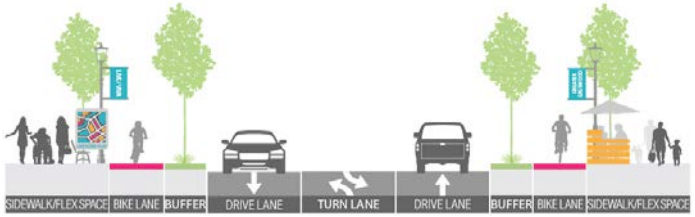
Survey Questions 2-4

Great streets were defined as corridors that "prioritize safety, support economic opportunity and continued community development, and expand access for everyone including those walking, biking, driving or riding transit." 53% of respondents indicated the "strongly agreed" with this statement followed by 29% who "agree."

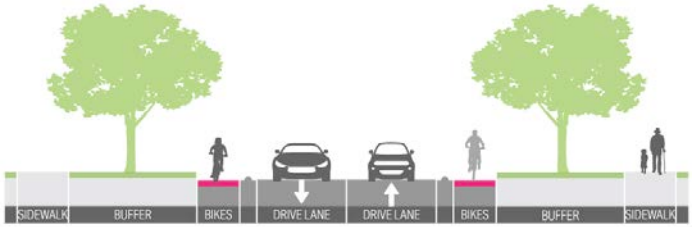
In an effort to capture what visual aspects of great streets resonated most with community members, four images representing different levels of intervention and a range in street design components were provided. Each respondent was offered the opportunity to select two of their favorite images. The highest percent of support recorded was 49% for the "Great accessibility and placemaking" option followed by 19% selecting "bike Lanes and good sidewalks" detailed in Figure C.5.

Figure C.5

Great Accessibility and Placemaking



Bike Lanes and Good Sidewalks



Open Ended Feedback

Following the Great Street Goal Statement, 30 respondents expressed comments on what components of the street options they liked the most. Themes of safety and connectivity for vulnerable road users (pedestrians and bicyclists), greenery, and trees were repeatedly mentioned as needed and preferred components to a great street.

A comment was also collected expressing concern in regards to how "great streets" will fit within the current built reality of the neighborhood. This astute comment alludes to how large parking lots, driveway standards, and set-backs may interact with new accessibility and placemaking elements (i.e. bike lanes). Additionally a couple comments hint at a feeling of discomfort for some respondents at the idea of adding bikeways that seem to take space from free vehicle flow or parking.

Recommendation 2: Healthy & Active

Survey Questions 5-9

A healthy and active Eastwood was defined as elements to the community that "expand access and social connectivity to outdoor parks and greenspace, places for play, and environmental resiliency public spaces to build on and maintain Greater Eastwood's high quality of life. Strategies include: Expanded shade tree coverage; Enhancing park and play spaces; Providing plazas and social spaces for community interaction; Daylighting Slaughter Pen Bayou as a natural space."

The majority of respondents (52.43%) "strongly agree" with this statement followed by approximately 33% who "agree." Additionally, more than 90% of respondents reported they agree or strongly agree enhancing existing parks and providing new parks with multi-generational components is important and 91% of respondents "like" or "really like" the idea of a "green corridor" where natural elements like trees, daylighting Slaughter Pen Bayou, and social spaces are brought to light.

To dive a little deeper into what visual aspects were most desired in the community, images representing a variety of ideas for gathering and activity spaces were provided. Responses show interest in all options with a slight favor for small scale community plazas (23.85%), and outdoor seating and greenery (20%) depicted in Figure C.6.

Open Ended Feedback

Open ended responses are supportive of more green space and areas for gathering with the understanding that maintenance and safety of the spaces and the ability to walk or bike to them are important as well. One respondent captures the essence of the active and healthy recommendation perfectly.

Figure C. 6: Small Community Plaza

Outdoor Seating and Greenery

Recommendation 3: Hub of Education

Survey Questions 10-12

The Greater Eastwood community encompasses several schools of varying levels. The education recommendation was defined as a "focus on access to schools for children and families to walk or bike and create community partnerships and programs that involve schools and children, broadening the scope of learning in the community." 67.37% of respondents "strongly agreed" with this recommendation and is the highest level of support for an individual recommendation measured overall.

Images were provided to respondents to understand what roadway crossings near schools are preferred. A raised crosswalk (41%) and a crosswalk with a narrowed crossing (30.46%) were the top two answer choices reported.

Open Ended Feedback

Feedback is overwhelmingly supportive with specific examples of safety concerns around schools in the area. Respondents explain the raised crosswalk will force drivers to slow down, while a painted crosswalk may not have the same results.

"These are things that our neighborhood needs the most. Being raised in this neighborhood, it would have been great to experience more community-geared events and having spaces such as the ones selected. [This] would strengthen our bond as a community as well as leaving a greener area for later generations."

-Survey Respondent

Recommendation 4: Walkable & Connected

Survey Question 13-18

A more specific version of great streets with added ambition towards the area's relationship to other parts of Houston, a walkable and connected community was defined as "one of the most walkable, transit, and bike-friendly neighborhoods in Houston by building on the connected street grid, frequent transit services, and opportunities to improve places for people to walk and bike." 60% of respondents "strongly agree" with this statement.

In an visually based question 30% of respondents selected the "wide sidewalk" option shown in Figure C.7, followed by 27.17% for "wide walking area around businesses." In short, not only is a wide and level sidewalk important, but engaging streets with small scale shops, greenery, and seating is desirable as well.

Building on the specific preferences for street components, bus shelters were also shown with images. 58.16% of respondents preferred a traditional bus stop with an artistic component to it, and 32.65% preferred a fully customizable and artistic bus stop (see Figure C.8).

In regards to bicycling and bikeways, preferences for bike lanes with a buffered physical barrier were reported by 42.94% of respondents as the design they would feel most comfortable riding a bicycle on followed by a bike lane with a physical barrier (34.97%). The top selected bike lane image is depicted in Figure C.9.

73.47% of respondents agree or strongly agree more bike parking is needed at community destinations. Additionally 54.18% of respondents indicated they would likely use bike share if the stations were more conveniently located.

Wide sidewalks, traditional bus stops with added artistic components, bike parking, and bike share stations are supported by the majority of respondents giving the District great places to continue improvements.

Open Ended Feedback

12 comments from respondents revolve around preferences for bike lanes, ADA compliance, bike parking, and streets that better accommodate both bicyclists and pedestrians.

Recommendation 5: A Cultural Center

Questions 19-21

In the first survey, history and culture were tallied as the most important asset to the Greater Eastwood community by respondents. The Cultural Center recommendation is intended to "build on and expand the culture and history the Greater Eastwood community is known for though placemaking that enhances the public realm." This includes signage, gateways, plazas, public art, and street-side furnishings. 47.87% of respondents "strongly agree" with the Cultural Center recommendation. The top two ways respondents think culture could be incorporated into placemaking are through vibrant lighting and color (33%) and community kiosks with wayfinding signage (25.73%).

Open Ended Feedback

The threat of gentrification was mentioned throughout the comments while also communicating the importance of signage that does not re-brand or change the name of neighborhoods (i.e. Second Ward to EaDo). Some comments indicate a level of dissatisfaction with the presented solutions and offer ideas to invest in community based cultural organizations, provide more affordable housing for artists and more opportunities for local artists to exhibit their work instead.

Figure C.7 Top sidewalk selection

Figure C.8 Top bus stop selection

Figure C.9 Top bikeway selection

Figure C.10 Top Transit Oriented Development Selections

Recommendation 6: Rich with Opportunity

Survey Questions 22-26

The final recommendation gauges how primed residents are for big moves in lifestyle and infrastructure and how they see all the pieces of a livable community coming together.

The recommendation states: "Greater Eastwood is prime for leveraging infrastructure investments in transit and street improvements. These investments can support job opportunities and diverse housing options to meet the needs of the community. Greater Eastwood is rich with opportunities for more economic activity, new housing options, and walkable development near areas served by high-quality transit." When asked to what level residents agreed with this statement 46.74% indicated they "strongly agreed" followed by 33.7% who "agreed." This indicates general optimism about the potential for the area in the future and the residents willingness to consider changes as well.

Specifically, approximately half of respondents "strongly agree" public investments in infrastructure and a "go local" campaign would help local businesses.

Development Near Transit

In an effort to deconstruct and piece back together components of a Transit Oriented Development, specific questions regarding preferences for business locations, housing options, visual elements, and development scale.

37% of respondents indicated they "strongly agree" locating businesses near transit would benefit local businesses. When asked who they would like to see housing options for in theses areas, respondents were split between seniors (39.13%), students (32.84%), and workers (37.68%) with favor towards more senior housing. Corridors that support walkability in smaller scale mixed-use developments with a community event space were three important components to transit oriented development for respondents. The images that tallied the most positive response from community members are indicated in Figure C.10.

Open Ended Feedback

Respondents are not opposed to new development or new residents, but comments reflect the preference for smaller scale developments that are kept affordable for long-time residents.

History and culture of the neighborhood are also frequently mentioned and the concept of "placemaking" is called out as something that may deter long-time residents from using new or improved spaces. Steps should be taken to bring existing community history into new development concepts. Lastly, town homes are not ideal for respondents, one resident even claiming they can be "suffocating."

"We need to maintain the integrity and culture of our East End community and especially allow for our low income residents who have lived here for generations to stay here."

-Survey Respondent

Recommendation Conclusion

The framework of the recommendations present six defined visions for the future of Greater Eastwood with packages of projects and direction to prioritize investments for the future. Respondents were asked to rank each recommendation or "goal statement" as presented in the survey. While the majority of respondents agree all the packages of recommendations are valuable by a consistent level of "agree" and "strongly agree" statements throughout the survey, "Great Streets" resonated most when compared directly with other options.

In addition, when asked how each respondent would allocate $100 dollars across 14 components of a livable community (build great streets, enhance parks and open spaces, develop green corridors, more trees and plants, plazas and social spaces, safe access to schools, sidewalk improvements, better bus stops, comfortable bikeways, safe intersection crossings, placemaking and public art, investing in walkable places/ TOD, encourage economic development, encourage housing options) the top three choices with the highest dollar allocation was:

1. Build Great Streets
2. Improve Sidewalks
3. Safe Access to Schools

The Greater Eastwood community is looking for streets that support all people. Half of respondents, in an open ended format, wrote down walkability and bikability as their number one priority.

"I like the recommendations that create more outdoor experiences that families can enjoy, that encourage walking, playing, and hanging out in outdoor spaces, places where we can enjoy nature and outdoor exercise, where we can sort of escape from being indoors all day, and that are also going to be safe and relaxing."

-Survey Respondent

Virtual Public Meetings

Two virtual public meetings were held in three 1 hour sessions via Zoom and live-streamed on Facebook on the East End District website. The English sessions were held on August 24 from 5-6pm and 6-7pm, and the Spanish session was held on August 25 from 5-6pm.

Each public session began with a short video of photos and testimonials submitted by Eastwood residents or collected from the survey to educate viewers on the thoughts and desires of their neighbors followed by the project presentation. The Facebook comment option was used to solicit viewer feedback and respond to participants via live chat or verbal response through the live-stream.

Access

The Livable Centers team was sensitive to providing resources for participants who may not be familiar with Zoom or Facebook. To help bridge the gap in online knowledge, an FAQ sheet was developed in English and Spanish and posted on the District's website explaining how to access the Open House through Zoom or Facebook.

As a means to provide more access for Spanish speaking residents and workers, a canvassing method was used to inform community members of the project, collect testimonials to inform the study, and encourage the completion of the survey.

Participation

Participation at the public meetings was most effective via Facebook where comments could be collected and addressed by the project team. Viewership statistics detailed in Figure C.11 outline viewership from Facebook Live.

The one Spanish virtual open house tallied the most 1 minute views and has since been watched more than either one of the English sessions. While viewership from the English sessions combined outweighs the Spanish session, the availability of the Spanish Open House seems to have captured an engaged and underrepresented audience.

Figure C.11 Facebook Open House Viewership Statistics

	1-Minute Views	Average Video Watch Time	Peak Live Viewers	Total Views*
Session 1 (English)	36	27 seconds	14	277
Session 2 (English)	29	41 seconds	11	187
Session 3 (Spanish)	38	27 seconds	12	341
Total	103	~	37	805

Promotional Tactics

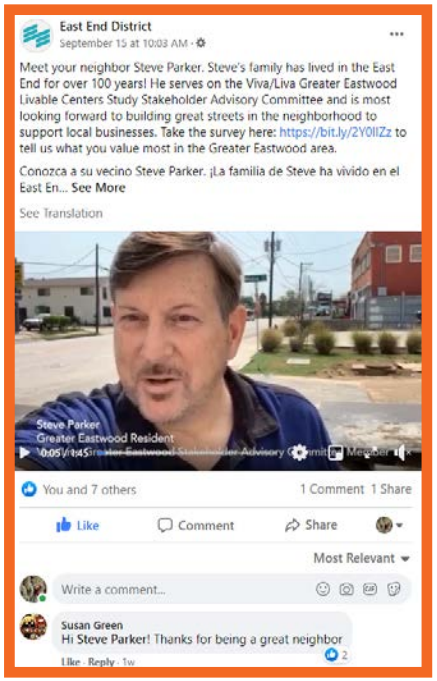
Social Media

A social media plan was developed to support the success of the survey and advertise the virtual public meetings. Social media was also used to live-stream the public meetings as they occurred to capture Facebook participants scrolling through social media content.

14 posts were made through the East End District's Facebook and Twitter pages from August 17 through September 18 including:

- (2) Call for photos and videos to be incorporated into the public meeting
- (4) Public meeting invitations/flyers
- (4) Graphics encouraging the survey
- (4) Resident and leadership videos (Figure C. 12)

Figure C.12 Sample resident videos



Canvassing

To engage the Spanish-speaking community and Eastwood workers more effectively the Tecolotl team visited local businesses and activity centers where they handed out flyers and encouraged survey participation. Figure C.13 catalogs testimonials taken by the Tecolotl team when prompted with questions about accessibility, livability, and the future of Greater Eastwood.

Figure C.13 Canvassing testimonials

Person	Comment
Owner of Bloom Oil (Latinx, bilingual, 30s, spoken in English)	Business is slow due to the pandemic, we had to become creative with our online sales. I currently walk to work and live in the neighborhood, which is also where my partner grew up. I really like the idea of textured sidewalks because I believe it would help visually impared people. Definitely think we need to have bumps blocking the bicycle lane because I see the three foot buffer we are supposed to follow isn't respected. I notice there isn't a whole lot of history like what I would see in New York when I lived there, which is sad. I've also noticed that public transportation is not great here. Had a terrible experience where I was dropped off far away from the destination after a very long ride.
Owner of Taste of Mexico (Latinx, middle aged, Spanish speaker)	I drive to work from Pasadena, and would like the streets to be improved. Especially Leeland because we come in and out through that street. Having better sidewalks would be good also. Will take the survey later.
Owner of Imperial Bakery (Latinx, elder, Spanish speaker)	I have several people with disabilities who can't access the shop, so I have to take the orders to their cars. I notice that when the bicycle lanes are painted on they are not respected. I think better streets and parks will help make this area look better. I also would like better street lights, more police surveillance, and the dumpster trash to be picked up more often to keep it from smelling.
Owner of Kismet (Latinx, bilingual, 30s, spoke in English)	I love any type of activity that can help better the community. We need safe crosswalks - they are very unsafe.The intersection of Telephone at Lockwood has many really bad accidents. We also need more parking for businesses: "Not like Westheimer, not people parking on the main streets (like Telephone) but instead on streets adjacent like Dumble or Elliot". I love the small business in Eastwood: It feels like home when people come in. "I hate gentrification but I like to see nice things."
Worker at Shine Dental (Latinx/Black, bilingual, middle aged, spoke in Spanish)	I've worked here for more than ten years. Currently live in Pearland, so I drive in to work. I really enjoy the walkability of this neighborhood; it's really important if I were to move here. I've seen lots of changes in the neighborhood over the years, but I think that Telephone has a lot of potential to be busier and more lively. [Left about 20 fliers in their waiting room.]
Cashier at Family Dollar (20s, Latinx, bilingual, spoke in English)	I live in Eastwood but I drive to work; it's not an easy walk plus it's really hot. [Couldn't talk much because there were customers in line behind me, but asked me for 5 extra fliers to share with her co-workers.]
Person shopping at the corner store (20s, Black, spoke in English)	I spend a lot of time in Eastwood. I don't have a car so I always have to rely on the bus. I really dig the neighborhood; I'm walking around here all the time. There's a lot of empty buildings though that could be put to better use, even here on Telephone you have the old school up ahead….and a lot of empty lots too.
Matamoros Meat Market Worker (30s, Latinx, Spanish speaker)	I live over by Jefferson and Telephone. I bike to work because I don't have a car, but I like it except when it's too hot. I cut through the smaller streets cuz I don't trust drivers; sidewalks and streets could be better. (While taking the survey) I never thought about those sidewalks with the little bumps for blind people. I guess the neighborhood in general is not good for blind people...or imagine if you had a wheelchair. I have two little kids and we walk around the neighborhood a lot. Having free events for families would be nice.
Appliance store owner (60s, asian, English speaker)	Was really adamant about the issue of homelessness in the neighborhood. He mentioned that he's had a lot of issues with homeless people coming into his shop or "loitering" around the neighborhood. We shared info about the project and invited him to include that as part of the comments on his survey.

Canvassing

Canvassing was conducted in place of being able to reach people through events or other in-person meetings due to COVID-19. The project team canvassed the area providing flyers, helping people take the survey, recording responses of people who did not want to take the survey, and encouraging people to learn more about the project. This effort was also conducted to specifically engage the minority and Spanish-speaking community within Greater Eastwood. Figure C.14 provides detailed interactions between the project team and residents/workers along Harrisburg Blvd. between 66th St. and Wayside St. In total, approximately 200 flyers were handed out and 20 Spanish surveys were completed as a result of these interactions. Persons who took the survey were encouraged to take it using their own device or one offered by Tecolotl. Facilitating full survey responses at places outside of the Transit Centers proved more fruitful as people had more time to converse and engage.

Figure C.14 Canvassing Interaction Summary

Location	Person(s)	Summarized Interaction
Eastwood Transit Center	Five Latina women, Spanish speakers	Cleaning and customer service workers in the Eastwood area who all live in the Beechnut area. Each take the 4 bus to work and back home each day. One woman explained sometimes they drive and carpool but for the most part taking the bus feels safer and more convenient.
Eastwood Transit Center	Latino man, approximately 20 years old	Young man lives in Eastwood and works at the Amazon warehouse in the neighborhood but takes the bus to Montrose for his second job at a bar. His family has a shared car so he usually takes the bus to and from work.
Magnolia Transit Center	Latino man, approximately 80 years old, Spanish speaking	Man lives in Eastwood neighborhood and indicated he was traveling to see his daughter. He said he likes to walk and wants to make sure the sidewalks are safer around his home.
Little Caesar's Pizza	Three Latino men in their 20s, bilingual	Workers at Little Caesar's all owned vehicles and drove to work.
Little Caesar's Pizza	Latino man in his 50s, Spanish speaker	Worker at Little Caesar's takes transit or rides a bike to work.
Little Caesar's Pizza	Latina women with children	Customers of Little Caesar's drove to the location and reported they prefer to drive because they have kids.
Organization Latina de Trans & Texas (OLTT)	Eight residents, staff, or volunteers, ages approximately 20-40 years old	Very responsive group to recommendations regarding placemaking, mobility, connectivity, arts, and culture. Group asked for examples of how placemaking would look in Eastwood. The group went on a short walk and commented on how flags on street lamps, fewer lanes for cars, and more greenery would be beneficial or favored. There was noticeable excitement about walkability and connectivity recommendations as only two of the eight group members owned a car.
Bloom Oil	Owner, Latinx, bilingual in 30's for age	Business is slow due to the pandemic, we had to become creative with our online sales. I currently walk to work and live in the neighborhood, which is also where my partner grew up. I really like the idea of textured sidewalks because I believe it would help visually impared people. Definitely think we need to have bumps blocking the bicycle lane because I see the three foot buffer we are supposed to follow isn't respected. I notice there isn't a whole lot of history like what I would see in New York when I lived there, which is sad. I've also noticed that public transportation is not great here. Had a terrible experience where I was dropped off far away from the destination after a very long ride.

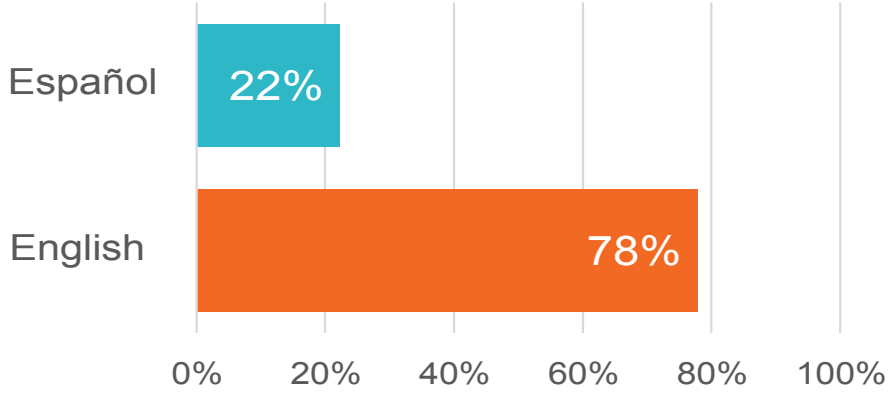
Figure C.14 Canvassing Interaction Summary continued

Location	Person(s)	Summarized Interaction
Taste of Mexico	Latinx, middle aged, Spanish speaker	I drive to work from Pasadena, and would like the streets to be improved. Especially Leeland because we come in and out through that street. Having better sidewalks would be good also.
Imperial Bakery	Latinx, elder, Spanish speaker	I have several people with disabilities who can't access the shop, so I have to take the orders to their cars. I notice that when the bicycle lanes are painted on they are not respected. I think better streets and parks will help make this area look better. I also would like better street lights, more police surveillance, and the dumpster trash to be picked up more often to keep it from smelling.
Kismet	Latinx, bilingual, in the 30's for age	I love any type of activity that can help better the community. We need safe crosswalks - they are very unsafe.The intersection of Telephone at Lockwood has many really bad accidents. We also need more parking for businesses: "Not like Westheimer, not people parking on the main streets (like Telephone) but instead on streets adjacent like Dumble or Elliot". I love the small business in Eastwood: It feels like home when people come in. "I hate gentrification but I like to see nice things."
Shine Dental	Worker, Latinx/Black, bilingual, middle-aged	I've worked here for more than ten years. Currently live in Pearland, so I drive in to work. I really enjoy the walkability of this neighborhood; it's really important if I were to move here. I've seen lots of changes in the neighborhood over the years, but I think that Telephone has a lot of potential to be busier and more lively. [Left about 20 fliers in their waiting room.]
Family Dollar	Worker, Latinx, bilingual, in the 20's for age	I live in Eastwood but I drive to work; it's not an easy walk plus it's really hot. [Couldn't talk much because there were customers in line behind me, but asked me for 5 extra fliers to share with her co-workers.]
Corner store	Person shopping, 20's, Black	I spend a lot of time in Eastwood. I don't have a car so I always have to rely on the bus. I really dig the neighborhood; I'm walking around here all the time. There's a lot of empty buildings though that could be put to better use, even here on Telephone you have the old school up ahead….and a lot of empty lots too.
Matamoros Meat Market	Worker, 30's in age, Latinx	I live over by Jefferson and Telephone. I bike to work because I don't have a car, but I like it except when it's too hot. I cut through the smaller streets cuz I don't trust drivers; sidewalks and streets could be better. (While taking the survey) I never thought about those sidewalks with the little bumps for blind people. I guess the neighborhood in general is not good for blind people...or imagine if you had a wheelchair. I have two little kids and we walk around the neighborhood a lot. Having free events for families would be nice.
Appliance store	Owner, 60's in age, Asian	Was really adamant about the issue of homelessness in the neighborhood. He mentioned that he's had a lot of issues with homeless people coming into his shop or "loitering" around the neighborhood. We shared info about the project and invited him to include that as part of the comments on his survey.

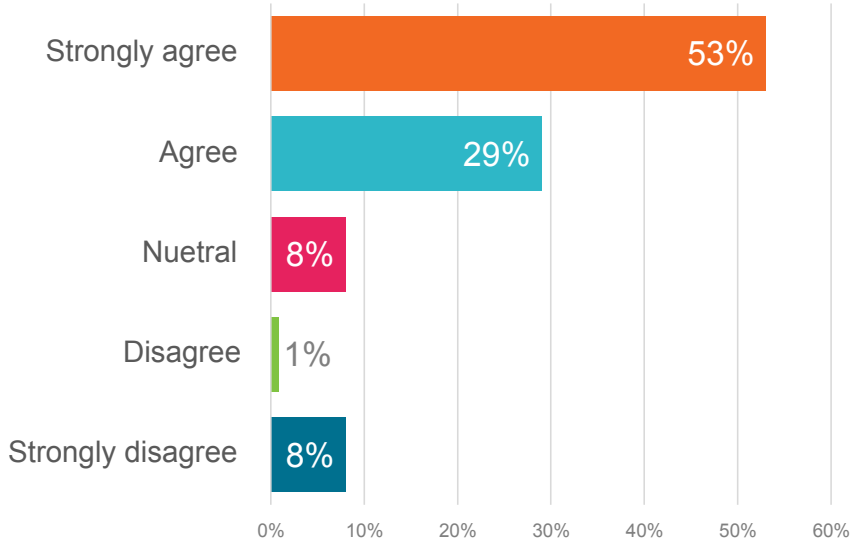
Online Survey Detailed Responses by Question

The online survey had a total of 31 questions. Each question and all responses are identified on the following pages.

Q1: Choose which language you're most comfortable with

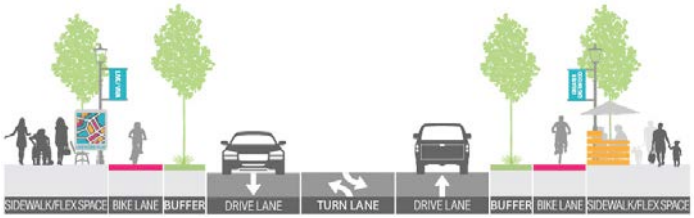


Q2: Goal Statement: Re-imagine key corridors as Great Streets to prioritize safety, support economic opportunity and continued community development, and expand access for everyone including those walking, biking, driving or riding transit. Strategies include: Developing the design of Telephone Road as a commercial main street for the neighborhood; Designing key street corridors to modern standards that better serve all users, include more bike lanes and better sidewalks; Improving safety and intersection operations; Enhancing pedestrian space with trees and better connections to adjacent developments. Please indicate your level of support for this statement.

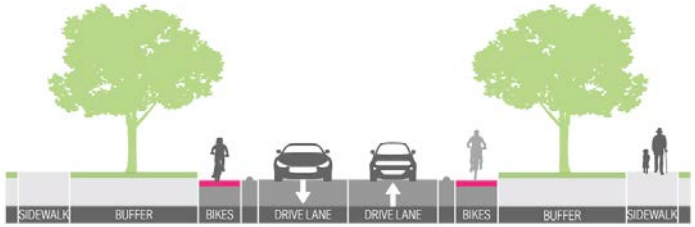


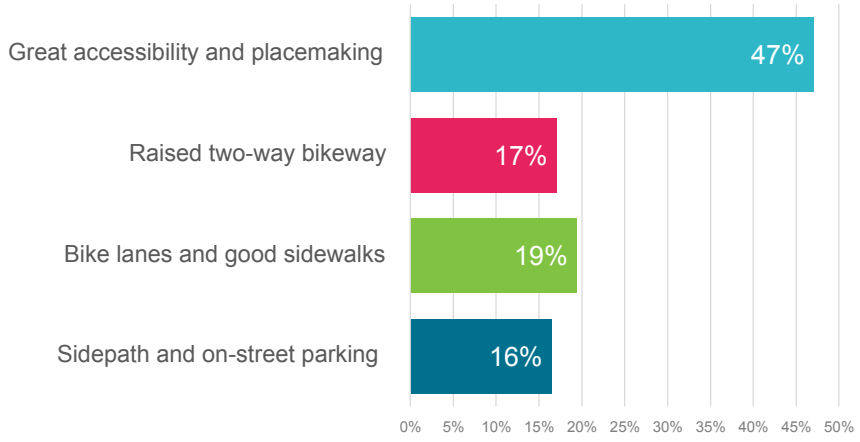
Q3: The images below show various examples of street design options. Which are your favorites? Places a check-mark on up to 2 options in the thumbnails below. Image captions: Sidepath and on-street parking, Bike lanes and good sidewalks, Raised two-way bikeway, and great accessibility and placemaking

Great Accessibility and Placemaking



Bike lanes and good sidewalks





Q4: Please feel free to tell us what you like most about any of these examples:

Comment
Love more greenery and protecting pedestrians
Bike paths away from traffic. Free flow of veh traffic.
Fixing sidewalks and please no more bike lanes on the street.
Bike lanes and Better sidewalks.
On street parking
It's safer for everyone, those in vehicles, biking, and walking
I love the last option, but it doesn't seem to "work" with the neighborhood as it is currently developed.
There trees lining the street, the buffer for the bikes and the separate walking path.
I think they are all good ideas
These are all great if we had unlimited funds to spend on them. We don't. Property taxes are already outrageously high in Houston / Harris County--and are starting to rise aggressively on the East side now, too. Sure, it would be great if the city and county has wisely allocated funds for this type of thing starting a hundred years ago--but they didn't--so it's kind of too late now. The city / streets / communities are simply too shitty and run down on the whole--and there simply is no money--and really very little interest outside of each individual neighborhood--to do anything about it.
Safety of bike riders and pedestrians
Barrier between pedestrians and cars.
Streetscape that is accessible and safe for pedestrians and bicyclists.
Prioritizing safety for walkers and bikers
I like that it creates a safer space for bicyclist and pedestrians. They can enjoy their activities off the Main Street.
The all in one
It is imperative that telephone have more greenery.
The more safer the streets become the more lively the area will be. The more people going out will also be more people eating out- stimulating local economy.

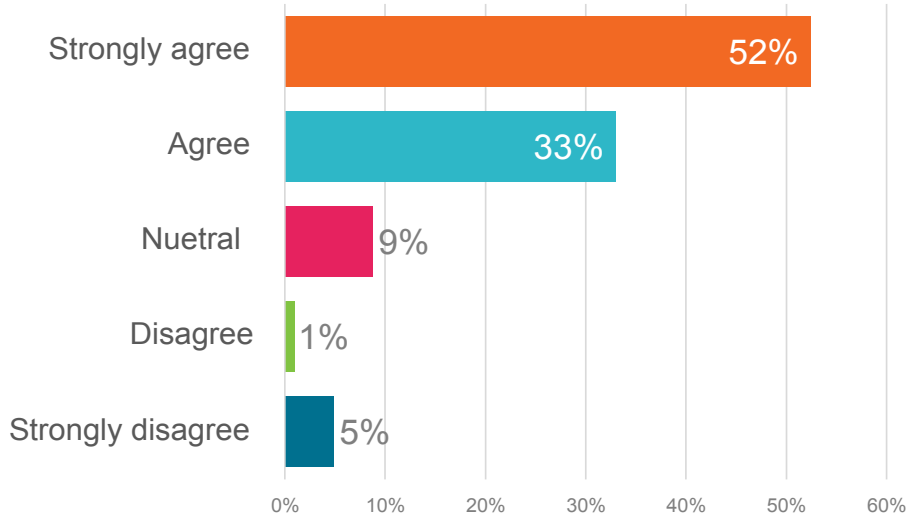
Q4: Continued

Comment
Enough space for everyone and parking space is always essential.
I like that bikes and pedestrians have their own lanes
I like that the buffer is between the cars and the bikes in addition to the bikes and the pedestrians. I really love the lights and the flex space. Would love to see the flex space being used for art exhibitions, seating, restaurants, etc.
The fewer drive lanes the better, this is great! Would love to see traffic slow down everywhere, and restrict thoroughfare traffic to Lockwood for N/S and Telephone/Leeland for E/W or McKinney
Raised two-way bike lane seems great -- but only with trees
I'm not a fan of the widespread availability of parking - I'm always annoyed at having to maneuver around parked cars on neighborhood streets while driveways aren't utilized to actually park vehicles! I like the placemaking idea initially but concerned any flex spaces would eventually fall into disrepair or misuse.
Separate lanes for different types of traffic seems safer.
There are more bikes on the roads now and they need their own lanes. Sometimes it is difficult to make turns and a turning lane makes sense.
Safe and prominent bike passageways. Safe and prominent pedestrian passage.
I like the bike lanes and on street parking. On street parking would be great for small businesses who would normally have to worry about providing parking would maybe bypass this rule if there was on street parking.
Great accessibility and placemaking is great a option for all types of transportation.
At sidewalk level bike lanes.
Qué hay espacio para personas especiales
Carrie de bicicleta de dos vias
El "buffer" se ve con más seguridad

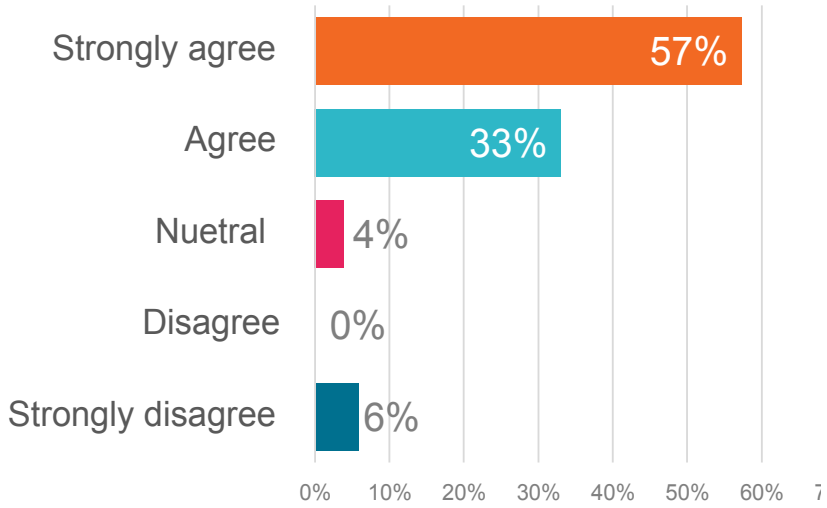
Q5: Goal Statement: Support a healthy, active community by expanding access and social connectivity to outdoor parks and greenspace, places for play, and environmental resiliency public spaces to build on and maintain Greater Eastwood's high quality of life. Strategies include:

- Expanded shade tree coverage;
- Enhancing park and play spaces;
- Providing plazas and social spaces for community interaction;
- Daylighting Slaughter Pen Bayou as a natural space

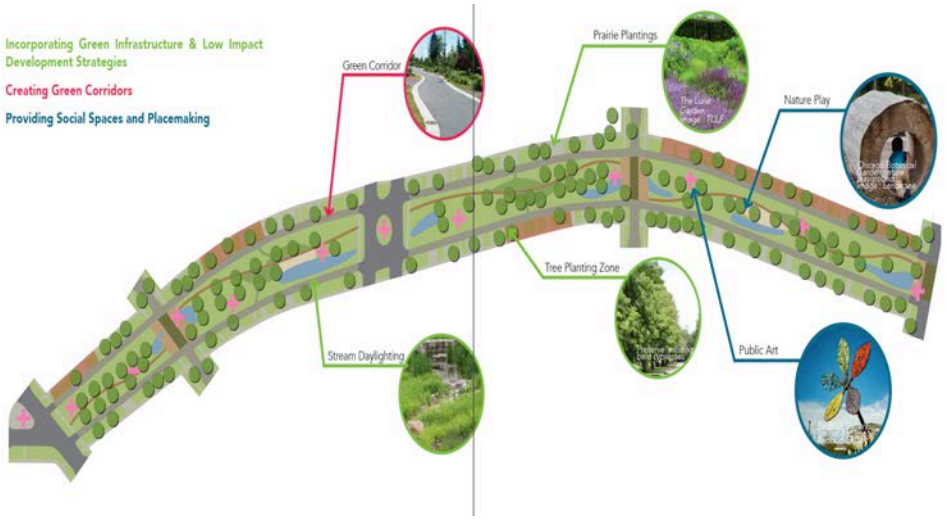
Note: daylighting is uncovering the bayou to be visible instead of flowing entirely underground. Please indicate your level of support for this statement.

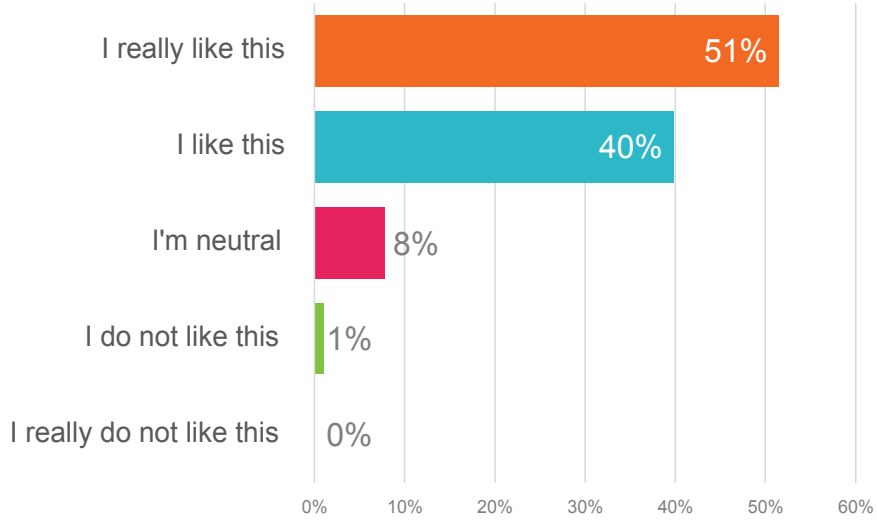


Q6: Indicate your level of support for this statement: I think that providing new parks or enhancing existing parks with multi-generational (children, teens, and older adults) spaces and programs is important.



Q7: This is an example of a "green corridor" that incorporates natural elements, daylighting, and social and play spaces. Please indicate how much you do or do not like this idea for use in Greater Eastwood.



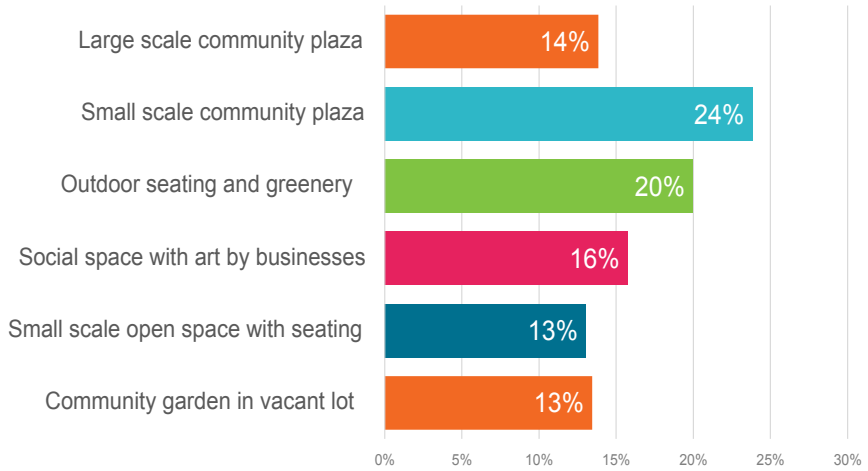


Q8: These images highlight examples of social spaces and plazas that could be incorporated into parks, streets, vacant lots, or other areas within Greater Eastwood. Please check up to 3 options that you would like to see most in your community.

Small scale community plaza

Outdoor seating and greenery

Social space with art by businesses



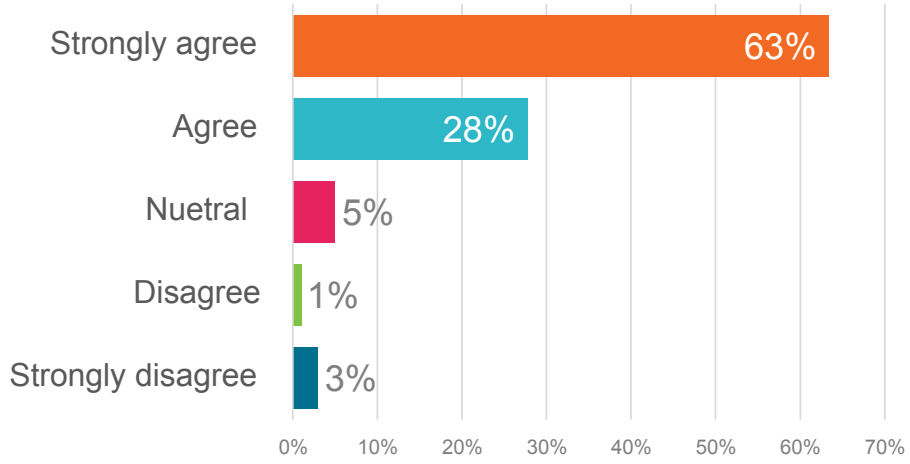
Q9: (Referring to Q8) Please feel free to tell us what you like most about any of these examples:

Comment
Open to all people: unhoused and others
To have a scenes if community but still keeping the Hispanic heritage
Need. Places to go outdoors and enjoy the day nice and well taken care of.
How would we keep the homeless from taking over and building encampments?
They are very important
Being able to walk to these places
This survey is poorly designed. You are jamming too much stuff in some questions--like #5--and not asking for or allowing enough feedback on most questions. If you really want to know what we think / feel--don't just make us choose between multiple versions of YOUR ideas. Plus, question #8 for example is dumb because there is no context to the choices. ALL of the options in #8 could be great--in the right place or the right context--or none of them--for the same reason. Honestly, the city / government has done a pretty poor job historically in making these kinds of decisions. If you want to know what people REALLy want in any given area--simply pay attention to where they are going and what that are doing already--particularly in the private sector. It's not that complicated.
Small, quaint areas are so nice if maintained. Art of all types will be great!
Small scale, decentralized locations for diverse community to gather.
The outdoors brings people together, I feel like the more places there are to be active and creative, the better.
Being out in the open in the greenery
These are things that our neighborhood needs the most. Being raised in this neighborhood, it would have been great to experience more community-geared events and having spaces such as the ones selected y would strengthen our bond as a community as well as leaving a greener area for later generations
In my experience in a different town, it takes a little bit of time for new areas to be used regularly, you want to start off large & in an open area. I have seen smaller scale social seating areas run down by gambling & illegal trade. If you start large & in an open area, the less likely the area will be used for counter productivity.

Q9: Continued

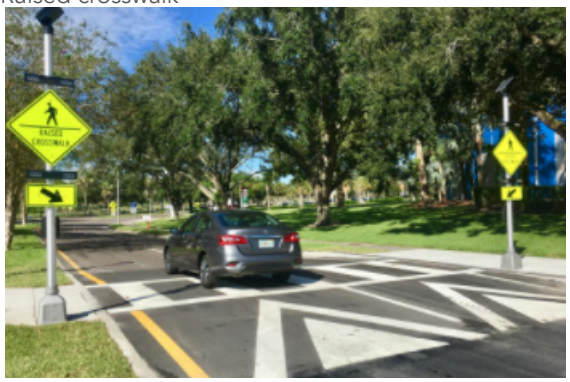
Comment
Green space and nature
Please please please create those community plazas! This is the future of public space for Americans as a whole. Europe has done such an amazing job of creating such spaces and to have Houston incorporate them into our city would truly be life changing for many. The most important aspects though are seating, umbrellas, shade trees, wide spaces, and greenery. The really great thing about these plazas is you can include diverse "amenities" like art work, seating, water fixtures/fountains, bike rakes, shade for walkers, drinking fountains, and mini-green spaces.
This is a great direction. You need more examples for kids, this is all mainly stuff for adult activities. Playgrounds, for examples, and open fields and play areas with a lot of tall trees and shade.
Please incorporate play areas for kids. Worry its going to be just a payday for developers. ALL these ideas need to paired with affordability and and anti-displacement agenda.
All of them- public spaces that encourage people to interact.
Son espacios abiertos y suficientes para mantener las distancias
Los jardines comunitarios en lugares baldíos y botes de basura
El jardín comunitario

Q10: Goal Statement: Leverage the abundance of high-quality schools in Greater Eastwood to create a Hub for Education. Focus on access to schools for children and families to walk or bike and create community partnerships and programs that involve schools and children, broadening the scope of learning in the community. Strategies include: Expanding sidewalk and bikeway networks to provide safe routes to school; Developing school access plans focused on safety and accessibility around schools; Involving schools in gathering data to track how kids get to school and sidewalk quality to improve experience; Building partnerships between schools to better support goals. Please indicate your level of support for this statement.

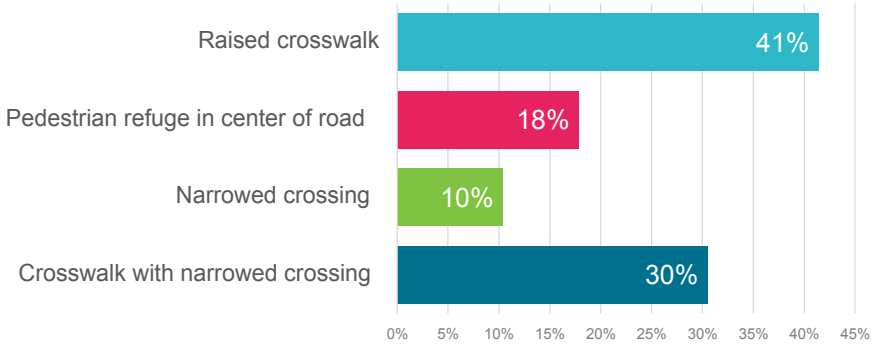


Q11: The images below represent different options to improve roadway crossings near schools for kids. Please indicate up to 2 type(s) you would most like to see in your community.

Raised crosswalk



Crosswalk with narrowed crossing



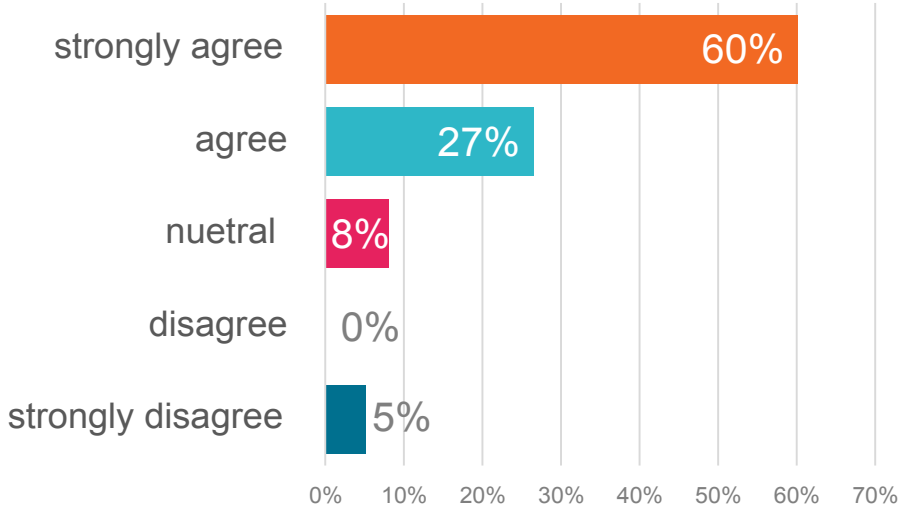
Q12: (Referring to Q11) Please feel free to tell us what you like most about any of these examples:

Comment
LOVE using schools and asking children their input. I have MANY students that take public transportation, walk, or bike to school
No more blocking streets for bike riding or bike lanes!
Raised crosswalks are best people disregard pedestrians.
There are so many schools in the area where kids & parents both walk. It needs to be safe for them when crossing busy streets like Lockwood, Telephone, etc.
Nobody uses crosswalks anymore. If you raised them, drivers would at least have to slow down. It might encourage more people to use them.
Meh. People are always trying to use "the children" as some bullshit excuse to spend money or make changes. Kids are dumber and more helpless today than they've ever been--because they've been given too much and coddled too often. I used to ride my bike for miles to school every day--or take the HISD school bus. Nobody picked me up in front of my school every day like helicopter parents do today. And I used to get high every day before and after school--and we're talking middle school and high school--and I turned out just fine--went to college--have started several successful businesses--and I own millions of dollars in real estate today. And virtually zero of that is because of public schools are fancy crosswalks or any other bullshit like that. 99% of that was good parenting and going to a good private school from kindergarten through 3rd grade.
Safer crossings. Shorter distances to cross and more awareness by drivers. Drivers will slow down on skinnier roads.
I like that they are flashy, hard to miss and easy to spot.
Where the cars actually have to slow down, and give the pedestrian enough time to walk to the other side of the road
One of the most dangerous areas for students to cross is between Telephone and Dumble. There are two high schools and one middle school in the vicinity (along with an elementary a block down) and yet there are no crossing guards or 'school speed limit' signs posted for cars. Students have to cross with the hope that card twill, which many do. This is an issue that will get resolved when there's an uptick in vocal concerns, or, unfortunately, and accident happens.

Q12: Continued

Comment
The raised crosswalk looks like a great option. Cars will have to slow down.
Enough space for children and not inconveniencing carsand creating traffic.
Any of these options would be great honestly. I like the narrowed crossing and the raised crosswalk because it would hopefully cause drivers to slow down. Please add pedestrian walking signage. Houston, in general, doesn't do a great job of posting up signage for pedestrian crosswalks and often times, the paint on the crosswalk gets faded so cars don't realize they are coming up to a crosswalk.
Yes! I don't feel like my kids are safe enough on streets like Polk Street, and the Polk/Lockwood intersection. Related to this, everyone who lives in Eastwood should send their kids to our awesome schools here.
I'm supportive of any method to slow down drivers and make crossings safer. Narrowing or raising lanes are two ways to do it.
The narrowed crossing causes more traffic. The raised crosswalk is good to get drivers to slow down.
What about pedestrian lights? And heavy police presence in school zones.
Porque tiene señales y eso ase que las personas entiendan
Paso de peatones elevado
Creo que es mas seguro
Me gusto que tengan esa ideas de tener la comunidad con muchas detallistas que poder jugar,aprender,convivir con otras personas y muchas cosas más

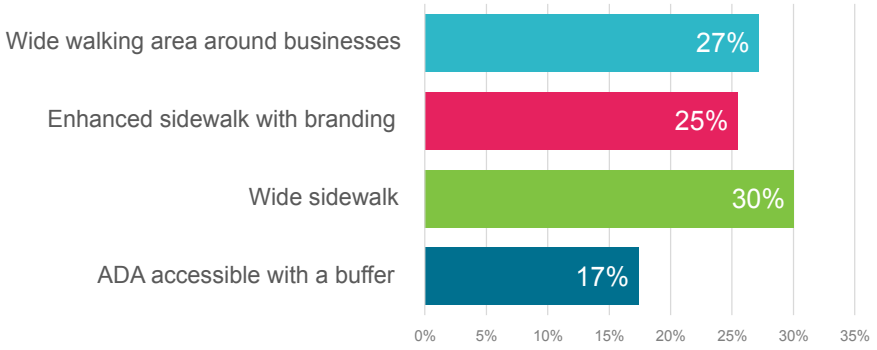
Q13: Greater Eastwood will be one of the most walkable, transit, and bike-friendly neighborhoods in Houston by building on the connected street grid, frequent transit services, and opportunities to improve places for people to walk and bike. Strategies include: Expanding walkability beyond key corridors to serve neighborhoods; Develop a program of sidewalk and safe crossing improvements; Improve bus stop access and customer experience; Develop a well-connected bike network; Providing expanded bike share linking neighborhood to great Houston system. Please indicate your level of support for this statement.



Q14: The following images focus on desired sidewalk quality. Please choose up to 2 image(s) that you would most like to see built in Greater Eastwood.

Wide sidewalk

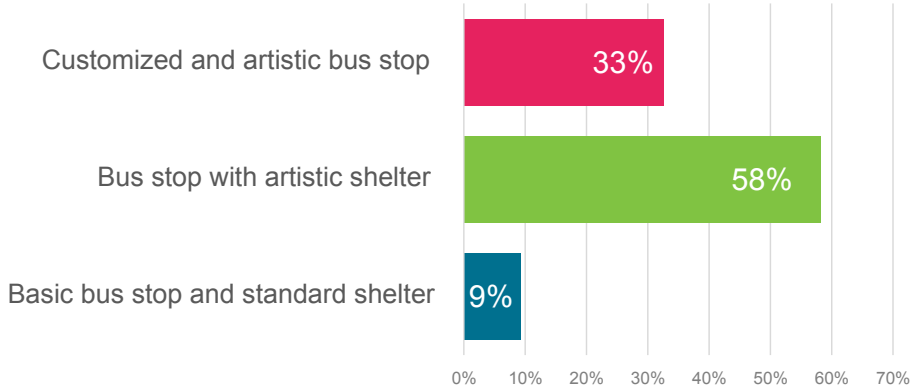
Wide walking area around businesses



Q15: Please indicate the type(s) of shelter you would most like to see in Greater Eastwood.

Bus stop with artistic shelter

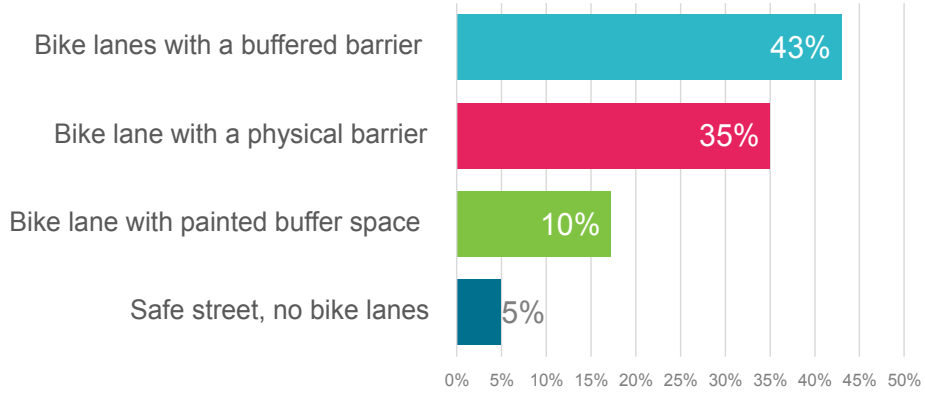
Customized and artistic bus stop



Q16:Please indicate the type(s) of bikeways that you would feel comfortable riding on or would most like to see in Greater Eastwood. Choose up to 2.

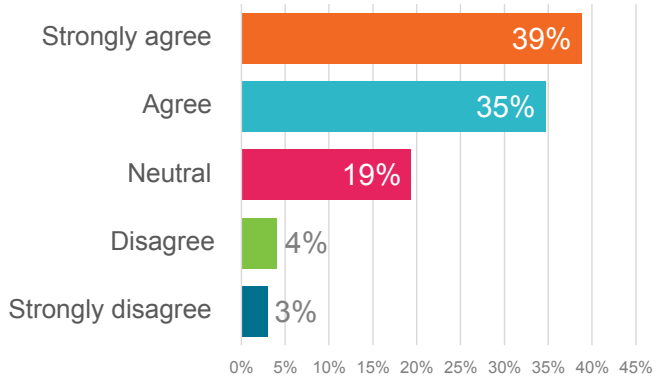
Bike lanes with a buffered barrier

Bike lanes with a buffered barrier

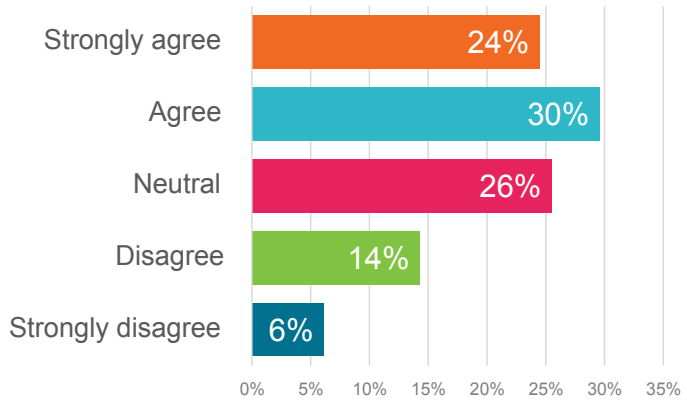


Q17:Please indicate the type(s) of bikeways that you would feel comfortable riding on or would most like to see in Greater Eastwood. Choose up to 2.

A. I would like to see more bike parking at community destinations



B. I would likely use bike share if the stations were convenient to where I wanted to go. (Bike share is a short-term bike rental from kiosks that must be returned, like B-Cycle)

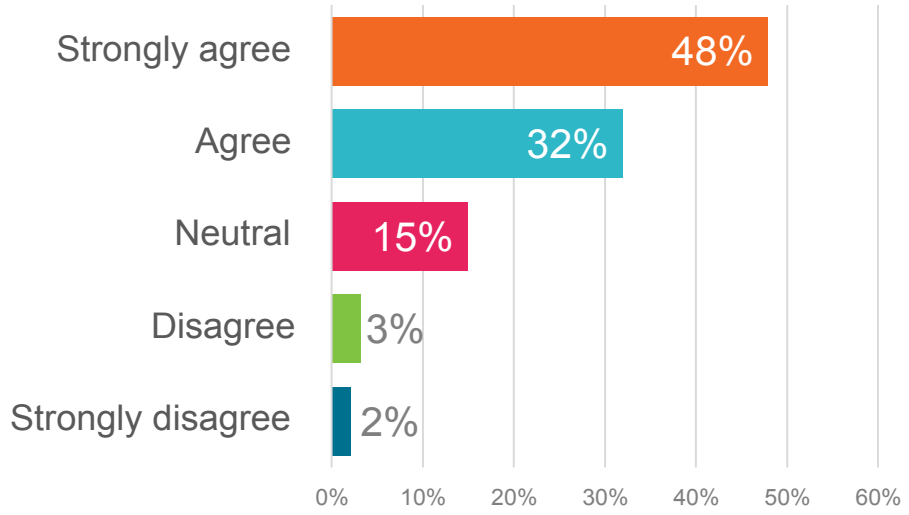


Q18: Please feel free to tell us what you like most about any of these examples:

Comment
Love ADA accessibility especially for the elderly and differently ambled in our community, love bike likes BUT NO TO SAFE STREETS. This needs to all be open and accessible to all people everywhere
Ada accommodations
"I would love to rent a bike and ride I have no space maintain one no space.
I have my own bikes.
Places that aren't walkable can be pretty bikeable. Still makes it easier for people to get around and alleviates the need for cars/parking lots.
A bike lane with painted buffer space works well & will cost the community a lot less. Bike sharing may work for a while but it didn't seem to last in my town, they were eventually being stolen.
I really love the artistic bus stop idea! A buffered barrier is mandatory for bike lanes!
Buses are essential for many. I think there are too many on Polk Street. Would be best to focus them all on one route, Telephone makes the most sense, to Leeland and then downtown. Sidewalks on Telephone are too close to the road, and I would like to see them and the streets there cleaned more often, it's a little rough and neglected in places. One major problem to address is stray/loose dogs, which chase bicycles and are a big problem for taking kids on walks. I like dogs, but I absolutely hate this problem
I'd like to see bike/ped only streets too. I disagree with "enhanced/branded" sidewalks bus shelters, etc. Functionality and accessibility is what will make a difference. A lot of those touches are pretty whack. Give artists real agency if you wanto engage them in projects.
I prefer to see residential sidewalks improved throughout the neighborhoods. The sidewalks pose such a hazard that it is not feasible for children to play or walk on the sidewalk and must walk in the streets.
I have a bike so I don't need a B cycle BUT I often need somewhere to lock it up.
Es bueno para no terminar asidebtes

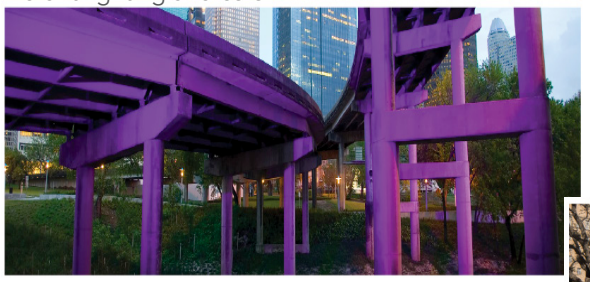
Comment
"Again, this survey is poorly designed--so you are going to get shit outcomes. Many of your questions REQUIRE an answer... like ""choose up to two blah blah blahs that you blah blah blah""; the survey FORCES you to choose one or more of the options--even if you don't like or support ANY of them. That's stupid--because if I HAVE to choose at least ONE of the options to advance--I'm just gonna pick something randomly--which will skew your results. ""none of the above"" should always be an option. Ok--back to BIKES: Houston is a hot, rainy, humid, traffic infested shit-hole of a town. Always has been; always will be. And that's why cycling has never been--and never will be--a viable year-round option for commuting or running errands. No amount of ""infrastructure"" will ever change the climate or the car-centric culture of Houston / Harris County. Never. Nobody wants to get up in the morning, take a shower, put on some nice work attire--then get on their bike and ride to work in 90+ degree 90% humid conditions--and be soaked to the bone in sweat when they get to work. And since the weather / climate window for commuting is very small here--just a few months at best--people will just never develop the habit of consistently using bikes for commuting here. Never. (Aside from, say, poor people of course--or people who have lost their license, etc.) I bike up to 5000 miles a year sometimes... but strictly for exercise and social groups. I know hundreds of cyclists in town... but very few who commute. Again, stop trying to CHANGE pre-existing behaviors that exist for very good reasons. You can certainly try to improve bicycle SAFETY on existing roadways and trails--I'm all for that--but you're not going to significantly impact the number of people who are using a bike to commute regularly in Houston. Ever. And you don't need fancified sidewalks--you just need ""OK"" / ""average"" but consistent sidewalks--that are in good repair--for walkers (and people in wheelchairs)--not cyclists. Generally speaking the state of Houston sidewalks and curb-cuts at intersections is deplorable and embarrassing. I've lived in many other cities and Houston's road and sidewalk infrastructure quality in general is by the far the worst and most dangerous if any place I have ever lived. I am much more likely to have a bad crash on my bike simply riding on Houston roads than I am to get hit by a car on the same roads--and that's saying something. Huge cracks between road slabs, pothole strew roads, horribly RR track crossings that are completely treacherous, sidewalks that just end suddenly--or end right into a giant ditch... the dangers in Houston are endless.

Q19: Goal Statement: Build on and expand the culture and history Greater Eastwood community is known for through placemaking that enhances the public realm. Strengthen the definition of the community's culture through signage, gateways and plazas, public art, furnishings, and unique materials. Strategies include: Placemaking in public plazas and gateways; Expanded public art and signage to enhance community connectivity and culture. Please indicate your level of support for this statement.

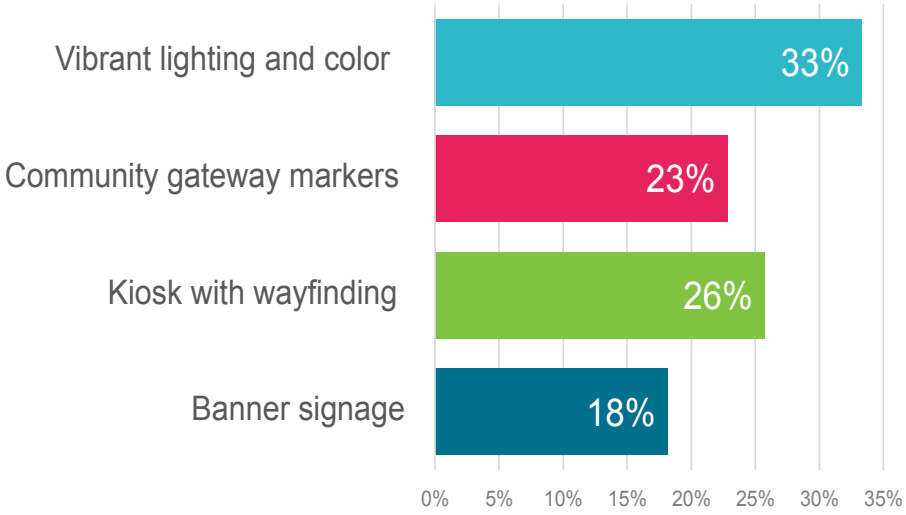


Q20: Please indicate which type(s) of placemaking below you would like to see incorporated into Greater Eastwood that would reflect and communicate the culture and history. Choose your top 2.

Vibrant lighting and color



Kiosk with wayfinding

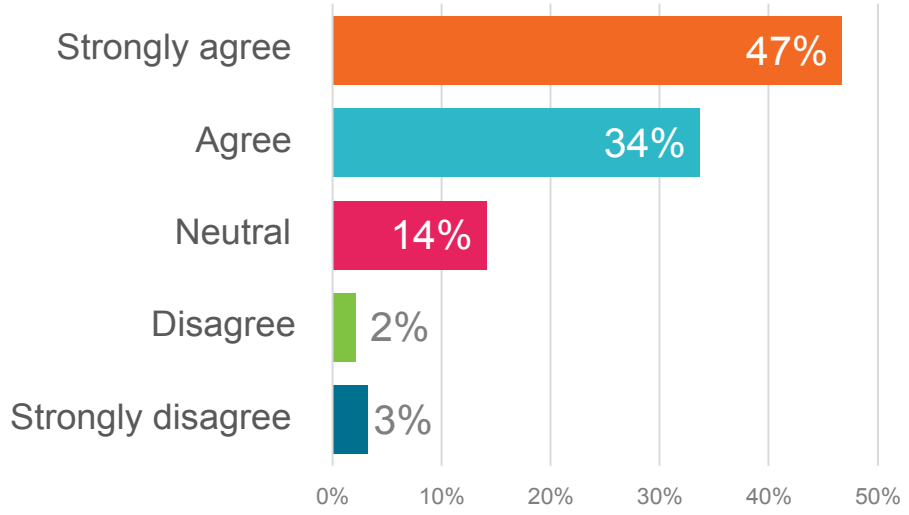


Q21:Please feel free to tell us what you like most about any of these examples:

Comment
Community gateway markers!! We are facing gentrification and many new people and businesses are trying to rebrand East End as Eado, which we are not
I like the definition of the area that these 2 give. The way finder seems like it would require upkeep and I haven't read about upkeep funding. I like the vibrant lights, but they only make a difference at night.
I like the lights too
Still making me choose something even if "none of the above" is the better choice.
I was forced to pick two options here but actually I think banners, kiosks, community gateways, and vibrant lighting are only superficial changes. I would rather see resources directed to community-based bottom-up cultural and arts projects and organizations. I associate all of these—banners, kiosks, gateways, and colorful lights—with gentrification that is not tied to the community or its interests. For example the very corporate and ugly "Welcome to East End" signs on Lockwood. This is not useful for the community. It is also not in touch with the needs of long-term residents.
Banners are good along dense walkable commercial corridors. Kiosks with wayfinding are good in less dense areas.
The removal of neighborhood specific signs such as the Second Ward and Magnolia Gardens sign was a complete lack of respect for the original residents and a obvious erasure of the history this neighborhood has. The kiosks and gateway markers would at least honor the original residents and lee the history of our neighborhood alive.
I really like all of these options. It was not clear to me what the community gateway markers was. I could not tell from the pictures. The city really needs community plaza space and a lot more art being showcased around town. This can be in the form of outdoor exhibitions, lighting and color, or even just unique green space designs. We really need our town to come alive in color and be unique! We have too much concrete and mundane looking buildings!
I just don't think this is what makes a neighborhood truly livable -- I more support affordability for artists to live and work in the community, and opportunities for creative people to design their own projects with community support. Otherwise its just urban planner shtick. We know we live here, we don't need signs to say so. I couldn't choose none so I chose kiosks because that at least could be informative on some level...

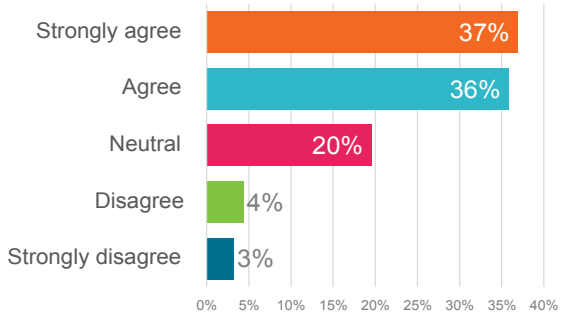
Comment
This is fine, but it's not how culture is produced or communicated, especially not here. Instead, I would give people more opportunities to do what they want with this space and stay out of their way
Muy lindo y colorido
Quiosco seria una magnifica occion
Kiosko de orientación con mapa del area

Q22: Goal Statement: Greater Eastwood is prime for leveraging infrastructure investments in transit and street improvements. These investments can support job opportunities and diverse housing options to meet the needs of the community. Greater Eastwood is rich with opportunities for more economic activity, new housing options, and walkable development near areas served by high-quality transit. Strategies include: Supporting appropriate Transit-Oriented Development aligned with METRORail Stations and Transit Centers (TOD is a walkable, dense, mixed-use development around high-quality, frequent transit service); Capitalize on redevelopment of transitioning industrial areas; Promoting local businesses; Supporting housing options and needs near transit and bikeway investments. Please indicate your level of support for this statement.

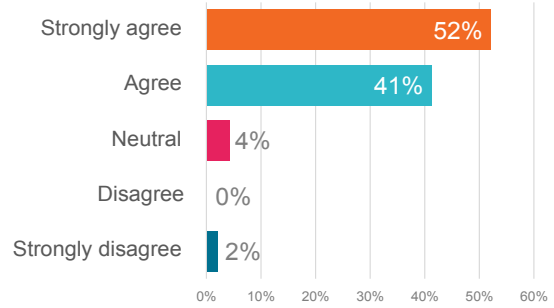


Q23: Indicate your level of agreement with the following:

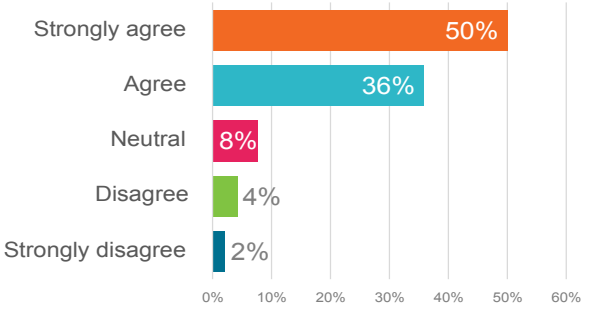
A. New businesses near transit are desirable



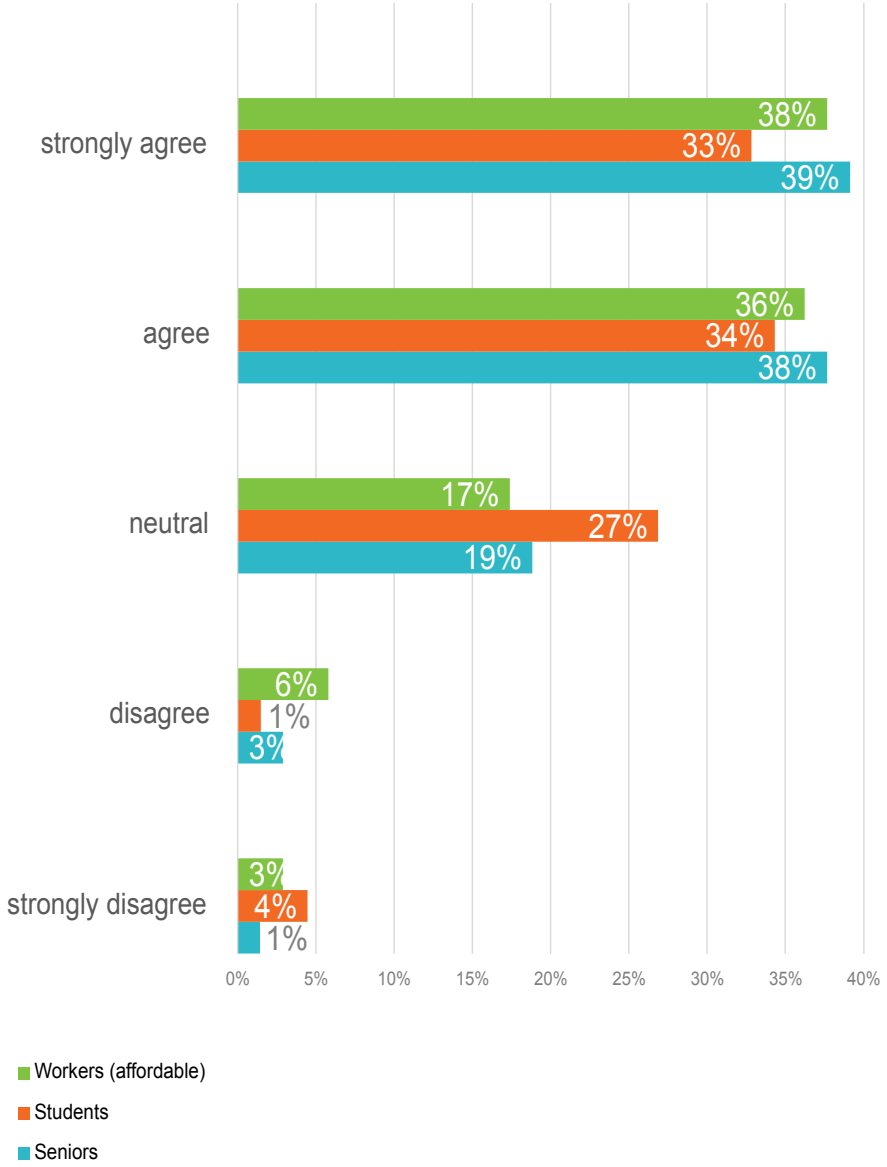
B. Public investments (street, sidewalk, placemaking, other improvements) would be beneficial to area businesses



C. Promoting shopping and dining in a "go local" campaign would help area businesses



Q24: I would like to see housing options located in walkable areas near transit for:

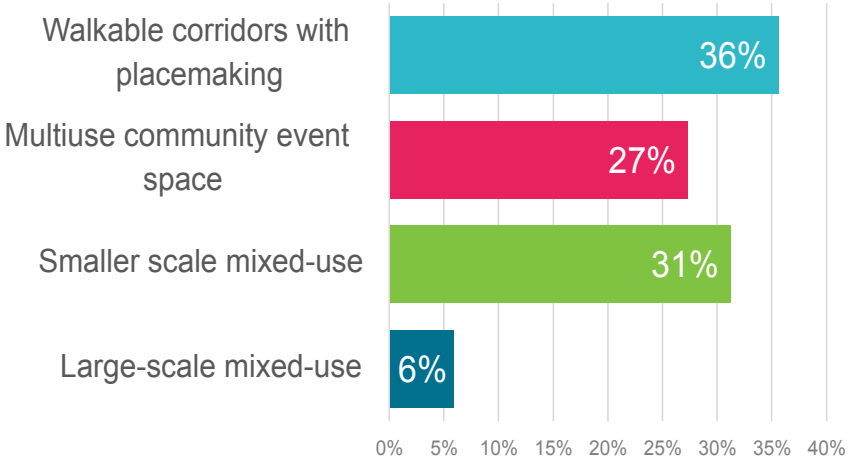


Q25: Please check the images that represent type(s) of development near transit (such as the area around Eastwood Transit Center) that you would most like to see. Choose up to 3.

Walkable corridors with placemaking

Smaller scale mixed-use

Multiuse community event space

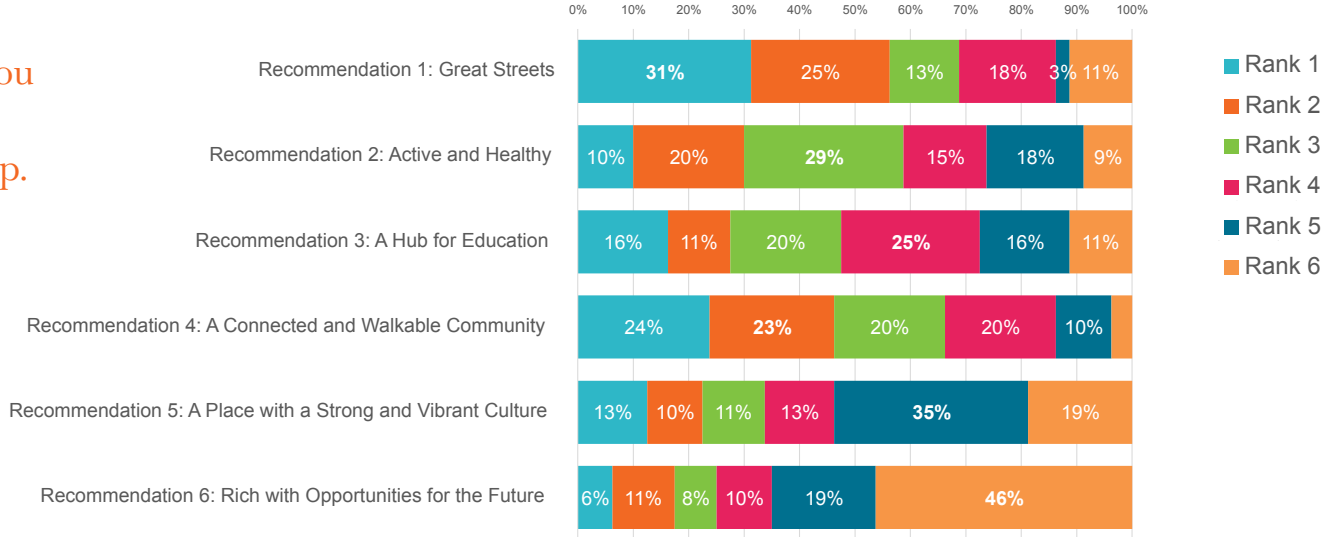


Q26: (Referring to Q24) Please feel free to tell us what you like most about any of these examples:

Comment
We need to maintain the integrity and culture of our East End community and especially allow for our low income residents who have lived here for generations to stay here. We need to pressure the city and developers for more tenant rights and not push out the people that make this community what it is
I'm not sure what a large scale development would be like. It seems too huge. Development should be kept small and repurpose old buildings as much as possible.
I like all of them
Some of these things "sound" good... but they aren't even things you could control or cause to happen. Like mixed use development--which is a function of market forces and building codes. And current rents on the east side simply do not support those kinds of projects--and probably won't for many more years--thanks to the drop in oil prices in 2016 and now the pandemic. Houston's lack of zoning simply doesn't allow much control over how any given area deveops. So you might as well focus your energy elsewhere--on battles you can win.
I think it is important to make sure that this new housing is affordable and accessible to long-term residents. I also think "Placemaking" here becomes some kind of cutesy add-ons to the neighborhood that alienate long-term residents. I would rather see the money invested in arts and culture projects in the neighborhood.
The choices would be more on the smaller scale than having a large building towering over the neighborhood
Don't bring three story townhouses to my neighborhood
"New transits are great, I see them get used everyday, but also a lot out of towners using the town as a checkpoint. A lot of them here seem to have no idea what crosswalks are. If there will be a new transit, there should be some type of sidewalk enforcement because it gets ridiculous.
There is currently new housing being made in my town , on the same street as a transit system, horrible idea. The street was already well known for high volume traffic, it will become unbearable, making people find alternate routes, thus congesting many new parts of town. If new housing will be made, it should be made in an area not too close, not too far from the transit.
Se mira divertido

Comment
I'm not a huge fan of the large-scale mixed use spaces because they usually consistent of 90% high-rise or apartment buildings. I'm in favor of large-scale mixed use spaces if the builders were more lower level and instead of all being so tall and suffocating.
What's great about Eastwood is that we have lawns/backyards, it's a family place, there's a suburban type feel, but it's also close to downtown and affordable. So that's a great balance right now: it's not a hip place it's a nice place though. Let Eado do more of the mixed use stuff and please keep those rows of cheap townhouse condo boxes out of Eastwood.

Q27: Please rank each of the recommendations in order of what you like most to least. Your most desired recommendations should be at the top.



Q28: There are more great opportunities and needs than available funding for improvements in Greater Eastwood. Help us prioritize where potential funds should be spent by allocating 100 dollars to the project categories below. Place a dollar amount from 1 to 100 in one or more of the categories to indicate your preference for spending the total 100 dollars. *Note: Dollar amounts must equal 100 total. You do not have to place a number in every category.*

Recommendation 1 $14.30

Recommendation 2 $28.47

Recommendation 3 $12.14

Recommendation 4 $28.89

Recommendation 5 $2.09

Recommendation 6 $14.11

Q29: If you could prioritize one concept out of the recommendations presented for Greater Eastwood, what would it be?

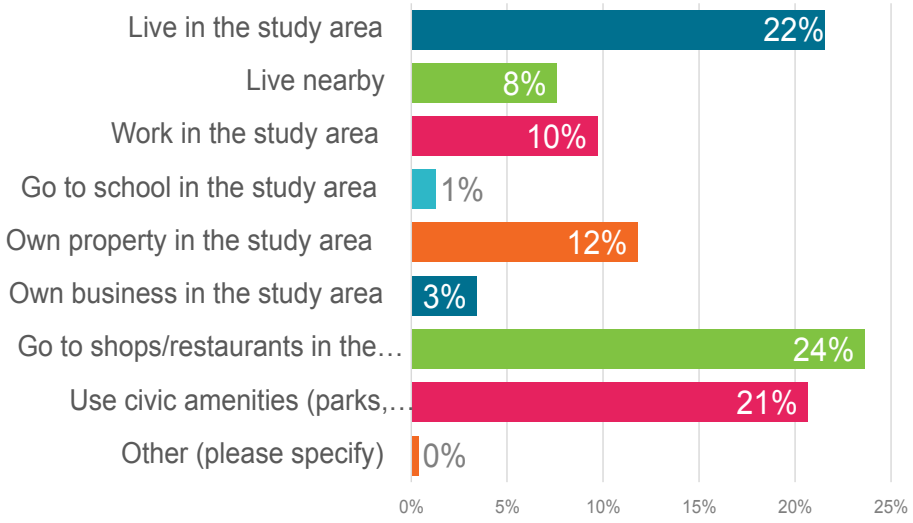
Comment
Affordable housing options!!!
Better bikeways and social plazas
Better living conditions, get rid of old deplorable buildings horrible in this area so sad to see.
More investment in parks, playgrounds (please more play spaces!) and public spaces and improving access to these family and community oriented spaces.
TREES
Street/sidewalk improvements which can tie in with safe access to schools/ intersection crossings. Safety is a priority.
Make it a pleasant place to explore! It's somewhat soulless to the outside eye right now - driving down telephone is pretty dreadful, but the addition of some nice trees/flowers/better sidewalks would change everything!
More green spaces
Bike ways
Take advantage of recently passed TODP and invest in walkable/bikeable places. Builds the bones for the rest.
Sidewalk
Encourage AFFORDABLE housing options, due to the gentrification happening in the Eastwood/EastEnd communities. People are getting kicked out of their homes to build condos and other non-affordable housing. Our community is being displaced and so is the culture.
The streets and walkways
Walk ability
If I could only choose one, it would be to encourage economic development. If the city can grow it's economy, then the other projects can be made in the future when the funds are there.
Plant more trees.
Schools as hubs for the community
Improve ALL sidewalks!
Great Streets
Connected and Walkable Community

Comment
More walkability and access to public transportation as well as beautification of the area.
Safer more multi-modal streets
I like the recommendations that create more outdoor experiences that families can enjoy, that encourage walking, playing, and hanging out in outdoor spaces, places where we can enjoy nature and outdoor exercise, where we can sort of escape from being indoors all day, and that are also going to be safe and relaxing
Connected and Walkable Community
The east side is such a mess that it would be really tough to pick just one issue to focus on... and so much damage has already been done with projects like the light rail system that it really is an uphill battle. But for sure the main issue--and the one that you strangely failed to mention at all in your survey--is crime--or better yet--the PERCEPTION of crime. I own properties all over the inner loop--including EaDo--and the #1 thing that people ask me about when inquiring about my east side property is "safety". And the irony is that of ALL my properties in town--crime is actually LOWER near my EaDo property than it is near my Montrose properties or my Afton Oaks properties--and the crime is also very different in nature. So, over-coming that erroneous public perception that the east side is "lower class" and therefore more "dangerous" should be part of ANY conversation about ANY improvements of ANY kind in that area. So, instead of a "buy local" ad campaign, maybe a "we're safer" campaign might be better in the short term. Additionally, helping to create, organize, and support things like neighborhood watch programs and perhaps using new technologies--like cheap, web-based security cameras and devices like Ring doorbell cameras--to create a new and / or better network of collective / neighborhood security footage--to help police solve crimes faster--and to act as a deterrent as well. And perhaps every project on your list should have a policing / public safety / crime prevention element to it as well. But, yeah, the streets in Houston are always in a deplorable and unsafe condition--so that should generally be a high priority--especially if you are wanting to promote more cycling--not to mention the bike THEFT problem in Houston (and pretty much every major city in the world). Nobody wants to ride their nice bike to the store or the bar or to work--if there is no place to safely STORE it--and if the police never recover it if it does get stolen. And public art and more trees are never a bad thing--if it is good art. If you drive through the most expensive parts of Houston--and virtually ANY city in the world--what all of them have in common is big, mature, beautiful trees. Drive around the EaDo and you don't see a lot of those lining the streets. Oh, and the open ditches in most of the east side certainly aren't helping much. Getting proper storm drains and sidewalks and green space in front of more houses would certainly add a lot of value.

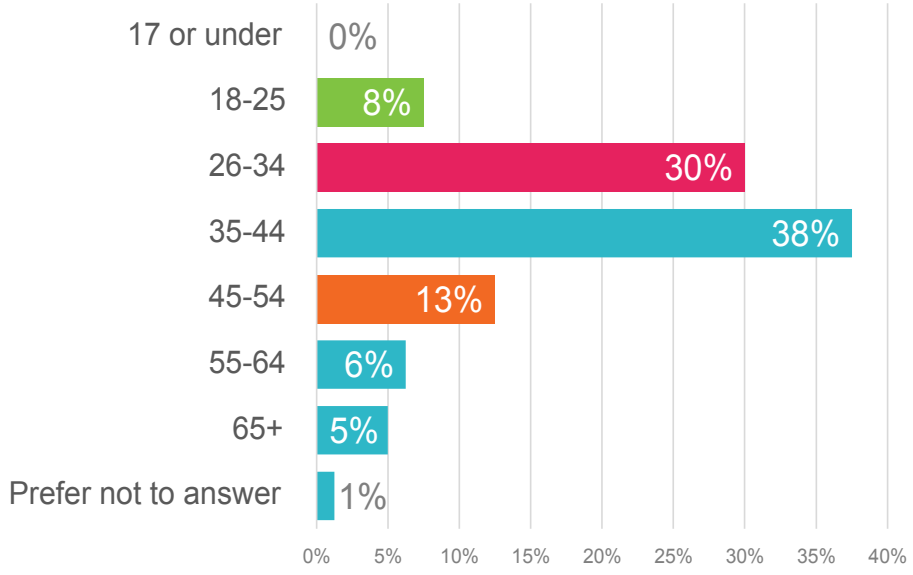
Q29 (Continued)

Comment
Muy buena idea
Una manera mas segura de cruzar las calles. Hay muchas calles que son diaginal que son peligrosas
Limpiesa general calles y peatones
Acceso a discapacitados
Corredores verdes
Árboles y plantas
Las calles y los parques para que se vea un poco mejor el Area; más arregladas más seguras

Q30: Please tell us your connection to the Greater Eastwood area (select all that apply):



Q31: What is your age?



Q32: Is there any additional information you would like to share as a part of the study?

Comment
Meadowbrook subdivision area needs to be developed more since we have the Meadowbrook Houston Botanic Garden open now. It needs beautification to fit in with the Botanic Garden.
Get rid of deplorable buildings that are Trashy
Please continue to reach out and be transparent with the public. Feel there needs to be more reaching out to local businesses/schools in the area as well.
The east end is awesome! I hope that it can be the next heights, without the high cost of property.
Basically you are trying to herd cats here. There are simply way too many things beyond your control in all of these areas that would make it impossible for you to really have much of an impact anywhere at all. The dike has way too many holes in it in Houston. The best you can really do is just hold on tight and enjoy the ride.
Parking and ride for light rail. There is no available parking. From most areas the walk is too long and too dangerous to use the rail
Taking this survey is a little worrying. Some of the questions use the word "redevelopment" I hope this isn't a ploy to knock down housing for low income residents to pave the way for upper middle class people to relocate here as seen in 2nd, 3rd, & 5th Ward areas. I do however like the ideas to create a safer space for excising community members which are predominantly low income minority families. Better roads, side walks and bus stops are needed in the area. Developing parks, recreational facilities and libraries sound like a great idea as well.
Don't forget about the residents that have been in this area for years.
Ideas are great improvements are already noticeable, but Finish all sidewalks
We need a grocery store!!!!!
mas seguridad creo esta faltando, mucho color mucho ajardin pero tambien neceitamos mas seguridad
Sidewalks are really important and bike lanes need to be safer; meet the needs of people who don't have cars

APPENDIX D: Air Quality Analysis

Photo submitted by Abby Fernandez as part of a photo contest for "What Greater Eastwood means to me"in Round 2 of Community Engagement.

Air Quality Analysis

Improving air quality is an important outcome for any transportation study or project. In addition to health and safety benefits of recommended projects, a shift in travel modes to increased levels of biking, walking, and transit in the study area will likely reduce the level of emissions from vehicle trips.

Analysis Methodology

While it is difficult to estimate the total impact from these improvements due to the number of factors that affect the total trips and the share of diverted trips in the study area, an estimation of the potential benefits has been made. This estimate is based on assumptions of the total trips generated from the region for both home and employment based trips as well as trip lengths, mode shift factors and emission rates.

The air quality benefits derived from implementation of the recommended improvements for the Greater Eastwood Livable Centers Study Area were estimated based on methodology below and are summarized in Figure D.1.

Catchment Area

The Greater Eastwood Study Area was defined as the catchment area to determine the number of trips that would potentially be affected by the recommended improvements.

Trips Generated

The following regional trip generation rates based on data from H-GAC were used to estimate the total trips produced in the catchment area:

- 6.54 trips per household
- 2.53 trips per job

Mode Share Shifts

Three mode share shift rates were estimated based on a comparison of existing travel modes in the study area and region. The three rates were identified as Scenario 1 at 10% mode share shift, Scenario 2 at 15% mode share shift, and Scenario 3 at 20% mode share shift. (Figure D.2)

Demand

The number of non-vehicle trips generated was computed by multiplying the assumed increase in mode split by the total number of trips computed for the catchment area. This resulted in three trip estimates respective of each scenario. (Figure D.2)

VMT Reduction

Total reduction in vehicle miles traveled (VMTs) were calculated by multiplying 2017 National Household Travel Survey estimates of trip length (2.38 miles for bike, 0.87 miles for walking, 8.32 miles for transit). Transit trip length assumes a 50/50 split between bus and LRT modes which have average trip lengths of 7.15 and 9.49 miles respectively. A total average trip length was calculated by estimating the share of each mode within the total mode share for the computed demand (4.45 miles per trip moved from auto to bus, bike, or transit combined). (Figures D.3 and D.4)

Air Quality Calculations

Emission reductions were calculated using the 2020 Mobile Source Emissions Reduction Strategies (MOSERS) guide from Texas A&M Transportation Institute. Specific emission rates per pollutant were assumed for an Urban-Arterial corridor, year 2018 for automobiles at 30 miles per hour. The emission rates were multiplied by the vmt reduction to identify overall air quality emission benefits for each scenario. (Figure D.5)

Figure D.1 Summary of Air Quality Benefits

Scenario 1: Total Annual Emissions Reduction		
Nox	1,774	kg/year
VOC	665	kg/year
CO	36	ton/year
CO2	4,261	ton/year
PM10	44	kg/year
Scenario 2: Total Annual Emissions Reduction		
Nox	2,660	kg/year
VOC	998	kg/year
CO	54	ton/year
CO2	6,391	ton/year
PM10	67	kg/year
Scenario 3: Total Annual Emissions Reduction		
Nox	3,547	kg/year
VOC	1,330	kg/year
CO	72	ton/year
CO2	8,521	ton/year
PM10	89	kg/year

Figure D.2 Mode Shift and Trip Calculations

Calculation Step	Equation		Quantity	Units
Texas City Trip Generators	a	Households	11,758	homes
	b	Employment	7,483	jobs
Trip Rates	c	Households	6.54	trips/day/job
	d	Employment	2.53	trips/day/home
Total Trips	e=(a*c)+(b*d)		95,829	trips/day
Mode Shift Rate	f	Scenario 1	10%	percent trips
	f	Scenario 2	15%	percent trips
	f	Scenario 3	20%	percent trips
Trips Replaced	g=e*f	Scenario 1	9,583	trips/day
	g=e*f	Scenario 2	14,374	trips/day
	g=e*f	Scenario 3	19,166	trips/day

Figure D.3 VMT Reduction Calculations

Calculation Step	Equation	Scenario	Quantity	Units
Trips Replaced	g=e*f	1	9,583	trips/day
	g=e*f	2	14,374	trips/day
	g=e*f	3	19,166	trips/day
Miles per Trip Replaced	h		4.45	miles/trip
Vehicle Miles Travel Replaced	j=g*h	1	42,634	miles/day
	j=g*h	2	63,952	miles/day
	j=g*h	3	85,269	miles/day

Figure D.4 Miles Per Trip Calculation

Mode	Share of Mode Shift	Trip Length (mi)	Weighted Miles/Trip
Walking	40%	0.87	0.35
Biking	15%	2.38	0.36
Transit	45%	8.32	3.74
Miles/Trip Average			4.45

Figure D.5 Emission Reduction Calculations

Calculation Step	Equation	Pollutant	Quantity	Units	Scenario 1	Scenario 2	Scenario 3
Emissions Factors	k	NOx	0.16	g/mile			
	l	VOC	0.06	g/mile			
	m	CO	3.26	g/mile			
	n	CO2	384.37	g/mile			
	o	PM10	0.004	g/mile			
Total Emissions Reduced	p=j*k	NOx		g	6,822	10,232	13,643
	q=j*l	VOC		g	2,558	3,837	5,116
	r=j*m	CO		g	138,988	208,483	277,977
	s=j*n	CO2		g	16,387,407	24,581,111	32,774,815
	t=j*o	PM10		g	171	256	341
Annual Days	u		260	days/year			
Metric Conversion Factor	v		1,000	g/kg			
	w		1,000,000	g/ton			
Annual Emissions Reduction	x=q*u/v	NOx		kg/year	1,774	2,660	3,547
	y=r*u/v	VOC		kg/year	665	998	1,330
	z=s*u/w	CO		ton/year	36	54	72
	aa-t*u/w	CO2		ton/year	4,261	6,391	8,521
	ab-t*u/v	PM10		kg/year	44	67	89

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