

**NORTH HOUSTON DISTRICT
SIDEWALK INVENTORY & FUNDING STRATEGY**



REPORT PREPARED FOR:



North Houston District

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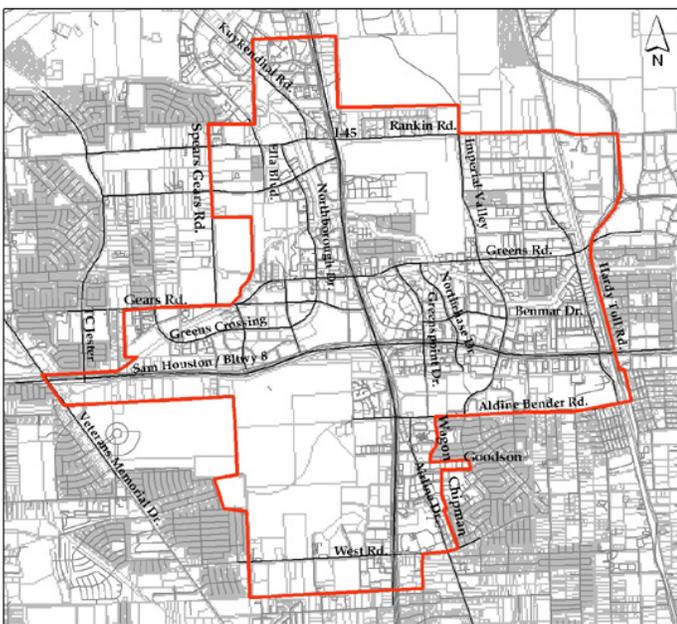
Alex Weinheimer

PROJECT BACKGROUND

The North Houston District is a 12-square-mile area bounded by the Hardy Toll Road to the east, East Airtex Drive to the north, Veterans Memorial Drive to the west, and West Road to the south (see Figure 1). The District is responsible for attracting quality growth and development by providing services and amenities that enhance property values and attractiveness as a place to live, work, visit, or invest. The District's vision is to be a well-planned, high quality community, integrating regional and metropolitan commercial development with a stable, desirable residential neighborhood. Improving sidewalks and pedestrian crossings is essential for the North Houston District to achieve its community vision for residents, workers, and visitors.

Walking is an important mobility choice in the North Houston District, due in part to the success of recent development such as the North Houston Skate Park and the significant transit usage within the District. There have been some recent sidewalk improvements made in the District and this assessment will help the District continue to make improvements for the community that help provide people with greater access and transportation choices.

Figure 1. North Houston District Boundaries



Walkability is a measure of how friendly an area is to walking and carries important community health, environmental, and economic benefits. The key factors that influence walkability include the availability, or absence, of sidewalks, building accessibility, safety, roadway and traffic conditions, and land use patterns. Communities that increase their walkability and invest in pedestrian infrastructure experience greater overall desirability and property values, and can be more effective in attracting commercial development to residential areas. Providing adequate sidewalks for both existing and future pedestrian usage will be key in establishing the North Houston District as a pedestrian-friendly environment.

This report focused on the availability of sidewalks and the connectivity of people to transit, community centers, schools, jobs, parks, and trails. By identifying where sidewalks currently exist within the North Houston District and analyzed in relation to these various points of interest, priority investments and funding strategies can be developed. The following sections identify the methodology utilized to identify and capture sidewalk conditions, key findings and priorities, and a fundamental funding and implementation strategy for the District.

New sidewalk at a bus stop along Imperial Valley



SIDEWALK INVENTORY METHODOLOGY

In order to determine where existing sidewalks and curb ramps exist, and their condition, an assessment scale was developed and utilized along primary roadways within the North Houston District's boundaries. This assessment was then mapped in Google Earth for the District to utilize in development of priorities and key pedestrian connections. The assessment included five levels of sidewalk quality ranging from exceeding standards to missing along with curb ramps identified at all intersection points

ranging in identified quality from meets standards to missing. These categories are color coded to the map and show key areas where gaps exist and where crucial connections are missing. Additionally, having the data in map format will enable the district to develop a network of projects easily when applying for grant funding that meet specific criteria, such as connections to transit or schools. See Figure 2 for condition definitions utilized sidewalk inventory.

Figure 2. Sidewalk Inventory Definitions

SIDEWALKS

Exceeds Standard

A sidewalk exceeding five feet in width, with a smooth surface and no obstacles.



Meets Standard

A sidewalk with a minimum of five feet in width, with a smooth surface and no obstacles.



Below Standard

A sidewalk that is less than five feet in width, has low pavement quality, is impeded by light posts or trees, exceeds maximum slope requirements, or presents other challenges to the user.



Needs Replacing

A sidewalk with unacceptable pavement conditions, which present challenges to the user, and is in need of replacement.



Missing

A location without a sidewalk.



CURB RAMPS

Meets Standard

A ramp meeting ADA requirements for slope and width, in good condition and oriented in the desired direction of travel.



Below Standard

A ramp that is too narrow or steep, in bad condition, or leads the user off of the desired travel path.



Needs Replacing

A ramp with conditions that present challenges for the user, and is in need of replacement.



Missing

A pedestrian crossing without a ramp connecting to the sidewalk.



KEY FINDINGS & PRIORITIES

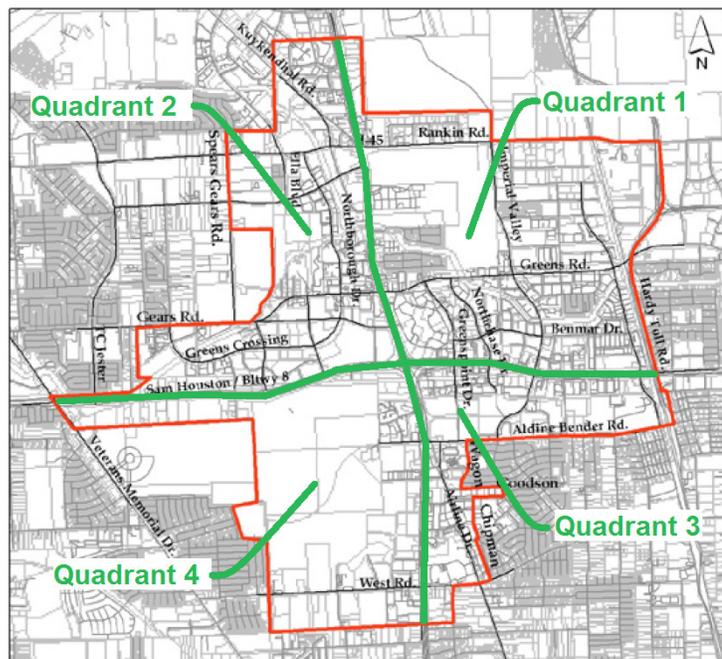
The North Houston District was divided into quadrants for the purposes of this sidewalk inventory as shown in Figure 3. The full map of sidewalk conditions is shown in Figure 4. Most notably, there are a few roadway segments that have higher quality sidewalks and curb ramps, but overall the District is lacking significantly in safe, comfortable sidewalk connections.

Quadrant 1 presents the highest opportunity area with a significant number of corridors that have no sidewalk facilities or curb ramps. There are also a number of businesses, residential areas, transit routes, and community destinations within the quadrant that if connected with sidewalk facilities would greatly improve walkability within the District.

Quadrants 2 and 3 show some areas of improved sidewalks and curb ramps, but have many areas with missing segments. These areas also present opportunities for improvements that would increase walkability by connecting residential areas to transit and key community destinations. Quadrant 4 has very few sidewalk facilities or curb ramps in good condition. However, this area is also less populated than the other quadrants with no transit service inside the quadrant and fewer community destinations.

Priority should be placed on facilities that attract people to places, such as jobs, transit, schools, and community centers, first. Expansion of the sidewalk network along those key corridors that provide important multimodal connections for the community should generally focus on filling gaps, upgrading existing facilities, then adding pedestrian amenities along existing facilities that meet or exceed standards.

Figure 3. District Quadrants

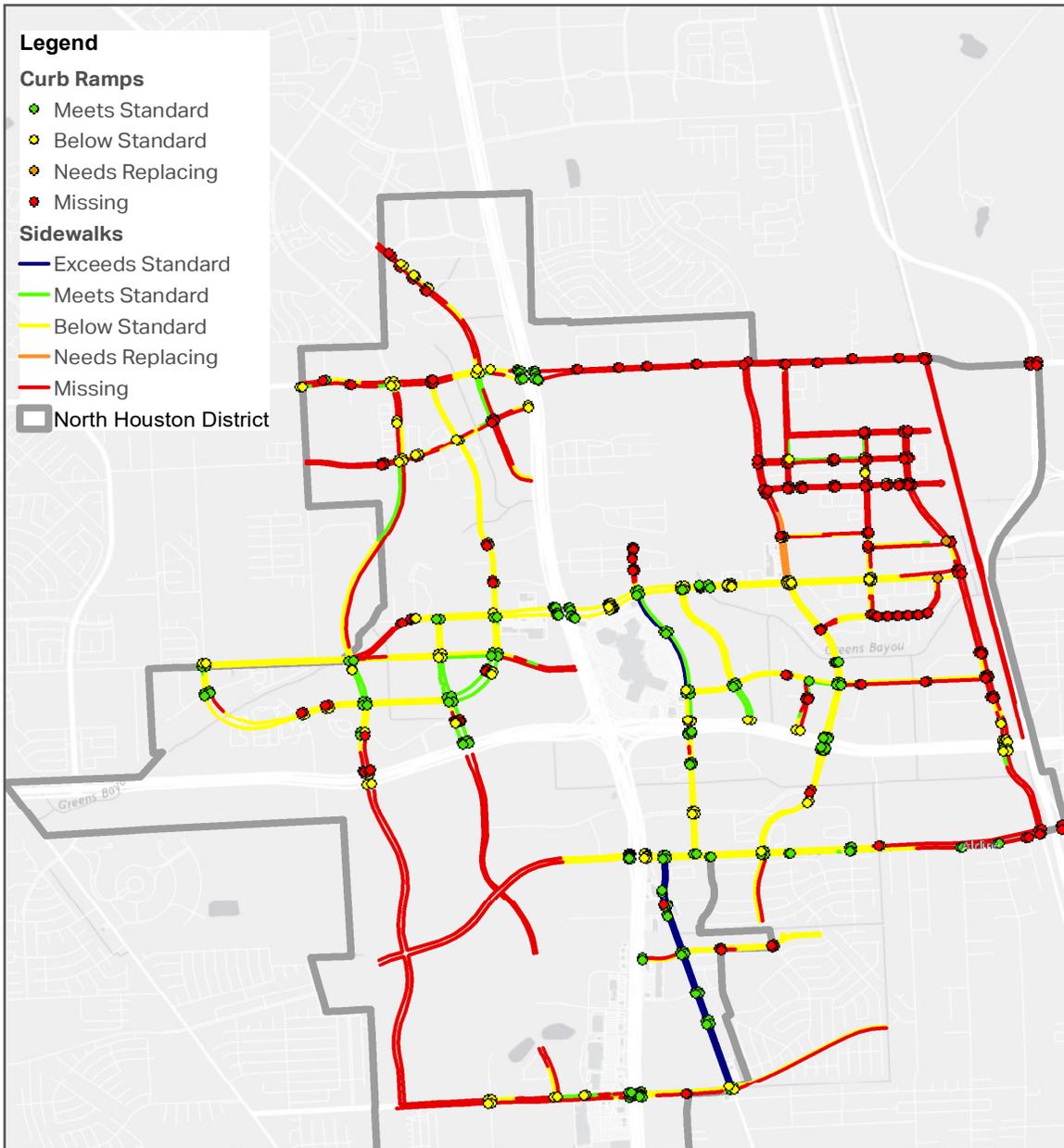


Sidewalk ending along Imperial Valley Dr



Pedestrian waiting for the bus on Imperial Valley Dr

Figure 4. Sidewalk Conditions



Sidewalk ending near residences on Cotillion Dr



Sidewalk desire line along Ella Blvd

FUNDING & IMPLEMENTATION STRATEGY

Strategic implementation will be key for the North Houston District to make meaningful sidewalk connections and best leverage their capital resources. There are three fundamental elements to employ for the District to successfully implement a well-connected, comfortable sidewalk network: partnerships, grants, and evaluation.

PARTNERSHIPS

As sidewalk facilities are vital in creating desirable areas that are walkable with high economic value, it is important for other public agencies, developers, property owners, businesses, non-profit organizations, and the community to work together with the District to create a solid foundation for walkability. Support from these entities in the form of financial investment, contributing to amenities, providing letters of support, and even volunteer time for beautification and enhancement of facilities can help leverage the District's capital funds and show community support for projects. This can be particularly important in obtaining grant funding as partnerships show a commitment and desire from those who will benefit from the project(s) to making lasting improvements within the community. In order to coordinate and partner with other agencies, North Houston District must be able to clearly identify what the benefit to the partnering entity is. 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 and amenity 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, 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.

GRANTS

Implementation is inherently tied to funding availability. It will be essential for the District to identify multiple funding streams in addition to their existing local funds to support implementation of a well-connected sidewalk network in the near-term and further in the future. Grants provide the District with opportunities to leverage additional dollars and stretch their financial capacity. Grants require that all projects meet federal ADA requirements and a local match that is typically 20% of the total project cost. Some grants also allow in-kind match to be provided as well, which can consist of things like staff time or equipment. Grants are highly competitive and typically have a short time frame to complete the application process.

It will be important for the North Houston District to identify which projects will require or be a priority to apply for grant funding. Grants are available from local, regional, state, and federal entities. In order to best utilize time and effort in applying for grants, while generating the highest possibility for funding, it is important to match the right project, or projects, to the right grant opportunity. Figure 5 on the following page identifies relevant grant programs and eligible project activities to help the District proactively identify potential funding sources. The following information further describes the most applicable funding programs.

- Surface Transportation Block Grant Program (STBG) funds are perhaps the most flexible federal funding available and may be used for nearly all transportation project types, including construction of sidewalk facilities, curb ramps, lighting, other amenities, and non-construction projects such as data collection and monitoring. STBGP funds are allocated to states, with 55% suballocated to the local Metropolitan Planning Organization (MPO). The Houston region's MPO is the Houston-Galveston Area Council (H-GAC). H-GAC holds a competitive process for distributing funds and typically holds a call-for-projects every other year, coordinating with approval of the Transportation Improvement Program (TIP).
- The Surface Transportation Block Grant Set-Aside Program (TAP - previously the Transportation Alternatives Program) allocates funding specifically for bicycle and pedestrian projects. Eligible activities include infrastructure facilities, safety and educational activities, and

Figure 5. Transportation Grant Funding Programs

Eligible Activity		FTA	CMAQ	HSIP	NHPP	STBG	TAP	CDBG
Pedestrian	Access enhancements to public transportation	✓	✓			✓	✓	
	Bridges/overcrossings	✓	✓	✓	✓	✓	✓	
	Bus shelters/passenger amenities	✓	✓			✓	✓	
	Crosswalks (new or retrofit)	✓	✓	✓	✓	✓	✓	✓
	Curb cuts and ramps	✓	✓	✓	✓	✓	✓	✓
	Data collection and monitoring for bicyclists and/or pedestrians	✓		✓	✓	✓	✓	
	Landscaping, streetscaping (bike and/or ped route; transit access)	✓				✓	✓	✓
	Lighting (associated with ped/bike project)	✓		✓	✓	✓	✓	✓
	Sidewalks (new or retrofit)	✓	✓	✓	✓	✓	✓	✓
	Signs/signals/signal improvements	✓	✓		✓	✓	✓	
	Stormwater impacts related to bike/ped projects	✓		✓	✓	✓	✓	
	Traffic calming	✓		✓	✓	✓	✓	

✓ = eligible

FTA: Federal Transit Administration Capital Funding (multiple funding categories, ex: 5310 programmed through METRO)

CMAQ: Congestion Mitigation & Air Quality Improvement Program (H-GAC)

HSIP: Highway Safety Improvement Program (TxDOT)

NHPP: National Highway Performance Program (TxDOT)

STBG: Surface Transportation Program (H-GAC)

TAP: Transportation Alternatives Program - Set Aside within STBG (H-GAC)

CDBG: Community Development Block Grant (HUD)

Safe Routes to School programs. These funds are subject to the same competitive process and allocation as the overarching STBG funds.

- Funds from the Congestion Mitigation and Air Quality (CMAQ) Improvement Program may be used to construct sidewalk facilities or non-construction projects. CMAQ funds are also allocated through a competitive process by the MPO, and typically match the same call-for-projects timing as STBG funds.
- The Federal Transit Administration (FTA) provides multiple grant opportunities that aim to increase transit ridership. Key infrastructure elements, such as comfortable access to transit stops and pedestrian amenities like shelters can make a significant impact on transit usage in a community. METRO has identified first-mile/last-mile access as a key priority for the agency. METRO is responsible for selecting projects that provide access to transit for communities with higher levels of elderly and disabled persons (Section 5310). This particular grant is typically awarded annually and has particular applicability within the District.
- The Highway Safety Improvement Program (HSIP), aims to improve roadway safety for all modes of travel. A highway safety improvement project is any strategy, activity or project on a public road that is consistent with the State Strategic Highway Safety Plan (SHSP) and corrects or improves a hazardous road location, or addresses a highway safety problem. The program has can provide funds for sidewalk infrastructure improvements. It is administered by the Texas Department of Transportation (TxDOT) and are typically allocated in an annual call-for-projects.
- Community Development Block Grants (CDBG) are provided to entitlement communities as annual grants on a formula basis to cities and counties. These grants are aim to revitalize neighborhoods, improve economic development, and provide improved community facilities and services. Eligible activities include construction of public facilities improvements, including sidewalks. Funding is allocated to Harris County and the City of Houston as entitlement communities and funding requests and opportunities should be coordinated with the local agencies.

Beyond those funding resources listed in Figure 5, there are additional sources of funding that may be useful. The Center for Disease Control (CDC) recognizes the nexus between active transportation and improved community health and has identified complete street-type infrastructure and improvements in the built environment to increase levels of walking and biking as a primary strategy to combat obesity. The CDC currently has the following grant programs, that can be used to fund projects that improve mobility and encourage greater levels of activity in the community.

- Partnerships to Improve Community Health (PICH)
- Racial and Ethnic Approaches to Community Health (REACH)

H-GAC also provides two Community Enhancement Grants funded through the Houston-Galveston Area Local Development Corporation that are designed to promote economic development through investments in creating quality places that attract people and activity. The first is the Community Trees Grant Program which provides up to \$2,000 to purchase trees for community-based plantings in parks, public spaces, and community gateways. The second is the Downtown Public Spaces Improvements Program that is intended to improve public spaces in the Downtown or community gateway areas. A wide variety of project activities are eligible, and include streetscape improvements, street amenities, lighting, sidewalks, and landscaping.

There are additional funding resources available through a wide variety of agencies and organizations, including the Texas State Energy Conservation Office (SECO), philanthropic organizations, and more. These funds may be applicable if the project incorporates elements that achieve the agency or organization's missions. For example, installing solar lighting as a pedestrian amenity as part of a sidewalk construction project could potentially make the sidewalk eligible for SECO funding. Philanthropic organizations have more frequently been assisting in building infrastructure that has a direct impact on communities, whether that be health, access to jobs, arts, and more. As projects are more clearly developed based on the needs and priorities of the District, additional, more specialized funding opportunities should be evaluated as well.

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 North Houston 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 or pedestrian usage, or economic value 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 North Houston District could signal which projects to further prioritize and invest in while building momentum and support for other projects that may be important, but provide less obvious impacts, such as shade, lighting, and other pedestrian amenities. This type of prioritization can only happen through monitoring and evaluating implemented projects.

OVERALL IMPACT

If the North Houston District utilizes the funding and implementation strategies at outlined above in connection with the assessment and prioritization of connecting the community to places of interest, jobs, recreation opportunities, and transit, it will be successful in improving walkability for the community and realize other benefits that will help to strengthen the community and improve desirability.