

- 34% of funding is dedicated to Downtown Overlay District sidewalks
- 28% of funding is recommended within 1/4 mile of Southwestern University
- 26% of funding is recommended within 1/4 mile of Georgetown ISD facilities



Faulting sidewalks create tripping hazards.

IMPLEMENTATION STRATEGIES

The pedestrian network within public right-of-way, within the city limits of Georgetown, presents a long-term asset management challenge in part because of its long useful life cycle, steady growth and cost of repair. It is appropriate that the asset management and financing strategies for the network account for Capital Improvement Plan (CIP) projects, ongoing operations and maintenance costs and accommodation of future network needs.

Existing Funding Sources

The Streets Department within Transportation Services is responsible for the maintenance and operations of the City's pedestrian network. The Streets Department relies on two main sources of revenue to complete its maintenance and operations requirements.

① The first and largest revenue source comes from the City's General Fund. Annual funding for sidewalk construction and maintenance is approximately \$75,000.

② The Unified Development Code (UDC) generally requires sidewalks on both sides of all streets having a right-of-way width equal to or greater than 50 feet. However, the UDC does provide for deferment of construction. To qualify for the deferment of residential sidewalks, developers must pay 20% of the total cost of the uninstalled sidewalk improvements to the City for allocation to a residential sidewalk fund. Although this mechanism is available for construction and maintenance by the Streets Department, there are currently no monies within the fund to do so.

Annual funding levels do not adequately support maintenance of existing infrastructure nor do they mirror the growth in the pedestrian network brought about by new roadway construction and development as required by Federal and State law. The project team recommends that City Council, related boards and commissions evaluate legal requirements and appropriate maintenance and operation standards which, when fully funded, support community expectations and legal requirements.

Summary of Approximate Costs

Preliminary construction cost estimates were developed for the sidewalk projects identified in the Master Plan. A breakdown of potential sidewalk construction costs, in present dollars, is as follows:

Table E3. Preliminary Plan Costs

Description	Estimated Fee
Priority 1 Projects	\$10,180,000
Priority 2 Projects	\$7,570,000
Priority 3 Projects	\$7,770,000
Remaining Citywide Projects	\$243,640,000

2015-2025 Maintenance Costs

The planning cycle for operations and maintenance will follow the same 10-year cycle proposed for prioritized projects. In determining life cycle costs, the project team reviewed industry literature and adopted best management practice life cycles for sidewalks. According to that literature, a new sidewalk has an expected useful life of up to 50 years; sidewalks in fair condition have an expected useful life of 10 years. If the recommendation to inventory the City's pedestrian facilities every 10 years is adopted, the project team does not recommend including facilities previously categorized as good or excellent, as these facilities are assumed to maintain their usable status until the next inventory cycle in 2025.

Through this Sidewalk Plan's efforts, the project team determined that \$5,540,000 is required to repair all currently failing and limited-failure pedestrian facilities citywide (excluding the Downtown Overlay District, whose repairs have been accounted for through the CIP process). The funding of Priority 1 projects through the CIP process will include roughly \$560,000 towards these repairs, leaving approximately \$4,980,000 required for maintenance of existing, failing infrastructure. At current staffing levels, the Streets Department can administer approximately five projects a year with an

individual project cost of \$100,000; resulting in the maintenance of approximately 1,500 linear feet of sidewalk, 40 curb ramps, 60 detectable warning surface repairs and crosswalk striping, as needed. If the recommended maintenance funding is approved, the City will be able to repair all failing and limited-failure pedestrian infrastructure within the 10-year planning horizon. Maintenance funding and efforts should be focused on these project types:

- Failing sidewalk facilities not included in Priority 1 projects
- Limited-failure sidewalk facilities not included in Priority 1 projects
- Failing curb ramps not included in Priority 1 projects
- Functional ramp repairs requiring ADA compliant detectable warning surfaces.

Retirement and Replacement Programming

Accounting for the future costs of sidewalk replacement is an important aspect given the anticipated growth in the network over time as well as the constant increase in project costs. The age and condition of pedestrian facilities varies throughout the network; however, the City can forecast



Missing sidewalk at Edwards Park.

future rehabilitation needs for the years between 2015 and 2025 using a 50-year lifecycle. Based on the historic growth of the sidewalk network, the project team estimates that approximately 40 miles of sidewalk existed in 1965. Assuming 1/50th of the 1965 network will deteriorate annually through 2025, it is anticipated that an additional 1.25 miles of sidewalk and 20 curb ramps will deteriorate from passable to failing conditions annually. Using these assumptions, approximately \$800,000 is required per year for program retirement and replacement of the pedestrian infrastructure between 2015 and 2025. The City has three options to consider for employment of a retirement and replacement program:

- ① Replace those failing segments annually,
- ② Save money annually for replacement of those segments in 2025, or
- ③ Plan for replacement in 2025 using CIP-type financing (bond or general fund).

The project team recommends expending replacement and retirement funds for those expected failures in 2025 after the update



Accessible pedestrian signals should be provided at all signalized intersections to meet ADA standards.

of the 2015 Plan when the City will be able to better determine actual failure rates and costs using bond financing. This will allow the City to focus its efforts and resources on a retirement and replacement program and minimize maintenance efforts beginning in 2025 with the adoption of an updated Master Plan.

Approximately \$1,300,000 is required per year for maintenance and program retirement and replacement of pedestrian infrastructure deteriorating to failing conditions between 2015 and 2025. As with all other projected costs in this report, the City should review the required cost yearly in order to ensure inflation, cost of construction and overall network estimates made in 2014 reflect current conditions.

Potential Funding Sources

Outside of the City's general fund, there are four areas, which could be harnessed to support the maintenance and operations of the City's pedestrian network.

- ① Special Revenue Districts
- ② Community Development Block Grants (CDBG)
- ③ Public Improvement District (PIDs).
- ④ Bonds

Annual Review Process

An annual review process is paramount to the execution of the Master Plan. City staff and management have made a concerted effort to include pedestrian infrastructure within the same asset management schema as other capital items in the City's inventory. The pedestrian network serves the community in the public right-of-way which conveys liability and requires public expenditure.

The project team recommends that the Master Plan be reviewed annually in coordination with CIP efforts. Every effort should be made to synchronize roadway and pedestrian improvements to minimize impact to public and staff. Initial project prioritization and recommended scheduling are included in this Master Plan; however, additional project selection criteria will be included that allows staff to respond to public partners and elected official requests in a transparent and predictable manner. The annual review should include three components:

- ① An audit of projects completed in the prior year in terms of costs, scheduling and scope.
- ② Analysis of current needs compared to the prioritized project list.
- ③ Funding request through the CIP process, informed by expected revenues and grants.

CITY MANUALS AND STANDARDS REVIEW

Resources & Standards

As part of the Master Plan process, a review and evaluation of current City documents and policies relevant to sidewalk infrastructure planning was completed. Through this process, the following documents were reviewed in terms of the following aspects: sidewalk requirements, sidewalk connectivity, sidewalk accessibility, sidewalk design, city processes, sidewalk funding, sidewalk construction, or sidewalk maintenance:

- City of Georgetown Unified Development Code (April 2012)
- City of Georgetown Overall Transportation Plan (June 2004)

- Zoning Regulations for Mixed Use Developments (January 2008)
- Georgetown Downtown Master Plan Update (January 2014)
- Georgetown Parks, Recreation and Trails Master Plan (June 2009)
- City of Georgetown ADA Transition Plan (March 2014)
- City of Georgetown 2030 Comprehensive Plan (May 2009)
- Williams Drive Gateway Redevelopment Plan (April 2006)
- City of Georgetown Construction Standards and Details (June 2006)
- City of Georgetown GIS Files (Accessed June 2014)
- Texas Accessibility Standards (March 2012)
- Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (July 2011)

Summary

Notable findings include:

- The UDC requires new developments to provide for the provision of pedestrian facilities to ensure orderly growth of the



Pedestrian facilities should be provided on at least one side of every roadway.

City. The UDC allows for exceptions to sidewalk installation:

- 80% Rule – Sidewalks will not be required for a residential development of four or fewer lots, when 80% of the adjacent lots are developed.
- Deferred Installation – The installation of residential sidewalks may be deferred until the construction of a residential unit on each lot.
- Alternative Sidewalk Plan – Sidewalks will not be required for sites with unique and extraordinary conditions. These sites may qualify for alternative routes, payments-in-lieu of construction, or delays in construction.
- City Participation – Developments may request City participation in the cost of pedestrian improvements.

Exceptions to these rules include sidewalks near school facilities, parks, or prioritized in the Master Plan.

- Maintenance of sidewalk facilities within the City right-of-way should be maintained by the City of Georgetown unless otherwise defined:
 - Public improvements, such as sidewalks, may be accepted by the



Incomplete sidewalks direct pedestrians into the street.

City after the applicant submits record drawings and a one-year maintenance bond.

- A Property Owners Association (POA) may be established and approved by City Council for the continuous operation, maintenance, and supervision of common physical facilities, such as sidewalks.
- Sidewalk design requirements varied throughout the City documents. Sidewalk width requirements varied between 5' and 12', depending on the location and functionality of the sidewalk. Similarly, the recommended setback between the sidewalk and the adjacent roadway varied between 2' and 25'. In most cases, the recommended setback was not clearly defined.

Recommendations

The following recommendations are made:

- Enforcement of the UDC requirements for sidewalk installation should be continued to ensure new developments are contributing to the sidewalk network.
- A unique sidewalk fund should be established within the City of Georgetown to track all fee-in-lieu payments by developers who utilized the Deferred Installation or Alternative Sidewalk Plan. This will ensure the fees are dedicated to sidewalk facilities identified in the Sidewalk Master Plan.
- Minor rewording of the UDC will ultimately be required to capture the prioritized sidewalk analysis completed in this Master Plan. Rewording should also include provisions to account for installation of pedestrian facilities "above and beyond" those defined in the adopted City of Georgetown Construction Standards and Details.
- The City should develop a single document that clearly identifies sidewalk width and setback requirements. This

should be reviewed and agreed to by all applicable City departments.

SUMMARY

Through the sidewalk master planning process, recommendations were developed to assist the City in facilitation of the installation and maintenance of sidewalk facilities. The results of the study identified areas for improvement in City requirements and processes, design and planning elements and most notably installation and maintenance. The following recommendations are made to guide near-term sidewalk implementation and establish a process for successful management of an integrated pedestrian network.

City Requirements and Processes

- Enforcement of the UDC requirements for sidewalk installation should be continued to ensure new developments are contributing to the sidewalk network.
- A unique sidewalk fund should be established within the City of Georgetown to track all fee-in-lieu payments by developers who utilized the Deferred Installation or Alternative Sidewalk Plan. This will ensure fees are dedicated to sidewalk facilities identified in the Master Plan.
- Minor rewording of the UDC will ultimately be required to capture the prioritized sidewalk analysis completed in this Master Plan. Rewording should also include provisions to account for installation of pedestrian facilities “above and beyond” those defined in the adopted City of Georgetown Construction Standards and Details.
- Within 24 months of adoption of this Plan, the City of Georgetown should

review current City practice for sidewalk ownership and the liabilities associated with sidewalk construction and maintenance. Consideration should be given to sidewalk management and maintenance models established in other cities.

Design and Planning Elements

- Sidewalks should be located on at least one side of every roadway within the City. Some roadways, in particular the major arterials, should have sidewalks located on both sides of the roadway throughout the developed portions of the City.
- Along arterials, sidewalks should be separated from the curb and/or edge of roadway wherever possible. Required and recommended sidewalk setbacks should be more clearly identified in the UDC. This separation provides for safer movement of pedestrians when separated from adjacent traffic.
- The City should develop a single document that clearly identifies sidewalk width and setback requirements. This should be reviewed and agreed to by all applicable City departments.
- Well-marked crosswalks should be provided at all signalized intersections and intersections near schools. Crosswalks should also be installed at unsignalized intersections with arterials.
- Sidewalks can be integrated with bicycle facilities as shared-use paths, where appropriate, to development a comprehensive multi-modal network

Sidewalk Installation and Maintenance

- Adopt a policy standard for maintenance of the pedestrian network with associated funding levels.
- Complete Master Plan Priority 1

projects within 10 years. While the Master Plan list prioritizes sidewalk segments, flexibility will be required in implementation of the plan. It is anticipated that the sidewalk segments could move up or down the priority list based on a variety of external factors including ongoing or future roadway construction projects, new developments, construction cost estimates, etc.

- Document public comments received on deficient or missing sidewalk infrastructure. Managing these comments will make for easier prioritization of projects in future reviews.
- Fill sidewalk gaps as soon as possible. Although sidewalk gaps were not always identified as Priority 1 improvements through the prioritization process, completing these segments will provide for quick and cost effective upgrades to the current sidewalk system.
- Incorporate findings from the annual sidewalk review process prior to the initiation of the CIP process, including:
 - An audit of projects completed in the prior year in terms of costs, scheduling, and scope. It is recommended that completed projects are tracked in the GIS database.
 - An analysis of current needs compared to the prioritized project list. A detailed cost evaluation will be required once current projects needs have been identified and annual projects selected.
 - Funding request through the CIP process, informed by expected revenues, community partnerships and grants.



Striped crosswalks should direct pedestrians to ADA compliant pedestrian ramps.



Steps and stairs are difficult for strollers and wheel-chair users- and in some cases, not traversable at all.