

EXISTING CONDITIONS ANALYSIS



The process of evaluating existing sidewalk infrastructure conditions provided crucial insight into the current state of Georgetown's pedestrian network. Existing design deficiencies and infrastructure gaps compromise connectivity, pedestrian safety and ultimately mobility in the City. The comprehensive evaluation process determined where resources should be focused for improvements and new facilities.

DATA COLLECTION PROCESS

To develop a complete sidewalk inventory, the project team initially used Google Earth Imagery, City aerial photography and existing City GIS data prior to on-site field analysis. The citywide inventory encompassed a drive-by review of all

existing sidewalk, curb ramp and crosswalk facilities outside the Downtown Overlay District. Pedestrian infrastructure in the Downtown Overlay District was evaluated in greater detail with in-depth inspection and measurement of all pedestrian elements to determine ADA compliance.

EXISTING CONDITIONS

The sidewalk inventory included a review of existing sidewalk segments, segments along streets without sidewalks (referred to as “no-sidewalk” segments), curb ramps, traffic signals and marked crosswalks along roadways. Table 1 summarizes the results of the assessment. These quantities include all sidewalks within the city limits, including infrastructure in the Downtown Overlay District and on TxDOT facilities.

Table 1. Infrastructure Inventory Summary

Infrastructure	Quantity
Total Sidewalks	759,112 lf (144 miles)
Sidewalks in the Downtown Overlay District	38,858 lf (7 miles)
Total Roadways with No Sidewalks	2,045,678 lf (387 miles)
Total Curb Ramps	2,368 each
Curb Ramps in the Downtown Overlay District	268 each
Total Crosswalks	361 each
Crosswalks in the Downtown Overlay District	174 each

Citywide Inventory

Sidewalks

During on-site field reviews, pedestrian elements were assessed using established evaluation criteria. Evaluation criteria for sidewalks included:

- Overall condition
- Width
- Running slope
- Failures type
- Repair area
- Number of intersecting driveways
- Obstructions

Overall sidewalk condition ranged from “Excellent” to “Failing”. Table 2 provides descriptions of each condition and the quantity and percentage of all sidewalks with that condition.

Table 2. Existing Sidewalk Conditions

Sidewalk Condition	Description	Quantity	Percent
Excellent	New or nearly new sidewalk	47,013 lf	6%
Good	Functional sidewalk, good condition, may be of insufficient width	474,988 lf	63%
Passable	Functional sidewalk with no noticeable failures, may be of insufficient width	132,249 lf	18%
Limited Failures	Functional with spot failures	48,836 lf	6%
Failing	Nonfunctional, cannot be used by wheelchairs, difficult for pedestrians	56,026 lf	7%
Total		759,112 lf	100%



Example of an excellent sidewalk. This sidewalk appears to be in nearly-new condition, is sufficiently wide and has a slope that is level with the adjacent roadway.

Sidewalk facilities classified as limited-failure or failing were evaluated further for failure type. Sidewalk failures were categorized as excessive slope, faulting, distortion and sunken.



Example of a sidewalk with faulting failure.



Example of a sidewalk with distortion failure.



Example of a sunken sidewalk.

Sidewalks were also inventoried for obstructions in the clear path of the pedestrian facility. An object was considered an obstruction when there appeared to be less than 3' of clearance around the object. Obstructions included, but were not limited to, utility poles, fire hydrants, utility meters, trees, vegetation, signs, benches and trash receptacles.



Vegetation and mailboxes act as obstructions to a clear path on the sidewalk.

To quantify the financial impact of the failures, repair areas for a segment of sidewalk were estimated based on observed condition, failures and obstructions. Table 3 shows the quantity and percentage of sidewalk segments that exhibit each type of failure. The City has a total repair area of 39,441 lf, which is 5% of all sidewalks.

Table 3. Existing Sidewalk Failures

Sidewalk Failures	Quantity	Percentage
Excessive Slope	7,703 lf	1%
Faulting	58,231 lf	8%
Distortion	108,594 lf	14%
Sunken	20,746 lf	3%
Obstructions	43,969 lf	6%

Curb Ramps

Evaluation criteria for curb ramps included overall condition, failure types, positioning in relation to crosswalk if applicable and the presence of detectable warning surfaces. Curb ramp condition was designated as either “Good”, “Functional”, or “Non-functional” based on evaluation criteria. Table 4 provides descriptions for each condition and the quantity and percentage of curb ramps with that condition.

Table 4. Existing Curb Ramp Conditions

Curb Ramp Condition	Description	Quantity	Percent
Good	Good functional curb ramp, does not need replacing	675	28%
Functional	Functional curb ramp though does not appear ADA compliant (missing warning surface, skewed directionality)	1,171	48%
Non Functional	Non functional curb ramp (excessive slope, broken)	516	24%
Not Inventoried	Not Inventoried (under construction)	6	0%
Total		2,368	100%



Example of a good curb ramp. The curb ramp provides an adequately-sized landing area, has the appropriate ramp slope and is fitted with a detectable warning surface.



Example of a functional curb ramp. Although the curb ramp provides an adequately sized landing area and has the appropriate ramp slope, the ramp does not have an ADA-compliant detectable warning surface.



Example of a non-functional curb ramp. The curb ramp does not have a landing area or an ADA-compliant detectable warning surface which makes utilization by a wheelchair extremely difficult.