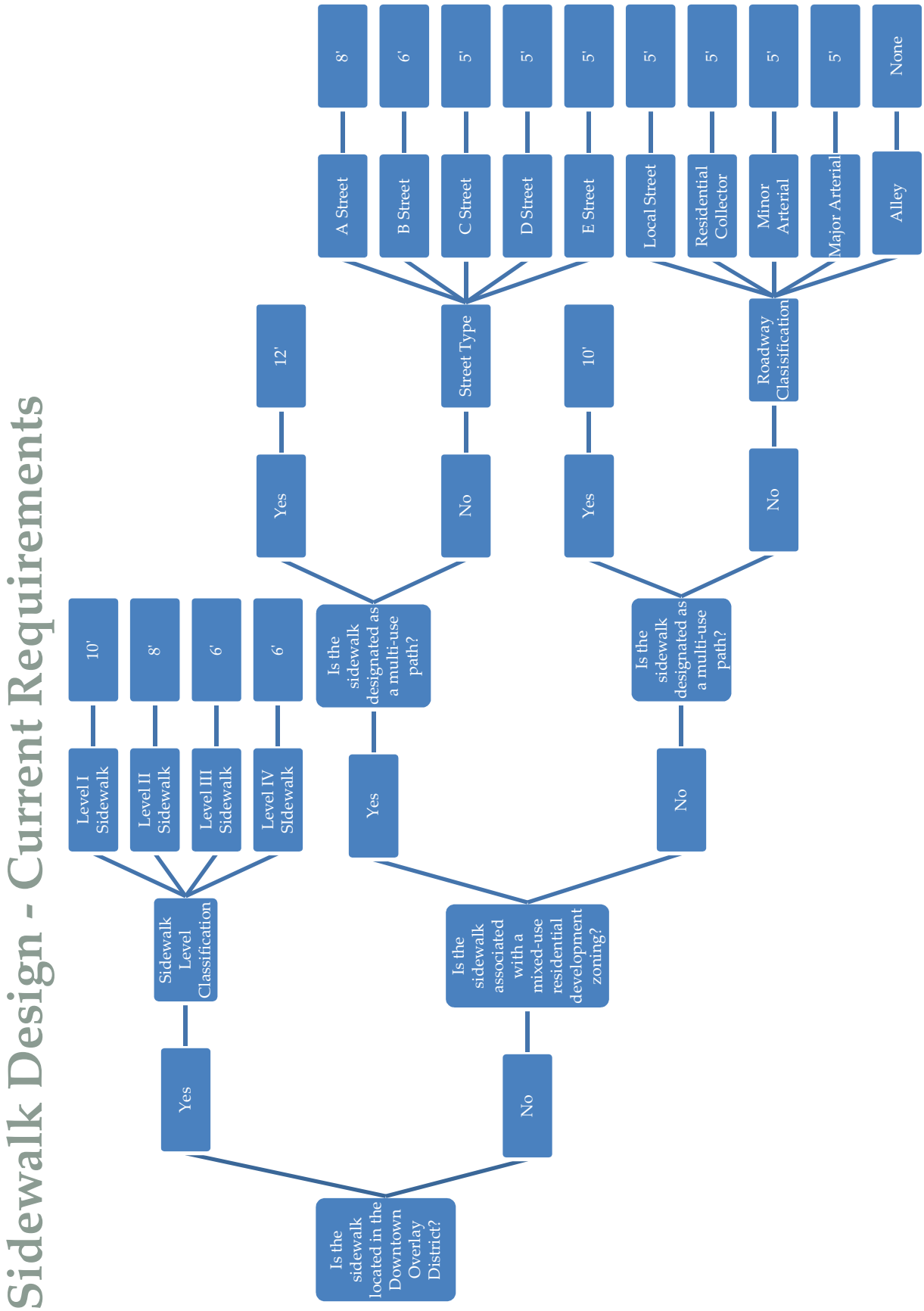
Sidewalk Design - Current Requirements



Downtown Assessment Criteria

Item	Title	Data Type	Compliant	Element	Measurement			
1	Curb Ramp	Point	Yes					
			No	Running slope	8-9%	9-10%	>10%	
				Cross slope	2-3%	3-4%	>4%	
				Landing	2-3%	3-4%	>4%	
				Detectable warnings				
				Flares	10-12%	12-15%	>15%	
				Side	Left	Right		
				Counter Slope	5-6%	6-7%	>7%	
				Not within crosswalk				
2	Sidewalk	Line	No	Running slope	5-6%	6-7%	>8%	
				Cross slope	2-3%	3-4%	>4%	
				Width	-Enter text-			
				Steps				
				Missing passing space				
3	Changes in Level	Point		Vertical deflection	1/4"-1/2"	1/2" - 1"	>1"	
				Horizontal deflection	> 1/2			
				Paver deflection	1/4"-1/2"	1/2" - 1"	>1"	
				Panel deflection	1/4"-1/2"	1/2" - 1"	>1"	
4	Pedestrian Push Button	Point	No	Direction	North	South	East	West
				Outside of reach range				
				Landing Slope	2-3%	3-4%	>4%	
				Landing on ramp	4-6%	6-8%	>8%	

Downtown Assessment Criteria

Item	Title	Data Type	Compliant	Element	Measurement			
5	Protruding Object	Point	No	City banner sign				
				Traffic sign				
				Business sign				
				Awnings				
				Tree				
				Mail box				
				Handrail				
				Other	-Enter text-			
6	Door	Point	No	Vertical deflection	-Enter text-			
7	Ramp	Point	No	Running slope	8-9%	9-10%	>10%	
				Cross slope	2-3%	3-4%	>4%	
				No handrail				
				Handrail height	-Enter text-			
				Handrail extension	Missing	Turned		
				No edge protection				
8	Driveway	Point	No	Running slope	5-6%	6-7%	>8%	
				Cross slope	2-3%	3-4%	>4%	
				Needs curb ramp(s)	1	2		
9	Crosswalk	Point	No	Cross slope	2-3%	3-4%	>4%	
10	Marked ADA Parking	Point	Marked					

Downtown Sidewalk Assessment

Infrastructure Inventory Summary

An inventory of sidewalks facilities was completed within the City of Georgetown Downtown District in July 2014. The following summarizes the results of the assessment.

Infrastructure	Total Quantity	Non-Compliant
Sidewalk	38,858 lf	5,696 lf
Curb Ramps	268 each	174 each
Pedestrian Crosswalks	174 each	17 each
Protruding Objects	N/A	174 each
Pedestrian Push Buttons	48 each	8 each
Doors	N/A	55 each
Ramps	7 each	7 each
Driveways	N/A	67 each

Sidewalk Assessment

Sidewalk Condition	Description	Criteria	Quantity
Compliant	Sidewalk that complies with all applicable elements	• Compliant	33,162 lf (85%)
Non-Compliant	Sidewalk that does not comply with one or more applicable elements	• Running Slope >5% and Exceeds Running Slope of Adjacent Street • Cross Slope >2% • Width <5′ with no passing space • Steps as Only Means of Travel • Vertical Deflection >1/2″ • Horizontal Opening >1/2″	5,696 lf (15%)
Total Linear Feet			**38,858 lf (100%)**

Downtown Sidewalk Assessment

Curb Ramp Assessment

Curb Ramp Condition	Description	Criteria	Quantity
Compliant	Curb ramp that complies with all applicable elements	• Compliant	94 (35%)
Non-Compliant	Curb ramp that does not comply with one or more applicable elements	• Running Slope >8.3% • Cross Slope >2% • Landing >2% • No detectible warnings • Flare(s) Slope >10% • Counter Slope >5% • Not within crosswalk	174 (65%)
Total Number			**268 (100%)**

Crosswalk Assessment

Crosswalk	Description	Criteria	Quantity
Compliant	Crosswalks at intersections	• Compliant	157 (90%)
Non-Compliant	Crosswalks at intersections	• Running Slope >5% or Greater Than Running Slope of Parallel Street • Cross Slope >2%	17 (10%)
Total Number			**174 (100%)**

Downtown Sidewalk Assessment

Protruding Object Assessment

Protruding Object	Description/Criteria	Object	Quantity
Non-Compliant	Fixed object that protrudes more than 4″ from a wall or more than 12″ if mounted on a pole. The object is located between 27″ and 80″ from the ground.	• Business Sign • City Banner • Trees / Vegetation • Traffic Sign • Drinking Fountain • Signage • Exterior Stairwell	2 9 156 2 1 1 3
Total Number			**174**

Non-Accessible Push Button Assessment

Push Button	Description	Criteria	Quantity
Compliant	Pedestrian push button for activation of pedestrian crossing signal	• Compliant	40 (83%)
Non-Compliant	Pedestrian push button for activation of pedestrian crossing signal	• Slope >2% at Clear Space • Not Within Reach Range	8 (17%)
Total Number			**48**

Non-Accessible Door Assessment

Door	Description	Criteria	Quantity
Total Non-Compliant	Doors providing access to and from the sidewalk along the public right-of-way	• Vertical Deflection >1/2″ • Missing Clear Space on Latch Side • Slope >2% at Clear Space	55

Downtown Sidewalk Assessment

Non-Accessible Ramp Assessment

Ramp	Description	Criteria	Quantity
Compliant	Ramps are part of the accessible route that exceeds 5% in running slope	• Compliant	0 (0%)
Non-Compliant	Ramps are part of the accessible route that exceeds 5% in running slope	• Running Slope >8.3% • Cross Slope >2% • Missing Handrail • Handrail at Wrong Height • Incorrect Handrail Extension • Missing Edge Protection	7 (100%)
Total Number			**7**

Non-Accessible Driveway Assessment

Driveway	Description	Criteria	Quantity
Non-Compliant	Driveways that are part of the accessible route	• Running Slope >5% • Cross Slope >2% • Width <3' • Missing Curb Ramp(s)	67

Sidewalk Assessment Criteria

The sidewalk assessment criteria and evaluation categories described below are for use in sidewalk assessment and preparation of a sidewalk implementation plan. The categories do not include evaluation criteria for the detailed ADA Assessment Survey for the Downtown District.

Item	Title	Evaluation Category	Measurement	Description
1	Curb Ramps	Overall Condition	1 Good	Good functional ramp, does not need replacing
			2 Functional	Functional ramp though does not appear ADA compliant (missing warning surface, skewed directionality)
			3 Non Functional	Non functional ramp (excessive slope, broken)
			4 No Ramp	No ramp present
		Slope	Good	Appears to be < 8%
			Excessive	Appears to be > 8%
		Faulting	Yes	
			No	
		Distortion	Yes	
			No	
		Sunken	Yes	
			No	
		Located Inside Crosswalk Markings	Yes	Sloped portion of curb ramp (excludes wings) is located between the crosswalk markings
			No	
		Detectible Warning Surface	Yes	New modern domed warning surfaces
			No	

Sidewalk Assessment Criteria

Item	Title	Evaluation Category	Measurement	Description
2	Sidewalk	Overall Condition	1 Excellent	New or nearly new sidewalk
			2 Good	Functional sidewalk, good condition, may be of insufficient width
			3 Passable	Functional sidewalk with no noticeable failures, may be of insufficient width
			4 Limited Failures	Functional with spot failures
			5 Failing	Nonfunctional, cannot be used by wheelchairs, difficult for pedestrians
		Width	XXXXX	Estimated width based on aerial and field observation (feet)
		Exceeds Running Slope of Pavement	Yes	Slope of sidewalk as compared to adjacent roadway based on field observations (no measurements)
			No	
		Faulting	Yes	
			No	
		Distortion	Yes	
			No	
		Sunken	Yes	
			No	
		Repair Area	XXXXX	Estimated area in need of repair (linear feet)
		Driveways	XXXXX	Number of driveways in segment (#)
		Obstructions (utility pole)	XXXXX	Number of obstacles in sidewalk resulting in sidewalk width less than ~36"
		Obstructions (fire hydrant)	XXXXX	
		Obstructions (utility meters)	XXXXX	

Sidewalk Assessment Criteria

		Obstructions (tree/vegetation)	XXXXX	
		Obstructions (sign)	XXXXX	
		Obstructions (bench)	XXXXX	
		Obstructions (trash receptacle)	XXXXX	
		Obstructions (other)	XXXXX	Description of obstacle type
3	Crosswalk	Pedestrian Push Button	Yes	Presence of pedestrian push buttons
			No	
		Crosswalk Striping	Yes	Presence of striped crosswalk
			No	

Notes:

- Default value will be N/A for all measurements. Input not required.
- Sidewalks will be evaluated on a segment basis, where a segment is defined a roadway segment between two roadway intersections.

Sidewalk Assessment

Infrastructure Inventory Summary

An inventory of sidewalks facilities was completed within the City of Georgetown City Limits in July and August of 2014. The following summarizes the results of the assessment. Quantities include all sidewalks within the City Limits, including the Downtown District and on TxDOT facilities.

Infrastructure	Quantity
Total Sidewalks	759,112 lf (144 miles)
Sidewalks in the Downtown 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 District	268 each
Total Crosswalks	361 each
Crosswalks in the Downtown District	174 each

Sidewalk Assessment

Quantities include all sidewalks within the City Limits, including the Downtown District and on TxDOT facilities.

Sidewalk Condition	Description	Quantity	Percentage
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%**

Sidewalk Assessment

The following sidewalk failures were identified in sidewalks classified as passable, limited failures, or failing. It should be noted that some sidewalks can have multiple types of failures. The sidewalk failures, totaled below, are for the entire length of sidewalk to be repaired. Further detail is presented on estimated repair areas, below.

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%

Sidewalk Failures	Quantity	Percentage
Estimated Repair Area	39,441 lf	5%

Curb Ramp Assessment

Quantities include all curb ramps within the City Limits, including the Downtown District and or TxDOT facilities.

Curb Ramp Condition	Description	Quantity	Percentage
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%**

The following curb ramp failures were identified in curb ramps classified as functional or non-functional. It should be noted that some curb ramps can have multiple types of failures. The presence of a non-compliant ADA detectable warning surface did not result in a non-functional curb ramp classification.

Curb Ramp Failures	Quantity	Percentage
Slope	382	16%
Faulting	105	4%
Distortion	47	2%
Sunken	22	1%
Located Outside Crosswalk	18	1%
Non-Compliant ADA Detectable Warning Surface	1,012	43%

Sidewalk Assessment

Crosswalk Assessment

Quantities include all crosswalks within the City Limits, including the Downtown District and on TxDOT facilities. It should be noted that crosswalks may have striping and/or pedestrian push buttons.

Crosswalk	Description	Quantity	Percentage
Striped	Striped crosswalks (does not include decorative pavers)	266	74%
Pedestrian Push Button	Crosswalks with pedestrian push buttons	98	26%
Total Number		**361**	

Sidewalk Prioritization Methodology

Category	Element	Criteria	Points	Weighted % to Subtotal	Weighted % to Total
Pedestrian Attractors	**Downtown District**	Segment is within the Downtown District	100	18%	30%
	Proximity to Schools (GISD)	Segment is within 1/8 mi of a GISD school	100	17%	
		Segment is within 1/4 mi of a GISD school	50		
	Proximity to Schools (Southwestern University)	Segment is within 1/8 mi of Southwestern University	100	16%	
		Segment is within 1/4 mi of Southwestern University	50		
	Proximity to Trails	Segment is within 1/4 mi of Trail Access	100	11%	
		Segment is within 1/2 mi of Trail Access	50		
	Proximity to Retail	Segment is within 1/8 mi of Retail	100	11%	
		Segment is within 1/4 mi of Retail	50		
	Proximity to Single Family Residential Land Uses	Segment is within 1/8 mi of a Single Family Residential Land Use	100	11%	
		Segment is within 1/4 mi of a Single Family Residential Land Use	50		
	Proximity to Playground/Parks	Segment is within 1/8 mi of Public Recreational Facility/Playgroun	100	8%	
		Segment is within 1/4 mi of Public Recreational Facility/Playgroun	50		
	Proximity to Multi Family Residential Land Uses	Segment is within 1/8 mi of a Multi Family Residential Land Use	100	4%	
		Segment is within 1/4 mi of a Multi Family Residential Land Use	50		
	Proximity to City Facilities	Segment is within 1/8 mi of a City Facility	100	4%	
		Segment is within 1/4 mi of a City Facility	50		
Pedestrian Safety	**Functionally Classified Streets**	Segment is on a Freeway/Tollway	0	50%	15%
		Segment is on an Arterial	100		
		Segment is on an Collector	50		
		Segment is on a Local Street	0		
	Pedestrian/Automobile Incidents	Pedestrian-Auto Crash on Facility in last 5 years	100	50%	
Demographics	**Median Household Income**	Segment is within an area with greater than 47% of the population at low to moderate income households	100	33%	15%
	Residential Population Density	Segment is within an area with population density greater than 3,000 people per square mile	100	33%	
		Segment is within an area with population density greater than 2,000 people per square mile	50		
	Residential Housing Type	Segment is within 1/8 mi of Affordable Housing	100	33%	
		Segment is within 1/4 mi of Affordable Housing	50		
Special Considerations	**Agency Request**	Requested by GISD	100	14%	40%
		Requested by Parks&Rec	100	14%	
		Requested as Phase I Priority in 2001 Sidewalk Master Plan	200	14%	
		Requested as Phase II Priority in 2001 Sidewalk Master Plan	100		
		Requested as Priority 1 in the Downtown Master Plan	200	14%	
		Requested as Priority 2 in the Downtown Master Plan	100		
		Requested as Priority 3 in the Downtown Master Plan	50		
		Requested by Public (Greater than 5 requests)	200	14%	
		Requested by Public	100		
		Requested by Others	100	14%	
	Other	Segment less than 200' in length with no sidewalk (i.e. a "sidewalk gap")	200	14%	

Bid Item Unit Prices

ITEM NO	DESCRIPTION	UNITS	BID
104 2015	REMOVING CONC (SIDEWALKS)	LF	$8
104 2032	REMOVING CONC (WHEELCHAIR RAMP)	RAMP	$400
529 2004	CONC CURB & GUTTER (TY II)	LF	$15
531 ****	CONC SIDEWALKS (6")	LF OF 6' SIDEWALK	$40
531 ****	CURB RAMPS	EA	$1,700
618 2018	CONDT (PVC) (SCHD 40) (2")	LF	$8
620 2011	ELEC CONDR (NO. 8) BARE	LF	$1
666 2041	REFL PAV MRK TY I (W) 12"(SLD)(090MIL)	LF	$13
666 2047	REFL PAV MRK TY I (W) 24"(SLD)(090MIL)	LF	$15
666 2155	REF PAV MRK TY II (W) 12" (SLD)	LF	$2
666 2157	REF PAV MRK TY II (W) 24" (SLD)	LF	$4
677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	$1
677 2007	ELIM EXT PAV MRK & MRKS (24")	LF	$4
680 2003	INSTALL HWY TRF SIG (SYSTEM)	EA	$6,000
682 2066	PED SIG SEC (12 IN) LED (COUNTDOWN)	EA	$800
684 2028	TRF SIG CBL (TY A) (14 AWG) (2 CONDR)	LF	$1
684 2031	TRF SIG CBL (TY A) (14 AWG) (5 CONDR)	LF	$2
687 2001	PED POLE ASSEMBLY	EA	$1,500
8835 2001	ACCESSIBLE PEDESTRIAN SIGNAL UNITS	EA	$2,300
****	EACH SIGNAL WITH NEW PED EQUIPMENT	EA	$6,000
****	SIGNALIZED PED CROSSING (ADA COMPLIANT)	EA	$10,000
****	UNSIGNALIZED PED CROSSING (STRIPING) (ASSUMED 48' CROSSING)	EA	$2,500
	ESCALATIONS:		
	UTILITIES	10%	
	EROSION CONTROLS	20%	
	DRAINAGE	6%	
	MOBILIZATION	10%	
	CONTINGENCY	25%	
	PRECONSTRUCTION AND DESIGN	20%	
	CONSTRUCTION ADMINISTRATION	2%	

Preliminary Option of Probable Costs

Citywide Cost Estimates

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
	NEW SIDEWALK				
529 2004	CONC CURB & GUTTER (TY II)	LF	2,030,010	$15	$30,450,150
531 ****	CONC SIDEWALKS (6")	LF OF 6' SIDEWALK	2,030,010	$40	$81,200,400
				MATERIALS SUBTOTAL	$111,650,550
	UTILITIES (10%)				$11,165,055
	EROSION CONTROLS (20%)				$22,330,110
	DRAINAGE (6%)				$6,699,033
	MOBILIZATION (10%)				$11,165,055
				MATERIALS	$163,009,803
				CONTINGENCY (25%)	$40,752,451
				PRECONSTRUCTION AND DESIGN (20%)	$32,601,961
				CONTRUCTION ADMINISTRATION (2%)	$3,260,196
				TOTAL	$239,624,410
	NEW CURB RAMPS				
531 ****	CURB RAMPS	EA	5,724	$1,700	$9,730,800
				MATERIALS SUBTOTAL	$9,730,800
	UTILITIES (10%)				$973,080
	EROSION CONTROLS (20%)				$1,946,160
	DRAINAGE (6%)				$583,848
	MOBILIZATION (10%)				$973,080
				MATERIALS	$14,206,968
				CONTINGENCY (25%)	$3,551,742
				PRECONSTRUCTION AND DESIGN (20%)	$2,841,394
				CONTRUCTION ADMINISTRATION (2%)	$284,139
				TOTAL	$20,884,243
	FAILING SIDEWALK REPAIRS				
104 2015	REMOVING CONC (SIDEWALKS)	LF	13,473	$8	$107,784
531 ****	CONC SIDEWALKS (6")	LF OF 6' SIDEWALK	13,473	$40	$538,920
				MATERIALS SUBTOTAL	$646,704
	UTILITIES (10%)				$64,670
	EROSION CONTROLS (20%)				$129,341
	DRAINAGE (6%)				$38,802
	MOBILIZATION (10%)				$64,670
				MATERIALS	$944,188
				CONTINGENCY (25%)	$236,047
				PRECONSTRUCTION AND DESIGN (20%)	$188,838
				CONTRUCTION ADMINISTRATION (2%)	$18,884
				TOTAL	$1,387,956

Preliminary Option of Probable Costs

Citywide Cost Estimates

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
	LIMITED FAILURE SIDEWALK REPAIRS				
104 2015	REMOVING CONC (SIDEWALKS)	LF	4,166	$8	$33,328
531 ****	CONC SIDEWALKS (6")	LF OF 6' SIDEWALK	4,166	$40	$166,640
				MATERIALS SUBTOTAL	$199,968
	UTILITIES (10%)				$19,997
	EROSION CONTROLS (20%)				$39,994
	DRAINAGE (6%)				$11,998
	MOBILIZATION (10%)				$19,997
				MATERIALS	$291,953
				CONTINGENCY (25%)	$72,988
				PRECONSTRUCTION AND DESIGN (20%)	$58,391
				CONTRUCTION ADMINISTRATION (2%)	$5,839
				TOTAL	$429,171
	NON-FUNCTIONAL RAMP REPAIRS				
104 2032	REMOVING CONC (WHEELCHAIR RAMP)	RAMP	457	$400	$182,800
531 ****	CURB RAMPS	EA	457	$1,700	$776,900
				MATERIALS SUBTOTAL	$959,700
	UTILITIES (10%)				$95,970
	EROSION CONTROLS (20%)				$191,940
	DRAINAGE (6%)				$57,582
	MOBILIZATION (10%)				$95,970
				MATERIALS	$1,401,162
				CONTINGENCY (25%)	$350,291
				PRECONSTRUCTION AND DESIGN (20%)	$280,232
				CONTRUCTION ADMINISTRATION (2%)	$28,023
				TOTAL	$2,059,708
	FUNCTIONAL RAMP REPAIRS				
104 2032	REMOVING CONC (WHEELCHAIR RAMP)	RAMP	1,063	$400	$425,200
531 ****	CURB RAMPS	EA	1,063	$1,700	$1,807,100
				MATERIALS SUBTOTAL	$2,232,300
	UTILITIES (10%)				$223,230
	EROSION CONTROLS (20%)				$446,460
	DRAINAGE (6%)				$133,938
	MOBILIZATION (10%)				$223,230
				MATERIALS	$3,259,158
				CONTINGENCY (25%)	$814,790
				PRECONSTRUCTION AND DESIGN (20%)	$651,832
				CONTRUCTION ADMINISTRATION (2%)	$65,183
				TOTAL	$4,790,962

Preliminary Option of Probable Costs

Citywide Cost Estimates

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
	PEDESTRIAN SIGNAL UPGRADES				
****	EACH SIGNAL WITH NEW PED EQUIPMENT	EA SIGNAL	17	$6,000	$102,000
****	SIGNALIZED PED CROSSING (ADA COMPLIANT)	EA CROSSING	54	$10,000	$540,000
				MATERIALS SUBTOTAL	$642,000
	UTILITIES (10%)				$64,200
	MOBILIZATION (10%)				$64,200
				MATERIALS	$770,400
				CONTINGENCY (25%)	$192,600
				PRECONSTRUCTION AND DESIGN (20%)	$154,080
				CONTRUCTION ADMINISTRATION (2%)	$15,408
				TOTAL	$1,132,488

Preliminary Option of Probable Costs

Downtown Overlay District - New Facilities

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
	NEW SIDEWALK				
529 2004	CONC CURB & GUTTER (TY II)	LF	12,122	$15	$181,830
531 ****	CONC SIDEWALKS (6")	LF OF 6' SIDEWALK	12,122	$40	$484,880
				MATERIALS SUBTOTAL	$666,710
	UTILITIES (10%)				$66,671
	EROSION CONTROLS (20%)				$133,342
	DRAINAGE (6%)				$40,003
	MOBILIZATION (10%)				$66,671
				MATERIALS	$973,397
				CONTINGENCY (25%)	$243,349
				PRECONSTRUCTION AND DESIGN (20%)	$194,679
				CONTRUCTION ADMINISTRATION (2%)	$19,468
				TOTAL	$1,430,893
	NEW CURB RAMPS				
531 ****	CURB RAMPS	EA	126	$1,700	$214,200
				MATERIALS SUBTOTAL	$214,200
	UTILITIES (10%)				$21,420
	EROSION CONTROLS (20%)				$42,840
	DRAINAGE (6%)				$12,852
	MOBILIZATION (10%)				$21,420
				MATERIALS	$312,732
				CONTINGENCY (25%)	$78,183
				PRECONSTRUCTION AND DESIGN (20%)	$62,546
				CONTRUCTION ADMINISTRATION (2%)	$6,255
				TOTAL	$459,716

Preliminary Option of Probable Costs

Downtown Overlay District - Repairs

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
	REMOVE SIDEWALK	633	SY	$12.00	$7,596
	NEW CONCRETE SIDEWALK	3,987	LF	$40.00	$159,480
	NEW CONCRETE SIDEWALK WITH PAVERS	1,709	LF	$48.00	$82,032
	REMOVE CURB RAMPS	174	EA	$400.00	$69,600
	NEW CURB RAMP	174	EA	$1,700.00	$295,800
	CROSSWALK	17	EA	$10,000.00	$170,000
	PROTRUDING OBJECT	174	EA	$200.00	$34,800
	PEDESTRIAN PUSH BUTTON (LANDING)	8	EA	$750.00	$6,000
	DOOR HEIGHT DIFFERENCE	1,375	LF	$35.00	$48,125
	RAMP (WITH METAL HANDRAIL)	245	LF	$45.00	$11,025
	REMOVE DRIVEWAY	26,800	SF	$2.00	$53,600
	NEW CONCRETE DRIVEWAY	26,800	SF	$9.00	$241,200
				MATERIALS	**$1,179,258**
				CONTINGENCY (25%)	$294,815
				PRECONSTRUCTION AND DESIGN (20%)	$235,852
				CONTRUCTION ADMINISTRATION (2%)	$23,585
				TOTAL	$1,733,509

Preliminary Option of Probable Costs

Pedestrian Signals

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
	PEDESTRIAN SIGNAL UPGRADES				
****	EACH SIGNAL WITH NEW PED EQUIPMENT	EA SIGNAL	17	$6,000	$102,000
****	SIGNALIZED PED CROSSING (ADA COMPLIANT)	EA CROSSING	30	$10,000	$300,000
				MATERIALS SUBTOTAL	$402,000
	UTILITIES (10%)				$40,200
	MOBILIZATION (10%)				$40,200
				MATERIALS	$482,400
				CONTINGENCY (25%)	$120,600
				PRECONSTRUCTION AND DESIGN (20%)	$96,480
				CONTRUCTION ADMINISTRATION (2%)	$9,648
				TOTAL	$709,128

Preliminary Option of Probable Costs

Government Facilities

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
	PARKING SPACE	32	EA	$2,400.00	$76,800
	RAMP (WITH METAL HANDRAIL)	8	EA	$1,200.00	$9,600
	CURB/SIDEWALK SLOPE	32	EA	$1,200.00	$38,400
	PROTRUDING OBJECT	100	EA	$65.00	$6,500
				MATERIALS	$131,300
				CONTINGENCY (25%)	$32,825
				PRECONSTRUCTION AND DESIGN (20%)	$26,260
				CONTRUCTION ADMINISTRATION (2%)	$2,626
				TOTAL	$193,011

Preliminary Option of Probable Costs

Summary

NEW SIDEWALK	########	LF	$239,624,410
NEW CURB RAMPS	5,724	EA	$20,884,243
FAILING SIDEWALK REPAIRS	13,473	LF	$1,387,956
LIMITED FAILURE SIDEWALK REPAIRS	4,166	LF	$429,171
NON-FUNCTIONAL RAMP REPAIRS	457	EA	$2,059,708
FUNCTIONAL RAMP REPAIRS	1,063	EA	$4,790,962
PEDESTRIAN SIGNAL UPGRADES	54	EA CROSSING	$1,132,488
		TOTAL	**$270,308,939**

Assumptions used in preparation of estimate:

1. TxDOT 12 Month Austin District Average Low Bid Unit Prices and recent City of Georgetown Bid Tabs used for cost estimates.
2. Utility, Erosion, Drainage, and Mobilization costs estimated as percentage of total.
3. ROW acquisition not included
4. Assumes Accessible Pedestrian Signal upgrades to all City maintained signals.
5. Does not include Downtown District.
6. Assumed 6' sidewalk widths.

PRIORITY 1 BREAKDOWN		
DOWNTOWN ADA REPAIRS		$1,733,509
DOWNTOWN NEW SIDEWALK		$1,430,893
DOWNTOWN NEW CURB RAMPS		$459,716
PHASE 1 PEDESTRIAN SIGNAL UPGRADES		$709,128
ACCESSIBLE ROUTES TO GOVERNMENT FACILITIES		$193,011
PHASE 1 RAMP UPGRADES AT PEDESTRIAN SIGNALS		$150,361
OLD TOWN NORTHEAST		$1,177,645
SH29 CENTRAL		$2,069,483
2ND STREET		$410,051
AUSTIN AVENUE SOUTH		$365,284
OLD TOWN SOUTHEAST		$1,466,956
	TOTAL	**$10,166,037**

Preliminary Option of Probable Costs

Summary

PRIORITY 2 BREAKDOWN		
OLD TOWN SOUTHWEST		$1,813,793
AUSTIN AVENUE NORTH		$231,979
SHELL ROAD		$1,950,883
LAKEWAY AND WILLIAMS		$2,126,661
LEANDER ROAD		$922,870
IH 35 SBFR		$525,997
	TOTAL	**$7,572,184**

PRIORITY 3 BREAKDOWN		
PRIORITY 3 PROJECTS	***TOTAL***	**$7,768,016**

Priority Projects

PROJECT	NAME	NEW SIDEWALK		FAILING SIDEWALK REPAIR		LIMITED FAILURE SIDEWALK REPAIR		NEW RAMPS		FAILING RAMP REPAIR		LIMITED FAILURE RAMP REPAIR		NEW RAMPS		TOTAL	PRIORITY 1	PRIORITY 2
		LENGTH	$	LENGTH	$	LENGTH	$	EA	$	EA	$	EA	$	EA	$	$		
1	OLD TOWN NORTHEAST	6,742	795,793	70	7,211	345	35,541	66	240,804	21	94,647	0	0	1	3,649	1,177,645	1	
2	SH29 CENTRAL	14,238	1,680,634	1,270	130,832	90	9,272	44	160,536	11	49,577	15	38,632	0	0	2,069,483	1	
3	2ND STREET	3,127	369,058	0	0	0	0	10	36,485	1	4,507	0	0	0	0	410,051	1	
4	AUSTIN AVENUE SOUTH	2,530	298,666	0	0	80	8,241	16	58,377	0	0	0	0	0	0	365,284	1	
5	OLD TOWN SOUTHEAST	9,804	1,157,217	25	2,575	465	47,903	42	153,239	15	67,605	5	12,877	6	25,540	1,466,956	1	
6	OLD TOWN SOUTHWEST	11,861	1,400,040	123	12,671	10	1,030	66	240,804	24	108,168	17	43,782	2	7,297	1,813,793		2
7	AUSTIN AVENUE NORTH	1,222	144,243	0	0	60	6,181	10	36,485	10	45,070	0	0	0	0	231,979		2
8	SHELL ROAD	15,365	1,813,741	0	0	25	2,575	30	109,456	5	22,535	1	2,575	0	0	1,950,883		2
9	LAKEWAY AND WILLIAMS	13,391	1,580,736	450	46,358	141	14,525	62	226,209	27	121,690	49	126,197	2	10,946	2,126,661		2
10	LEANDER ROAD	6,156	726,622	0	0	80	8,241	30	109,456	4	18,028	13	33,481	6	27,042	922,870		2
11	IH 35 SBFR	4,271	504,105	0	0	0	0	6	21,891	0	0	0	0	0	0	525,997		2

CITY OF GEORGETOWN SIDEWALK MASTER PLAN AND PUBLIC FACILITY ACCESS AUDIT
PRIORITY 3 PROJECTS

PROJECT	NAME	NEW SIDEWALK		FAILING SIDEWALK REPAIR		LIMITED FAILURE SIDEWALK REPAIR		NEW RAMPS		FAILING RAMP REPAIR		LIMITED FAILURE RAMP REPAIR		NEW RAMPS		TOTAL
		LENGTH	$	LENGTH	$	LENGTH	$	EA	$	EA	$	EA	$	EA	$	$
N/A	PRIORITY 3 PROJECTS	58,000	6,846,351	700	72,112	55	5,666	196	715,114	16	72,112	22	56,660	0	0	7,768,016

Preliminary Option of Probable Costs

Annual Maintenance

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
	TOTAL REQUIRED:				
	SIDEWALK REPAIR	LF	17,639		
	NON FUNCTIONAL CURB RAMP REPAIR	EA	457		
	NON FUNCTIONAL CURB RAMP REPAIR	EA	646		
	PRIORITY 1:				
	SIDEWALK REPAIR	LF	2,345		
	NON FUNCTIONAL CURB RAMP REPAIR	EA	50		
		EA	22		
	Signal Ramps:				
		EA	6		
		EA	3		
	REMAINING:				
	SIDEWALK REPAIR	LF	15,294		
	NON FUNCTIONAL CURB RAMP REPAIR	EA	401		
	NON FUNCTIONAL CURB RAMP REPAIR	EA	621		
	ANNUAL:				
	NEW SIDEWALK	LF	$55		$0
	SIDEWALK REPAIR	LF	$48	$300	$14,400
	NEW CURB RAMP	EA	$1,700		$0
	NON FUNCTIONAL CURB RAMP REPAIR	EA	$2,100	$8	$16,800
	DETECTABLE WARNING SURFACE REPAIR	EA	$1,200	$12	$14,400
	CROSSWALKS	EA	$2,500		$0
				Materials Subtotal	$45,600
	UTILITIES (10%)				$4,560
	EROSION CONTROLS (20%)				$9,120
	DRAINAGE (6%)				$2,736
	MOBILIZATION (10%)				$4,560
				MATERIALS	$66,576
				CONTINGENCY (25%)	$16,644
				PRECONSTRUCTION AND DESIGN (20%)	$13,315
				CONTRUCTION ADMINISTRATION (2%)	$1,332
				TOTAL	$97,867
				TOTAL PER YEAR	**$489,333.60**
				5 PROJECTS PER YEAR	

Preliminary Option of Probable Costs

Program Replacement

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
	NEW SIDEWALK	LF		$55	0
	SIDEWALK REPAIR	LF	68,844	$48	3,304,493
	NEW CURB RAMP	EA		$1,700	0
	NON FUNCTIONAL CURB RAMP REPAIR	EA	209	$2,100	438,013
	DETECTABLE WARNING SURFACE REPAIR	EA		$1,200	0
	CROSSWALKS	EA		$2,500	0
				Materials Subtotal	3,742,506
	UTILITIES (10%)				374,251
	EROSION CONTROLS (20%)				748,501
	DRAINAGE (6%)				224,550
	MOBILIZATION (10%)				374,251
				MATERIALS	5,464,059
				CONTINGENCY (25%)	1,366,015
				PRECONSTRUCTION AND DESIGN (20%)	1,092,812
				CONTRUCTION ADMINISTRATION (2%)	109,281
				TOTAL	8,032,166
				TOTAL PER YEAR	803,217

Preliminary Option of Probable Costs

Program Replacement

Year	Sidewalks Inventory (miles)	Sidewalk Repair Annually (miles)	Ramp Inventory (each)	Ramp Repair Annually (each)
1965	42	1.04	685	11.26
1966	43	1.07	702	17.56
1967	44	1.10	720	18.01
1968	45	1.12	739	18.47
1969	46	1.15	758	18.95
1970	47	1.18	777	19.43
1971	48	1.21	797	19.93
1972	50	1.24	818	20.44
1973	51	1.27	839	20.97
1974	52	1.31	860	21.50
1975	54	1.34	882	22.05
1976	55	1.38	905	22.62
1977	56	1.41	928	23.20
1978	58	1.45	952	23.80
1979	59	1.48	976	24.41
1980	61	1.52	1001	25.03
1981	62	1.56	1027	25.67
1982	64	1.60	1053	26.33
1983	66	1.64	1080	27.01
1984	67	1.68	1108	27.70
1985	69	1.73	1136	28.41
1986	71	1.77	1165	29.14
1987	73	1.82	1195	29.88
1988	75	1.86	1226	30.65
1989	76	1.91	1257	31.44
1990	78	1.96	1290	32.24
1991	80	2.01	1323	33.07
1992	83	2.06	1357	33.92
1993	85	2.12	1391	34.79
1994	87	2.17	1427	35.68
1995	89	2.23	1464	36.59
1996	91	2.28	1501	37.53
1997	94	2.34	1540	38.49
1998	96	2.40	1579	39.48
1999	98	2.46	1620	40.49
2000	101	2.53	1661	41.53
2001	104	2.59	1704	42.60
2002	106	2.66	1748	43.69
2003	109	2.72	1792	44.81
2004	112	2.79	1838	45.96
2005	115	2.87	1885	47.14
2006	118	2.94	1934	48.35
2007	121	3.02	1983	49.59
2008	124	3.09	2034	50.86
2009	127	3.17	2086	52.16

Preliminary Option of Probable Costs

Program Replacement

Year	Sidewalks Inventory (miles)	Sidewalk Repair Annually (miles)	Ramp Inventory (each)	Ramp Repair Annually (each)
2010	130	3.25	2140	53.50
2011	133	3.34	2195	54.87
2012	137	3.42	2251	56.28
2013	140	3.51	2309	57.72
2014	144	3.60	2368	59.20
2015	148	3.69	2429	60.72
2016	151	3.79	2491	62.27
2017	155	3.88	2555	63.87
2018	159	3.98	2620	65.51
2019	163	4.09	2688	67.19
2020	168	4.19	2756	68.91
2021	172	4.30	2827	70.68
2022	176	4.41	2900	72.49
2023	181	4.52	2974	74.35
2024	185	4.64	3050	76.26
Assuming 50 year life-cycle				
2025-2035	10-year total	13.04	10-year total	208.58
	10-year average	1.19	10-year average	18.96