

APPENDIX B

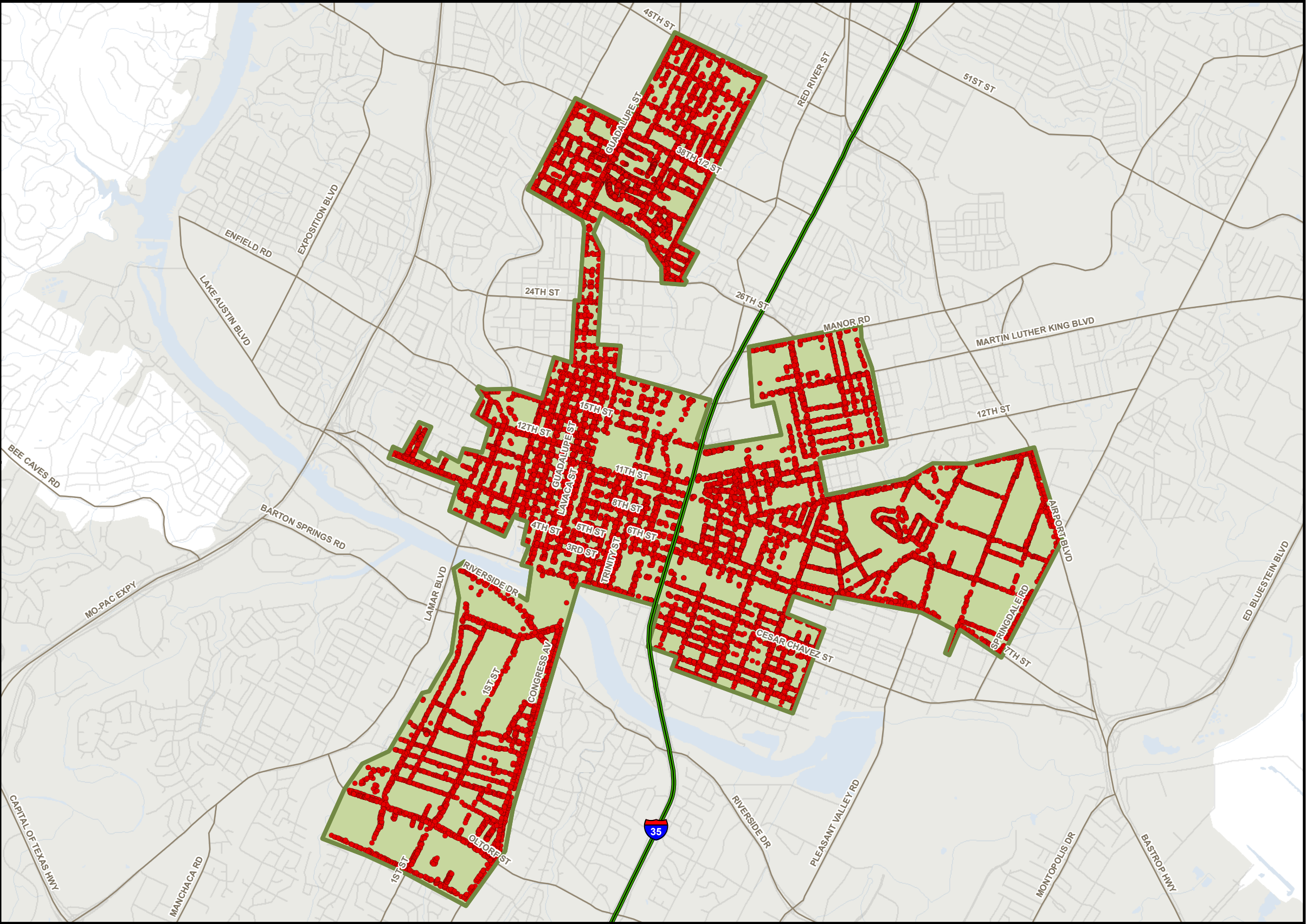
TRAIL NETWORK

(TO BE PROVIDED BY COA AT A LATER DATE)

APPENDIX C

FIELD ASSESSMENT DATA DICTIONARY

Field Condition Collection Area



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Condition Points

Collection Area

Austin City Limit



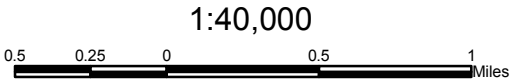
Projection: Lambert Conformal Conic
(Central Texas StatePlane - FIPS 4203)
Units: Feet
Datum: NAD83
Central_Meridian: -100.333333
Standard_Parallel_1: 30.116667
Standard_Parallel_2: 31.883333
Latitude_Of_Origin: 29.666667
False_Easting: 2296583.333333
False_Northing: 9842500.000000

Lockwood, Andrews & Newnam Inc. makes no representations or warranties regarding accuracy or completeness of the information depicted on this map or the data from which it was produced. This map is NOT suitable for survey purposes and does not purport to depict or establish boundaries between land owners or locations of utility infrastructure where survey data is available and field locations have been established.

Created by: Shelby Coder
August 2008



Lockwood, Andrews & Newnam, Inc.
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Sidewalk Condition Assessment – ADA Data Dictionary

Flag Type: ADA Sidewalk – Type 1

Required data entry:

ADADesc1	Description of Sidewalk ADA issue
ADADesc2 (if applicable)	"
ADADesc3 (if applicable)	"
ADADesc4 (if applicable)	"
ADADesc5 (if applicable)	"
CondLength (if noted below)	If entire segment enter "999"

ADADesc* for Sidewalk Flags

<u>Problem</u>	<u>Description</u>
1- Cross slope 2.1-4%	Cross slope is 2.1-4%...also enter the CondLength
2- Cross slope 4.1-6%	Cross slope is 4.1-6%...also enter the CondLength
3- Cross slope >6%	Cross slope is > 6%...also enter the CondLength
4- Pt width <36"	A single point usually around an obstacle has a passing width less than 36"
5- Edge chg > ¼"	Vertical edge change is greater than ¼ inch
6- Cont Width <36"	A continuous length of sidewalk is narrower than 36"...also enter the CondLength
7- Vert. Clear	Vertical clearance is less than 80" (7 feet)...also enter CondLength
8- > Road slope	The sidewalk slope exceeds the slope of the road...also enter CondLength
9- Obst Wid <48"	The radius around object less than 48" in width is less than 48"
10- No pass space	No passing space on sidewalks greater than 200' long...also enter CondLength
11- Pass int >200'	Interval between passing spaces is greater than 200'...also enter CondLength
12- Grate does not meet ADA standards	Spaces are wider than ½" or openings are not parallel to travel direction

Flag Type: ADA Ramp – Type 2

Required data entry:

ADADesc1	Description of Ramp ADA issue
ADADesc2 (if applicable)	"
ADADesc3 (if applicable)	"
ADADesc4 (if applicable)	"
ADADesc5 (if applicable)	"

ADADesc* for Ramp Flags

<u>Problem</u>	<u>Description</u>
1- Slope 8.1-9%	Slope of ramp face is 8.1-9%
2- Slope 9.1-12%	Slope of ramp face is 9.1-12%
3- Slope > 12%	Slope of ramp face is > 12%
4- X slope 2.1-4%	Cross slope of ramp face is 2.1-4%
5- X slope 4.1-6%	Cross slope of ramp face is 4.1-6%
6- X slope 6%	Cross slope of ramp face is > 6%
7- No ramp	No ramp
8- Flare > 10%	Angle of necessary flare is greater than 10%
9- No flares	Flares are missing where required
10- Edge chg > ¼"	Vertical edge change at roadbed or sidewalk is greater than ¼ inch
11- No discernable Surface	Ramp face is not a different material/color than the sidewalk
12- No landing/Landing not regulation	Landing missing or not 4'x4'
13- Width < 36"	Ramp face width is less than 36"
14- Rise > 30"	The height from the bottom to the top of the ramp is greater than 30" without a level landing area
15- Lng Rp Width < 44"	Ramp longer than X' is less than 44" wide
16- No handrails	Ramp longer than X' is missing handrails

Flag Type: ADA Driveway – Type 3

Required data entry:

ADADesc1-5	Description of Driveway ADA issue
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ADADesc* for Driveway Flags

<u>Problem</u>	<u>Description</u>
1- X slope 2.1-4%	Cross slope of driveway is 2.1-4%
2- X slope 4.1-6%	Cross slope of driveway is 4.1-6%
3- X slope > 6%	Cross slope of driveway > 6%
4- Edge chg > ¼"	Vertical edge change is greater than ¼"
5- Vert. clear	Vertical clearance is less than 80" (7')
6- Trans. Slope > 5%	Slope of transition between sidewalk and driveway is > 5%

Ramp Type

Collect a point for all ramps. Specify the type of ramp in the **RampType** field.

- 1- Type 1 – Ramp has 2 flares and is perpendicular to street
- 2- Type 1A – Ramp has 1 flare and is perpendicular to street
- 3- Type 1B – Ramp has no flares and is perpendicular to street
- 4- Type 2 – Ramp is multi-direction (sends pedestrian into intersection)

Sidewalk Condition Assessment – Maintenance Data Dictionary

General Sidewalk Data

swCondition - Condition (1- Excellent, 2- Good, 3- Passable, 4- Limited Spot Failures, 5- Failed, 6- No Sidewalk)

swCondLength - Length of segment in same condition rating (ft)

swCondWidth - Width (ft)

Other Sidewalk Information

swFaulting - Faulting (1- Severe, 2- Moderate, 3- Minor)

swDistortion - Distortion (1- Severe, 2- Moderate, 3- Minor)

swSunken - Sunken Sdkw @ InletTop (1- Severe, 2- Moderate, 3- Minor)

swFailCause - Primary Cause(s) of Failures (1- Unstable soils, 2- Erosion, 3- Utilities, 4- Poor Concrete Condition, 5- Tree Roots, 6- Water, 7- Thickness, 8- Unknown)

swRepArea - Estimate of Repair Areas Required (sq ft)

Temporary Repairs Completed? (1- Yes, 2- No)

Comments **Notes**

Related Data - Only As Necessary

swNSMaterials - Non-Standard Materials? (1- Bricks, 2- Pavers, 3- Granite, 4- Asphalt, 5- Other **Notes**)

swADAAccess - ADA accessible path? (Y- Yes, P- Passable, N- No)
If no, list Obstructions: **Notes**

swIllegal - Illegal use of sidewalk? (Y- Yes, P- Possible, N- No;
Observation: **Notes**)

swSteepSlope - Steep Slope? (Y- Yes, M- Moderate, F- Flat)

swSchoolZn - School Zone? (Y- Yes, C- Close, N- No)

swChildSafeZn - Child Safety Zone? (Y- Yes, C- Close, N- No)

Commentary of Assessment Items

General Sidewalk Data

Condition: None is used for missing sidewalk areas adjacent to existing.

Other Sidewalk Information

Faulting, Distortion, and Sunken at [drainage] Inlet Top will all be rated using: Severe – frequent faulting or distortions > 4", Moderate – typical faulting or distortions > 2", Minor – typical faulting or distortions between ½" and 2")

Poor Condition is the primary cause of failure in old, broken concrete if no other causes apply. Underground water or springs can cause failures or slipping hazards. The thickness cause implies that the sidewalk is too thin for that location or was improperly constructed.

Repairs: square feet of remove and replace. Including non-standard or temporary asphalt sidewalk repairs which need a permanent concrete fix.

Related Data – Only As Necessary

Sidewalks are assumed to be concrete if no other material is noted. Non-standard materials are common in CBD

Standard ADA accessible path: Passable means it is smooth and wide enough overall (36" minimum) when including the surrounding hardscape elements or ground. Problems can be benches, trees, signs, anchor bolts, poles, or other utility appurtenances. Obstructions do not include damaged sidewalk such as cracks and depressions.

Illegal use of sidewalks by cars, trucks, or construction equipment may be evident and recoverable.

Steep Slope>5%; Moderate>2%; Flat<=2%

Special attention may be given to sidewalks in school zones.
Yes implies a school within 1 block or 500' of that location, Close implies a school within 4 blocks or 2,000' of that location.

Child Safety Zone could imply park area or common play area.

Assessment Items (cont'd)

Driveways

drCondition - Condition (1- Good, 2- Fair, 3- Broken, 4- Distorted, 5- Missing)

drADAAccess - ADA Accessible? (Y- Yes, P- Passable, N- No)

drRepArea - Estimate of Driveway Repairs Required (sq ft)

Sidewalk Ramps

rpADAAccess - Standard ADA ramp? (Y- Yes, P- Passable, N- No)

rpCondition - Condition (1- Broken, 2- Distorted, or 3- Missing)

rpDrainage - Drainage problems at ramp? (1- Severe, 2- Moderate, 3- None)

rpRepArea - Estimate of Ramp Repairs Required (sq ft)

Inlet Tops

InCondition - Condition (1- Broken, 2- Uneven, 3- MH Lid Problem)

InRepArea - Estimate of Inlet Repairs Required (sq ft)

Other Maintenance Required

Overgrowth - Overgrown with Weeds, Brush, or Trees? (1- Severe, 2- Moderate, 3- Minor)

OvTrimArea - Estimate of Clearing and Trimming Required (sq ft)

Commentary (cont'd)

Driveways

Driveways only noted if there is a problem.

Continuous ADA accessible path across driveway?

Sidewalk Ramps

Note all missing Sidewalk Ramps and Curb Cuts.

Ramp Condition is only noted if there is a problem.

Passable ramp does not meet ADA exactly, but functions well.

Inlet Tops

Inlet tops only noted if there is a problem.

Other Maintenance Required

Overgrown areas may require grass removal, brush clearing, and/or tree trimming. Responsibility for the area may be PARD.

Severe areas need immediate attention. Moderate areas are still passable, but getting marginal.

APPENDIX D

TRANSITION PLAN SUMMARIES

**TASB Condition Assessment
Cost Estimate
Assumptions**

Problem	Repair Strategy	Unit	Unit Cost	Area assumptions (if length and width were not included in the data)
Sidewalks				
1 - Cross slope 2.1-4%	Remove and Rebuild Sidewalk	SF	\$14	Assumed 50 sf (5' wide by 10' long - 2 panels)
2 - Cross slope 4.1 - 6%	Remove and Rebuild Sidewalk	SF	\$14	Assumed 50 sf (5' wide by 10' long - 2 panels)
3 - Cross slope > 6%	Remove and Rebuild Sidewalk	SF	\$14	Assumed 50 sf (5' wide by 10' long - 2 panels)
4 - Pt width <36"	Add Sidewalk Width	SF	\$14	Assumed 15 sf (3' wide by 5' long)
5 - Edge chg > 1/4 "	Remove and Rebuild Sidewalk	SF	\$14	Assumed 50 sf (5' wide by 10' long - 2 panels)
6 - Cont Width <36"	Add Sidewalk Width	SF	\$14	Assumed 30 sf (3' wide by 10' long)
7 - Vertical Clearance	Clear Vegetation	LF	\$7.50	Assumed 5'
8 - Sidewalk > Road Slope	Remove and Rebuild Sidewalk	SF	\$14	Assumed 500 sf (5' wide by 100' long)
9 - Obst Wid <48"	Add Sidewalk Width	SF	\$14	Assumed 40 sf (4' wide by 10' long)
10 - No pass space	Add Sidewalk Width	SF	\$14	Assumed 30 sf (3' wide by 10' long)
11 - Pass int >200'	Add Sidewalk Width	SF	\$14	Assumed 30 sf (3' wide by 10' long)
12 - Grate doesn't meet standards	Grate Adjustment	EA	\$250	
Driveways				
1 - Cross slope 2.1 - 4%	Rehab Driveway	SF	\$14	Assumed 80 sf (4' wide by 20' long)
2 - Cross slope 4.1 - 6%	Rehab Driveway	SF	\$14	Assumed 80 sf (4' wide by 20' long)
3 - Cross slope >6%	Rehab Driveway	SF	\$14	Assumed 80 sf (4' wide by 20' long)
4 - Edge chg >1/4"	Remove and Rebuild Sidewalk	SF	\$14	Assumed 25 sf (5' wide by 5' long - 1 panel)
5 - Vertical Clearance	Clear Vegetation	LF	\$7.50	Assumed 5'
6 - Trans. Slope >5%	Build Ramp	EA	\$2,532	Assumed 1 per driveway
Ramps				
1 - Slope 8.1 - 9%	Build Ramp	EA	\$2,532	
2 - Slope 9.1 - 12%	Build Ramp	EA	\$2,532	
3 - Slope >12%	Build Ramp	EA	\$2,532	
4 - Cross slope 2.1 - 4%	Build Ramp	EA	\$2,532	
5 - Cross slope 4.1 - 6%	Build Ramp	EA	\$2,532	
6 - Cross slope >6%	Build Ramp	EA	\$2,532	
7 - No ramp	Build Ramp	EA	\$2,532	
8 - Flare >10%	Remove and Rebuild Sidewalk	SF	\$14	Assumed 30 sf (5' wide by 6' tall triangle on each side)
9 - No flares	Add Sidewalk Width	SF	\$14	Assumed 30 sf (5' wide by 6' tall triangle on each side)
10 - Edge chg > 1/4"	Remove and Rebuild Sidewalk	SF	\$14	Assumed 25 sf (5' wide by 5' long - 1 panel)
11 - No discernable surface	Granite Pavers	SF	\$25	Assumed 30 sf (5' wide by 6' tall)
12 - No landing	Add Sidewalk Width	SF	\$14	Assumed 52 sf (add two 4x4 panels on either side and one 4x5 panel behind ramp)
13 - Width <36"	Build Ramp	EA	\$2,532	
14 - Rise >30"	Build Ramp	EA	\$2,532	
15 - Lng rp Width <44"	Add Sidewalk Width	SF	\$14	Assumed 30 sf (3' wide by 10' long)
16 - No handrails	Add Handrails	LF	\$75	Assumed 20'

City of Austin Transition Plan
Inventory of Existing / Absent Sidewalks and Ramps

RAMPS	Type Codes							
	Blank	0	1	1A	1B	2	3	TOTAL
Outside City	42	1,163	441	-	-	505	364	2,515
CBD	73	-	782	234	173	365	-	1,627
Central	504	-	83	18	35	34	-	674
E Margin	75	339	220	-	-	145	132	911
East	780	-	307	75	82	373	-	1,617
Far North	322	1,118	682	5	11	862	267	3,267
Far South	237	292	184	-	-	237	193	1,143
Holly St	140	-	43	19	41	104	-	347
Northeast	437	4	7	-	-	27	1	476
Northwest I	604	-	-	-	-	-	-	604
Northwest II	895	-	-	-	-	10	-	905
Southeast	509	-	-	-	-	-	-	509
Southwest	592	-	3	-	5	3	-	603
W Margin	118	1,930	386	-	353	448	-	3,235
West	288	4	2	-	-	32	13	339
TOTAL	5,616	4,850	3,140	351	700	3,145	970	18,772
SIDEWALKS	Type Codes							
	0	1	2	3	4	5	TOTAL	TOTAL
	Absent SW	Existing SW	Driveway	Marked Xing	Unmarked Xing	Other/Unknown	FEET	MILES
CBD	34,330	246,632	30,165	34,769	15,740	140	361,776	68.5
Central	283,991	278,665	39,607	13,497	22,293	107	638,160	120.9
E Margin	1,637,159	564,085	101,481	8,737	31,362	62	2,342,886	443.7
East	791,674	483,639	68,788	15,002	50,312	104	1,409,520	267.0
Far North	3,371,144	2,884,844	548,938	48,876	127,549	255	6,981,606	1,322.3
Far South	1,250,881	1,537,942	332,097	24,557	45,784	108	3,191,369	604.4
Holly St	70,157	92,371	12,802	2,522	8,314	-	186,166	35.3
Northeast	738,231	230,950	35,225	8,097	18,899	39	1,031,442	195.3
Northwest I	440,667	204,796	36,469	8,462	21,715	188	712,296	134.9
Northwest II	854,336	341,306	69,267	13,221	32,135	79	1,310,345	248.2
Southeast	395,924	291,734	36,914	8,029	22,214	95	754,910	143.0
Southwest	600,393	261,798	51,196	12,107	25,604	109	951,206	180.2
W Margin	6,262,147	2,940,879	515,604	30,962	97,482	325	9,847,398	1,865.0
West	1,325,699	393,756	53,660	9,801	23,700	65	1,806,681	342.2
TOTAL FEET	18,056,734	10,753,398	1,932,215	238,638	543,102	1,675	31,525,762	
TOTAL MILES	3,419.8	2,036.6	365.9	45.2	102.9	0.3		5,970.8
<i>"Margin" refers to areas inside the City limits but not within the other 12 named areas.</i>								

TASB / ADA Condition Assessment
Cost Estimate
Based on Limited Field Assessment (13%)

Description	Work Order Item	Qty	Unit	Unit Price	Cost
Sidewalks					
Sidewalk exceeds 2% cross-slope	R&R Sidewalk	405,474	SF	\$ 14.00	\$ 5,676,636.00
Passing width < 36"	Add SW Width	702	SF	\$ 14.00	\$ 9,828.00
Edge chg > 1/4"	R&R Sidewalk	76,150	SF	\$ 14.00	\$ 1,066,100.00
Continuous length < 36"	Add SW Width	5,496	SF	\$ 14.00	\$ 76,944.00
Vert Clear < 80"	Clear Vegetation	785	LF	\$ 7.50	\$ 5,887.50
Sidewalk slope > Road Slope	R&R Sidewalk	24,576	SF	\$ 14.00	\$ 344,064.00
Obstacle Width < 48"	Add SW Width	4,420	SF	\$ 14.00	\$ 61,880.00
No pass space	Add SW Width	486	SF	\$ 14.00	\$ 6,804.00
Grate does not meet ADA standards	Grate Adjustment	2	EA	\$ 250.00	\$ 500.00
Subtotal Sidewalks					\$ 7,248,643.50
Ramps					
Slope exceeds 8%	R&R Ramp	448	EA	\$ 2,532.00	\$ 1,134,336.00
Cross slope exceeds 2%	R&R Ramp	146	EA	\$ 2,532.00	\$ 369,672.00
No ramp	Build Ramp	249	EA	\$ 2,532.00	\$ 630,468.00
Flare >10%	R&R Sidewalk	3,450	SF	\$ 14.00	\$ 48,300.00
No flares	Add SW Width	3,570	SF	\$ 14.00	\$ 49,980.00
Edge chg > 1/4"	R&R Sidewalk	200	SF	\$ 14.00	\$ 2,800.00
No discernable surface	Add Granite Pavers	4,800	SF	\$ 25.00	\$ 120,000.00
No landing	Add SW Width	260	SF	\$ 14.00	\$ 3,640.00
No handrails	Add Handrails	40	LF	\$ 75.00	\$ 3,000.00
Subtotal Ramps					\$ 2,362,196.00
Driveways					
Cross slope >2%	Rehab Driveway	125,536	LF	\$ 14.00	\$ 1,757,504.00
Edge chg > 1/4"	R&R Sidewalk	3,900	SF	\$ 14.00	\$ 54,600.00
Trans slope > 5%	Build Ramp	40	EA	\$ 2,352.00	\$ 94,080.00
Subtotal Driveways					\$ 1,906,184.00
Total ADA Sidewalk Improvements					\$ 11,517,023.50
Total Linear Feet of Existing Sidewalk:		2,167			
Total Linear Feet included in Field Assessment:		285			
Percentage of Sidewalk included in Field Assessment:		13%			
City-wide Extrapolated Construction Cost:		\$90M			
City-wide Extrapolated Total Cost:		\$115M			