



- **2.5% of PAS;** Bicycle Lanes add points if there are bicycle lanes on both sides of the street.
- 2. The Pedestrian Safety Score (**PSS**) accounts for <u>40%</u> of the base score. This score looks at adjacent street characteristics, number of pedestrian incidents with motor vehicles, and public health data for the area. This score makes no judgment about existing infrastructure or faulty facilities.
- **45**% **of PSS;** Street Classification gives points to sidewalks based on the classification of adjacent streets, adding more points to streets with higher traffic volume and speed limits.
- **35**% **of PSS**; Pedestrian Health Risk uses public health data to look at the health needs at a zip-code level. Points are awarded by higher points given to very high, medium, low, or very low health need areas respectively.
- 20% of PSS; Pedestrian/Automobile incidents awards points according the number of incidents adjacent to the sidewalk segment. This element provides an indicator of pedestrian activity and does not imply fault or negligence on any party. The data is multiplied per occurrence; so locations with multiple incidents receive higher scores.
- 3. The Fiscal Availability Score represents <u>10%</u> of the base score. This score is awarded if fiscal posting exists for a portion of, or for the entire absent sidewalk segment.
- 4. The Neighborhood Plan Score is added to the base score for sidewalk segments requested in an adopted neighborhood plan. This is an additional score since not all neighborhoods have adopted a plan. The score is based on the age of the plan, one point per year can be added with a maximum of 10 points.
- 5. The Special Consideration Score is also added to the base score and allows for consideration of specific areas known to attract a higher volume of pedestrian traffic than would be suggested by the surrounding criteria (i.e. Zilker Park). The City's safe routes to school program is another candidate for addition of the Special Consideration Score. Additionally, the special consideration score may be awarded to absent sidewalk segments which serve to implement an indentified trail system within the City's Trail Master Plan or implements a safe routes to school program objective. Points are discretionary and must be approved by the Director of Public Works or Director of Transportation with a maximum of 10 points.



NDED 18	Table 1				
	Absent Sidewalk Prioritization Matrix				
ABSENT SIDEWALK PRIORITIZATION IVIATRIX  Pedestrian Attractors Score(PAS):  Base Score Weight 50%					
<u>0 - 100</u>		Durana	d Dainta		
Element	Criteria	Proposed	1/4 Mile		
Proximity to Attractors	(Multiply Possible Points by number of attractors within specified radius)  State or Local Government Offices	1/8 Mile 10x			
Weight: 45%	Commuter Rail Stations	10x 10x	5x 5x		
	Commuter Kan Stations	IUX	38		
	Transit Stop (Max. of 50 pts.)	9x	4.5x		
	Major Grocery Stores	9x	4.5x		
	Places of Public Accommodation (parks, libraries, etc.)	8x	4x		
	Public or Private Schools	8x	4x		
	Employers with > 500 Employees	8x	4x		
	Public Housing	7x	3.5x		
	Public Parking Facilities	5x	2.5x		
	Religious Institutions	5x	2.5x		
		(max 10	00 pts.)		
Median Household Income	Within a census tract at or below Median Household Income (n=\$48,950)				
Weight: 5%	a) Yes	10	0		
	b) No	0	)		
Residential Population	Total population residing within <u>1/2</u> -mile radius of proposed project				
Weight: 25%	a) Population >/= 8,000	100			
	b) Population >/= 4,000 and < 8,000	75			
	c) Population >/= 1,000 and < 4,000	50			
	d) Population >/= 500 and <1,000	25			
	e) Population < 500	0	1		
<b>Existing Facilities on Street</b>	For arterials and collector streets, are there complete sidewalks on				
- Weight: 10%	both sides of the street?				
	a) Yes	0	)		
	b) No	100			
	For local / residental streets, is there an existing complete sidewalk on				
	either side of the street?				
	a) Yes	0	)		
	b) No	100			
Request	Project requested by ADA Task Force				
Weight: 10%	a) Yes	75			
	b) No	0	)		
	Project requested by citizen through 311				
	a) Yes	25	5		
	b) No	0	)		
C T ''C ''	Is the sidewalk within a 1/4 mile of a Core Transit Corridor?				
Core Transit Corridors Weight: 2.5%	a) Yes	10	10		
Weight. 2.570	b) No	0			
Bicycle Lanes	Are there bike lanes on both sides of the street?				
Weight: 2.5%	a) Yes	10			
	b) No	0	)		



# TABLE 2 CONTINUED

Pedestrian Safety Score(PSS): 0 - 100	Base Score Weight 40%	
Street Classification	a) Arterial	100
Weight: 45%	b) Collector	75
	c) Residential	50
Pedestrian Health Status	a) Very High	100
Weight: 35%	b) High	75
	c) Moderate	50
	d) Low	25
	e) Very Low	0
Pedestrian/Automobile Incidents	Number of incidents reported to APD involving pedestrians and motorized	
Weight: 20%	vehicles in previous 36 months multiplied by 10	10X
	only applied to sidewalk on the street where the incident took place	(max 100 pts.)
Fiscal Availability Score(FAS): 0-100	Base Score Weight 10%	
Existing Fiscal Availability	Is there fiscal posting for this block?	
Weight: 100%	a) Yes	100
Neighborhood Plan Score(NPS): 0 -	Addition to base score (max 10 points)	0
100	Project requested via Adopted Neighborhood Plan - Age of	
Neighborhood Request	Neighborhood Plan	1 point / per year
Weight: 100%	One point per year since the adoption of the neighborhood plan, up to 10 points	(max 10 pts.)
Special Consideration Score(SCS): 0 - 100	Addition to base score (max 10 points)	
Special Consideration Weight: 100%	As approved by the Director of Public Works or Director of Transportation (Safe Routes to School, special recurring events, trail connectivity, or other) 10 point addition for absent sidewalk segments within 1/2 mile of location.	10
	a) Yes	10
	b) No	0





The Exhibit 1 in Appendix A illustrates absent sidewalk scores for the City of Austin. The absent sidewalk matrix scoring range (0-100) is subdivided into five categories and is color coded for clarity. The categorical ranges are derived by a comparison algorithm that creates natural groupings within the score results. The scores are generated using the Absent Sidewalk Prioritization Matrix. The following table outlines the score range for each priority ranking as well as the color associated with the ranking in the exhibit.



Table 3 Priority Hierarchy Ranges				
	Rank	Color		
Very High	> 59.01	Red		
High	50.01 - 59.00	Navy		
Medium	40.01 - 50.00	Green		
Low	30.01 - 40.00	Orange		
Very Low	< 30.00	Violet		

On August 31, 2006, the City of Austin passed Ordinance No. 20060831-068, establishing Commercial Design Standards in the City of Austin. A key element to the standards are specific sidewalk width and design requirements. Sidewalks built by the City of Austin Public Works Department shall conform to the widths prescribed, or apply for approval of alternative equivalent compliance, per section 1.5 of Attachment A of the Ordinance. All other sidewalks shall be built per the Transportation Criteria Manual (TCM). Where feasible, a 2-foot buffer, measured from the back of curb, will be constructed between the roadway and the sidewalk. Additionally, physical buffers such as street trees, a range of street furnishings and amenities, landscaping, bicycle lanes, on-street parking, and transit-only lanes can enhance sidewalk design by separating the road and the sidewalk.

The estimated cost to build-out the City's sidewalk network is \$824 million. This is based on the approximately 3,500 linear miles of absent sidewalk and over 5,500 missing curb ramps. A cost of \$5.50/square foot of sidewalk, average 5' sidewalk width, and \$1,000/ramp was used to develop this estimate. Additionally, it includes the cost of realizing sidewalk widths on core transit corridors and urban roadways, as prescribed by Commercial Design Standards Ordinance (Ordinance No. 2006831-068). Adherence to the Commercial Design Ordinance for suburban roadways is assumed in the 25% contingency cost. The estimate is for sidewalk construction only, and includes a 25% contingency and a 25% allowance for soft costs such as engineering, ROW, inspection, City management, etc. It does not include retaining walls, excavation, reinforcing, expansive soils mitigation, detectable pavers, landscape and sprinkler system repairs, traffic control, rebuilding portions of driveways, relocating mailboxes, new curbs or curb repairs, thickened commercial driveways, demolition, water meter and shut-off relocations, safety fencing, handrails, guard rails, erosion control, anti-graffiti coatings, asphalt cutting and patching, sign removal and installation, mobilization, etc. Table 4 summarizes the absent sidewalk costs.





Table 4 Absent Sidewalk Costs					
Sidewalk Description	Linear Miles	Width (feet)	Cost		
Core Transit Corridors	33	15	\$15,000,000		
Urban Roadways	10.5	12	\$4,000,000		
Surburban and Residential	3456.5	5	\$502,000,000		
Ramps	5500		\$6,000,000		
Subtotal			\$527,000,000		
Contingency (25%)			\$132,000,000		
Soft Costs (25%)			\$165,000,000		
Total			\$824,000,000		

#### PIMS TOOL MAINTENANCE PLAN

The City of Austin will be responsible for maintaining the PIMS tool by making updates to the GIS datasets. Each dataset is assigned an update schedule, and some update processes are more intensive than others. A "how-to" process document is included in the User Manual for step-by-step instructions to update every dataset in the PIMS tool.

The datasets directly related to sidewalk condition will need to be modified regularly as sidewalk infrastructure is replaced or repaired. Accurate and timely updates to these particular datasets are critical to the integrity of the PIMS tool, and will require a significant amount of time devoted to the task. They are listed below as "Continual Updates."

Some datasets need to be updated annually, as there may not be significant changes or available data within a shorter time frame. There are two categories under "Annual Updates" following: Readily Available Datasets and Datasets Must be Created. The former are datasets that are already being created or updated by another entity, so they need to be collected and used to replace the old datasets in PIMS. "Datasets Must be Created" refers to datasets for which there is no readily available replacement. Updates to this data requires significantly more time and effort, as there is a process involved to create spatial data from other information sources.

The remaining datasets fall under the "Other" category and have varying update frequencies. As in the "Annual Updates" category, some datasets are listed as being readily available, and some will require additional resources.

It is anticipated that the maintenance and upkeep of these datasets will require one full time employee.





# Table 5 City of Austin PIMS Tool Datasets

# CONTINUAL UPDATES

The following datasets noted with "continually" should be updated as any changes are made to the entity the dataset represents. The original file will be edited directly, but archives should be saved monthly.

- Condition Flag Points
- Curb Ramps
- Network (sidewalks)

# ANNUAL UPDATES

Datasets with an "annual" update status are likely to have a few updates over the span of a year, and as such should be checked annually. The entire dataset will be replaced with a new one. If there are no changes from the previous year, then it is not necessary to replace the existing file.

# **Readily Available Datasets:**

- Government Offices
- Major Employers
- Parks
- Public Accommodations
- Public Facilities
- Bicycle Lanes
- Rail Stops
- Transit Stops

# **Datasets Must Be Created:**

- Accidents
- Religious Institutions
- Fiscal Posting
- Grocery Stores
- Neighborhood Plan Requests
- Parking
- Public Housing
- 311 Request

# **UPDATES** - OTHER

The datasets below fall into as-needed update categories.

#### **Readily Available Datasets:**

- Census Blocks (every 10 yrs)
- Median Income (every 10 yrs)
- Streets (as available)

# **Datasets Must Be Created:**

- Health Status (every 2 yrs)
- Core Transit Corridors (if change approved by Council)
- ADA Task Force Request (as needed)



Table 6 City of Austin PIMS Tool Maintenance Plan				
Dataset Name	Create Dataset	Cost		
<b>Condition Flag Points</b>	Continually Updated	COA CTM		
<b>Curb Ramps</b>	Continually Updated	COA CTM		
Network (sidewalks)	Continually Updated	COA CTM		
Government Offices	COA CTM	COA CTM		
Major Employers	COA CTM	COA CTM		
Parks	COA CTM	COA CTM		
Public Accommodations	COA CTM	COA CTM		
Public Facilities	COA CTM	COA CTM		
Bicycle Lanes	COA CTM	COA CTM		
Rail Stops	CapMetro	COA CTM		
Transit Stops	CapMetro	COA CTM		
Major Employers	COA CTM	COA CTM		
Accidents	LAN	COA GIS Analyst		
Religious Institutions	LAN	COA GIS Analyst		
<b>Fiscal Posting</b>	LAN	COA GIS Analyst		
<b>Grocery Stores</b>	LAN	COA GIS Analyst		
<b>Neighborhood Plan Requests</b>	LAN	COA GIS Analyst		
Parking	LAN	COA GIS Analyst		
311 Request (table)	LAN	COA GIS Analyst		
Census Blocks	U.S. Census Bureau	COA GIS Analyst		
Median Income	U.S. Census Bureau	COA GIS Analyst		
Streets	City of Austin Addressing	COA GIS Analyst		
<b>Health Status</b>	LAN	COA GIS Analyst		
<b>Core Transit Corridors</b>	LAN	COA GIS Analyst		
<b>ADA Task Force Request</b>	LAN	COA GIS Analyst		

<sup>\*</sup>Entities listed in gray are subject for evaluation, and may be overwritten.

COA = City of Austin

CTM = Communication and Technology Management

LAN = Lockwood, Andrews & Newnam, Inc.

Create Dataset- Person/Organization responsible for creation of the feature class required to run PIMS. Update PIMS- Person/Organization responsible for replacing or updating the existing dataset in PIMS tool with new dataset.





#### PUBLIC INPUT AND REVIEW

The Public Works Department Bicycle and Pedestrian program along with LAN conducted an extensive series of public presentations from May 2007 through May 2008 to gain insight and apply citizen input into the PIMS tool development and absent sidewalk matrix design. This process resulted in numerous modifications of the matrix to further refine stakeholders' requirements and also gave the development team practical knowledge of the public's desire for transparent processes in the expenditure of sidewalk infrastructure funds. The public process included the following stakeholders, boards, and commissions with the major items of input those groups provided.

#### **ADAPT**

Submission of list of priority projects

#### MAYOR'S FITNESS COUNCIL

- Public Health data weighting changes
- Addition of grocery stores as a pedestrian attractor

#### **ADA TASK FORCE AND ADAPT**

- Public Health data weighting changes
- Transit stop weight element changed

# URBAN TRANSPORTATION COMMISSION

- Inclusion of Safe Routes to School (SRTS) information
- Address sidewalk gaps

#### COMPREHENSIVE SUBCOMMITTEE (PLANNING COMMISSION)

- Pedestrian/Automobile Incidents element
- Gap analysis
- ° Inclusion of SRTS

# MAYOR'S COMMITTEE FOR PEOPLE WITH DISABILITIES

- Addition of grocery stores as a pedestrian attractor
- ADA Task Force weighting modification

# Austin Neighborhood Council

Formation of a focus group to further encourage public comment

# ZONING AND PLATTING COMMISSION

Question on creation of sidewalk matrix dataset

#### **DESIGN COMMISSION**

- ° Changed name to Sidewalk Master Plan to better reflect the scope of the project due to multiple comments for the plan to address the pedestrian environment beyond sidewalks.
- Core Transit Corridors added as element
- Proximity to parkland

#### **DIRECTOR OF PUBLIC WORKS**

Added median household income as an element