

Tucson Region Sidewalk Inventory Project Report

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Pima Association of Governments

January 2005

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A special thanks to:

Jeff Handt for all his hard work as a citizen volunteer on this project, and as a strong advocate for the disabled community

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1. Project Purpose

The Sidewalk Inventory Project provides a "big picture" assessment of sidewalk connectivity and accessibility along the major roadway network within the Tucson Region. This inventory will be used to identify and prioritize new sidewalk improvement projects with the main goal of building an interconnected network of pedestrian-accessible transportation corridors.

One key objective of this project was to identify the gaps in the existing sidewalk network to indicate where barriers exist. Filling in the gaps is the first step in making the network accessible, especially for persons with disabilities. While sidewalk gaps represent the main barrier to accessibility, they are not the only barrier that should be addressed.

Another objective was to analyze the design characteristics of existing sidewalks to determine if they meet the basic standards for accessibility set by the federal Americans with Disability Act (ADA). Features

Figure 1. A gap in the sidewalk network makes this roadway inaccessible to wheelchair users.

such as sidewalk width, slope and alignment were analyzed to assess the extent of ADA-accessibility of each sidewalk segment.

Once the inventory was completed, sidewalk segments were put into a GIS-based map and database. The maps and database serve as tools for future project development and prioritization. These tools are now available for short-range and long-range sidewalk project planning and programming within the Tucson Region.

2. Inventory Process

The sidewalk inventory survey work began in January 2003 and ended in October 2003. The survey covers the entire Tucson region from approximately Sandario Road to the west, Freeman Road to the east, the Town of Oro Valley limits to the north, and the Green Valley community to the south. This area is roughly 1,350 square miles (See map in Appendix A).

The inventory focused specifically on the major roadway grid network, consisting of approximately 4,000 directional miles of arterials and collectors. Existing shared-use pathways were also included, most of which parallel major arterials or are considered regional pedestrian facilities.

Sidewalks were inventoried based on half-mile to one-mile roadway segments, or between major intersection points. This level of detail was sufficient to analyze sidewalk needs on a regional scale in order to understand the "big picture." In the future, the Pima Association of Governments (PAG) plans to conduct a more detailed inventory of all streets and roadways to identify neighborhood-scale sidewalk needs.

The inventory was conducted using a variety of tools and data in a particular sequence. Local staff knowledge of regional roadway conditions was used first as a process of identifying roadway segments with no sidewalks. Approximately 25 percent of roadways surveyed are rural roadways commonly known to not have sidewalks, much less curbs and other basic infrastructure.

Survey work was then conducted using PAG's 2002 digital orthophoto aerial imagery covering the entire Tucson region¹ (See Figure 2). The color imagery shows the landscape in great detail at high resolution. It is effective for surveying suburban and rural roadways; however, it does not work well for urban roadways covered with shadows and other visual obstructions. A clear vertical view of the sidewalk area is necessary when using this source for visual accuracy.

For other roadways, the Tucson Department of Transportation's Transview website provides a very clear horizontal view of most urban arterials using a series of photo images packaged in a "Virtual Ride" function². By simply clicking a button, the viewer can drive a selected roadway at a set speed and scan the sidewalk area and other roadway features. This process was conducted for both sides of selected roadways.

Lastly, field surveys were conducted to verify any unknown areas, as well as roadways under construction or those that experience new development on a regular basis. While all of these tools were helpful in putting together the sidewalk map, by no means is the inventory 100 percent current due to the lag time between the inventory process and final mapping. However, a "big picture" assessment was achieved and is suitable for 5year planning.



Figure 2. Example of digital orthophoto imagery.

¹ Pima Association of Governments orthodigital photo imagery: http://www.pagnet.org/RDC/.

² Tucson Department of Transportation imagery: http://tdotmaps.transview.org/mapquide mwf tdot.htm.

3. Database and Mapping

Once the sidewalk inventory field work was completed, each half-mile to mile roadway segment was recorded into a Microsoft Excel database and mapped using a GIS-based program. There are approximately 1,000 line-item roadway segments for the region. The database contains pertinent information on each roadway segment such as location, roadway type and classification (arterial, collector), jurisdictional control, transit routes and sidewalk status. Appendix B shows the database format. Segments are listed in alphabetical order but can be quickly reorganized by another category using the "sort" function. Additional data can be added in the future, as needed.



Figure 3. Although usable by most pedestrians, hard-packed dirt surfaces are not considered accessible sidewalks.

For the purposes of this inventory, sidewalks are considered concrete, brick, or asphalt-paved surfaces, clearly designated for pedestrian use. Hard-packed dirt and/or unmarked asphalt surfaces are not considered sidewalks. The "sidewalk status" column in the database corresponds directly to four color-coded sidewalk categories shown on the inventory map (Appendix A). Below is a description of each sidewalk category.

- Sidewalk (Accessible). Continuous sidewalk segments that appear to be ADAaccessible for persons with disabilities for the entire length of the roadway segment on both sides, unless one side is entirely undeveloped. This inventory does not guarantee ADA-accessibility for any segment of roadway.
- Sidewalk (Partially Accessible). Continuous sidewalk segments for the entire length of the roadway segment on both sides, but do not appear to be ADAaccessible for one or more of the following reasons: no wheelchair ramps; sidewalk is too narrow; slopes are too steep; or there are permanent pathway barriers such as utilities, signs, landscaping and/or drainage ways.
- Partial Sidewalk. Sidewalk segments for only a portion of the entire length of the
 roadway segment, or only on one side of the roadway with existing development.
 In some places, sidewalk segments are 95 percent completed. In other places,
 sidewalk segments are 5 percent completed, or only on one side. In all of these
 cases, the sidewalk segment is considered partially completed and therefore, not
 ADA-accessible.
- Shared-Use Path. Designated asphalt or concrete-paved pathways shared by pedestrians, cyclists and other non-motorized users. All shared-use paths shown on the map are considered ADA-accessible for persons with disabilities.

4. Key Inventory Findings

- There are many missing sidewalk segments (gaps) along major roadways in the urban core. This is most likely due to the fact that these roadways were built in the 1950s through 1970s, when sidewalks were not required through government development codes and policies, and when pedestrian travel (especially for the disabled) was not identified as a high priority.
- Many of the accessible sidewalk segments exist in suburban areas where significant development has occurred since the late 1980s, and after the ADA was passed by Congress.
- Accessible sidewalks in the urban core were built mostly as part of major roadway improvement projects in the last 10 to 15 years. However, since the mid 1990s, the cities of Tucson and South Tucson have invested heavily in sidewalks as stand-alone projects to improve safety and mobility for pedestrians.
- Several of the high-ridership transit corridors have significant gaps in the sidewalk network. These corridors include Broadway, Speedway, 22nd Street, Grant, Stone, and Campbell.



Figure 4. Many pedestrian barriers exist along older urban roadways.



Figure 5. A new segment of ADA-accessible sidewalk as part of a major roadway improvement project.

- Sidewalks are generally provided in newer residential areas with 4 or more dwelling units per acre. This is very evident in the suburban communities of Marana, Oro Valley, Sahuarita and southeast Tucson where most of the medium to high-density residential development has occurred in the last few years.
- Less dense residential areas have fewer sidewalks for several possible reasons:

 there have been no or few pedestrian-related accidents or demand for sidewalks 2) there is minimal commercial development within walking distance,
 there are no schools within walking distance, or 4) residents have actively opposed sidewalks and other modern roadway features to retain the rural character of the area (e.g. historic Fort Lowell area).

5. Ranking System Development

Once the inventory was completed, a ranking system was developed to prioritize corridors with sidewalk needs based on a common set of criteria. The main intent of the ranking system is to create a rational process for local officials to plan and build sidewalks where they are needed the most along the major roadway network. It is expected that high-priority sidewalk projects will be incorporated into future major transportation projects, when and where practical.

The development of the sidewalk project ranking system involved the input of local jurisdictional staff, pedestrian planners, members of the disabled community, and others who have an interest in pedestrian facilities and accessibility. Systems from other communities were researched as well. It was determined that the ranking criteria should be diverse enough to represent a variety of pedestrian trip generators and attractors, yet simple enough to update in future years. A 100-point sidewalk project ranking system was developed using 9 major criteria, listed below.

- Annual Average Daily Traffic (AADT)
 Major roadways usually accommodate more traffic and higher speeds. The more traffic and higher the speeds, the less safe the roadway is for pedestrians. 1 to 10 points for traffic volumes (source: 2003 PAG traffic volumes map).
- Transit Ridership

 Fixed-route transit service encourages travel by pedestrians. Roadways with higher levels of transit ridership have higher levels of pedestrian traffic. 0 to 5 points for passengers per mile, and 0 to 5 points for bus stop boardings (source: 2002 PAG bus stop boardings map).
- Population Density
 More densely populated residential areas tend to have more pedestrians using nearby streets. 1 to 10 points based on PAG region population density map (source: 2000 Census data).
- Commercial Land Use within ¼ Mile

 More densely populated commercial business districts tend to attract more pedestrians. 0 to 15 points based on density of commercial activity along street segments (source: 2002 PAG land use map).
- Schools within 1/3 Mile

 Schools attract large volumes of pedestrians because students often live within walking distance and are too young to drive. The larger the school, the more students walk to school. Also, younger students tend to be less safe on local roadways. 0 to 15 points based on size, type, and number of schools along

roadway segments (sources: 2004 Tucson Metro Street Atlas, Yellow Pages Directory, thru September 2004).

Parks and Recreation within 1/4 Mile

10 points max.

Parks and other recreational facilities attract pedestrians for health and fitness reasons. Also, parks attract many younger pedestrians. The larger the park, the more pedestrians use nearby roadways. 0 to 10 points based on the size of the park, number of parks and recreational use (source: 2004 Tucson Metro Street Atlas).

Medical with 1/4 Mile

10 points max.

Medical facilities and offices attract many pedestrians, especially those who have disabilities and are unable to drive themselves. The larger the medical facility, the more pedestrians use nearby roadways. Also, the type of facility determines the pedestrian volumes. 0 to 10 points based on type, size, and number of medical facilities (source: 2004 Tucson Metro Street Atlas, Yellow Pages Directory thru September 2004).

ADA Eligible Rider Density

10 points max.

The City of Tucson collects and maintains a list of ADA eligible paratransit service users. Some ADA-eligible riders use paratransit services only because there are no accessible sidewalks connecting to nearby bus stops. The higher the density of ADA eligible riders along a major roadway, the more people with disabilities could benefit from sidewalk improvements. 0 to 10 points based on ADA rider residential density (source: City of Tucson Dept. of Transportation).

Local Priority/Safety

10 points max.

Many sidewalk projects have a high level of importance due to specific jurisdictional needs. A substantial number of pedestrian-related accidents along a particular section of roadway often results in a high priority project. Also, repeated citizen requests for a particular project can result in a high priority project. 0 to 10 points based on level of priority determined by local jurisdiction officials (source: to be determined by local jurisdictions).

• 100 points maximum

6. Project Ranking Results

Once the criteria points were assigned to each roadway segment, all segments were ranked using their total point score. Appendix B shows the first page of segments in alphabetical order. Appendix C shows the first page of segments in rank order. Not surprisingly, almost all of the top 50 ranked segments are in the urban core where there are high numbers of residential and commercial business densities, schools, hospitals, parks, transit routes, and traffic volumes. These are also the same corridors with frequent bicycle and pedestrian-related accidents.

A closer analysis of the rankings indicates that 32 (over 60 percent) of the top 50 segments are located on just five major roadways: Speedway, Broadway, Wilmot, Grant and



Figure 4. A new segment of ADA-accessible sidewalk.

Oracle. All but two of the 32 are within the City of Tucson limits. The other two are along busy sections of Oracle Road in unincorporated Pima County.

Local officials can use the database to "sort" projects by jurisdiction and begin programming and construction in their annual capital improvement programs. The City of Tucson began a massive sidewalk improvement program in the fall of 2004, which includes many of the top 50 rankings. Other projects will be completed through major roadway improvements programmed over the next several years.

The map in Appendix D shows Tucson Region Programmed Sidewalk Improvements for Fiscal Years 2005-2009. Approximately \$20 million will be invested in sidewalk and shared-use path improvements over the next five years. Another \$5 million will be spent on other pedestrian needs such as signalized crosswalks, wheelchair ramps and safety education programs.

7. Related Projects

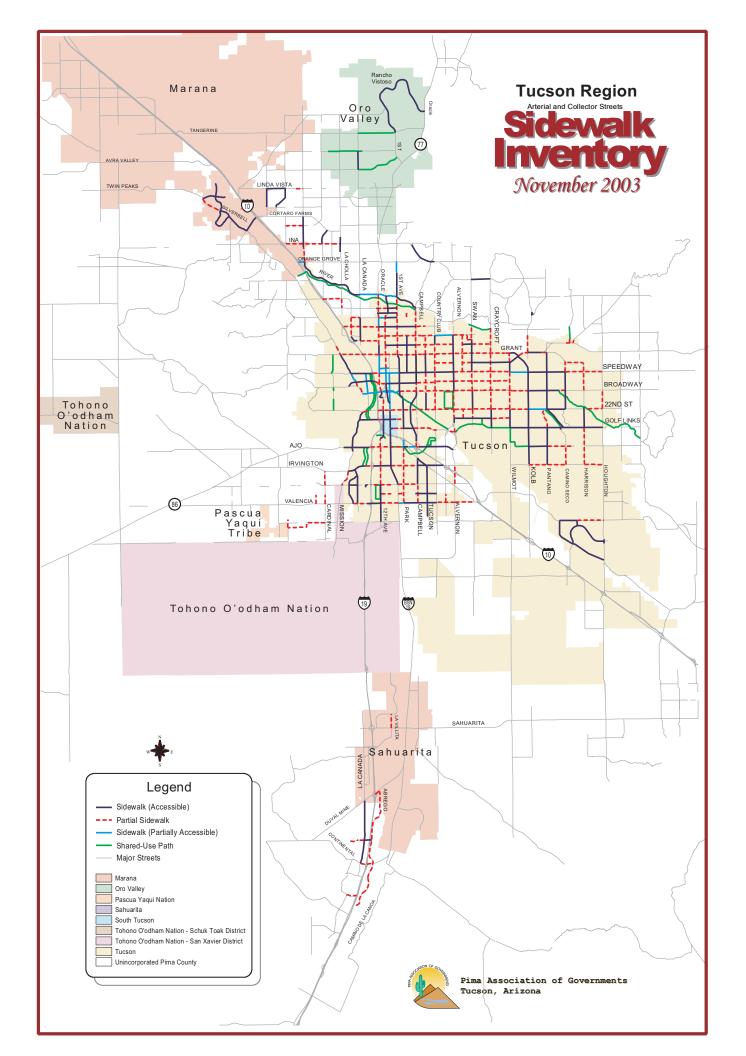
The sidewalk inventory has become a useful tool for other analyses. Just recently, PAG staff coordinated with the DIRECT Center for Independence to create a map of accessible sidewalks in relation to accessible rental housing units within the region. This map will help people with disabilities make better decisions about where to live so they have better access to public transit, employment, shopping and medical facilities.

The inventory has been useful in assisting City of Tucson staff make specific determinations for ADA eligibility. This is an ongoing process as new client applications are reviewed each month. Future projects include the analysis of accessible sidewalks in relation to the fixed-route transit system, hospitals, shopping malls and schools.

Tucson Region Sidewalk Ir	nventory	Project
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Appendix A

Tucson Region Sidewalk Inventory Map November 2003



Tucson Region	Sidewalk	Inventory	/ Project
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Appendix B

Tucson Region Sidewalk Inventory Database (segments in alphabetical order)

2005

Street	Segment Des	cription							Project Ranking Criteria										
											ADA			Park/Rec Schools Commrcl. Medical S					
				Jurisdiction/	Sidewalk	Planned	Transit	Roadway	Functional		Rider	Transit	Рор.		3 within 1/3			Local	Total
Rank	Street Name	From	То	Control	Status	Completion	Route	Туре	Class	AADT	Density	Ridership	Density	mile	mile	mile	1/4 mile.	Priority	Points
	10th Ave.	I-10	12th Ave.	South Tucson			16	Urban	Minor Arterial	2	6	5	8	0	10	3	0		34
	10th Ave.	18th St.	22nd St.	Tucson	PS	2005	7,16	Urban	Minor Arterial	1	2	6	7	4	4	3	0		27
	10th Ave.	22nd St.	29th St.	South Tucson		2005	16	Urban	Minor Arterial	1	2	5	7	4	2	3	0		24
	10th Ave.	29th St.	I-10	South Tucson		2005	16	Urban	Minor Arterial	2	3	5	8	0	0	3	0		21
	12th Ave. 12th Ave.	44th St.	Ajo	Tucson Tucson	PS PS	2005/2030 2005/2030	16	Urban	Minor Arterial	2	5	9	8	4	10	6	8		47
	12th Ave.	Ajo Nebraska	Irvington Drexel	Tucson	PS	2005/2030	16 24,27	Urban Urban	Minor Arterial Minor Arterial	4	4	8	10	6	2	6	2		44
	12th Ave.	Bilby	Valencia	Tucson	SFA	2003/2030	24,27	Urban	Minor Arterial	3	6	5	10	6	2	6	2		42
	12th Ave.	Irvington	Nebraska	Tucson	PS	2005/2030	16,23,24,2		Minor Arterial	4	4	6	8	0	4	6	2		34
	12th Ave.	Valencia	Elvira	Tucson	SFA	2005/2030	24	Urban	Collector	2	6	5	10	0	0	6	2		31
	12th Ave.	Drexel	Bilby	Tucson	SFA	2005/2030	24	Urban	Minor Arterial	3	3	5	9	6	2	3	0		31
	12th Ave.	40th St.	44th St.	Tucson	PS	2005/2030		Urban	Minor Arterial	2	3	0	8	0	8	3	2		26
	12th Ave.	Elvira	Los Reales	Tucson	SFA	2005/2030	24	Urban	Collector	1	3	5	10	0	0	0	0		19
	1st Ave.	Prince	Ft. Lowell	Tucson	PS	2005	6,34	Urban	Minor Arterial	7	4	8	9	4	8	12	8	+	60
	1st Ave.	Roger	Prince	Tucson	PS		6,34	Urban	Minor Arterial	7	4	8	10	0	9	9	3		50
	1st Ave.	Wetmore	Limberlost	Tucson	PS		6,34	Urban	Minor Arterial	6	5	6	10	8	0	9	3		47
	1st Ave.	Glenn	Grant	Tucson	PS	2005	6	Urban	Minor Arterial	6	5	7	9	4	2	12	1		46
	1st Ave.	River	Wetmore	Tucson	PS		34	Urban	Minor Arterial	6	2	4	6	8	0	9	10		45
	1st Ave.	Ft. Lowell	Glenn	Tucson	PS	2005	6	Urban	Minor Arterial	6	3	7	9	0	2	9	8		44
	1st Ave.	Limberlost	Roger	Tucson	PS		6,34	Urban	Minor Arterial	6	5	6	10	4	0	6	2		39
	1st Ave.	Rudasill	River	na County/Tuc			105	Urban	Minor Arterial	5	2	1	4	8	0	3	10		33
	1st Ave.	Lambet Ln.	Oracle	Oro Valley	0			Urban	Minor Arterial	3	1	0	4	0	0	9	0		17
	1st Ave.	Orange Grove	Rudasill	Pima County	SFA		105	Urban	Minor Arterial	4	1	1	5	0	0	0	0		11
	1st Ave.	Tangerine	Naranja	Oro Valley	0			Urban	Minor Arterial	3	1	0	3	0	0	3	0		10
	1st Ave.	Ina	Orange Grove	Pima County	0			Urban	Minor Arterial	34	4	0	4	0	1	0	0		9
	1st Ave.	Naranja	Lambert Ln.	Oro Valley	0		7	Urban	Minor Arterial		- 1	0	3	0	0	0	0		
	22nd St. 22nd St.	Alvernon Wilmot	Columbus Kolb	Tucson Tucson	PS PS	2005		Urban Urban —	Principal Arterial Principal Arterial	l 6 1 0		8 7	9 8	10	6 14	9	4		55 55
	22nd St. 22nd St.	Columbus	Swan	Tucson	PS	2005	 	Urban	Principal Arterial Principal Arterial	8	5	7	9	4	6	6	7		51
	22nd St. 22nd St.	Kolb	Pantano	Tucson	SPA			Urban	Principal Arterial		3	7	9	0	13	6	4		49
	22nd St.	Craycroft	Wilmot	Tucson	PS		7	Urban	Principal Arterial		7	7	8	4	1	9	3		47
	22nd St.	10th Ave.	6th Ave.	Tucson	PS	2030	7	Urban	Principal Arterial	-	4	6	8	10	9	3	1		47
	22nd St.	Swan	Craycroft	Tucson	PS	2000	7	Urban	Principal Arterial		6	6	8	0	0	6	8		42
	22nd St.	6th Ave.	Park	Tucson	PS	2030	7	Urban	Principal Arterial		2	7	8	6	8	3	0		40
	22nd St.	Tucson	Country Club	Tucson	PS		7,15	Urban	Principal Arterial	-	4	7	8	10	0	3	0		40
	22nd St.	Country Club	Alvernon	Tucson	PS-50		7	Urban	Principal Arterial		3	8	5	10	0	3	1		38
	22nd St.	Pantano Pkwy	Camino Seco	Tucson	SFA		7	Urban	Principal Arterial		2	5	8	0	9	3	4		36
	22nd St.	Camino Seco	Harrison	Tucson	PS		7	Urban	Principal Arterial	l 4	2	5	6	4	8	3	1		33
	22nd St.	Pantano	Pantano Pkwy	Tucson	SPA		7,37	Urban	Principal Arterial	l 7	0	5	7	0	1	6	2		28
	22nd St.	I-10	10th Ave	Tucson	PS	2030		Urban	Principal Arterial		1	0	5	6	2	6	0		26
	22nd St.	Park	Kino	Tucson	PS	2030	2,7	Urban	Principal Arterial		2	7	2	0	2	3	0		23
	22nd St.	Kino	Tucson	Tucson	PS		7	Urban	Principal Arterial		2	5	4	0	0	3	1		22
	22nd St.	Harrison	Old Spanish Trl	Tucson	PS			Urban	Principal Arterial		0	0	6	0	0	3	0		12
	22nd St.	Old Spanish Trl	Houghton	Tucson	PS			Urban	Principal Arterial	1 2	1	0	6	0	0	0	0		9
	22nd St.	Houghton	Melpomene	Tucson	0		4.47	Urban	Minor Arterial	1	2	0	4	0	0	0	0		7
	29th St.	Columbus	Swan	Tucson	SFA		1,17	Urban	Minor Arterial	3	6	6	9	10	2	3	2		41
	29th St. 29th St.	Swan	Craycroft	Tucson	SFA SFA		1,17	Urban	Minor Arterial	3 4	7	7	9	10	2	3 6	3		41 37
	29th St.	Alvernon 10th Ave.	Columbus 6th Ave.	Tucson South Tucson		2005	23	Urban Urban	Minor Arterial Minor Arterial		3	5	10	0	1	3	6		
	29th St.	Craycroft	Wilmot	Tucson	PS	2005	17	Urban	Minor Arterial	2 2	6	4	9	0	2	3	1	+	29 27
	29th St.	I-10	10th Ave.	son/South Tuc		2005	23	Urban	Minor Arterial	2	1	4	6	0	0	3	6	+	22
	29th St.	6th Ave.	4th Ave.	South Tucson		2000	23	Urban	Minor Arterial	2	2	5	6	0	0	3	1		19
	29th St.	4th Ave.	(RR Tracks)	South Tucson		2005	23	Urban	Minor Arterial	2	2	4	5	0	0	3	0	+	16
	36th St.	Campbell	Country Club	Tucson	PS	2000	2	Urban	Minor Arterial	3	5	4	9	10	3	3	0	+	37
	36th St.	Park	Kino	Tucson	SFA		_	Urban	Minor Arterial	3	2	0	3	8	9	3	0	+	28
	36th St.	La Cholla	Mission	Tucson	0		23	Urban	Collector	2	7	5	7	0	2	3	1	+	27
	36th St.	Kino	Campbell	Tucson	PS		2	Urban	Minor Arterial	3	1	4	9	8	0	0	0	+	25
	36th St.	(RR Tracks)	Park	Tucson	PS		-	Urban	Minor Arterial	2	2	0	8	8	0	3	0	+	23
	36th St.	6th Ave.	4th Ave.	South Tucson				Urban	Minor Arterial	2	3	0	8	0	0	3	1	+	17
	36th St.	4th Ave.	(RR Tracks)	South Tucson		2008	1	Urban	Minor Arterial	2	3	0	8	0	0	3	0	+	16

Tucson Region Sidewalk In	ventory Project
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Appendix C

Tucson Region Sidewalk Inventory Database (segments in rank order)

2005

Street	Segment Des	cription				Project Ranking Criteria													
											ADA			Park/Rec Schools Commrcl. Medical Safety					
				Jurisdiction/	Sidewalk	Planned	Transit	Roadway	Functional		Rider	Transit	Pop.	within 1/3		/3 within 1		Local	Total
Rank	Street Name	From	То	Control	Status	Completion	Route	Туре	Class	AADT	Density	Ridership	Density	mile	mile	mile	1/4 mile.	Priority	Points
1	Broadway	Wilmot	Kolb	Tucson	PS	2005	5,8,82	Urban	Principal Arterial	8	9	10	7	10	1	15	10		70
2	Wilmot	5th St.	Broadway	Tucson	PS	2225/2222	rt 3/5	Urban	Principal Arterial	9	10	8	8	4	6	15	10		70
3	Speedway	Swan	Craycroft	Tucson	PS	2005/2030	4/180	Urban	Principal Arterial	9	10	9	9	4	6	15	7		69
5	Grant Broadway	Country Club Swan	Alvernon Craycroft	Tucson Tucson	PS PS	2030	9 8,82	Urban Urban	Principal Arterial Principal Arterial	8	9	8 9	8	0 4	14 6	12 15	8 10		68 65
6	Swan	Speedway	5th St.	Tucson	PS		1	Urban	Principal Arterial	6	9	6	8	4	14	9	8		64
7	Wilmot	Speedway	5th St.	Tucson	PS		5	Urban	Principal Arterial	8	10	8	6	4	6	12	10		64
8	Broadway	Craycroft	Wilmot	Tucson	PS		8,82	Urban	Principal Arterial	9	6	10	6	4	6	15	6		62
9	Grant	Swan	Craycroft	Tucson	PS		9,81	Urban	Principal Arterial	9	10	6	6	0	9	12	10		62
10	Craycroft	Broadway	22nd St.	Tucson	PS		34	Urban	Minor Arterial	7	7	6	6	10	11	12	2		61
	Broadway	6th Ave.	5th Ave.	Tucson	SPA	0005	2,7,8,9,21		Principal Arterial	4	10	10	7	8	6	12	4		61
12	1st Ave.	Prince	Ft. Lowell	Tucson	PS	2005	6,34	Urban	Minor Arterial	7	4	8 7	9	4	8	12	8		60
13 14	Stone Broadway	Grant 5th Ave.	Drachman Aviation	Tucson Tucson	PS SPA	2005	19/105 2,5,8,82,8	Urban 3 Urban	Minor Arterial Principal Arterial	5 6	10	10	7	10	15 6	9	3 4		60 60
15	Speedway	Craycroft	Wilmot	Tucson	PS	2030	4/180	Urban	Principal Arterial	9	10	9	7	0	1	15	8		59
16	Swan	5th St.	Broadway	Tucson	PS	2000	1	Urban	Principal Arterial	6	6	6	9	0	14	9	9		59
17	Alvernon	22nd St.	29th St.	Tucson	PS		11,180	Urban	Principal Arterial	7	6	8	10	10	1	12	5		59
18	Craycroft	Glenn	Grant	Tucson	PS		34	Urban	Minor Arterial	6	10	5	5	8	8	6	10		58
19	Speedway	Columbus	Swan	Tucson	PS	2005/2030	4/81/106/		Principal Arterial	9	10	9	9	4	0	15	2		58
20	Speedway	Stone	6th Ave.	Tucson	SPA		4/5/81/102		Principal Arterial	7	2	10	8	8	15	6	2		58
21	Speedway	Wilmot	Kolb	Tucson	SPA	2030	4/180	Urban	Principal Arterial	8	7	9	7	6	0	12	8		57
22 23	Grant Prince	Craycroft Flowing Wells	Wilmot Fairview	Tucson Tucson	PS PS	2005	9,81	Urban Urban	Principal Arterial Minor Arterial	9	10 8	5 5	9	10	5 8	9	10		56 56
24	Oracle	Grant	Drachman	Tucson	SPA		rt 10/16	Urban	Principal Arterial	6	10	9_	6	4	12	9	0		56
25	22nd St.	Alvernon	Columbus	Tucson	PS		7	Urban	Principal Arterial			8	9	10	6	9	1		55
26	22nd St.	Wilmot	Kolb	Tucson	PS	2005	7	- Urban	Principal Arterial	8	5	7	8	0	14	9	4		55
27	Broadway	Euclid	Campbell	Tucson	PS		8,82	Urban	Principal Arterial	6	4 3	9	8	4	14	6	4		55
28	Broadway	Campbell	Tucson	Tucson	PS	2030	8,82	Urban	Principal Arterial	7	8	9	7	0	12	9	3		55
29	Oracle	Roger	Prince	Tucson	SPA	10 U U U U U U U U U U U U U U U U U U U	16	Urban	Principal Arterial	10	4	8	9	0	8	15	1		55
30	5th St.	Swan	Craycroft	Tucson	PS	2005/2030	3	Urban	Minor Arterial	4	7	5	8	4	14	3	9		54
31 32	Broadway Broadway	Old Spanish Trl Country Club	Camino Seco Alvernon	Tucson Tucson	PS PS	2005 2030	8,82 8,82	Urban Urban	Principal Arterial Principal Arterial	7 8	10	6 9	9	10	7 0	12 15	7		54 54
33	Wilmot	Broadway	22nd St.	Tucson	PS	2030	3	Urban	Principal Arterial	7	8	8	7	4	2	12	6		54
34	Speedway	Main	Stone	Tucson	SPA		rt 5/10	Urban	Principal Arterial	7	3	8	5	8	15	6	2		54
	Oracle	Orange Grove	Rudasill	Pima County	0		16/103/16		Principal Arterial	9	10	7	6	0	0	12	9		53
36	Oracle	Rudasill	River	na County/Tuc	s 0		16/103/16		Principal Arterial	9	8	7	4	10	0	6	9		53
37	Grant	Alvernon	Columbus	Tucson	PS	2030	9	Urban	Principal Arterial	8	10	7	9	0	1	9	9		53
38	Tanque Verde	Kolb	Sabino Canyon R		PS		rt 9/81	Urban	Minor Arterial	10	4	6	5	8	0	15	5		53
	Stone	Drachman	Speedway	Tucson	SPA	2009	16/19/105		Principal Arterial	6	3	8	6	4	15	9	2		53
40	Campbell Fort Lowell	Prince	Ft. Lowell 1st Ave.	Tucson	PS PS	2005	15,103	Urban	Principal Arterial	6	4	8	9	0 4	9 15	9	10 8		52 52
	Stone	Stone Roger	Prince	Tucson Tucson	PS PS	2005	19/105	Urban Urban	Minor Arterial Minor Arterial	4	9	8	10	0	15	9	0		52
43	Broadway	Church	Stone	Tucson	SPA		2,7,8,16,2		Principal Arterial	4	10	10	6	6	0	12	4		52
44	Broadway	Stone	6th Ave.	Tucson	SPA		1,2,4,7,8,9		Principal Arterial	4	10	10	6	6	0	12	4		52
45	Congress	6th Ave.	5th Ave.	Tucson	SPA		16,21,22,8		Minor Arterial	4	10	10	6	8	2	9	3		52
46	Congress	5th Ave.	Toole/Broadway	Tucson	SPA		6,8,82	Urban	Minor Arterial	4	10	10	6	8	2	9	3		52
	22nd St.	Columbus	Swan	Tucson	PS		7	Urban	Principal Arterial	8	4	7	9	4	6	6	7		51
	Broadway	Tucson	Country Club	Tucson	PS	2030	8,82	Urban	Principal Arterial	7	8	9	7	0	6	9	5		51
	Campbell	Glenn	Grant	Tucson	PS PS	2005 2030	15,103 9,81	Urban Urban	Collector	6	4	7	7 9	0	8	9	6		51 51
50 51	Grant Stone	Columbus Ft. Lowell	Swan Glenn	Tucson Tucson	PS PS	2030	19/105	Urban	Principal Arterial Minor Arterial	8 5	10 5	5 7	9	0	14	12 9	2		51 51
	Swan	22nd St.	29th St.	Tucson	PS	2000	1	Urban	Minor Arterial	4	7	4	8	10	4	9	5		51
	La Cholla	Ina Rd.	Orange Grove	Pima County	PS-25	2005/2030	61/186	Urban	Principal Arterial	4	5	5	4	0	14	9	10		51
	Speedway	6th Ave.	4th Ave.	Tucson	SPA		4/5/81/102		Principal Arterial	7	2	7	8	8	15	3	1		51
55	Speedway	4th Ave.	Euclid	Tucson	SPA		4/5/81/102		Principal Arterial	8	4	7	9	4	15	3	1		51
56	1st Ave.	Roger	Prince	Tucson	PS		6,34	Urban	Minor Arterial	7	4	8	10	0	9	9	3		50
57	Broadway	Columbus	Swan	Tucson	PS	2005	8,82	Urban	Principal Arterial	8	3	8	9	0	0	12	10		50
	Craycroft	5th St.	Broadway	Tucson	PS	2005	34	Urban	Minor Arterial	6	2	6	6	4	6	12	8		50
	6th Ave.	Broadway Et Lowell	Stone/18th St.	Tucson	SPA PS	2005	1/8/2019	Urban	Minor Arterial	2	10	9 7	9	4	6	6 12	5	1	50
60	Campbell	Ft. Lowell	Glenn	Tucson	۲۵	2005	15,103	Urban	Minor Arterial	6		1	9	4	U	12	9		49

