

# ADA Sidewalk Inventory Study Report



AHEAD

The 2012 ADA Sidewalk Inventory Report is an update to the 2005 Sidewalk Inventory and was written and produced through a cooperative effort between the City of Tucson and Pima Association of Governments.



Pima Association of Governments



October 2012

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### Appendix A - Maps

*Pima County*

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*Tohono O'odham Nation*

*City of South Tucson*

*City of Tucson*

### Appendix B - Database

*Sidewalk Inventory Database – Sample January 2012*



## 1. Study Purpose and Background

Identifying gaps in the existing sidewalk network is crucial to ensuring that the sidewalks in the Tucson region meet the needs of all citizens. Filling in the gaps is the first step in making the network accessible for all users, especially for persons with disabilities. While sidewalk gaps represent the main barrier to accessibility, they are not the only barriers that will be addressed in this report.

prioritizing improvements and funding. Identifying needs and resources for sidewalk improvements will aid jurisdictions as they meet the needs of all sidewalk users.

### Previous Studies

In 2005, Pima Association of Governments (PAG) conducted an initial sidewalk inventory of all major roadway corridors in the Tucson region. The region

*"Pedestrian accessibility enhancements not only benefit people with disabilities, they benefit all pedestrians as well. Examples include curb ramp improvements that assist people pushing carts or strollers and placing the WALK push buttons in a place that is accessible and easily understandable for all intersection users." Intersection Safety Issue Brief 11.pdf, Pedestrian Design for Accessibility Within the Public Right-of-Way, November 2009, Federal Highway Administration publication FHWA-SA-10-005.*

The U.S. Congress enacted major legislation that increased the focus on accessibility in transportation planning. These included the Section 504 of the Rehabilitation Act of 1973, the American with Disabilities Act of 1990, and the Intermodal Surface Transportation Efficiency Act of 1991. Throughout the decades, these mandates sharpened the focus on accessible pedestrian transportation facilities and highlighted the need to ensure people with disabilities were not excluded. Pedestrian facility improvements are funded by private development, local jurisdictions through local Capital

Improvement Programs (CIP), State Highway User Revenue Funds (HURF), the Regional Transportation Authority (RTA), federally funded programs such as the Transportation Enhancement Program, and additional sources not listed, as found in Pima Association of Governments' regional Transportation Improvement Plan (TIP).

Analyzing the design characteristics that promote accessibility will help jurisdictions meet basic standards for accessibility. It also aids the process of

includes the jurisdictions of unincorporated Pima County, Town of Marana, Town of Oro Valley, Town of Sahuarita, Pascua Yaqui Tribe, Tohono O'odham Nation San Xavier District, City of South Tucson and City of Tucson. The focus of that study was to evaluate and understand the pedestrian infrastructure needs on a regional scale.

The end result was a report, map and database that identified existing sidewalks, gaps in the pedestrian network and a recommended priority ranking system for improvements. Future inventories and studies were recommended to focus on an expanded area and with finer detail. In 2008, PAG

awarded the City of Tucson Department of Transportation (TDOT) funding to conduct a study titled ADA Sidewalk Accessibility to Bus Stops. The study was broken into two phases: phase one was the ADA bus stop accessibility study, and phase two was the ADA sidewalk inventory study. For a link to the ADA Bus Stop Accessibility Study Report, go to [cms3.tucsonaz.gov/sites/default/files/transit/ada\\_bus\\_stop\\_accessibility\\_study\\_report.pdf](https://cms3.tucsonaz.gov/sites/default/files/transit/ada_bus_stop_accessibility_study_report.pdf).

The ADA bus stop accessibility study evaluated each



bus stop location on the Sun Tran fixed-route system throughout the Tucson region for ADA accessibility. This study focused on the pedestrian facilities for all major arterial and collector roadways throughout Pima County using current GIS technology and standards for pedestrian facilities and data collected on the ADA standards and route segment characteristics.

The report of each study is written so that each may be used independently or in conjunction with one another as jurisdictions look at improving pedestrian safety and access to alternative modes of travel. While these studies do not include details at the local street level due to funding and scheduling constraints, they do update the 2005 Tucson Region Sidewalk Inventory Project Report and recommend improvements at a finer scale. Whereas the 2005 sidewalk inventory report recommended improvements to broad lengths of roadway corridors, this study recommends improvements to pedestrian facilities in segments between two major street intersections.

### **Current Study**

The database development and sidewalk inventory process began in May 2010 and ended in December 2011. The inventory covers the entirety of Pima County, including areas of entities that were not part of the original sidewalk inventory (Town of Ajo, Tohono O'odham Nation, Pascua Yaqui Tribe). The inventory focused specifically on the major roadway network, consisting of approximately 2,435 directional miles of arterials and collectors, as identified in Pima County's Major Street Plan and the City of Tucson's Major Streets & Routes Plan. The roadway network was inventoried for sidewalks and accessible pedestrian routes regardless of any existing infrastructure. Sidewalks were inventoried between major street intersection points, on both sides of the street. For the purpose of this inventory, shared-use paths that parallel major roads were counted as "sidewalks," such as the shared-use path surrounding Reid and Randolph parks.

This study covers the pedestrian facilities for all major arterial and collector roadways. Using GIS technology, data was input for each segment regarding physical characteristics, accessibility criteria, existing barriers, planned improvements, transit routes for that segment, and any additional comments by the data collector. The criteria relating to accessibility included sidewalk width and alignment, the presence of curb ramps and the materials used. Where any barriers

existed, the segment was deemed inaccessible. Using the inventory data, maps were produced that identified each segment based on whether it was complete and ADA accessible. Facilities that were deemed not ADA accessible were completed facilities containing barriers, partial facilities or no facilities at all.

### **Potential Projects for Priority Pedestrian Facility Improvements**

Using the inventory maps and data, additional criteria were used to help prioritize potential projects for pedestrian facility improvements. These included proximity within one-quarter mile of the following: fixed-route transit service (which relates to the ADA Bus Stop Accessibility Study Report), commercial and public land uses, schools, parks and recreational facilities, and major medical centers. Jurisdictions may wish to incorporate pedestrian crash history and citizen requests for improvements, since these data were not included in this study's list of potential projects. These projects are provided as a courtesy to help local officials prioritize segments to repair, replace or install new pedestrian facilities. The improvements are listed alphabetically so that no priority emphasis is implied on the order.

The inventory maps and GIS data clearly show sidewalk gaps, and serve as tools for future project development and prioritization. These tools are available to the jurisdictions for sidewalk project planning and programming within the Tucson region.

## **2. Study Criteria**

### **RESEARCH, SUMMARIZE AND DEVELOP CRITERIA FOR EVALUATING ACCESSIBLE PEDESTRIAN FACILITIES BASED ON THE ADA STANDARDS AND THE U.S. ACCESS BOARD "BEST PRACTICES" GUIDELINES.**

For the purpose of this report, it was determined that the "best practices" would be followed as recommended in: the November 2005 Draft Public-Rights-of-Way Accessibility Guidelines (PROWAG); the U.S. Access-Board's technical assistance; and the American with Disabilities Act Accessibility Guidelines (ADAAG) for sidewalks and pedestrian access routes. The Federal Highway Administration (FHWA) is the responsible agency for implementation of pedestrian access requirements under the Americans with Disabilities Act of 1990 (ADA).

An update to the ADA was published in the Federal Register on September 15, 2010, allowing jurisdictions, public agencies, commercial facilities,

and entities that deal with the public, a grace period that both the 1991 and 2010 Standards could be used until March 15, 2012. The Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way was released July 26, 2011. Public comment was extended until February 2, 2012. When the rulemaking process is complete, the adopted guidelines will become mandatory. Providing for the needs of the disabled community in pedestrian facilities improves the infrastructure for everyone who uses them.



#### **Abridged Selection of Resources:**

*Americans with Disabilities Act 1991 with revisions July 1, 1994*

<http://www.ada.gov/reg3a.html#Anchor-Appendix-52467>

*U.S. Department of Transportation; Federal Highway Administration Memorandum: Subject: ADAAG Detectable Warnings (Truncated Domes), Dated: May 6, 2002* <http://www.fhwa.dot.gov/environment/bikeped/dwm.htm>

*U.S. Department of Transportation; Federal Highway Administration Memorandum: Subject: INFORMATION: Public Rights-of-Way Access Advisory, Dated: January 23, 2006* <http://www.fhwa.dot.gov/environment/bikeped/prwaa.htm>

*Public Rights of Way, 2005 Revised Draft Guidelines and current Proposed Accessibility Guidelines for Public Rights of Way (comment phase July 26, 2011 – February 2, 2012)* <http://www.access-board.gov/prowac/>

#### **Pedestrian Facilities Evaluation Criteria:**

- Sidewalk Status: (0) None, (1) Partial, or (2) Existing, completed segment
- Sidewalk width is noted. If sidewalk is less than five feet in clear width, does it have passing spaces that allow for continuous travel? Lack of passing zones

on segments less than five feet are noted in the barrier section. The City of Tucson Development Standards used a four-foot minimum requirement

when landscaping was present.

This standard has since been updated to be a five-foot minimum requirement for all sidewalks, which eliminates the need to construct additional passing zones on newer sidewalks. Regardless of which version of the ADA that was used during time of

construction, pedestrian access routes (sidewalks) less than a clear five-foot width must have a five (5') feet x five (5') feet passing space at reasonable intervals not to exceed 200 feet. An intersection at perpendicular walkways or driveways would be acceptable as passing spaces. Due to the age of construction on many sidewalks, four (4') feet was used as a minimum width, even though the letter of the law was a 36 (3') inch width.

Pima County Subdivision and Development Street (current) Standards for urban residential subdivisions require that "... All residential and major collectors must have ... a sidewalk at least 5 feet wide"(4.1.2.2). Standards for commercial and industrial areas state that " ... Collector street sidewalks shall be a minimum of 5 feet in width ... (7.1.2.2)".

- Materials are noted to make sure that the surface is firm, stable and slip-resistant. In all cases if surfaces or textures did not meet the ADA requirement of firm, stable and slip resistant, the sidewalk segment was not marked as accessible, including sidewalks and pedestrian paths that consisted of broken or loose asphalt, unstabilized decomposed granite (dg), dirt, sand, or were covered with loose soil. Materials that do not comply would cause the segment to be identified as "partial" for sidewalk status.
- Curb-ramps/Curb-cuts: (0) None, (1) Partial if one or more curb-ramps are missing within the segment, and (2) Existing if all corners and alleyways have necessary curb-cuts and connectivity.



Detectable warnings at curb ramps were not counted. These devices were suspended from the U.S. Department of Transportation requirements for the ADA until July 26, 2001. New construction and alterations since July 26, 2001, must use the approved truncated domes as acceptable detectable warnings. As new construction and alterations are completed on roadway projects, intersection corners are evaluated for replacement. City of Tucson and Pima County staff have reconstructed and retrofitted most of the earlier intersection corners to have acceptable ADA accessible detectable warnings throughout their jurisdictions.

- Notations were included for any barriers in the pedestrian facilities. Indications of slope and cross-slope issues are based on slopes that were extreme enough to be visible without levels or other instruments. More precise measurements should be completed at the time of any reconstruction. Other barriers identified included permanent street signposts, fire hydrants, mailboxes and utility poles in the pedestrian access route.

### 3. Inventory Process

#### INVENTORY PEDESTRIAN FACILITIES ON BOTH SIDES OF MAJOR ARTERIAL AND COLLECTOR ROADWAYS.

The inventory was conducted in a three-step process.

1. Street segments were identified and evaluated for pedestrian facilities to include curb-ramps and sidewalks using a variety of digital tools and data, including current Pima County Orthographic GIS layers (2008 & 2010), Google Maps, and City of Tucson Department of Transportation Map Guide current Virtual Ride Streets Layers (2009 & 2010). Orthographic images allow the user to view color images from a satellite bird's eye view (figure 1). Virtual Ride and Google Maps Street View allow the user to view a horizontal view of most urban arterials using a series of photo images. 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.

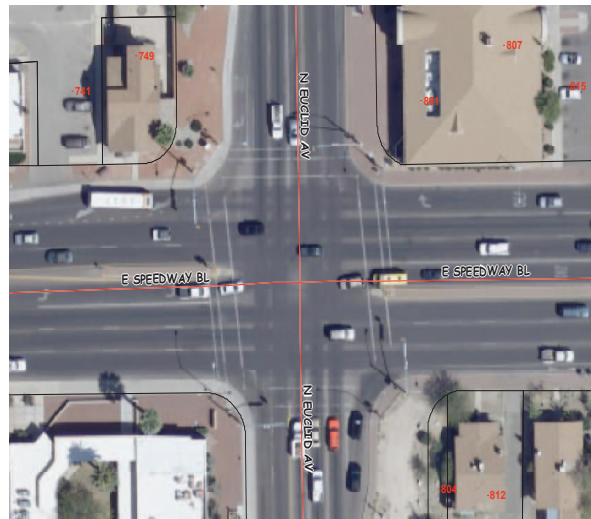


Figure 1. Example of digital orthophoto imagery.

2. Once an initial assessment of road segments was completed using digital tools, field surveys were conducted to verify existing data acquired from the Virtual Ride, Street View, and aerial images, unknown areas, roadways under construction, and the areas that had experienced recent development.

3. Pima Association of Governments (PAG) contacted each jurisdiction to confirm sidewalk data. The City of Tucson collected the sidewalk inventory data within its boundaries and the City of South Tucson.

### 4. Database and Mapping

#### DOCUMENT IN A GIS DATABASE THE BASELINE CHARACTERISTIC DATA IN SEGMENTS FROM MAJOR INTERSECTION TO MAJOR INTERSECTION, GAPS AND BARRIERS, AND COMPLETED IMPROVEMENTS SINCE THE 2005 INVENTORY. MAP AND RECORD SIDEWALK SEGMENTS OF PEDESTRIAN FACILITIES. IDENTIFY PEDESTRIAN INFRASTRUCTURE GAPS AND DEFICIENCIES.

As the field surveys were completed, each sidewalk segment was recorded and mapped in a GIS-based program (ESRI ArcMap 10). There are over 3,700 line-item sidewalk segments, which calculate to approximately 3,670 miles for both sides of the roadways inventoried. The database contains pertinent information on each sidewalk segment such as the street name, roadway classification (i.e. arterial, collector), segment location, jurisdictional control, sidewalk status, width, curb ramp status, accessibility, and any additional notes or comments (table 1). For the purposes of this inventory, sidewalks are considered concrete, brick, or asphalt-paved surfaces, clearly designated for pedestrian use. Hard-packed dirt, asphalt roadway shoulders, and/or bike lanes are not considered sidewalks (pedestrian facilities or access routes). Sidewalk segments were placed into four categories, which correspond directly to



## GIS DATABASE ATTRIBUTES (CATEGORIES)

Object ID	FID – ArcGIS generated		
Shape	Polyline – ArcGIS generated		
Street Name	from original street network data		
Function Class	from original street network data		
Map Name	from original street network data		
Side of roadway (direction)	N/S/E/W		
Road segments (intersection to intersection)	From (N/E)	To (S/W)	
Area (Jurisdiction)	Tucson, So. Tucson, Marana, Sahuarita, Oro Valley, Pima County, etc.		
Sidewalk Status	Existing - Complete (2)	Partial (1)	None (0)
Width (measured/estimated from orthos & field visit)	i.e.: 4.6 = four to six feet wide		
Materials	i.e.: asphalt, concrete, dirt, rocks, etc.		
Curb-ramps (cuts)	Existing - Complete (2)	Partial (1)	None (0)
Accessible	Yes (1)	No (0)	No Data 5 – Tucson 8 – Other Jurisdiction
Barriers	Text – type (i.e. fire hydrant, utility poles, street signs, street light fixture, gaps, etc)		
Planned Improvements	Yes (1)	No (0)	
Status Improvements	Right of Way, Design, Construction		
Date Completed (if completed after 2004)	Year		
Transit Routes			
Additional Comments	i.e. under construction, missing 5' section, etc.		
SW_ID	Numerical unique id for each line segment		

**Table 1: GIS Database Attributes.**

the color-coded sidewalk categories shown on the inventory maps (Appendix A). Below is a description of each sidewalk category.

- **Complete – Accessible:** These segments contain complete accessible sidewalks, free of major gaps or barriers, minimum of four (4') feet in width with necessary passing zones, and with curb ramps in appropriate locations. These segments are anticipated to be safe for use by persons of all abilities for the entire length of the segment.



- **Complete with Barriers – Not Accessible:** These segments have sidewalks, curb-ramps, and are at least four (4') feet in width, but contain barriers. These barriers might include absence of passing areas on sidewalks less than 5' in width, slopes that are too steep to be classified as accessible, and/or utility poles, street sign posts, landscaping, or drainage ways.
- **Partial Infrastructure – Not Accessible:** Sidewalk segments and/or curb-ramps for only portions of

the entire length of the segment are not present. In some places, sidewalk segments are 95 percent completed with or without curb ramps. In other places, sidewalk segments are only 5 percent completed or there is no sidewalk and only curb ramps. In all these cases, the segment is considered partial and, therefore, not accessible for persons with disabilities.



- **No Infrastructure – Not Accessible:** These segments have neither sidewalks nor curb ramps for the entire segment. Materials and barriers are still identified.



## 5. Key Inventory Findings

- Sidewalk gaps and other barriers are often located in areas of the region that were developed prior to the 1980s. Government development codes and policies prior to that time did not require sidewalks on major roadway construction projects. Additionally, pedestrian travel (especially for the disabled) was not identified as a high priority in transportation planning at that time.
- Two major pieces of federal legislation increased the focus on sidewalks in transportation planning. Congress passed the American with Disabilities Act of 1990, which has affected alterations or new construction undertaken after July 26, 1991. The following year, Congress passed the Intermodal Surface Transportation Efficiency Act of 1991. These Acts sharpened the focus on pedestrian travel, and highlighted the need for ensuring that pedestrian facilities are accessible to people with disabilities.

Additional court cases clarified the necessity of local agencies' responsibilities for planning and constructing pedestrian facilities in the public-right-of-way to access all public services, as well as private commercial services.



- In the last 15 to 20 years, new sidewalks have often been built as part of major roadway projects. However, in recent years, local, state and federal sources have funded sidewalk-specific projects. Additionally, the Regional Transportation Authority, approved by voters in 2006 to collect a half-cent sales tax, has funded the construction of 81.5 miles of new sidewalks, with another 196 miles of sidewalk under construction or in design.
- Less dense residential areas have fewer sidewalks for several possible reasons:
  - 1) There has been minimal demand for sidewalks.
  - 2) There is minimal commercial development within walking distance.
  - 3) There are no schools or parks within walking distance.
  - 4) Residents have actively opposed sidewalks and other modern roadway features to retain the rural character of their area (e.g. historic Fort Lowell area).
- Sidewalks are generally provided in newer residential areas with four or more dwelling units per acre. This is very evident in the suburban communities of Marana, Oro Valley and Sahuarita, and the City of Tucson's edge areas where most of the medium to high-density residential development has occurred in the last few years.

## 6. Prioritizing Pedestrian Facility Improvements

### IDENTIFY POTENTIAL HIGH-USE PEDESTRIAN SEGMENTS BASED ON CRITERIA IDENTIFIED IN THE 2005 INVENTORY.

Once the inventory was completed, a list of suggested corridor improvement projects was created for each jurisdiction in order to prioritize sidewalk improvement efforts. The main intent of the list is to give jurisdictions an idea of which roadway corridors are in need of improvements based on a number of supplementary criteria.

The development of the priority list involved the input of local jurisdictional staff, pedestrian planners, members of the disabled community and others who have an interest in pedestrian facilities. Arterial and collectors that exhibit the following criteria were given higher precedence. The top criteria for the development of the priority sidewalk improvement lists are as follows:

- **Transit Service**

Fixed-route transit service encourages travel by pedestrians. Segments with bus stops attract a high volume of pedestrian activity. A number of ADA paratransit eligible riders also use the fixed-route stops.

- **Commercial and Public Land Uses**

Local business, retail and other public services such as libraries, post offices, and town halls are considered pedestrian trip destinations.

- **Schools**

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 may walk to school.

- **Parks and Recreational Facilities**

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 may use nearby roadways.

- **Major Medical Centers**

Hospitals attract many pedestrians, especially those who are service workers or have disabilities and are unable to drive themselves. Those who use hospitals for medical care and appointments need accessible sidewalks to ensure safe travel to the hospital. The larger the medical facility, the more

pedestrians may use nearby roadways.

- **Pedestrian Crash History and Citizen Requests**

Segments and intersections with previous history of pedestrian related crashes need to be taken into consideration with regard to sidewalk and safe crossing prioritization. In addition, citizen requests identify areas that are in regular use and may benefit from prioritization. Sidewalks are vital to the safety of pedestrians and motorists alike.

## 7. Potential Improvements

The following list of recommended priority pedestrian improvements is organized by jurisdiction. The list recommends segments based on need for improvements and the supplementary priority criteria. Local officials can use the list to prioritize which segments to repair, replace, or install new pedestrian facilities. Segments are identified by location and the type of treatment is recommended in italics. The factors for each segment are the supplementary priority criteria upon which the segment was selected. Finally, the list is organized alphabetically per jurisdiction so that no priority emphasis is implied on the order.



### Unincorporated Pima County

The majority of unincorporated Pima County's completed sidewalks and ADA ramps are located north of City of Tucson limits on major collectors and arterials such as Skyline Drive, Thornydale Road and River Road. Road segments that are south and west of the City of Tucson limits generally do not have sidewalks. As the northern portion of the Tucson Region has urbanized standards for commercial, industrial, and urban residential development has required sidewalks and other pedestrian facilities to be installed with new development. Much of the County south and west of the City of Tucson has remained rural. However, pedestrian facilities continue to be built with new development, unless property owners have received Administrative approval of modifications to the standards per Chapter 9 "Administration of the Standards."

#### Potential projects:

1. Campbell Avenue between Skyline Drive and Ina Road: **Sidewalk improvements.**  
*Factors:*
  - 2 bus stops
  - Manzanita School
  - Local Business Zone, Mixed Use
  - Heavy residential use
2. Cloud Road between Sabino Canyon Road and Pantano Road: **Sidewalk improvements, missing segments.**  
*Factors:*
  - 10 bus stops
  - Fruchthendler Elementary
  - Low Residential
3. Continental Road between La Cañada Drive and Abrego Drive (Green Valley): **Sidewalk improvements.**  
*Factors:*
  - Bus stops
  - Continental Elementary School
  - United Community Health Center
4. Houghton Road between Sahuarita Road and Camino Del Toro: **Install sidewalks.**  
*Factors:*
  - Civano Middle School
  - Sycamore Elementary
  - Corona Foothills Middle School
5. Mary Ann Cleveland between Houghton Road and Colossal Cave Road: **Install sidewalks.**  
*Factors:*
  - Pantano School
  - Cienega High School
  - Old Vail Middle School
  - Cienega Creek Natural Preserve
6. Melpomene Way between Fort Lowell Road and Catalina Highway: **Install sidewalks.**  
*Factors:*
  - Emily Gray Junior High School
  - Tanque Verde High School
  - Agua Caliente School
  - Local business zone
7. North Ajo Well No. 1 Road between Rasmussen Road and East 1st Avenue (Ajo): **Install sidewalks.**  
*Factors:*
  - Ajo Elementary
  - Ajo High School
  - Ajo Ballpark



8. Orange Grove Road between 1st Avenue and Skyline Drive: **Sidewalk improvements.**

**Factors:**

- 6 bus stops
- Orange Grove Middle School
- Cornerstone Christian Academy
- Heavy residential use

9. Orange Grove Road between Thornydale Road and La Cholla Boulevard: **Install sidewalks, fill gaps.**

**Factors:**

- J Robert Hendricks Elementary School
- Lifelong Learning Academy
- Mountain Rose Academy
- Northwest Medical Center
- Neighborhood Commercial Zone
- RV Park

10. Palo Verde Road between 36th Street and Irvington Road: **Sidewalk Improvements.**

**Factors:**

- 13 bus stops
- Pima County Health Department
- Kino Teen Center
- University Physicians Healthcare Hospital at Kino
- Local business zone
- General industrial zone

11. Ruthrauff Road between I-10 and La Cholla Boulevard: **Sidewalk Improvements.**

**Factors:**

- 7 bus stops
- Laguna Elementary
- St. Elizabeth's of Hungary Clinic - Flowing Wells
- General Business Zone, Mixed Use

12. Sunrise Drive between Pontatoc Road and Swan Road: **Sidewalk improvements.**

**Factors:**

- 4 bus stops
- Catalina Foothills High School
- Mixed use
- Local business zone



## Town of Marana

The majority of Marana's completed sidewalks are located on the west side of I-10 on Silverbell Road, where commercial development is growing rapidly. However, a large portion of Marana's land is used for farming and agriculture, which yields low levels of completed sidewalks.

**Potential projects:**

1. Coachline (north of Twin Peaks Road), between Silverbell Road and Twin Peaks Road: **Install sidewalks.**  
**Factors:**
  - 2 Bus stops
  - Twin Peaks Elementary
  - Residential use
2. Ina Road between Silverbell Road and Camino de la Tierra (or the Cañada del Oro Wash): **Sidewalk improvements: west of Thornydale has missing segments and gaps at commercial development.**  
**Factors:**
  - 5 Bus stops
  - Neighborhood Commercial Zone
  - Marana Physical Therapy
3. Lon Adams Road from Barnett Road to Grier Road: **Install sidewalks.**  
**Factors:**
  - Estes Elementary
  - Marana Middle School
  - Another Chance at Education (ACE)
  - Ora Mae Harn Park
  - Geasa Marana Branch Library
  - Post Office
  - Marana Health Center
  - Marana Municipal Complex
  - Apartments
4. Sandario Road between I-10 and Moore Road: **Install sidewalks.**  
**Factors:**

- Citizen Request
  - Estes Elementary
  - Marana Middle School
  - Ora Mae Harn Park
  - Another Chance at Education (ACE)
  - Geasa Marana Branch Library
  - Post Office
  - Marana Health Center
  - Marana Municipal Complex
  - Neighborhood Commercial Zone
5. Silverbell Road between Twin Peaks Road and Cortaro Road (west side only): **Sidewalk improvements: missing segments in residential area.**
- Factors:**
- 7 Bus stops
  - Redeemer Lutheran School
  - Twin Peaks Elementary
  - Coyote Trail Elementary School
  - Rattlesnake Ridge Elementary School
  - Continental Reserve Urgent Care
  - Neighborhood Commercial Zone



## Town of Oro Valley

The majority of Oro Valley's completed sidewalks and ADA ramps are located in the northern region of the jurisdiction in areas of mixed residential and commercial use. Oro Valley's main arterial, Oracle Road, lacks sidewalks and ADA ramps throughout its entire length. This roadway is Arizona State Route 77 under the control of the Arizona Department of Transportation (ADOT).

### Potential projects:

1. Calle Concordia between Oracle Road and Calle Buena Vista: **Sidewalk improvements.**
- Factors:**
- Bus stops
  - Canyon Del Oro High School
  - James D. Kriegh Park

- Pusch Ridge Christian Academy
2. Lambert Lane between La Cañada and First Avenue: **Install sidewalks.**
- Factors:**
- 3 bus stops
  - Cañada del Oro Riverfront Park
  - Manufactured homes
3. Naranja Drive between Shannon Road and La Cholla Boulevard: **Install sidewalks.**
- Factors:**
- Ironwood Ridge High School
  - Casas Christian School
4. Oracle Road between Ina Road and 1st Avenue: **Install sidewalks.**
- Factors:**
- 7 bus stops
  - Pusch Ridge Christian Academy
  - Canyon del Oro High School
  - James D. Kriegh Park
  - Commercial District
5. Rancho Vistoso between Moore Road and Oracle Boulevard: **Sidewalk improvements from Moore Road to Sun City on east side, install sidewalks from Sun City Boulevard to Del Webb Boulevard.**
- Factors:**
- 6 bus stops
  - Painted Sky Elementary
  - Honey Bee Canyon Park
6. Tangerine Road between Innovation Park and Monterra Vista Drive: **Install sidewalks.**
- Factors:**
- 5 bus stops
  - Painted Sky Elementary
  - Northwest Medical Center
  - Commercial District





## Town of Sahuarita

Sahuarita's major collectors and arterials with completed sidewalks and ramps include La Cañada Drive, Rancho Sahuarita Boulevard, La Villita Road and Campbell Avenue.

### Potential projects:

1. Duval Mine road sidewalk from I-19 to La Cañada Road: **Sidewalk improvements.**

#### **Factors:**

- Commercial Development
- RV resort
- Residential use
- Jurisdiction request

2. Sahuarita Road between Nogales Highway and I-10 (north side only): **Sidewalk improvements.**

#### **Factors:**

- Carondelet Health Network
- Sahuarita Christian Academy
- Sahuarita Elementary
- Bus stops
- Sahuarita School District
- General and local business zone



## Pascua Yaqui Tribe

The Pascua Yaqui Tribe currently has no sidewalks or ADA ramps in any of its Major Street segments. However, the Tribe has included accessible sidewalks in their planned roadway corridors.

### Potential projects:

1. Camino de Oeste between Los Reales Road and Calle Torim: **Install sidewalks.**

#### **Factors:**

- Pascua Yaqui Tribe Health Programs
- 2 bus stops

2. Mark Road between Valencia Road and Los Reales Road: **Install sidewalks.**

#### **Factors:**

- Southwest Alternative Middle and High Schools
- Lawrence District Park
- Lawrence Intermediate School
- Bus stops

3. Tetakusim Road between Camino de Oeste and Sorrel Lane: **Install sidewalks.**

#### **Factors:**

- Hohokam Middle School
- 4 bus stops
- Maldonado Elementary School



## Tohono O'odham Nation

The Tohono O'odham Nation currently has no sidewalks or ADA ramps in any of its Major Street segments. However, the Nation has accessible pedestrian projects in the planning process.

### Potential projects:

1. Highway 86 between Old Rental Road and Indian Route 19: **Install sidewalks.**

#### **Factors:**

- Baboquivari Middle School
- Indian Oasis Elementary School
- Tohono O'odham Community College
- Tohono Plaza Commercial Center
- Indian Health Services Hospital

2. Main Road between the eastern terminus and Highway 86: **Install sidewalks.**



**Factors:**

- Baboquivari Middle School
- Indian Oasis Elementary School
- Tohono O'odham Community College
- Tohono Plaza Commercial Center
- Indian Health Services Hospital
- Residential areas

3. Mission Road between San Xavier Road and Valencia: **Install sidewalks.**

**Factors:**

- Bus stops
- Residential areas

4. San Xavier Road between Mission Road and Los Reales: **Install sidewalks.**

**Factors:**

- Bus stops
- San Xavier Mission School
- San Xavier Education Center
- San Xavier Recreation Center
- Indian Health Center Clinic
- San Xavier del Bac Mission
- San Xavier District Offices



### City of South Tucson

The City of South Tucson has good pedestrian infrastructure with accessible sidewalks on the major streets. Administrative goals are to maintain and improve the accessibility of the pedestrian network with adjacent jurisdictions.

**Potential projects:**

1. 4th Avenue between 36th Street and Benson Highway (I-10 Frontage): **Install sidewalks and curb ramps.**

**Factors:**

- Greyhound Park & Entertainment Facility
- Future El Paso & Southwestern Greenway
- Future commercial/light industrial development

2. Benson Highway (I-10 Frontage) between 4th Avenue & Benson Highway (curves under I-10 to City of Tucson Benson Highway (I-10 frontage)):

**Install sidewalks and curb ramps.**

- Any improvement to this area would be based on future commercial / light industrial development.
- Arizona Department of Transportation (ADOT) improvements/alterations to I-10 and the adjacent frontage roads.



### City of Tucson

The City of Tucson has a mixture of pedestrian facilities depending on when development occurred, alterations to roadways due to widening projects, sidewalk improvement projects, and redevelopment. Many of the areas without any pedestrian access routes were annexed into the City after development occurred or has little to no currently existing development. The potential projects below are by no means complete lists of needs within the City due to the large size of the urban area.

**Potential projects (alphabetically with no priority emphasis on order):**

1. 1st Avenue between Grant Road and River Road: Sidewalk improvements, missing sidewalk sections and curb ramps. Barriers include street signs, utility poles, parking and passing zones.

**Factors:**

- Bus stops
- Keeling Elementary School
- El Hogar de la Paz

- Satori School
  - Don Hummel Park
  - Mansfield Park
  - Amphi Neighborhood Park
  - Rillito River Park
  - Woods Memorial Library
2. 12th Avenue between 38th Street (City of South Tucson) and Drexel Road: **Sidewalk improvements, missing sidewalk sections and curb ramps. Barriers include cross-slope and parking.**  
**Factors:**
    - Bus stops
    - Rose Elementary School
    - Pueblo High School
    - Arizona Academy of Leadership
    - St. John the Evangelists School
    - Rodeo Wash Park
    - Julian Wash Archaeological Park
    - Mission Manor Park
  3. 22nd Street between Alvernon Way and 4th Avenue: **Install and improve Sidewalks, missing sidewalk sections and curb ramps. Barriers include rail road tracks.**  
**Factors:**
    - Bus stops
    - Borton Magnet Elementary School
    - Santa Cruz School
    - School for Integrated Academics & Technology
    - Reid Park
    - Randolph Park
    - Parkview Park
    - Santa Rita Park
  4. 22nd Street between Wilmot Road and Alvernon Way: **Sidewalk improvements, missing sidewalk sections and curb ramps. Barriers include passing zones, parking and utilities.**  
**Factors:**
    - Bus stops
    - Lamad Preparatory Academy
    - Harriet Johnson Park
    - Toumey Park
    - Columbus Library
    - Commercial / Retail
  5. 29th Street between Wilmot Road and Alvernon Way: **sidewalk improvements, Partial sidewalks, curb-ramps, and barriers between Wilmot and Craycroft. Sidewalks with barriers between Craycroft and Alvernon to include missing**  
**passing zones.**  
**Factors:**
    - Bus stops
    - Future Investment Middle School
    - Children Reaching for the Stars
    - Roberts - Naylor K-8
    - Myers / Ganoung Elementary School
    - Corbett Elementary School
    - Freedom Park
    - Swan Park
    - Golf Links Sports Complex
  6. 5th Street between Alvernon Way and Country Club Road: **Sidewalk improvements, missing sidewalk sections. Barriers include utility poles and fire hydrants.**  
**Factors:**
    - Bus stops
    - Howell Elementary School
    - Faith Lutheran School
    - Alvernon Park
    - Miramonte Natural Resources Park
  7. 6th Ave between Prince Road and Grant Road: **Sidewalk improvements, missing sidewalk sections and curb ramps. Barriers include utility poles and cross-slopes.**  
**Factors:**
    - Keeling Elementary School
    - Prince Elementary School
    - Amphitheater Middle School
    - Rillito Center
    - Arizona Academy of Leadership
    - Balboa Heights Park
    - Keeling Desert Mini Park
    - Mansfield Park
    - Amphi Neighborhood Park
  8. 6th Street between Country Club Road and Cherry Avenue: **Install and improve Sidewalks, missing sidewalk sections and curb ramps. Barriers include passing zones.**  
**Factors:**
    - Bus stops
    - Hughes Elementary School
    - Himmel Park
  9. Ajo Way between Country Club Road and Mission Road: **Sidewalk improvements, missing sidewalk sections and curb ramps. Barriers include rail road tracks, passing zones and connections between brick and concrete (greater than ¼").**  
**Factors:**
    - Bus stops

- Hollinger Elementary School
  - Cape School Detention
  - Pima Vocational High School
  - St. John the Evangelist School
  - University Physicians @ Kino Hospital
  - Veterans Administration Hospital
  - Kino Veterans Memorial Sports Park
  - Sam Lena Recreation Area
10. Alvernon Way between Drexel Road and Valencia Road: **Install Sidewalks, sidewalk improvements, missing sidewalk sections and curb ramps.**  
**Factors:**
- Bus stops
  - Desert View High School
  - Chaparral Middle School
  - Gallego Basic Elementary School
11. Alvernon Way between Pima Road and Fort Lowell Road: **Sidewalk improvements, eliminate barriers to passing – sidewalk too narrow for passing zones.**  
**Factors:**
- Bus stops
  - Academy Adventures - Midtown
12. Bilby Road between Country Club Road and 12th Avenue: **Install and improve existing sidewalks, missing sidewalk sections and curb ramps.**  
**Factors:**
- Bus stops
  - Los Ranchitos Elementary
  - Mission Manor Elementary
  - Sunnyside High School
  - Children's Success Academy
  - Fiesta Park
  - Mission Manor Park
13. Broadway Boulevard between Wilmot Road and Swan Road: **Install sidewalks, missing sidewalk sections and barriers to include utilities and cross-slope issues.**  
**Factors:**
- Bus stops
  - Desert Sky Community School
  - St. Joseph Catholic School
  - Academy del Sol
  - Sears Park
  - Twenty-Thirty Park
  - Hoffman Park
  - Commercial/Retail
14. Broadway Boulevard between Wilmot Road and Houghton Road: **Install sidewalks and curb ramps, sidewalk improvements where existing. Partial sidewalks, curb-ramps, and barriers between Old Spanish Trail and Houghton. Sidewalks with barriers between Wilmot & Old Spanish Trail.**  
**Factors:**
- Bus stops
  - Sonoran Science Academy
  - Casa Niños School
  - Old Pueblo Children's Academy
  - AmeriSchools College Preparatory
  - Eastpointe High School
  - Gridley Middle School
  - Pantano River Park
  - Jesse Owens Park
  - Palo Verde Park
  - Case Park
15. Campbell Avenue between Prince Road and Grant Road: **Sidewalk improvements, missing sidewalk sections. Barriers include utility poles.**  
**Factors:**
- Bus stops
  - Holloway Elementary School
  - Presidio High School
  - Jefferson Park
  - Connor Park
  - Tahoe Park
16. Columbus Boulevard between 29th Street and Speedway Boulevard: **Sidewalk improvements, missing sidewalk sections and curb ramps. Barriers include street signs and utility poles.**  
**Factors:**
- Bus stops
  - Lineweaver Elementary
  - Roberts – Naylor K-8
  - LAMAD Preparatory Academy
  - Academy del Sol
  - Linden Park
  - Swan Park
  - Toumey Park
17. Drexel Road between Country Club Road and 12th Avenue: **Install and improve Sidewalks, missing sidewalk sections and curb ramps.**  
**Factors:**
- Bus stops
  - Drexel Elementary
  - Liberty Elementary
  - Los Amigos Elementary
  - Sierra Middle School
  - Arizona Academy of Leadership – South
  - Fiesta Park



- Mission Manor Park
18. Elm Street between County Club Road and Campbell Avenue: **Sidewalk improvements, missing sidewalk sections and curb ramps. Barriers include utility poles.**  
**Factors:**
    - Bus stops
    - Blenman Elementary School
    - Saints Peter & Paul Catholic School
    - Tahoe Park
    - University Medical Center
    - University of Arizona, College of Medicine
  19. Glenn between Alvernon and 6th Ave: **Sidewalk improvements, missing sidewalk sections. Barriers include street signs, utility poles and cross-slopes.**  
**Factors:**
    - Bus stops
    - Keeling Elementary
    - Cragin Elementary
    - Salpointe High School
    - Keeling Desert Mini Park
    - Connor Park
    - Mitchell Park
    - La Madera Park
  20. Irvington Road between Park Avenue and 12th Avenue: **Sidewalk improvements, missing sidewalk sections. Barriers include cross-slopes and rail road tracks.**  
**Factors:**
    - Bus stops
    - Toltecalli High School
    - Rudy Garcia Park
    - Rodeo Grounds
    - El Pueblo Park
    - El Pueblo Library
    - El Pueblo Neighborhood Center
  21. Kolb Road (eastside) between Broadway Boulevard and 22nd Street: **Install curb ramps.**  
**Factors:**
    - Bus stops
    - Booth – Fickett Math/Science Magnet School
    - Fountain of Life Lutheran School
    - Palo Verde Park
  22. Park Avenue between Speedway Boulevard and Fort Lowell Road: **Install and improve Sidewalks, missing sidewalk sections and curb ramps.**  
**Factors:**
    - Bus stops
    - Montessori SchoolHouse K-5
    - International School of Tucson
    - Mitchell Park
  23. Pima Road between Swan Road and Alvernon Way: **Install Sidewalks.**  
**Factors:**
    - Bus stops
    - Saint Cyril of Arizona School
    - Martha Cooper Library
    - Pinecrest Park
  24. Pima Road between Alvernon Way and County Club Road: **Sidewalk improvements, missing sidewalk sections and curb ramps. Barriers include utility poles.**  
**Factors:**
    - Bus stops
    - Blenman Elementary School
    - Catalina High School
  25. Prince Road between Oracle Road and I-10: **Sidewalk improvements, missing sidewalk sections. Barriers include rail road tracks, parking, utility poles, and street signs.**  
**Factors:**
    - Bus stops
    - Amphitheater High School
    - Flowing Wells High School
    - Academy of Math & Science
    - Jacobs Park
    - Silverbell Golf Course
  26. Rosemont Boulevard between Broadway Boulevard and Grant Road: **Sidewalk improvements, missing sidewalk sections and curb ramps.**  
**Factors:**
    - Mary Meredith K-12
    - Desert Valley Christian School
    - Pima Community College District Offices
    - Medical Offices
  27. Santa Clara Avenue between Drexel Road and Valencia Road: **Sidewalk improvements, missing sidewalk sections.**  
**Factors:**
    - Bus stops
    - Mission Manor Elementary School
    - Southgate Academy
    - Arizona Academy of Leadership – South
    - Mission Manor Park

28. Speedway Boulevard between Pantano Road & Kolb Road: **Sidewalks improvements, barriers due to slope/cross-slope issues.**

**Factors:**

- Bus stops
- Desert Christian Schools, K-12
- Pantano River Park/Walk
- Tucson Eastside City Hall
- Segments east to Camino Seco & west to Wilmot are complete and accessible

29. Speedway Boulevard between Wilmot Road and Alvernon Way: **Sidewalk improvements, missing sidewalk sections and curb ramps. Barriers include limited right-of-way and street signs.**

**Factors:**

- Bus stops
- Desert Valley Christian School
- Basis Middle School
- Desert Springs Academy
- Swanway Park
- Martha Cooper Library
- Refugee Assistance Center
- Commercial / Retail

30. St. Mary's Road/Anklam Road between Silverbell Road and Players Club Drive: **Install and improve sidewalks, missing sidewalk sections and curb ramps.**

**Factors:**

- Bus stops
- Seminole Park
- Greasewood Park
- St. Mary's Hospital
- Maxwell Middle School
- Aztec Middle College – West
- Tucson International Academy – West
- Pima Community College – West Campus

31. Stone Avenue between Grant Road and Wetmore Road: **Sidewalk improvements, missing sidewalk sections. Barriers include passing zones, utility poles and street signs.**

**Factors:**

- Bus stops
- Prince Elementary School
- Amphitheater Middle School
- Amphitheater High School
- Arizona Academy of Leadership – Central
- Rillito Center
- Desert Rose Academy
- Balboa Heights Park
- Keeling Desert Mini Park
- Don Hummel Park

- Rillito River Park

32. Swan Road between Broadway Boulevard and Speedway Boulevard: **Sidewalk improvements, missing sidewalk sections and curb ramps.**

**Factors:**

- Bus stops
- Rincon High School
- University High School
- Academy del Sol
- Linden Park
- Pinecrest Park
- Swanway Park

33. Tucson Boulevard between Eastland Street and Elm Street: **Install and improve Sidewalks, missing sidewalk sections and curb ramps. Barriers include utility poles, fire hydrant, and cross-slopes.**

**Factors:**

- Bus stops
- Hughes Elementary School
- Howenstine High Magnet School
- Teenage Parent School
- Edge High School – Himmel Park
- Saint Ambrose School
- Himmel Park Library
- Himmel Park



34. Valencia Road between Alvernon Way and 12th Avenue: **Install and improve Sidewalks.**

**Factors:**

- Bus stops
- San Miguel High School
- Desert View High School
- Los Ranchitos Elementary School
- Math & Science Success Academy
- Valencia Library

## 8. Next Steps

This ADA Sidewalk Inventory Study Report is a tool that local jurisdictions can use to more easily identify and address areas that lack pedestrian infrastructure. Pedestrian travel increases the efficiency of the entire transportation network. Creating a safe environment for pedestrians promotes walking as a viable mode of transportation. With the help and cooperation of local jurisdiction members, the goal of connectivity and safety on the region's major streets and routes can be more fully addressed. While there are many future steps yet to be taken, this effort will serve as an essential step in reaching this goal.

- Future studies and inventories should expand to include local streets whenever possible.
  - Plan for and implement improved pedestrian safety for the entire transportation network.
1. Develop an ADA Transition Plan for the public-right-of way. This transition plan provides specific guidelines for public transportation facilities to be evaluated and constructed for ADA accessibility on all roadway projects in a systematic order. One of the available tools is the American Association of State Highway and Transportation Officials' (AASHTO), ADA Transition Plans: A Guide to Best Management Practices, National Cooperative Highway Research Program (NCHRP 20-7), May 2009, by Jacobs Engineering Group, Baltimore, Md. This document shares successful practices related specifically to the development and update of State DOT ADA Transition Plans and also would be helpful to local jurisdictions.  
<http://design.transportation.org/Documents/ADATransitionPlansReport,May2009.doc>
  2. Develop a Pedestrian Safety Action Plan. Technical assistance is available through the Federal Highway Administration (FHWA) and the Arizona Department of Transportation (ADOT) with an Arizona specific supplement. Additionally, information about workshops in developing and designing for pedestrian safety also is available on the Pedestrian and Bicycle Information Center (PBIC) website at [www.walkinginfo.org/training/pbic](http://www.walkinginfo.org/training/pbic)

Spotlight on Safety article in the FHWA Publication Public Roads:

<http://www.fhwa.dot.gov/publications/publicroads/12janfeb/03.cfm>

3. Develop and adopt a Complete Streets Policy. Coordinate with the Arizona Department of Transportation (ADOT) Pedestrian Safety Action Plan. Complete streets are designed to balance safety and convenience for everyone using the road. (Section 3).

[http://www.azdot.gov/mpd/systems\\_planning/PDF/PedSafety/2009\\_06\\_24ADOT\\_PSAP\\_Final.pdf](http://www.azdot.gov/mpd/systems_planning/PDF/PedSafety/2009_06_24ADOT_PSAP_Final.pdf)

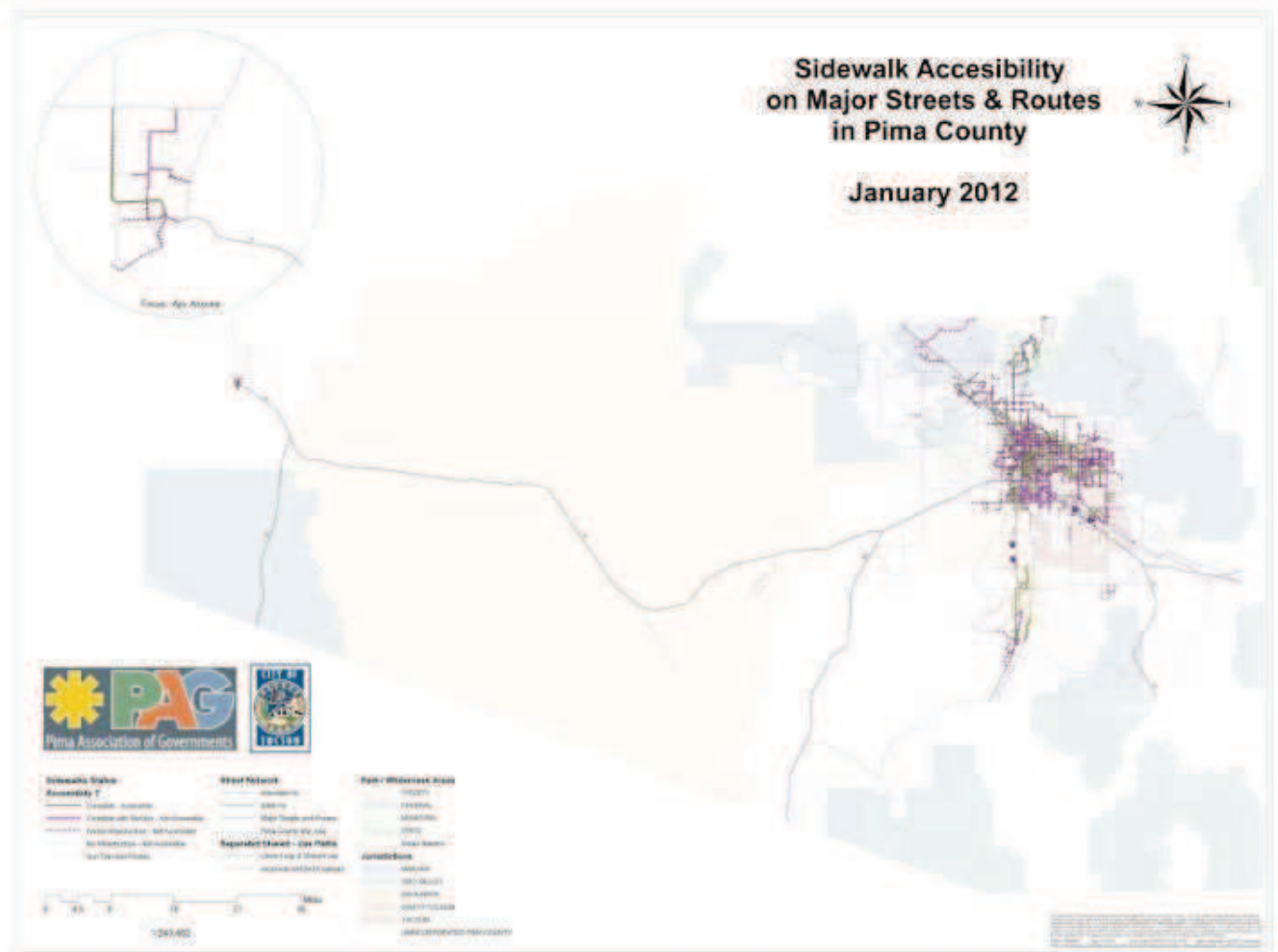




## Appendix A- MAPS

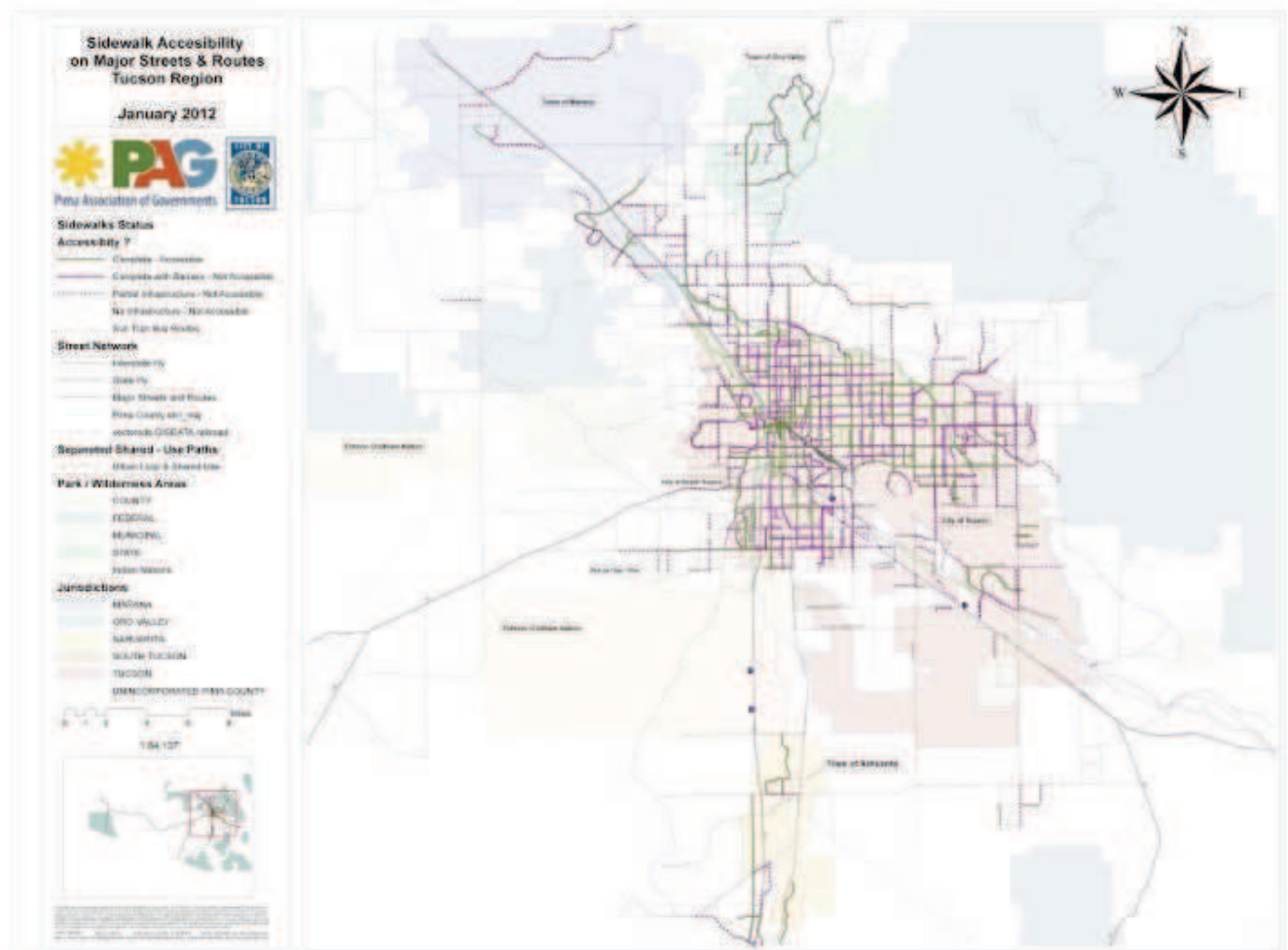
### Pima County

January 2012



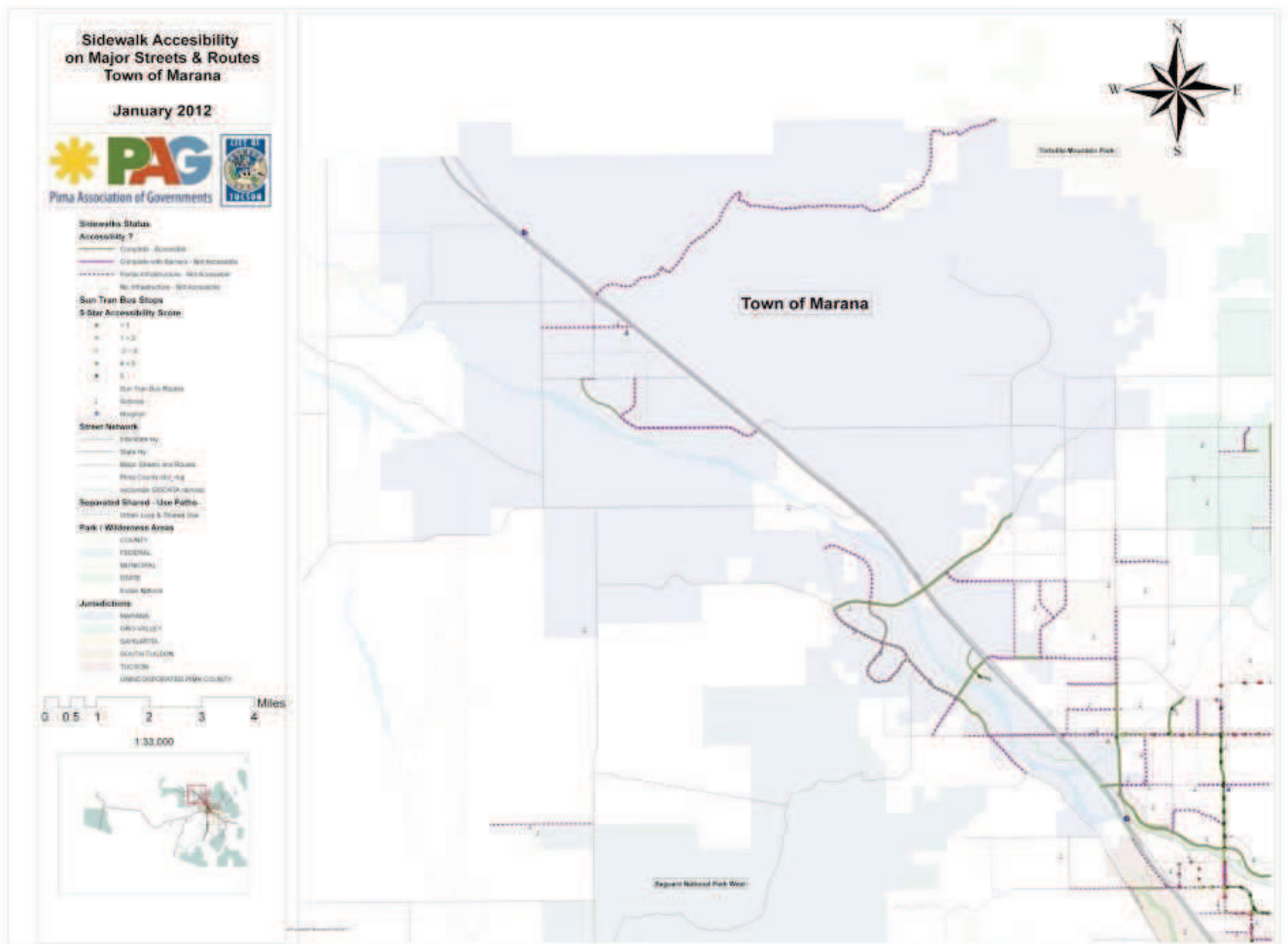
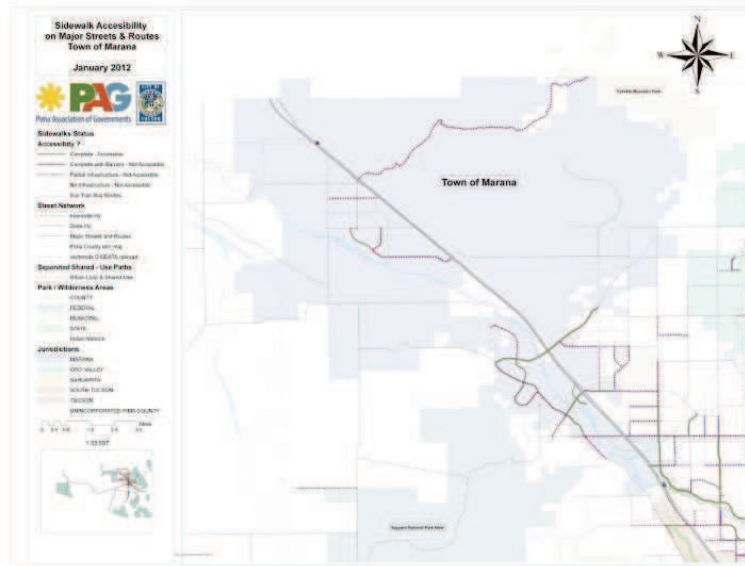
# Tucson Region

## January 2012



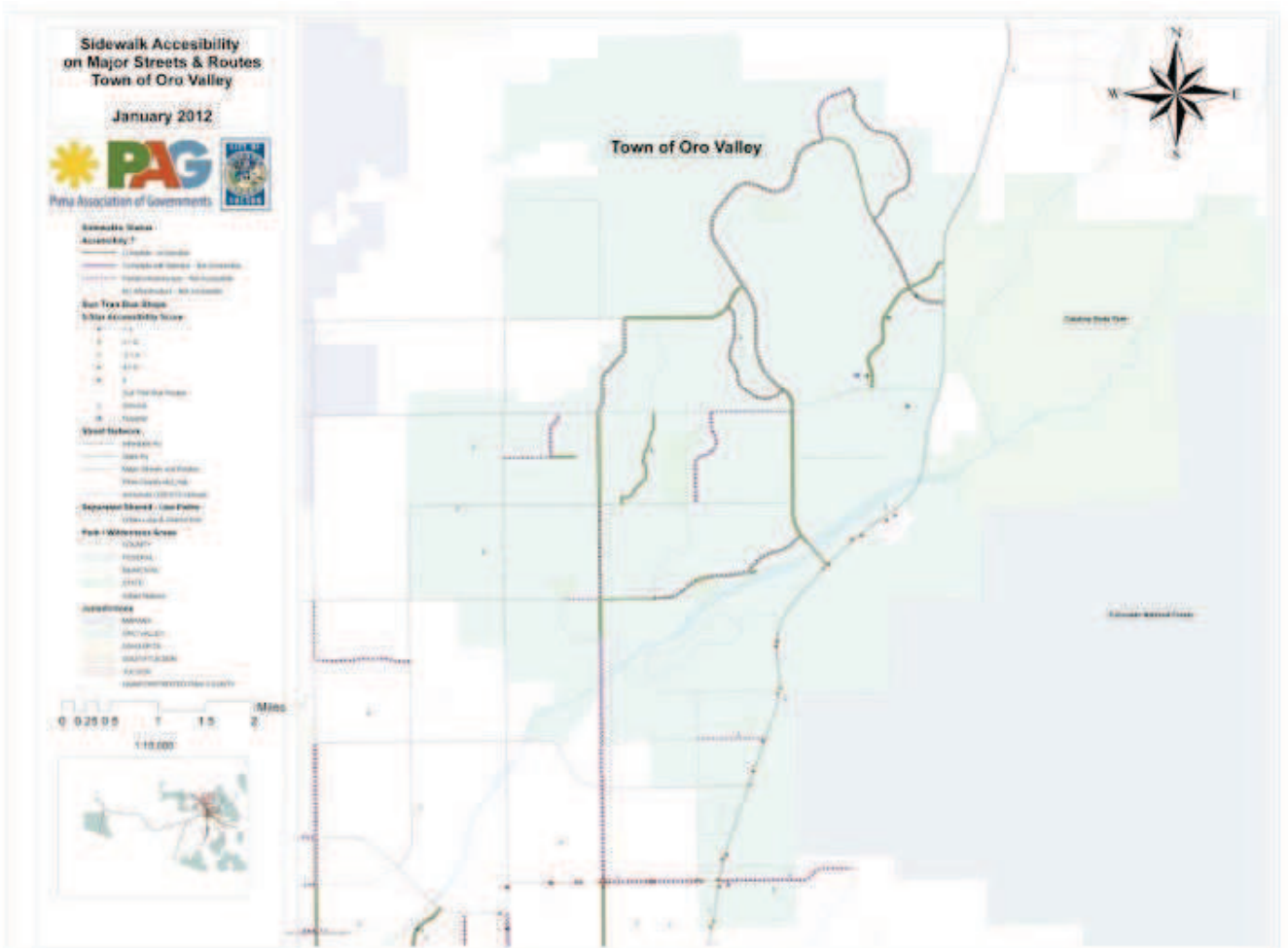
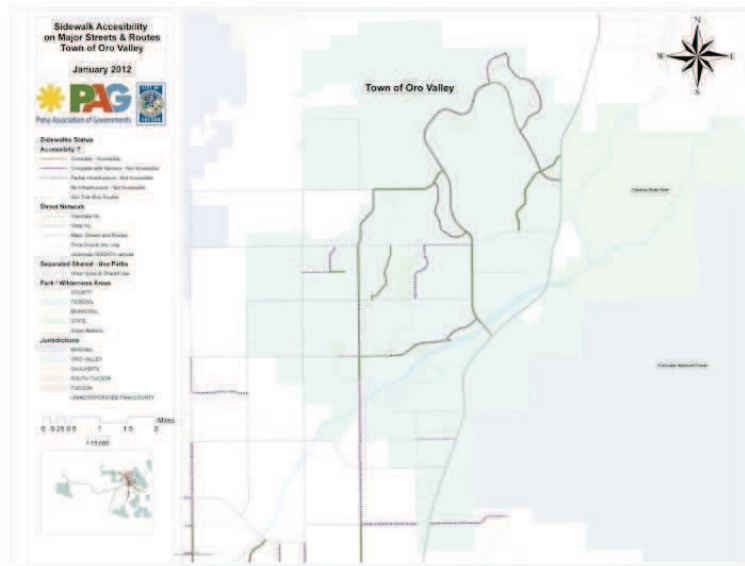
## Town of Marana

January 2012



# Town of Oro Valley

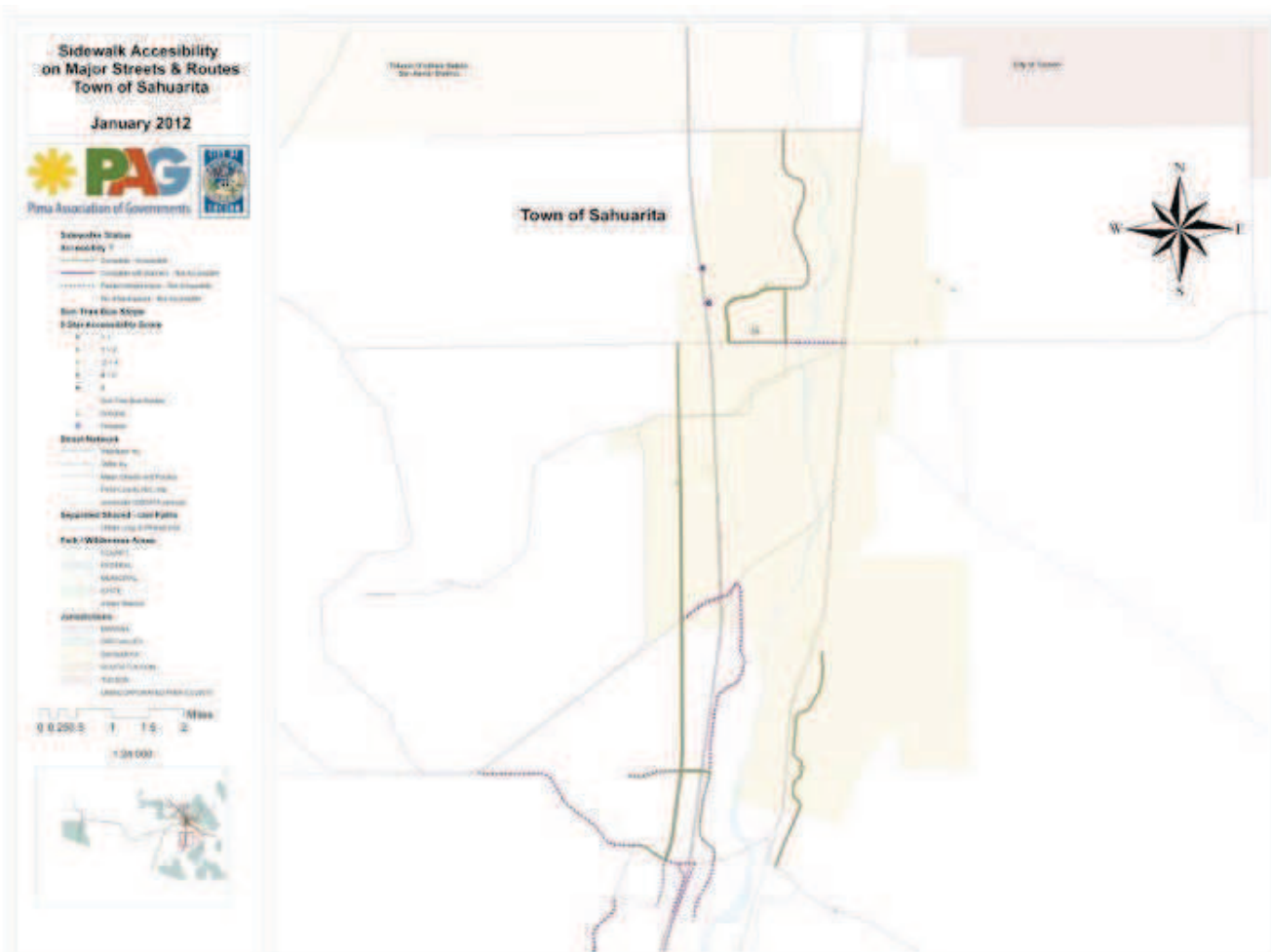
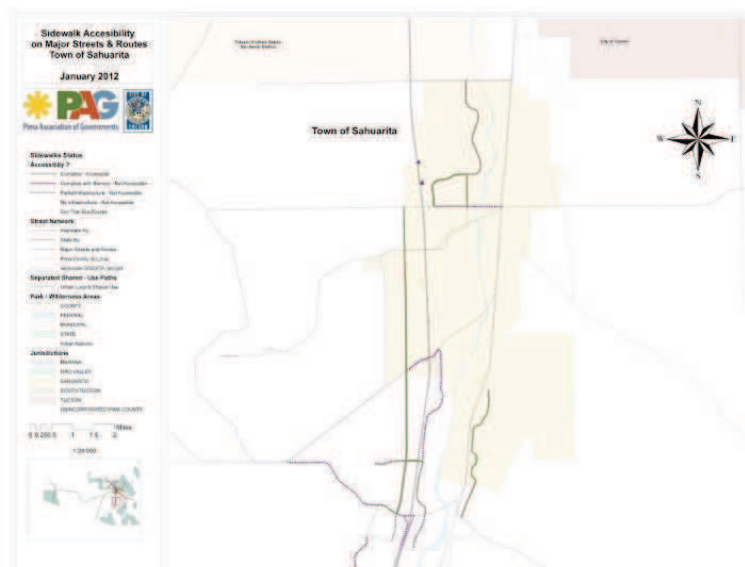
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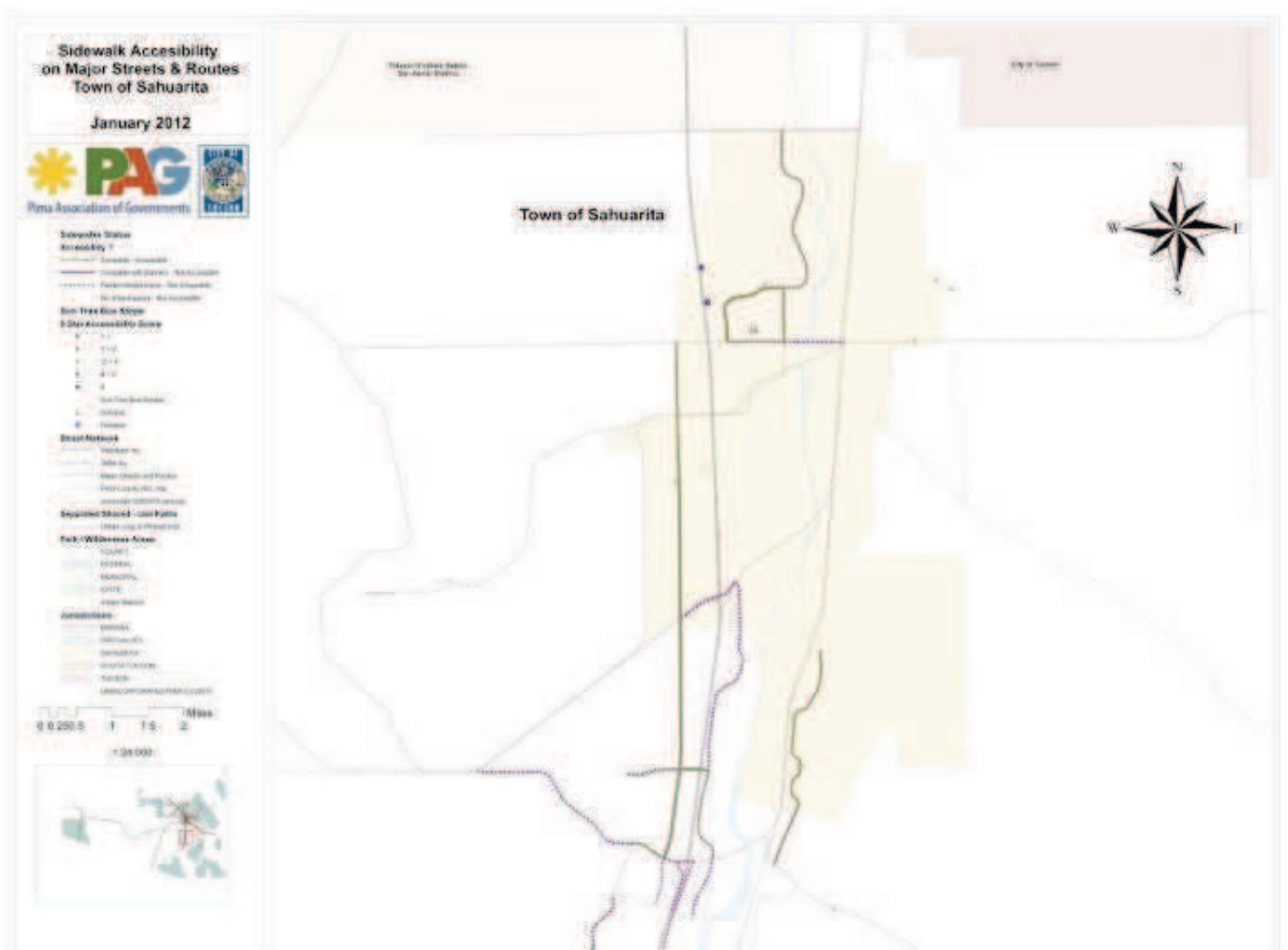
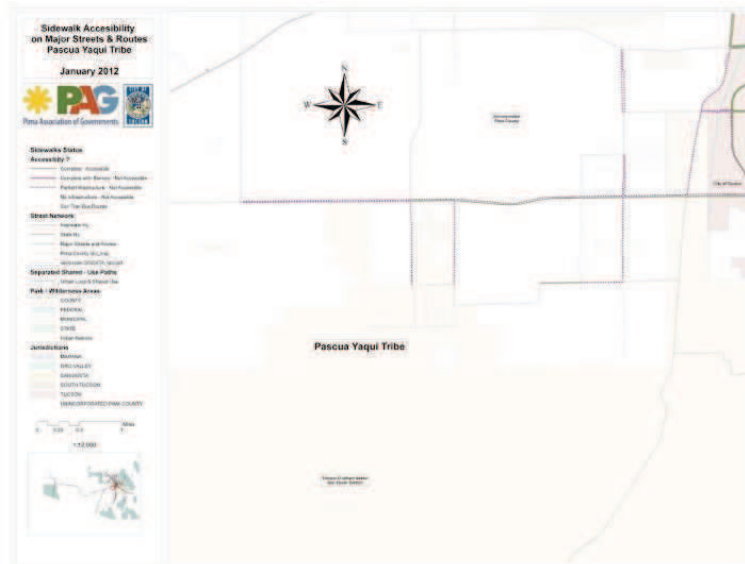
# Town of Sahuarita

## January 2012



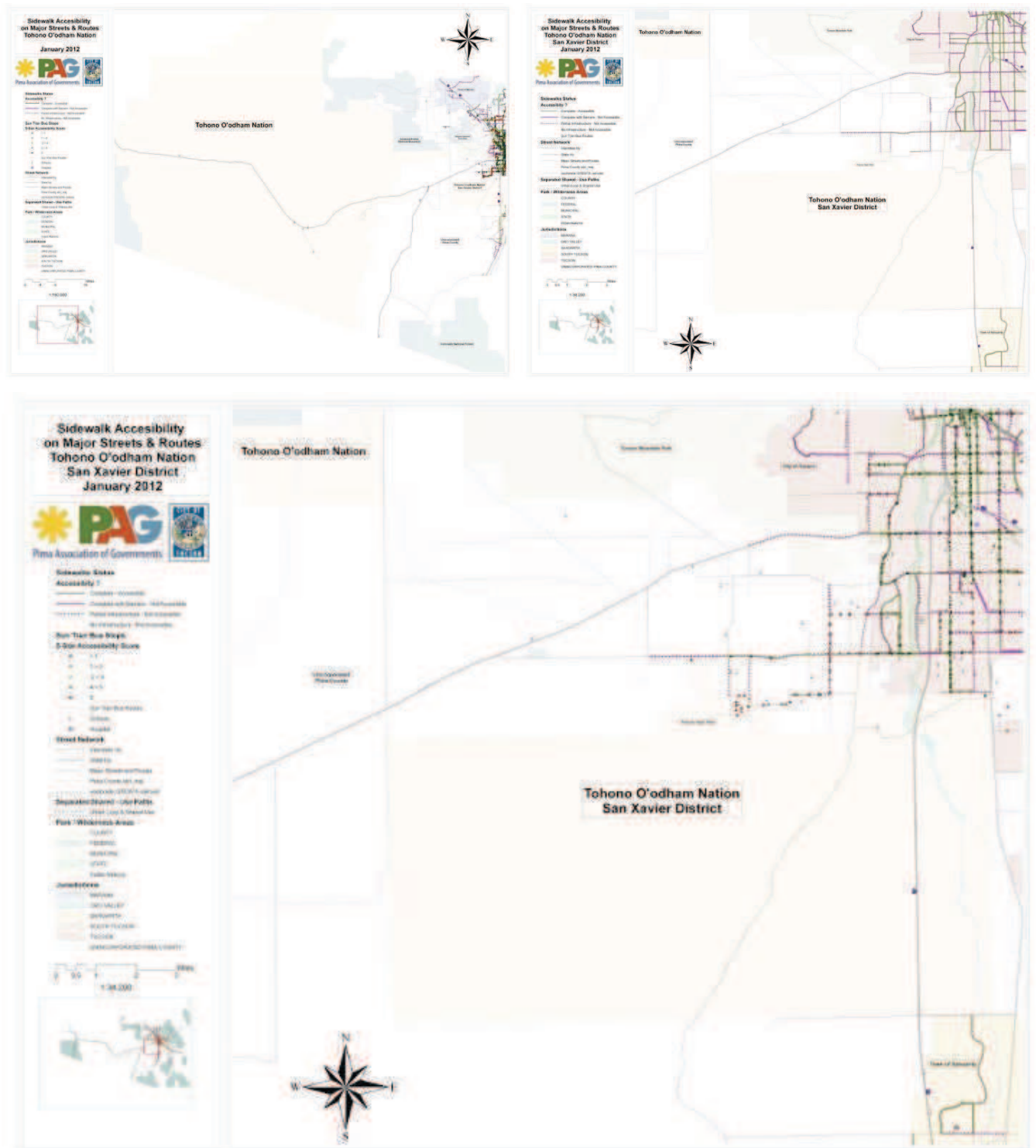
## Pascua Yaqui Tribe

January 2012



# Tohono O'odham Nation

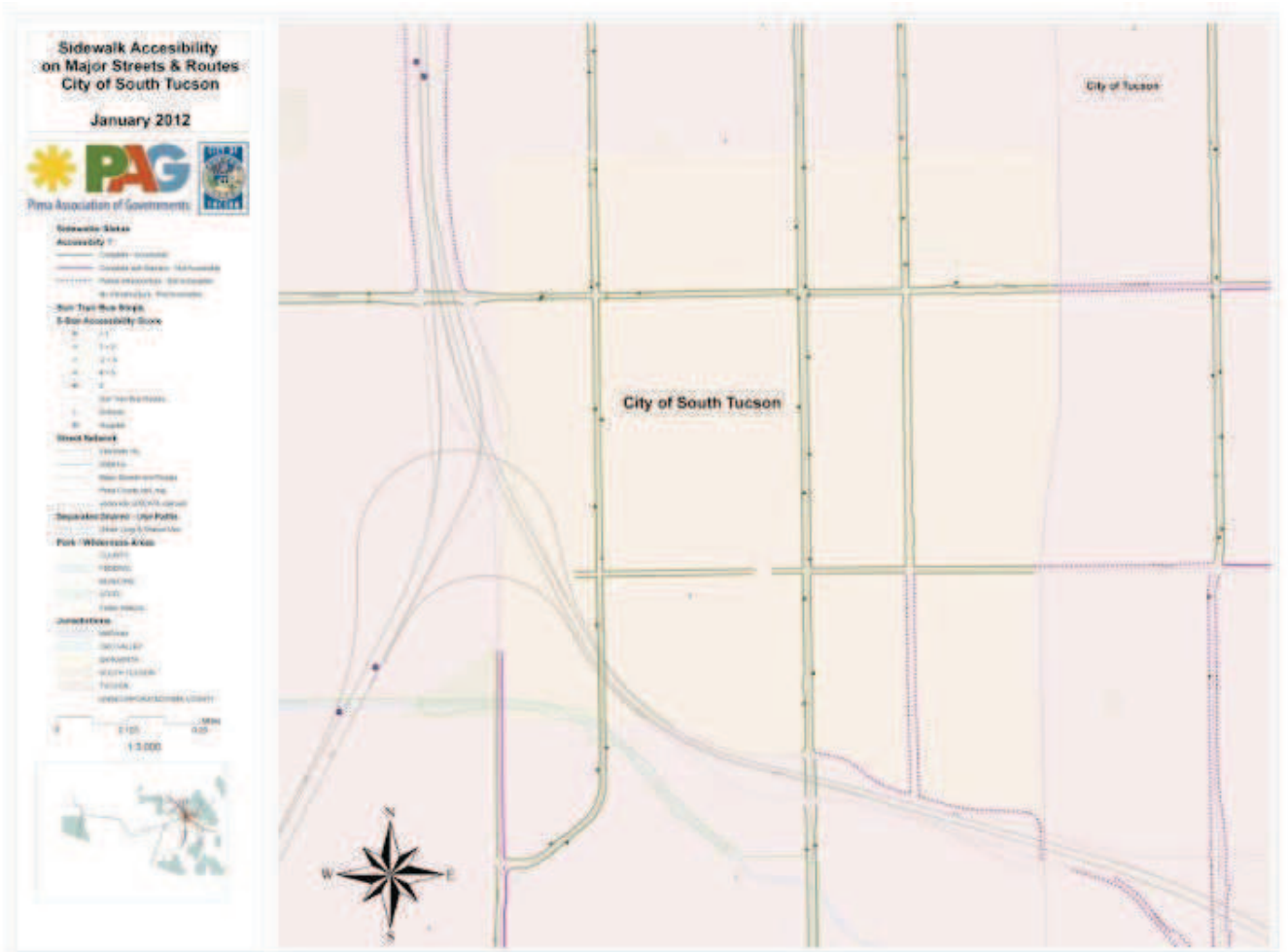
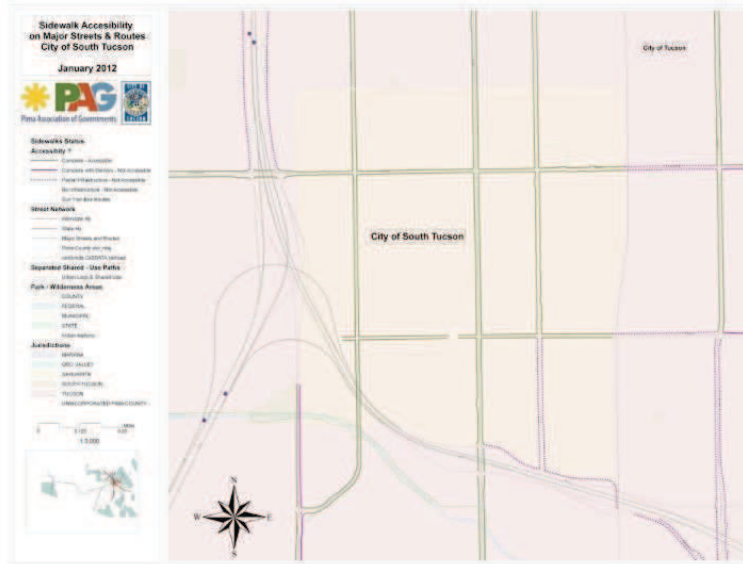
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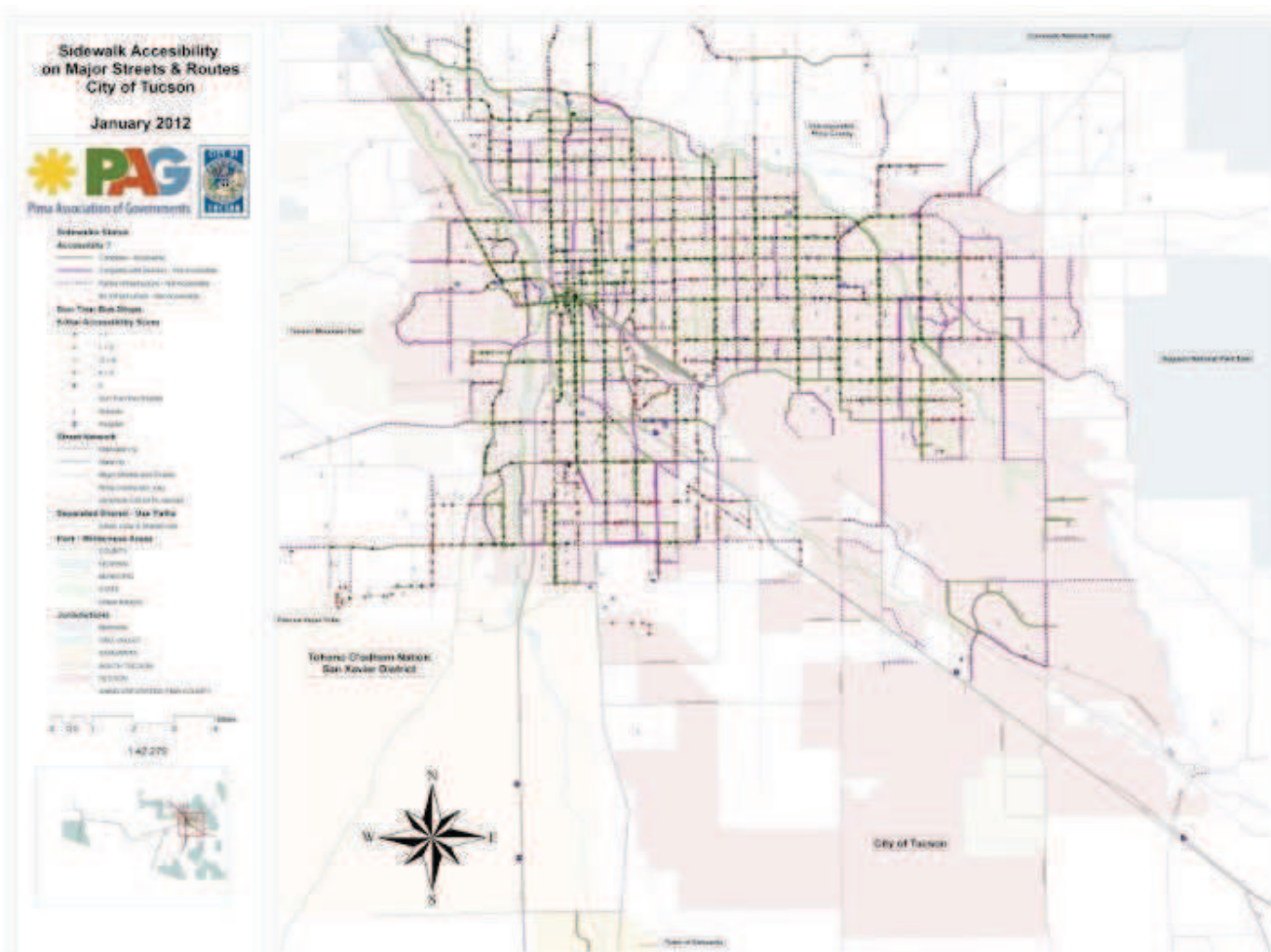
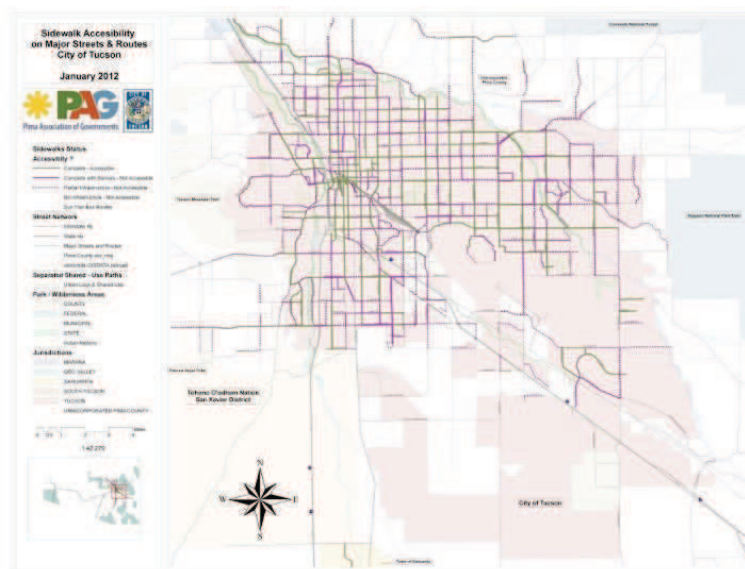
# City of South Tucson

## January 2012



## City of Tucson

January 2012



# Appendix B- Database

## Sidewalk Inventory Database Sample January 2012

STREET_NAM	FUNC_CLASS	MAP_NAME	Side_of_rd	From_N_E	To_S_W	AreaJuris	stat_sdwls
GREENFIELD RD	Urban Collector	GREENFIELD RD	S	Oracle Rd	Yellowstone Av	Oro Valley	0
110 FRONTAGE		110 FRONTAGE RD	NE	Camino De Marana	Cortaro Farms Rd	Marana	0
ORACLE RD	Urban Principal Arterial	ORACLE RD	W (N)	Camino Greenfield	Camino Cortaro	Oro Valley	0
CAMINO CORTARO	Urban Collector	CAMINO CORTARO	S	Oracle Rd	Yellowstone Av	Oro Valley	0
YELLOWSTONE AV	Urban Collector	YELLOWSTONE AVE	E	Camino Greenfield	Camino Cortaro	Oro Valley	0
CAMINO CORTARO	Urban Collector	CAMINO CORTARO	S	Yellowstone Av	Northern Av	Oro Valley	0
NORTHERN AV	Urban Collector	NORTHERN AVE	W	Hardy Rd	Calle Dadvoso	Oro Valley	0
CAMINO DE OESTE	Urban Collector	CAMINO DE OESTE	W	Bald Eagle Av	Cortaro Farms Rd	Pima County / Marana	1
CORTARO FARMS RD	Urban Minor Arterial	CORTARO FARMS RD	S	Sandy Desert Tr	Hartman Ln	Marana	2
HARTMAN LN	Urban Collector	HARTMAN LN	E	Linda Vista Bl	Cortaro Farms Rd	Pima County / Marana	1
THORNYDALE RD	Urban Minor Arterial	THORNYDALE RD	E	Overton Rd	Cortaro Farms Rd	Pima County	1
SILVERBELL RD	Urban Principal Arterial	SILVERBELL RD	N (E)	Coachline Bl	Somerton Dr	Marana	2
CORTARO FARMS RD	Urban Minor Arterial	CORTARO FARMS RD	N	Thornydale Rd	Camino de Oeste	Pima County / Marana	1
110 FRONTAGE		110 FRONTAGE RD	NE	Cortaro Farms Rd	Ina Rd	Marana	0
110 FRONTAGE		110 FRONTAGE RD	NW	Cortaro Rd	Casa Grande Hwy	Marana	0
SILVERBELL RD	Urban Principal Arterial	SILVERBELL RD	NE	Somerton Dr	Wade Rd	Marana	2
ARIZONA PAVILIONS DR	Urban Collector	ARIZONA PAVILIONS DR	E	Casa Grande Hy	Cortaro Rd	Marana	0
SHANNON RD	Urban Minor Arterial	SHANNON RD	E	Overton Rd	Magee Rd	Pima County	0
CORTARO FARMS RD	Urban Minor Arterial	CORTARO FARMS RD	N	Shannon Rd	Thornydale Rd	Pima County	0
ARIZONA PAVILIONS DR	Urban Collector	ARIZONA PAVILIONS DR	W	Cortaro Rd	Burlingame Rd	Marana	2
ORACLE RD	Urban Principal Arterial	ORACLE RD	W	Camino Cortaro	Magee Rd	Oro Valley	0
NORTHERN AV	Urban Collector	NORTHERN AVE	W	Calle Dadvoso	Magee Rd	Oro Valley	0
MAGEE RD	Urban Minor Arterial	MAGEE RD	S	Oracle Rd	Northern Av	Oro Valley	0
MAGEE RD	Urban Minor Arterial	MAGEE RD	S	Northern Av	La Canada Dr	Pima County	1
LA CANADA DR	Urban Minor Arterial	LA CANADA DR	E	Hardy Rd	Magee Rd	Pima County	1
MAGEE RD	Urban Minor Arterial	MAGEE RD	N	La Canada Dr	La Cholla Bl	Pima County	0
LA CHOLLA BL	Urban Principal Arterial	LA CHOLLA BLVD	W	Overton Rd	Magee Rd	Pima County	0
CAMINO DE OESTE	Urban Collector	CAMINO DE OESTE	E	End of Road / Plantation St	Magee Rd	Pima County	0
MAGEE RD	Urban Collector	MAGEE RD	S (E)	Cortaro Farms Rd / Shannon Rd	Thornydale Rd	Pima County	0
THORNYDALE RD	Urban Minor Arterial	THORNYDALE RD	W	Cortaro Farms Rd	Magee Rd	Pima County	2
MAGEE RD	Urban Collector	MAGEE RD	N	Thornydale Rd	Camino De Oeste	Pima County	1
MAGEE RD	Urban Collector	MAGEE RD	S	Christie Dr	Oracle Rd	Pima County / Oro Valley	1
MAGEE RD	Urban Minor Arterial	MAGEE RD	N (E)	Tuscany Dr	Shannon Rd / Cortaro Farms Rd	Pima County	0
CORTARO RD	Urban Minor Arterial	CORTARO RD	SE	Arizona Pavilions Dr	Silverbell Rd	Marana	2
SILVERBELL RD	Urban Principal Arterial	SILVERBELL RD	NE	Wade Rd	Cortaro Rd	Marana	2
LA CHOLLA BL	Urban Principal Arterial	LA CHOLLA BLVD	W	Magee Rd (N)	Magee Rd (S)	Pima County	0
MAGEE RD	Urban Minor Arterial	MAGEE RD	N	La Cholla Bl	Mona Lisa Rd	Pima County	0
MAGEE RD	Urban Minor Arterial	MAGEE RD	N	Mona Lisa Rd	Tuscany Dr	Pima County	0
CAMINO DE OESTE	Urban Collector	CAMINO DE OESTE	E	Magee Rd	Massingale Rd	Pima County	0
THORNYDALE RD	Urban Minor Arterial	THORNYDALE RD	W	Magee Rd	Massingale Rd	Pima County	2
MASSINGALE RD		MASSINGALE RD	S	Thornydale Rd	Camino De Oeste	Pima County	1
MASSINGALE RD		MASSINGALE RD	N	Meredith Bl	Thornwood Rd	Pima County	0
GENERAL HITCHCOCK HY	Rural Major Collector	MOUNT LEMMON HWY	S (E)	Unnamed	Prison Camp Rd	Coronado National Forest	0
110 EB FRONTAGE RD		110 EB FRONTAGE RD	NE	Burlingame Rd	Ina Rd	Marana	0

widths	material	ramp_ADA	access	barrier_s	Plan Imprv	Stat Imprv	Year	Trnst_rts	Add_Cmnts	SW_ID	length
0.00	asphalt	0	0		0	0	0	0		21088.00	844.84
0.00	dirt	0	0		0	0	0	0		15139.00	9388.16
0.00	asphalt	0	0		0	0	0	0		21169.00	1315.31
0.00	asphalt	0	0		0	0	0	0		21070.00	742.07
0.00	asphalt	0	0		0	0	0	0		21225.00	1295.27
0.00	asphalt	0	0		0	0	0	0		21072.00	970.94
0.00	dirt	0	0		0	0	0	0		21161.00	2579.16
4.60	concrete, dirt	1	0		0	0	0	0		29051.00	4761.10
4.60	concrete	2	1		0	construction	2006	0		15103.00	2629.22
4.60	concrete, dirt	1	0		0	0	0	0		29061.00	7808.47
4.60	concrete, dirt, asphalt	0	0		0	0	0	0		26165.00	5173.25
4.60	concrete	2	1		1	sidewalk improvements	2012	0		15238.00	3181.58
5.60	concrete, dg	1	0		0	0	0	0		29058.00	7556.20
0.00	dirt	0	0		0	0	0	0		15143.00	10560.57
0.00	dirt	0	0		0	0	0	0		15145.00	280.76
4.60	concrete	2	1		0	0	0	0		15244.00	1327.98
0.00	dirt	0	0		0	0	0	0		15050.00	2430.00
0.00	dirt	0	0		0	0	0	0		26011.00	7211.06
0.00	dirt	0	0		0	design, construction, right of					
0.00	dirt	0	0		0	1 way				25371.00	5030.78
4.60	concrete	2	1		0	0	2015	0		15053.00	1931.71
0.00	asphalt	0	0		0	0	0	0		21167.00	2682.49
0.00	asphalt	0	0		0	0	0	0		21158.00	2557.48
0.00	dirt	0	0		0	0	0	0		21133.00	1029.92
6.00	asphalt	0	0		1	design, construction	2015	0	shared use asphalt path	25748.00	5190.88
4.60	concrete, dg	1	0		1	construction	2013	107X, 203X	road widen project	25657.00	5227.24
0.00	dirt	0	0		0	0	2011	0		25741.00	5173.66
0.00	dirt	0	0		0	0	2011	0	west side shared-use path	25682.00	7908.12
0.00	dirt	0	0		0	0	0	0		25252.00	1318.11
0.00	dg	0	0		1	sidewalk improvements	2011	0		25740.00	4625.78
4.60	concrete	2	1		0	0	0	0		26158.00	2506.17
4.50	concrete, dg	0	0		0	0	0	0		25750.00	4906.73
4.60	concrete, dirt	1	0		1	construction	2011	0	includes multi-use path Oracle to North 1st Av	30054.00	7400.69
0.00	asphalt/dirt	0	0		1	design, construction, right of					
0.00	asphalt/dirt	0	0		1	way	2015	0		25752.00	3183.65
4.60	concrete	2	1		0	0	0	0		15109.00	3189.68
4.60	concrete	2	1		0	0	0	0		26164.00	2497.24
0.00	dirt	0	0		0	0	0	0		25675.00	1646.25
0.00	dg	0	0		0	0	0	0		25743.00	2340.93
0.00	dg	0	0		0	design, construction, right of					
0.00	dg	0	0		1	way	2015	0		25745.00	1304.67
0.00	dirt	0	0		0	0	0	0		25262.00	2495.37
4.60	concrete/asphalt	2	1		0	0	0	0		26164.00	2497.24
4.60	concrete, dirt	1	0		0	0	0	0		25774.00	4924.57
0.00	dirt	0	0		0	0	0	0		25771.00	2957.07
0.00	dirt	0	0		0	0	0	0		12061.00	24058.02
0.00	dirt	0	0		0	0	0	0		15133.00	8431.57