Dunbar Spring Neighborhood Walkability Assessment Report (August 2014)









This program was made possible through the regional Alternative Modes program at





THANK YOU AND CONTACT INFORMATION

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LIVING STREETS ALLIANCE
THANKS THE PARTICIPANTS IN THE
DUNBAR SPRING NEIGHBORHOOD
WALKABILITY ASSESSMENT FOR THEIR
TIME AND VALUABLE INPUT.

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ABOUT LIVING STREETS ALLIANCE

Founded in 2011, Living Streets Alliance (LSA) is a Tucson-based non-profit organization dedicated to encouraging and advocating for sustainable alterative transportation options in the greater Tucson region. The mission of Living Streets Alliance is to promote healthy communities by empowering people to transform our streets into vibrant places for walking, bicycling, socializing, and play.

In 2012, LSA launched a *Pedestrian Safety & Comfort Campaign* with the goal of "making the simple act of walking safe, comfortable, and convenient in the greater Tucson region." The campaign encompassed a variety of initiatives geared toward improving walkability for people of all ages and abilities in the region. Implementation of the Neighborhood Walkability Assessment Program was one of many concrete objectives achieved through the campaign. This round of the program was made possible through a partnership with Pima Association of Governments as part of their regional Alternative Modes program.

PROGRAM OVERVIEW

From October 2013 through May 2014, *Living Streets Alliance* conducted a *Neighborhood Walkability Assessment Program* in five neighborhoods. The Program was informed by participant feedback and lessons learned from the pilot phase of the program (February to April 2013).

Through the Neighborhood Walkability Assessments, LSA engaged residents in thinking and learning about walkability, while helping them identify the challenges that discourage walking and the assets that encourage walking in their neighborhoods. The program gave residents the opportunity to share their personal experiences of their neighborhood streets from a pedestrian perspective and initiated a conversation about neighborhood priorities regarding possible future improvements to the walking environment.

Program Goals

- Explore and evaluate methods for collecting and assessing qualitative information from neighborhoods regarding walkability and pedestrian safety and comfort.
- Educate residents of the greater Tucson region about the benefits of walking and having walkable neighborhoods.
- Share walking safety tips and "rules of the road" with participants.
- Engage residents in identifying their neighborhood walkability assets and challenges.
- Explore and evaluate ways to identify improvements based on resident input through walkability assessments.
- Explore and evaluate ways to communicate recommendations and data summaries with neighborhoods.
- Work to get relevant elected and appointed officials and/or local jurisdiction staff to attend components of the walkability assessment.
- Contribute to the PAG 2014 Pedestrian Plan Update.
- Continue to develop LSA's regional walkability database and document the walkability needs across the greater Tucson region.

Each Neighborhood Walkability Assessment consisted of three components: a Walkability Workshop, a Neighborhood Walk & Talk, and a Walkability Audit.

WALKABILITY WORKSHOP

The first form of engagement in each neighborhood was a 1.5-hour interactive Walkability Workshop,

designed to introduce participants to the concept of walkability and identify key aspects of walking in the neighborhood. During the workshop, participants were given a brief introduction on walkability, including the various elements that make an area walkable, and the benefits of walking and walkable neighborhoods. This presentation was followed by an interactive mapping exercise. Participants worked in small groups with large aerial maps of their neighborhoods and marked:

- Walking destinations in or around the neighborhood
- Neighborhood walking assets (such as shaded sidewalks, convenient crossings, etc.)
- Neighborhood walking challenges (such as obstacles on the sidewalk, speeding traffic, etc.)





LSA continually modified the workshop format and content to make the information more pertinent and practical for the neighborhoods. Starting with the third Neighborhood Walkability Assessment, a new section on walkability improvements was added to the workshop curriculum. This walkability improvements section included an introductory presentation on the "Walkability Toolbox" consisting of various street and intersection treatments aimed at traffic calming, volume management, improved pedestrian crossings at un-signalized and signalized locations, and other elements that can enhance pedestrian comfort and sense of welcome. A mapping exercise followed this presentation, allowing participants to discuss and identify specific locations where these treatments might be beneficial in their neighborhoods. Participants were also asked to suggest routes for the second component of the program, the *Neighborhood Walk & Talk*. After these sessions, the maps were digitized and uploaded to Google Maps to share with neighborhoods.

NEIGHBORHOOD WALK & TALK

Following the initial *Walkability Workshop* in each neighborhood, LSA hosted a *Neighborhood Walk* & *Talk* to engage residents in observing and identifying the elements in the neighborhood pedestrian environment that might encourage or discourage walking as well as to discuss improvements that could potentially enhance walkability.

The 2-hour walk was led by LSA staff along neighborhood streets following a route suggested by residents during the initial workshop. Whenever possible, the selected route included different types of streets (for example a neighborhood residential street and a collector street), with the purpose of providing residents with a sample subset of their neighborhood streets from which the findings and recommendations can be extrapolated to other similar streets in the neighborhood. The Walk & Talk was designed to be participatory, allowing ample time for ideas and discussions.

A note-taker and a photographer were designated at each event to document the conversations and the neighborhood features discussed. Additionally, participants completed short surveys for each street segment to give everyone a chance to provide input regarding pedestrian comfort and safety.





WALKABILITY AUDIT

After each *Neighborhood Walk & Talk*, LSA facilitated more detailed data collection on pedestrian safety and comfort elements, mainly along potential future bike boulevards identified in the City of Tucson's Draft Bike Boulevard Network¹ and other key pedestrian corridors identified during the workshop. An audit survey was created to collect qualitative information regarding how people felt walking in an area. Volunteers and neighborhood residents completed audit surveys one block at a time to give feedback on safety, traffic, shade, attractiveness of the streetscape, and a number of other items related to overall comfort and safety. The surveys provided space for open-ended comments about each element, asking the participant to share *why* they rated a particular street segment as they did.

¹ For more information on bike boulevards in Tucson: http://www.tucsonaz.gov/projects/bicycle-boulevards

DATA ANALYSIS SUMMARY

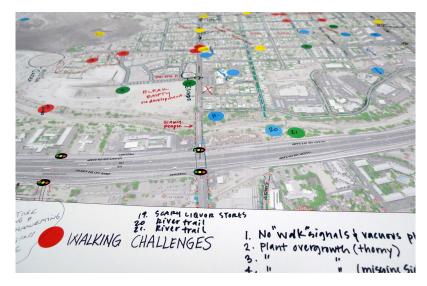
Multiple types of data were collected from participants through the variety of engagement methods used. Following is a summary of how data from each of the three program components were analyzed.

1. Walkability Workshop

The Walkability Workshop focused on soliciting information from participants about the general walking environment in their neighborhood.

Participants worked in small groups on large format neighborhood maps (36" x 48") to identify: walking assets, walking challenges, walking destinations and walking improvements.

All comments from the maps were digitized using QuantumGIS open source software, and shapefiles

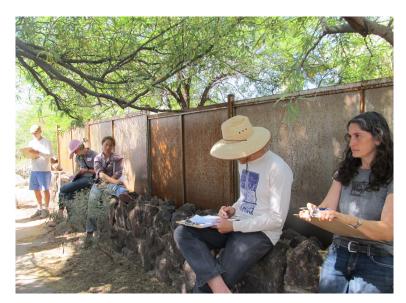


of all data were created. Online Google Maps were created to share with neighborhoods. These can be added to and edited by neighborhoods on an ongoing basis. Content analysis was conducted by classifying each map comment by theme (i.e. open space, crossings, lighting, etc.).

2. Neighborhood Walk & Talk

During the 2-hour Walk & Talk, participants completed brief surveys (Appendix 1) assessing each segment on the route based on how safe, comfortable, and welcoming the pedestrian environment feels. Open-ended questions also provided an opportunity for participants to share why they rated a segment as they did. All surveys were input by LSA staff and volunteers into online spreadsheets using Google Drive and a summary of participant responses was provided to each neighborhood. In some neighborhoods, a separate intersection survey was also completed (Appendix 2).

METHODOLOGY



Participants filling out surveys during a Neighborhood Walk & Talk

Each Walk & Talk also included a dedicated note-taker who recorded participant discussion and questions, and a photographer who captured images of the group and key elements in the environment as they were discussed. An online photomap tour was created and key points of the participant discussion were summarized for each neighborhood.

3. Walkability Audit

An audit survey (Appendix 3) was created to collect qualitative information about how people feel about walking in their neighborhoods. The goal was to complete audit surveys for all streets identified as priority pedestrian corridors or as potential future bike boulevards in the City of Tucson's Draft Bike Boulevard Network. This was achieved to varying degrees across the neighborhoods. Completed surveys were entered into an online spreadsheet in Google Drive. A simple content analysis was conducted to provide a summary of issues along the audited segments.

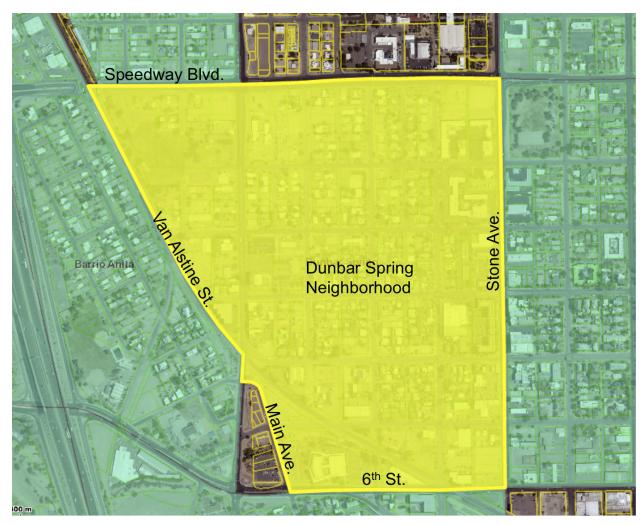
KEY ASSESSMENT FINDINGS ACROSS NEIGHBORHOODS

- Across all five neighborhoods, participants seemed interested and curious about the concept of walkability.
- In all neighborhoods, the presence of sidewalks (or walking paths²) was considered a walkability asset, as were safe and convenient pedestrian crossings. Subsequently, the lack of sidewalks and absence of good crossings were cited as walkability challenges.
- All neighborhoods had at least some areas where safety was a concern, although this was a
 larger issue in some more than others. Presence or absence of sidewalks (or walking paths)
 contributed to this across all neighborhoods. Where sidewalks were not present, uneven terrain
 and obstructions were frequently brought up as issues that compromised pedestrian safety.
 Poor lighting was also a concern in most neighborhoods.
- Areas with difficult and dangerous crossings (primarily at arterial or collector streets) were
 identified in all neighborhoods. In those neighborhoods where potential improvements were
 explored (Menlo Park, Flowing Wells, and Dunbar Spring), there was great interest in pedestrian
 refuge islands, crosswalks and HAWKs as a way to facilitate safer pedestrian crossings.
- Traffic and driver behaviors were connected to how participants perceived safety. Speeding, not yielding to pedestrians, and cut-through traffic led to lower safety scores, while low traffic volumes and traffic calming features enhanced pedestrian safety and comfort ratings. Varying levels of traffic calming installations were identified along the audited streets in all of the neighborhoods except Westwood Village. In all three neighborhoods where potential improvements were explored, participants expressed interest in traffic calming.
- Shade trees and landscaping were highly associated with pedestrian comfort and the attractiveness of the streetscape across all neighborhoods. Unfortunately, the majority of the audited street segments had no shade or minimal shade in all of the neighborhoods; this was the case to a lesser extent in Dunbar Spring.

² Many of the assessment participants in Dunbar Spring Neighborhood prefer walking paths with smooth compacted surface rather than actual sidewalks.

DUNBAR SPRING NEIGHBORHOOD WALKABILITY ASSESSMENT

Dunbar Spring Neighborhood is located between Speedway Boulevard and 6th Street, bounded by Stone Avenue on the east side and the Union Pacific railroad tracks and Main Avenue on the west side.



Dunbar Spring Neighborhood

1. Walkability Workshop (4/28/2014 – 15 participants)

A total of 177 map points were collected from participants during the workshop. Summaries below are presented in order of frequency of comment. Items listed first were the most frequently mentioned. To see everything that was shared, visit the online Dunbar Spring Walkability Map: http://goo.gl/maps/Q84sq.





Walkability Workshop

Walking Assets Summary

- Good pedestrian crossings: When they are painted, signalized, and well lit (e.g. Speedway/10th
 Ave, University/Stone)
- Good paths: Along 9th Ave and 10th Ave
- Shade: Particularly along 9th Ave
- Pedestrian refuge island: 6th St/9th Ave

Walking Challenges Summary

- Difficult/dangerous crossings: No crosswalks, poor visibility (primarily along Stone, 6th, and Main)
- Obstructions in path/Right of Way: Large stones, overgrown vegetation, parked cars
- No through access: University at train tracks, access to 4th Avenue south of 7th Street
- Noise: From train and TEP substation
- Walled-off yards
- Lack of shade

Walking Destinations Summary

- Restaurants, cafes and bars: A variety
- Unique neighborhood resources: Free library, bike church, community bulletin board, public benches, community art (Gila monster, fish sculpture)
- Parks: DeAnza, Estevan, Catalina
- Services: Banks, bike shop, car rental, Maker House, yoga
- Shopping: Grocery, bookstore, plant store

Walkability Improvements Needed Summary

- Improved crossings (particularly along Main and 6th St): More crosswalks, pedestrian refuge islands, leading pedestrian interval (Speedway/Stone, Granada/4th), HAWK (Main/6th St)
- Traffic calming (particularly along 1st St, 9th Ave, and University): Traffic circles and chicanes, road diet (Main and 5th St)
- Volume management: Limit traffic coming into neighborhood from Main and Stone
- Connectivity: Connection from neighborhood to El Paso Southwest Greenway

2. Neighborhood Walk & Talk (5/3/2014 - 15 participants)

Dunbar Spring Walk & Talk Route



For an overview of the Walk & Talk visit the Dunbar Spring

Walk & Talk Map Tour: http://bit.ly/1iTR890

(See Appendix 4 for map tour slides)

Route Surveys

Safety

Overall, safety scores were generally on the positive side of the scale, with most of the lower ratings associated with Main Avenue and 1st Street. Pedestrian crossing challenges on Main, lack of sidewalks or walking paths along inner neighborhood streets, and obstructions in the pedestrian area were reported as challenges. Traffic calming, the neighborly feel of streets, and having people and "eyes on the street" were listed as positive elements.

Segment	Very Safe	Safe	Somewhat Safe	Unsafe	Very Unsafe	Total
1	1	6	3	4	1	15
2	1	4	3	5	0	13
3	0	6	5	3	0	14
4	1	1	2	3	1	8
5	7	4	0	0	0	11
6	6	3	0	1	0	10
7	1	1	1	2	0	5
8	1	0	0	1	0	2
Total	18	25	14	19	2	78

Comfort and Welcome

Main Avenue also received some of the lowest "comfort and welcome" scores due to its unattractive streetscape and lack of shade trees and landscaping. In inner neighborhood streets, the scores were highly affected by the presence or absence of: trees and other vegetation, traffic calming features integrating water harvesting, sidewalks and walking paths with walkable surface materials, and obstructions in the pedestrian area such as untrimmed trees, rocks, and parked cars.

Segment	Very Comfortable / Welcoming	Comfortable / Welcoming	Somewhat Comfortable / Welcoming	Uncomfortable / Unwelcoming	Very Uncomfortable/ Unwelcoming	Total
1	0	1	7	5	1	14
2	0	3	5	6	0	14
3	0	3	5	4	2	14
4	1	0	3	3	1	8
5	8	2	0	0	0	10
6	6	4	0	0	0	10
7	1	1	2	1	0	5
8	1	0	1	1	0	3
Total	17	13	23	20	4	77

Summary of Discussion and Open-Ended Survey Responses

Segment 1: Main between 2nd Street and 1st Street

Walk & Talk discussions on this segment were primarily focused on the possibility of implementing a road diet along Main to make room for bike lanes and to provide easier crossings for pedestrians. Most participants agreed that crossing Main can be challenging depending on vehicular traffic. Improvement ideas shared include: marked crosswalks (especially on 1st Street by Estevan Park), pedestrian refuge islands, HAWK lights, a road diet with a parking lane buffering a bike lane, water harvesting tree basins to create a tree-lined sidewalk buffered from traffic, and a better entrance to Estevan Park.



Main Avenue

Safety ratings were slightly skewed towards the positive end including six marks as *safe*, four as *unsafe*, three as *somewhat safe* and one each as *very safe* and *very unsafe*. Safety was largely attributed to sidewalks, followed by low volume of traffic and streetlights. Lower safety scores were primarily explained by crossing challenges, followed by too many traffic lanes, speeding, and excessive solar exposure.

The segment received lower comfort and welcome ratings with seven responses as *somewhat comfortable/welcoming*, five as *uncomfortable/unwelcoming*, and one each as *very uncomfortable/unwelcoming* and *comfortable/welcoming*. Respondents mostly focused on the negative aspects, listing unattractive streetscape, sidewalk obstructions by vegetation, narrow sidewalks, lack of crosswalks, noisy/fast traffic, and especially the lack of trees and landscaping. Low traffic volume and shade from buildings were the only positive attributes mentioned.

Segment 2: 1st Street between Main and 11th Avenue

A car parked on the dirt strip between the private property and the curb, blocking pedestrian passage, spurred a lengthy discussion about property line measurements and where cars can be legally parked. Participants who prefer not to walk in the street highlighted this parking practice as a major obstruction.



Unpaved pedestrian area blocked by a parked vehicle

Safety ratings were pretty evenly distributed across the lower and the higher ends of the scale, with Segment 2 receiving three marks as *somewhat safe*, five as *unsafe*, four as *safe*, and one as *very safe*. Higher scores were generally associated with slower traffic and a decent clear area for walking, but also with quiet neighborhood streets, as well as high use and visibility. Lower scores were mostly due to lack of a sidewalk/path, followed by industrial feel/lack of eyes on the street, lack of trees, trash, scary dogs, homeless people, and cars turning from Main.

Comfort and welcome scores were towards the negative end, with six marks as *uncomfortable/unwelcoming*, five as *somewhat comfortable/welcoming* and three as *comfortable/welcoming*. Scores were reduced by lack of a consistent sidewalk/pedestrian path, cars parked in the pedestrian walking area off the street, trees/vegetation in the way, and lack of ramps. On the positive side, participants mentioned diversity, Red Barn Theater, and the presence of more trees and better walkways on the south side of the street. The need for traffic calming at the neighborhood entrance on Main, as well as more landscaping and water harvesting, was also brought up.



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Red Barn Theater

Segment 3: 1st Street between 11th Avenue and 10th Avenue

Many participants felt that the gravel between 11th Ave and Queen did not present a comfortable walking surface. One of the neighborhood residents brought a stroller along to test the difficulty of walking off the street and the stroller had to be lifted and carried in this area due to the large gravel. Speeding was also pointed out as an issue, along with the need for traffic calming integrating water harvesting for trees. One person shared that a previous proposal for a traffic circle was met with concern by a nearby neighbor due to flooding on this street. Residents liked the idea of a bike/pedestrian path in the street protected by on-street parking.



Gravel surface and rocks blocking passage

This segment received six ratings as *safe*, five as *somewhat safe* and three as *unsafe*. Safety was attributed to slow cars, neighbors, and a partial sidewalk in front of the church property, while lack of sidewalk/path, the gravel surface, rocks creating obstructions and trip hazards, and traffic concerns related to wide street width, fast traffic, and no traffic calming were listed as negative observations.

Comfort and welcome ratings were comprised of five *somewhat comfortable/welcoming*, four *uncomfortable/unwelcoming*, three *comfortable/welcoming* and two *very uncomfortable/unwelcoming*. Positive attributes of the area were trees and landscaping, and more people on the street. One respondent mentioned the church lawn as a good social area, while another highlighted the need for more trees to shade the sidewalk adjacent to this area. On the other hand, negative comments were mostly focused on lack of shade (especially on the south side), gravel surfaces, and rocks/cars/ overgrown weeds blocking the path. Scary dogs were also mentioned. One respondent had the following suggestion: "It would be great to capitalize on 1st Street being the West University wash and to harvest more water along and within the street to grow food bearing native trees as you'd find along a natural wash."

Segment 4: 1st Street between 10th Avenue and 9th Avenue

This segment also posed similar challenges for pushing the stroller off the street, due to a narrow gravel path that was further obstructed by overgrown vegetation. Neighbors acknowledged that the previous resident of the adjacent property built this path to improve the right-of-way, but probably wasn't aware of the accessibility issues created by the gravel. A discussion took place about the importance of keeping

paths clear and maintained and using more pedestrian-friendly materials such as dirt, stabilized earth, crushed stone, etc.



Gravel path taken over by vegetation

There was mixed feedback about the safety of this segment, including three responses rating it as *unsafe*, two as *somewhat safe* and one each as *safe*, *very safe*, *very unsafe*. Similar to the previous section, safety was associated with slow cars, being on a neighborhood street, and having more people on the street. Other people perceived the traffic conditions differently and picked a lower safety score based on speeding cars, lack of traffic calming, and wide street width. One person highlighted the positive safety impact of open porches and see-through fences vs. the negative impact of high fences blocking the "eyes on the street" along the block. Narrowness of the path, lack of ramps, and the gravel surface were also listed as safety concerns.

Comfort and welcome ratings were skewed towards the negative half of the scale, including three marks as *uncomfortable/unwelcoming*, three as *somewhat comfortable/welcoming* and one each as *very comfortable/welcoming* and *very uncomfortable/unwelcoming*. Landscaping, shady spots, water harvesting features, and other people on the street were the elements contributing to higher comfort scores. Lower scores largely stemmed from the already narrow gravel path being further obstructed by weeds, areas with inadequate shade, and poor tree maintenance. Scary dogs, vagrants, and trash were also mentioned once.

Segment 5: 9th Avenue between 1st Street and 2nd Street

Residents highlighted the lovely shade, sidewalks, and great density of front porches close to the sidewalk on the west side. People showed different preferences obout which side of the street to walk on, based on the security lights that are too bright and the blank wall on the east side vs. the scary dog on the west side. There was a disagreement about high walls and impermeable fences in front yards: some felt they caused an unsafe and unwelcoming atmosphere, removing "eyes on the street" and creating a "closed off" feeling in the neighborhood, while others argued that it is each person's prerogative to build a fence or wall for privacy. Sidewalk maintenance and general cleanup of sidewalk area were brought up as potential improvements for this section.



Dense shade canopy over the sidewalk

Safety scores for this segment were very high, with seven marks as *very safe* and four as *safe*. Respondents primarily emphasized shade/landscaping/trees buffering the street from the sidewalk, but several people also made reference to the friendly and neighborly feel of the street and interactions with neighbors as well as interesting and attractive homes. The only negative remarks noted on the uneven sidewalk surface in places.

Comfort and welcome ratings were also remarkably high, including eight responses as *very comfortable/welcoming* and two as *comfortable/welcoming*. These positive ratings were highly attributed to shade/well-trimmed trees/lots of vegetation, water harvesting in curb-cut basins, and sidewalks, as well as the friendly feel of the street due to nice houses, "eyes on the street", and interactions with neighbors in front yards. Negative comments had to do with broken sidewalk areas and impermeable fences. A number of people also mentioned the light pollution at night at Sahara Apartments across the street.

Segment 6: 9th Avenue between 2nd Street and University

At the beginning of this segment participants commented on the dirt mound that blocks pedestrian access at the SE corner of 9th Ave and 2nd Street Residents expressed that yield signs do not slow down cars. Some liked the idea of stop signs for cars and yield signs for bikes, or even changing the law so that bikes can always treat stop signs as yield signs, thus addressing this problem while not inconveniencing people on bikes. At the University end of this segment, residents acknowledged the traffic calming effects of the traffic circle but a concern was raised that the configuration of the paths, chicanes, and traffic circle can force people to walk in front of vehicles going around the traffic circle. One resident shared some potential ideas about improving this intersection by getting chicanes installed across from existing ones to complete the narrowing of the street as well as incorporating a speed table and pedestrian crossings at each chicane. The little free library down the street was recognized as a great neighborhood amenity that gives people a reason to walk.

Safety scores were generally high (six *very safe*, three *safe*) with one mark as *unsafe* due to the dirt mound, uneven dirt walking surface, narrow path, and lack of ramps. Positive ratings were attributed to smooth compacted soil path, traffic calming, water harvesting, mature landscaping, and the neighborly

feel and interactions along the street. One person mentioned that wide streets provide good visibility from cars, providing a good environment to walk in the street.

Comfort and welcome ratings were all positive including six for *very comfortable/welcoming* and four as *comfortable/welcoming*. These scores were associated with mature shade trees, a nice path (although a little narrow in places), water harvesting, great night sky, and the fact that the block looks cared for. However, people also noticed the low branches creating a hazard near the SW corner of 2nd and 9th, and one participant suggested that the trees should be pruned to allow seven feet of clearance.

Segment 7: 9th Avenue from University to 4th Street

The Walk & Talk discussions ended at this point, but a few participants continued to fill out surveys on their own. Before wrapping up the event, one last conversation took place about the wall on the SW corner of 9th and University that encroaches on the right-of-way and the pedestrian area.



Compacted soil path with landscaping

This segment was rated *unsafe* by two people and *somewhat safe*, *safe*, and *very safe* by one person each. Negative comments regarded encroachment in the right-of-way, trash cans in the walking path, and the impervious wall at the SW corner of 9th and University, while positive comments mentioned nice homes and mature landscaping. One respondent noted that the west side was "unwalkable" due to the wall and other obstacles blocking the pedestrian area.

There was mixed feedback on comfort and welcome measures, including two as *somewhat comfortable/welcoming* and one each as *very comfortable/welcoming*, *comfortable/welcoming*, and *uncomfortable/unwelcoming*. Most participants made a distinction between the shady eastside path enhanced with art, sitting places, and a neighborhood bulletin board vs. the obstructed and more barren westside path. Interesting architecture and neighbor interactions were also cited in positive responses.



East side



West side

Segment 8: 9th Avenue between 4th Street and 5th Street

This segment was rated by two respondents only: one marked it as *very safe* and one as *unsafe*. The only explanation referred to interaction with neighbors and mature landscaping as positive features. There were three comfort and welcome ratings: one *very comfortable/welcoming* (due to interesting architecture and shade), one *somewhat comfortable/welcoming* (no reason stated) and one *uncomfortable/unwelcoming* (due to narrow path obstructed by rocks and plants, and high walls blocking eyes on the street).

3. Walkability Audit

Twenty-five audit surveys were completed on 22 blocks in Dunbar Spring (see map below). A brief summary of audit results follows by survey category. Detailed maps of each category can be found in Appendix 5.



Safety

- The vast majority of audit streets were reported as either *safe* or *very safe*.
- Feelings of safety were primarily due to houses and porches facing the street, and sometimes the presence of street lights.
- Only one block was recorded as *unsafe* (5th Street, just east of Main Avenue). This was due to a lack of "eyes on the street" and prevailing vacant lots.

Traffic Safety

- On eight of the twenty-two surveyed blocks respondents reported the traffic made them feel
 either unsafe or somewhat unsafe. This was primarily due to occasional speeding, rather than large
 volumes of traffic
- 5th Street just east of Main Avenue was reported as *unsafe* due to the street feeling "excessively large" and encouraging speeding. A traffic circle was suggested here.
- Other audited streets felt safe due to very low volumes of traffic and slow speeds.

Traffic Calming

- Thirteen of the 22 surveyed blocks had no traffic calming of any kind
- Traffic circles were reported on 9th Avenue, Queen Avenue, University, 5th Street, and 1st Street
- Chicanes were seen on University, 9th Avenue and 5th Street

<u>Shade</u>

- Full shade was reported on only two blocks, and only on one side of the street (along Queen Avenue). The same blocks had only minimal or moderate shade on the opposite side of the street.
- No shade was reported on four blocks (13th Avenue, 10th Avenue, 5th Street, and 2nd Street).
- Other blocks had either moderate or minimal shade.

<u>Attractiveness</u>

- Only four of the surveyed blocks were reported as *unattractive or very unattractive*. These were areas along 5th Street, 13th Avenue, and 2nd Street with a domination of vacant lots, industrial areas or presence of garbage along the street.
- Six blocks were reported as *very attractive or attractive*. This was due to presence of vegetation, shade trees and well-kept houses and yards.
- Overall, participants reported the blocks as neutral (neither attractive nor unattractive). Comments
 indicate participants appreciated presence of street trees and other vegetation, but vacant lots,
 unkempt yards/houses, and presence of weeds or garbage sometimes brought down the overall
 feeling of attractiveness.

WALKING PATHS, UNFAVORABLE SURFACES, AND OBSTRUCTIONS

The neighborhood residents who participated in the walkability assessment generally had a preference for unpaved walking paths (as opposed to paved sidewalks) on neighborhood streets. Some participants found it safe and convenient to walk in the roadway, while others believed that it was important to provide a continuous and navigable network of walking paths for those who prefer to walk off the roadway, particularly people with children and strollers. Participants noted that obstructions such as rocks, plantings, parked cars, and overhanging/overgrown vegetation made it more challenging to stay off the roadway at times. Gravel poured up to the curb by several homeowners (most likely as a well-intentioned improvement idea) resulted in a non-walking-friendly surface at several spots and made it completely inaccessible for wheelchairs and strollers.

Recommendation 1

[City of Tucson Department of Transportation]:

For neighborhoods interested in walking paths, investigate providing an ADA accessible alternative to conventional concrete sidewalks made from materials such as compacted soil or crushed stone. As funding becomes available, complete the neighborhood walking path network by filling in the gaps to create a safe, comfortable, and accessible pedestrian environment.

Recommendation 2

[Dunbar Spring Neighborhood Association]:

Where obstructions are present, approach property owners to initiate a conversation about removing rocks and gravel, trimming overgrown vegetation, and parking cars on the street. Highlight that on-street parking can also help bring down speeds by narrowing the street. Each year include a section in the neighborhood newsletter about neighborhood walkability to educate newcomers about keeping these "informal walking areas" obstacle-free.

Where a sidewalk is not present, Tucson City Code allows for cars to be parked on the dirt strip between the curb and the property line as long as they are four feet away from the curb. A more recent ordinance made it legal for cars not to leave any space for pedestrians next to the curb, if on-street parking is not allowed on the street. Parkwise will send a parking enforcement agent upon request to investigate the legality of parking. (Contact: 791-5071)

MAIN AVENUE

Getting across Main Avenue can be challenging with four lanes of traffic (plus a center turn lane) and no safe crossings for pedestrians. As requested by the neighborhood residents, the City is planning to implement a road diet on Main Avenue in the near future, after the roadwork on Stone Avenue north of Speedway is completed.

Walkability Assessment participants identified the following specific improvements needed along Main:

- Crosswalk: Main and 4th Street; Main and 2nd Street
- Volume management into neighborhood: Main and 4th Street (a lot of cut-through traffic due to the railroad crossing); Main and University; Main and 5th Street
- Bike/ped crossing: Main and University; Main and 1st Street
- Leading Pedestrian Interval: Main and Speedway

Recommendation

[City of Tucson Department of Transportation]:

As part of the Main Avenue road diet, provide safe crossings on Main between Speedway and the railroad tracks, such as HAWK³ lights, marked crosswalks, and pedestrian refuge islands. Evaluate the feasibility of adding a parking lane with planted curb extensions on the east side or a protected bike lane buffered by a parking lane on the east side of Main.

PEDESTRIAN CROSSINGS

In addition to Main Avenue, improved pedestrian crossings are needed on all of the major streets surrounding the neighborhood to provide safer and more convenient pedestrian access to destinations outside of the neighborhood. The following are the particular locations identified by the assessment participants, in some cases paired with specific improvement suggestions:

- 6th Street and Main: (HAWK, bike/ped crossing, pedestrian refuge island)
- 6th Street and Church
- 6th Street and 9th Avenue
- Stone south of University
- Stone north of University
- Stone and Speedway (Leading Pedestrian Interval)

A HAWK is a pedestrian-activated signal that provides safe pedestrian crossings while minimizing traffic delays. Visit http://tdot.tucsonaz.gov/tdot/pedestrian-traffic-signal-operation for a description of different types of pedestrian crossings.

Recommendation

[City of Tucson Department of Transportation]:

The above-mentioned locations should be evaluated for enhanced pedestrian crossings, including treatments such as HAWK lights, pedestrian refuge islands, leading pedestrian intervals, etc. Existing pedestrian crossing conditions vary greatly across these locations and therefore appropriate treatments are also likely to be different in each case.

TRAFFIC CAI MING

To this date, Dunbar Spring Neighborhood has installed extensive traffic calming features integrating water harvesting, mainly through the Pima County Neighborhood Reinvestment Program. However, many of the streets in the neighborhood are 39 feet wide from curb to curb and can benefit from additional traffic calming features. Walkability Assessment participants identified the following areas for traffic calming, in some cases paired with specific infrastructure suggestions:

- 1st Street between Stone and 11th Avenue (traffic calming along this stretch including speed humps and a traffic circle at 1st and 10th)
- University between 10th and Perry
- University and 9th Street (chicanes)
- 9th Avenue between 1st Street and Speedway (volume management)
- 9th Avenue between 4th Street and 5th Street (speed hump)

A problem was identified with the traffic circle at 9th and University. The way the traffic circle, the chicane, and the pedestrian paths are configured directs the pedestrians into the motorists' path of travel.

Recommendation 1

[Dunbar Spring Neighborhood Association]:

Monitor future funding opportunities that may become available through the City, Watershed Management Group or the Pima County Neighborhood Reinvestment Program (this program may get funded again after the 2015 Pima County Bond election) for installing green infrastructure elements that can double as traffic calming strategies along the streets identified during the Walkability Assessment.

Recommendation 2

[Dunbar Spring Neighborhood Association]:

When installing traffic calming features be mindful of providing direct crossings for pedestrian away from intersections, even when formal walking paths/sidewalks are not present. Give directions to project design and construction staff accordingly.



SHADE

The neighborhood residents have made a remarkable effort planting shade trees; however, the need for more shade was highlighted during the Walkability Assessment. Shade trees are essential for pedestrian comfort in our desert environment and are an effective way of beautifying neighborhoods and improving the visual quality of the streetscape.

Recommendation

[Dunbar Spring Neighborhood Association]:

Work with Trees for Tucson to plant shade trees in the neighborhood through the School & Community Shade Trees Program. Tree planting corridors can be prioritized with the shade information collected during the *Walkability Audit*. Pima Association of Governments (PAG) has created an online map of tree canopies, which can also be helpful in determining additional areas of greater need. (See Additional Resources section for contact information and the link to PAG's map.)

Walk & Talk Segment Survey

Location:		St./Ave. between _		St./Ave. and	St./Ave
1. Safety: Hov	v safe do you	feel walking on this bl	ock?		
□Very safe	□Safe	\square Somewhat safe	□Unsafe	\square Very unsafe	
Why?					
2. Comfort: H	ow comforta	ble and welcoming is t	his block?		
□Very comfor			hat comfortable, hat welcoming	/ □Uncomfortable/ unwelcoming	☐ Very uncomfortable very unwelcoming
Why?					
2 Overall in-	rossions: De	you like walking alone	thic block?		
-		you like walking along	THIS DIOCK?		
□Yes □No					
Why?					
Location:				St./Ave. and	St./Ave
				St./Ave. and	St./Ave
	v safe do you	St./Ave. between_	ock?		St./Ave
1. Safety: How □ Very safe	v safe do you □Safe	St./Ave. between _ feel walking on this bl □Somewhat safe	ock? □Unsafe	□Very unsafe	St./Ave
1. Safety: How □ Very safe	v safe do you □Safe	St./Ave. between _ feel walking on this bl	ock? □Unsafe	□Very unsafe	St./Ave
1. Safety: How □ Very safe	v safe do you □Safe	St./Ave. between _ feel walking on this bl □Somewhat safe	ock? □Unsafe	□Very unsafe	St./Ave
1. Safety: Hov ☐ Very safe Why?	v safe do you □Safe	St./Ave. between _ feel walking on this bl □Somewhat safe	ock? □Unsafe	□Very unsafe	St./Ave
1. Safety: How □ Very safe Why? 2. Comfort: H	v safe do you	St./Ave. between _ feel walking on this bl	ock? □Unsafe his block?	□Very unsafe	
1. Safety: How Very safe Why? 2. Comfort: H Very comfor very welcon	v safe do you Safe Ow comfortal rtable/ So	St./Ave. between _ feel walking on this bl	ock? Unsafe his block? hat comfortable/ hat welcoming	□Very unsafe ' □Uncomfortable/	□Very uncomfortable
1. Safety: How Very safe Why? 2. Comfort: H Very comfor very welcon	v safe do you Safe Ow comfortal rtable/ So	St./Ave. between feel walking on this bl Somewhat safe ble and welcoming is the somewhat somewhat safe	ock? Unsafe his block? hat comfortable/ hat welcoming	□Very unsafe ' □Uncomfortable/	□Very uncomfortable
 Safety: How	v safe do you Safe ow comfortal rtable/ Sconing we	St./Ave. between feel walking on this bl	ock? □Unsafe his block? hat comfortable/hat welcoming	□Very unsafe ' □Uncomfortable/	□Very uncomfortable
 Safety: How	v safe do you Safe ow comfortal rtable/ Coning we	St./Ave. between feel walking on this bl	ock? □Unsafe his block? hat comfortable/hat welcoming	□Very unsafe ' □Uncomfortable/	□Very uncomfortable
1. Safety: Hov Very safe Why? 2. Comfort: H Very comfor very welcor Why? 3. Overall imp Yes No	v safe do you Safe ow comfortal rtable/ Some we coming we compose the composition of t	St./Ave. between feel walking on this bl	ock? Unsafe his block? hat comfortable/hat welcoming	□Very unsafe Uncomfortable/ unwelcoming	□Very uncomfortable very unwelcoming

Walk & Talk Intersection Survey

rsection? sient
rsection? ilent
rsection? ient
rossing make you feel comfortable?
rossing make you feel comfortable?
rossing make you feel comfortable?
n?
St./Ave. (Crossing direction:)
fe □Very unsafe
rsection?
ient
ilent Emconvenient Every inconvenient
ossing make you feel comfortable?
n?
f

Walkability Audit Survey

Name:	Date:	Neighborhood:				
I am on s	treet:on the block between	street andstreet				
Living Streets Alliance – Neighborhood Walkability Assessment						
2. Traf	y: How safe do you feel walking on this block? Very Safe Safe Somewhat safe Unsafe Very unsafe Why: fic: Does the traffic along this block make you feel omfortable or unsafe? Yes Somewhat No Why:	7. Traffic calming: Do you see any of the following? □ Traffic circle □ Speed hump □ Bulb out				
3. Nigh	wit: Would you feel comfortable walking here at night? □ Yes □ Somewhat □ No □ Unsure Why:	□ Chicane □ None of the above 8. Street crossing: Is it easy to cross the street? □ Yes □ Somewhat □ No Please explain:				
	de: Is the pedestrian area shaded? (Please indicate the side of street) Full shade (side of street) Moderate shade (side of street Minimal shade (side of street No shade (side of street	9. Attractiveness: How attractive is this block? Very attractive Attractive Neutral (neither attractive nor unattractive) Unattractive Very unattractive Why:				
safe	or roads: If this street meets a major road, is there a and convenient way to cross the road? N/A (street does not meet a major road) No street does not meet a major road) Street does not meet a major road)	10. Additional thoughts: 11. What else do you notice on this block? (Check all that apply)				
this	there any destinations or neighborhood hang-outs on street (such as a park, store, or walking path?) Yes No Yes, please describe:	□ Benches □ Garage doors facing the street □ Bike racks □ Abandoned buildings □ Front porches □ Vacant lots □ Street lights □ Lots of blank walls/high fences □ Bus stops with seating □ Neighborhood signage □ Drinking fountains □ Other: □ Public restrooms □ On-street parking □ Street trees				

Walk & Talk Map Tour

Go online for interactive version: http://bit.ly/1iTR890

On May 3, 2014 the Living Streets Alliance and neighbors from Dunbar Spring took a walk in the neighborhood. Here's what we saw.

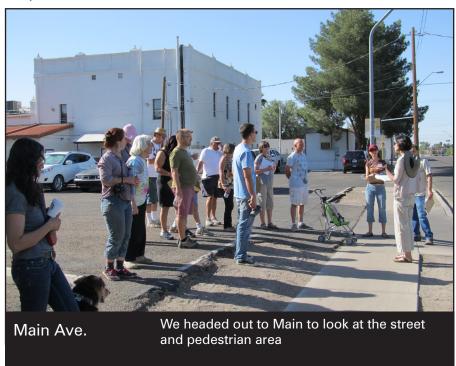
See the images for each map point on the following pages.



Walk & Talk Map Tour

Map Point 1





Walk & Talk Map Tour

Map Point 3





Walk & Talk Map Tour

Map Point 5





Walk & Talk Map Tour

Map Point 7



In several places throughout the neighborhood the right of way is gravely and difficult to walk on

Map Point 8



Path is blocked

inadvertently block the walking path when putting in their own improvements

Walk & Talk Map Tour

Map Point 9



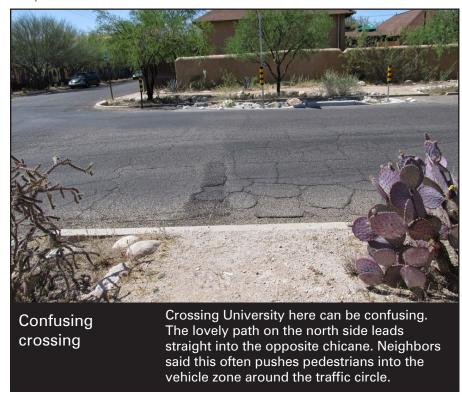


Walk & Talk Map Tour

Map Point 11



Map Point 12



Walk & Talk Map Tour

Map Point 13



Map Point 14



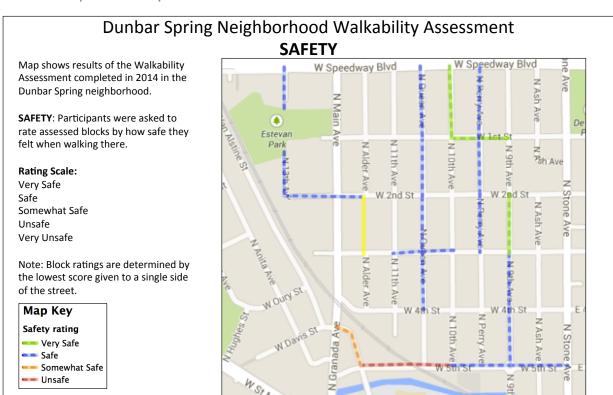
Walk & Talk Map Tour

Map Point 15



Walkability Audit Maps

Walkability Assessment Map Produced by the Living streets alliance | Living Streets Alliance - 2014



W 6th St

W 6th St

Dunbar Spring Neighborhood Walkability Assessment

Map shows results of the Walkability Assessment completed in 2014 in the Dunbar Spring neighborhood.

TRAFFIC SAFETY: Participants were asked to rate assessed blocks by whether traffic made them feel uncomfortable or unsafe

Rating Scale:

Do note feel unsafe Feel somewhat unsafe Feel unsafe

Note: Block ratings are determined by the lowest score given to a single side of the street.

Map Key

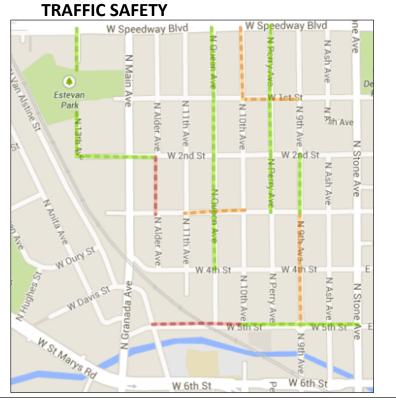
Traffic safety rating

Do not feel unsafe

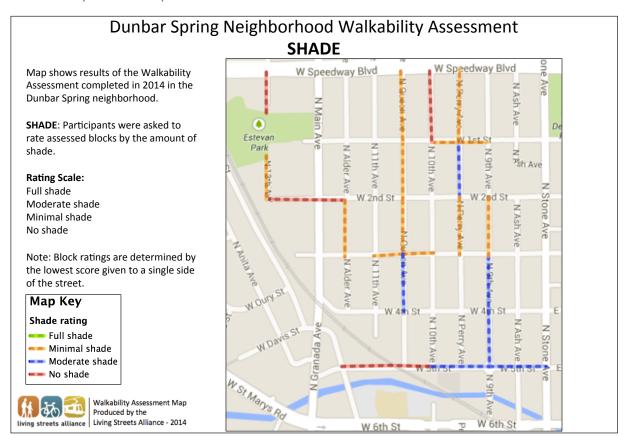
Feel somewhat unsafe Feel unsafe

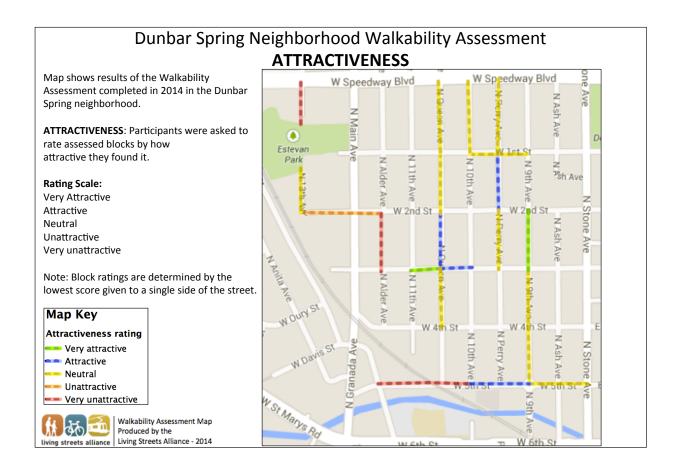


Walkability Assessment Map Produced by the living streets alliance | Living Streets Alliance - 2014



Walkability Audit Maps





Additional Resources

Walking and Walkability Literature/Resources

America Walks http://americawalks.org/

Walkable and Livable Communities Institute http://www.walklive.org/

Jeff Speck (Author of "Walkable City: How Downtown Can Save America, One Step at a Time") http://www.jeffspeck.com/

Project for Public Spaces www.pps.org

Pedestrian and Bicycle Information Center http://www.pedbikeinfo.org

Smart Growth America http://www.smartgrowthamerica.org

Pedestrian Safety Guide and Countermeasure Selection System http://www.pedbikesafe.org/PEDSAFE/

Local Organizations/Resources for More Walkable Neighborhoods

Watershed Management Group (WMG) http://watershedmg.org/
520-396-3266

Trees for Tucson http://tucsoncleanandbeautiful.org/trees-for-tucson/520-791-3109

City of Tucson Bicycle and Pedestrian Program http://tdot.tucsonaz.gov/bicycle
520-837-6691 (Program Coordinator: Ann Chanecka)

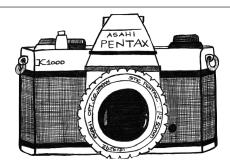
PAG Tree Canopy Map http://gismaps.pagnet.org/PAG-GIMap/#/About

Neighborhood Reinvestment Program http://webcms.pima.gov/community/neighborhoods/neighborhood_reinvestment_program/
520-724-6769

PhotoVoice Project

The Neighborhood Walkability Program challenged *Walk & Talk* participants to join in and capture their neighborhood on camera. By focusing on areas that make the neighborhood *more walkable* or *less walkable*, this project utilized participatory photography and digital storytelling to bring awareness to neighborhood walkability.

PHoTO VOiCE PRoJECT



tell your story through pictures

Step 1

Capture in a photograph:

- What makes the area more walkable
- 2. What makes the area less walkable

Step 2

Record location:

Write down the location of the photograph.
What intersection or landmark was the picture taken near?

Step 3

Tell your story: Write a few words or sentences related to your photograph that describes your walking experience. Think about how more walking could change your community.

Step 4

Send:

E-mail images & your story to: sarah@livingstreetsalliance.org

Thank you for contributing!!

PhotoVoice Project instructions



At 631 N. 9th Ave, rocks block path. Rocks along path make it too narrow - only four feet wide.



SE corner of 9th Avenue and 4th Street: a tamarisk tree offers great shade, but it needs to be pruned to make path clear for all. Less than six feet height of clearance. Less than four feet width.



Only sidewalk is in front of 628 N 9th Avenue (historic home). Nice clear and wide. Over five feet wide. But it needs repair. Neighbors garbage cans at 618 N 9th Ave somewhat block path on south end.



618 N 9th Avenue: there are two nice shade trees and room/need for another along street. Path is nice and clear, but gravel is hard to walk on. Garbage cans block pathway.



West of 48 W 4th Street along 9th Avenue: Caliche and dead branches debris often found along path. There are some newly planted shade trees, but more are needed. Pathway is clear.



Fairly clear and well shaded path along mural on west (9th Avenue) side of Merle's auto at 33 W University.

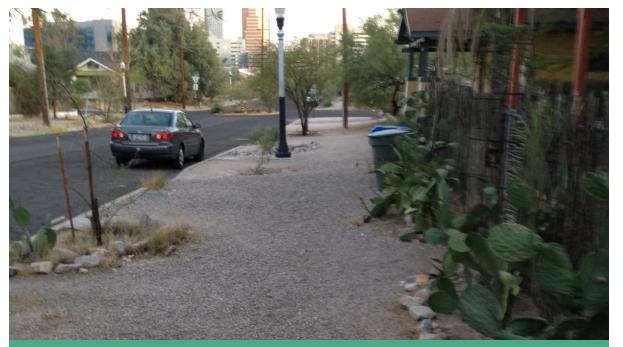


Access to path on west (9th ave) side of 33 W University is difficult (over berm and around plants.) Bulletin board and seats are nice.



Trees are nice, but wall encroaching ROW reduces its width from twenty feet to just three feet.

PhotoVoice Submissions



Gravel in walkway at 721 N 9th Ave makes walking or pushing stroller difficult.

Pathway is clear.

-Brad Lancaster



Impassable sidewalk due to vegetation on 5th Street east of 9th Avenue.

-Alexander Bardorf



These two pictures show impassable sidewalks on both sides (north and south side) of the intersection of 4th Street and Alder Avenue making it impossible to get to Main Street.



Impassable sidewalk on Perry Avenue south of 1st Street due to giant planter, vegetation, garbage can, and loose gravel followed by rock wall.

PhotoVoice photographs supplied by Alexander Bardorf



Cars blocking sidewalk on 11th Avenue.



Garbage cans and step make navigating the sidewalk difficult on 9th Ave. south of University.



Impassable sidewalk on 11th Ave south of University Blvd. due to loose gravel and rock barrier.



Handicapped access to nowhere due to loose gravel at 11th Ave. and 2nd Street. Pathway is clear.

PhotoVoice photographs supplied by Alexander Bardorf

PhotoVoice Submissions



PhotoVoice photographs supplied by Alexander Bardorf

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14 NALK REPORT

