

Walkability Audit **Report**

University of Illinois Wellness Center

Capstone Project

Michelle Johnson

12/14/11

Table of Contents

• Introduction	pg. 3
• Background Information	pg. 5
• What We Did	pg. 7
○ Description of Quadrants	
○ Entities Involved	
• How The Scores Were Determined	pg. 9
○ Overall Score	
○ Weighted Scoring Process	
○ Individual Category Score	
• What We Found	pg. 10
○ Overall Walkability Score for UIUC Campus	
○ Highest Scoring Quadrant	
○ Lowest Scoring Quadrants	
○ Remaining Quadrants	
○ Category Scores	
▪ High Category Scores	
▪ Low Category Scores	
▪ Average Category Scores	
▪ Discrepancies	
• Themes	pg. 18
○ Most Prevalent Themes	
○ Other Themes	
• Recommendations	pg. 19
○ Short-Term	
○ Long-Term	
○ Immediate Action	
• Barriers to Implementation	pg. 22
• Next Steps	pg. 22
• Conclusion	pg. 23
• Appendix A	pg. 26
○ Map of quadrants on University of Illinois at Urbana-Champaign Campus	
• Appendix B	pg. 27
○ UI Wellness Center Walkability Audit	

Introduction

Walkability of University communities has become increasingly popular as an attempt to tackle the growing obesity rates in the United States (Center for Disease Control and Prevention [CDC], 2011). The idea of making a community more walkable is directly related to the field of public health. Increased walkability of the University of Illinois at Urbana-Champaign (UIUC) campus would increase social interaction, increase physical activity, and increase safety (CDC, 2011). It is very important to address walkability issues on the UIUC campus to reduce pedestrian and bicycle conflict, increase the safety of pedestrians, and increase physical activity levels of the entire UIUC community. Walkability issues on the UIUC campus can be addressed through a walkability audit conducted by the University of Illinois Wellness Center (UI Wellness Center). Walkability of the UIUC campus has a direct correlation to many concerns in the field of public health and the UI Wellness Center aims make the campus more walkable through a walkability audit.

I completed my capstone through the UI Wellness Center under the direction of the Director of the Wellness Center. The project that I focused on was developing a walkability audit report for the UI Wellness Center. The UI Wellness Center has a goal to increase physical activity and promote healthy lifestyles. Since walking is a major mode of transportation on the UIUC campus, the UI Wellness Center conducted the first phase of a campus-wide walkability audit.

The UI Wellness Center had very specific goals they wanted to achieve through the walkability audit of the UIUC campus including to identify good places to walk on the

campus and identify areas where walkability can be enhanced. Both of these goals were communicated to the faculty, staff, and students of the UIUC community during the strategic planning phase of the walkability audit in March of 2010. The UI Wellness Center also intends to use the walkability audit as a launch pad for other campus-wide walking initiatives. The data collected from the walkability audit will be used to create a web-based walking toolkit for the UI Wellness Center website which will include a segment on best walks on campus. The UI Wellness Center also hopes to develop theme based campus walks. For example, Turn Off Your Television Week, and Sustainability Week. Other walking indicatives will likely result from the walkability audit as well.

Trained auditors conducted the walkability audits, which contained several components, around the UIUC campus. The audit contained both a raking system from one to five and observational questions located at the end of the audit. The walk auditors filled out information on a description of the segment, and overall ranking score, and description and ranking of specific audit categories, an overall ranking for each category, additional observations, and finally route measurements and the amount of time it took to walk the route. The walk audit categories focused on nine different categories which included pedestrian walking surface, pedestrian conflicts, crosswalks, maintenance, path size, buffers, universal accessibility, aesthetics, and shade. The additional observations section of the audit was available for auditors to make observations on other areas where they saw need for change or improvements. For example, level of safety, re-design ideas, exercise, entertainment, recreation, or amenities available in the area that what audited.

Background Information

UIUC is encouraging the University of Illinois Wellness Center to explore ways to enhance health and wellness among faculty, staff, and students. The University of Illinois Wellness Center aims to increase physical activity and promote healthy lifestyle choices. Based on the Center for Disease Control and Prevention (CDC) recommendations, individuals should participate in 30 minutes of moderately intense exercise, five days a week (CDC, 2011). An example of a moderate-intensity activity would be a brisk walk at a 15 to 20 minute mile pace. Students, staff, and faculty at UIUC could walk to meetings or classes instead of waiting for a bus or driving, and use stairs instead of elevators to increase their moderate-intensity physical activity.

The UI Wellness Center planned to initiate a project to increase lifestyle physical activity on campus by conducting a walkability audit of the campus. The walkability audit tool used for the University of Illinois at Urbana-Champaign was a modification of the instrument developed by CDC to assess the walkability of the campus. See Appendix A for the complete walkability audit used by the UI Wellness Center to conduct phase one of the walkability audit. The data collected from the walkability audit will help the UI Wellness Center develop and implement a comprehensive set of interventions to increase lifestyle physical activity on UIUC campus.

The UI Wellness Center generated excitement and a sense of ownership among students and employees by having them directly participate in the walkability audit. The UI Wellness Center recruited teams of volunteers to conduct the audits. The volunteers

consisted of students and employees from UIUC. By having students and employees conduct the walkability audit, they were able to gain a true sense of ownership of the project. The student and employee auditors completed walkability audits in quadrants that they lived, worked, or studied in.

The walkability audit tool was adapted to meet the priorities of the University of Illinois Wellness Center. The initial scoring methods from CDC walkability audit tool were left unchanged to ensure the reliability and validity of the instrument used for the UIUC campus. The University of Illinois Wellness Center added the safety and lighting components to the walkability audit to meet the needs of the UIUC campus. The CDC audit tool was originally created to determine the walkability of workplaces. However, on a University campus, more pedestrians walk around at night time when compared to a workplace. At the initial start of the walkability audit, the UIUC campus was experiencing increased reports of crime. Therefore, the University of Illinois Wellness Center felt it was important to add both lighting and safety to the walkability audit.

The walkability audit used by the University of Illinois Wellness Center also added a segment to the audit that focused on exercise, entertainment, and recreational use of the area being audited. This was added to the report to show encouraging amenities located on popular walking routes on campus. For example, UIUC students, faculty, or staff may want to be aware of the most walkable route to a park or workout facility. This section of the audit included items like benches, sculptures, architectural amenities, museums,

restaurants, trash bins, benches, bicycle racks, working drinking fountain, working public phone, and public restrooms.

After the audit of the entire campus was conducted, the data was analyzed and interpreted to find overarching positive and negative themes and general recommendations to improve walking conditions at the University of Illinois. Each walk audit included a description of the segment, an overall ranking, a description and ranking of specific audit categories, overall rankings for each category, additional observations, and route measurements and timing. The data were analyzed in terms of overall ranking scores, category specific ranking scores, and overall themes identified. The walkability of the campus was determined by looking at nine different categories. The categories included: walking surface, pedestrian conflicts, crosswalks, maintenance, path size, buffers, accessibility, esthetics, and shade.

What We Did

Description of Quadrants

To begin the walkability audit process, a map was created of the entire campus which divided the campus into twelve separate quadrants. See Appendix A for a complete map of the entire University of Illinois at Urbana-Champaign campus sectioned off into twelve separate quadrants. Each of the twelve quadrants contains boundaries, which are listed in Figure 1.1

Entities Involved

Three separate entities are responsible for various streets on the University of Illinois at Urbana-Champaign campus. The three entities include: University of Illinois at Urbana-Champaign campus, City of Champaign, and City of Urbana. Multiple quadrants include more than one entity, but for the purpose of this report, the primary entity responsible for each quadrant will be listed. See Figure 1.1 for a table of the description of all twelve quadrants including the street boundaries for each quadrant.

Figure 1.1

Description of Quadrants		
Quadrant	Boundaries	Primary Entities Responsible
1	University Avenue-Lincoln Avenue-Springfield Avenue-First Street	City of Urbana, City of Champaign, UIUC
2	Springfield Avenue-Lincoln Avenue-Green Street-First Street	City of Champaign and City of Urbana
3	Green Street-First Street-St. Mary's Road-Neil Street	City of Champaign and UIUC
4	Green Street-Fourth Street-St. Mary's Road-First Street	City of Champaign and UIUC
5	Green Street-Mathews Avenue-Gregory Drive-Fourth Street	City of Champaign and City of Urbana
6	Green Street-Lincoln Avenue-Pennsylvania Avenue-Dorner Drive-Gregory Drive-Mathews Avenue	City of Urbana and UIUC
7	Gregory Drive-Dorner Drive-Pennsylvania Avenue-Fourth Street	UIUC and City of Urbana
8	Pennsylvania Avenue-Lincoln Avenue-St. Mary's Road-Fourth Street	UIUC, City of Urbana, City of Champaign
9	St. Mary's Road-Fourth Street-Hazelwood Drive-Neil Street	UIUC and City of Champaign
10	Hazelwood Drive-Fourth Street-Windsor Road-Neil Street	UIUC and City of Champaign
11	St. Mary's Road-Lincoln Avenue-Windsor Road-Fourth Street	UIUC
12	Florida Avenue-Race Street-Windsor Road-Lincoln Avenue	UIUC, City of Urbana

How the Scores Were Determined

Overall Score

The ranking score was divided into high, medium, and low importance categories. The score was then weighted in terms of importance. The high importance category included: walking surface, pedestrian conflicts, and crosswalks. The medium importance category included: maintenance, path size, buffers, accessibility, and aesthetics. The low importance category included shade. Lighting and amenities were both also considered, but were not figured into the overall ranking score. To find the overall average walkability score of each quadrant the scores for each segment were added together and divided by the number of segments in the quadrant.

Weighted Scoring Process

The overall scoring process for the entire walkability audit was weighted. This means that certain categories had a greater contribution to the overall score. In order to total the walkability score for each audit, the total walkability audit score was tallied for the entire walk audit area. The scores from the high importance categories were added together and multiplied by three. The scores for the medium importance categories were added together and multiplied by two. The scores from the low importance category were multiplied by one. All three sub scores were then added together to get the total walkability score.

Most of the categories with the lowest overall scores were the ones that were most heavily weighted. The reason that the high importance categories were weighted the

highest was because walking surface, pedestrian conflicts and crosswalks have the highest impact on walkability.

Individual Category Scores

Each individual category was analyzed to find the average ranking out of 5 for each quadrant and for the entire campus. The definitions of the ranking scale included: 1-poor/major issues, 2-some problems, 3-satisfactory or neutral, 4-good, 5-excellent. The individual categories included: walking surface, pedestrian conflicts, crosswalks, maintenance, path size, buffers, accessibility, aesthetics, and shade. The average scores for the entire campus based on each individual category included: walking surface 3.5, pedestrian conflict 3.5, crosswalks 3.2, maintenance 3.9, path size 3.9, buffers 3.3, accessibility 4.0, aesthetics 3.8, and shade 3.0. The highest overall ranking based on category was accessibility and the lowest overall ranking based on category was shade. The overall average scores for each category were decent for the entire campus. Although most categories were in good standings, there is definitely room for improvement

What We Found

Overall Walkability Score for UIUC Campus

Overall, the University of Illinois Urbana Campus was found to be moderately walkable. The overall score of the entire campus was 72.3/100. See Figure 1.2 for a visual representation of the moderately walkable UIUC campus.

Figure 1.2

Highest Scoring Quadrant

Although the campus was found to be moderately walkable, the scores varied by quadrants. Quadrant 2 had the highest average score of 83/100 and scored high in a majority of the nine categories observed through the audit. This score found that quadrant 2 had good walking conditions. Quadrant 2 scored high in walking surface (4.3/5), crosswalks (4/5), maintenance (4/5), path size (5/5), accessibility (4.7/5), and aesthetics (4.3/5). The City of Champaign spent a great deal of time redeveloping multiple areas throughout quadrant between 2005 and 2010. This redevelopment could be directly related to the high scores found in quadrant 2. The City of Champaign took into consideration redevelopment ideas to make the area more visually appealing and more walkable for pedestrians. Landscaping was improved, paths were widened, sidewalks are now in great condition, and the overall visual appeal of the area is very inviting. The redevelopment by the City of Champaign in quadrant 2 created an optimal environment to walk in. Figure 1.3 shows a visual representation of the good walking conditions located in Quadrant 2 on the UIUC campus.

Figure 1.3**Quadrant 2:**

Springfield Ave-Lincoln Ave-Green St.-First St.

Lowest Scoring Quadrants

Quadrant's 9, 10, and 4 had extremely low average scores, which were an exception to the overall walkability score of campus. Quadrant 9 had an average score of 46/100, Quadrant 10 had an average score of 52/100 and Quadrant 4 had an average score of 66.5/100. These three quadrants had low scores in all of the nine categories observed.

Quadrant 9 had low category scores in walking surface (1/5), crosswalks (2.5/5), path size (2.5/5), buffers (1.5/5), accessibility (1.5/5) and shade (2/5). Figure 1.4 shows visual representation of the poor walking conditions of quadrant 9. As shown in Figure 1.4, the walking surface in quadrant 9 is extremely poor and there are limited buffers present.

Figure 1.4**Quadrant 9:**

St. Mary's Rd.-Fourth St.-Hazelwood Dr.-Neil St.

Quadrant 10 had low scores in walking surface (2.5/5), crosswalks (2.25/5), path size (2.25/5), buffers (2/5), accessibility (2.5/5), and shade (2.25/5). Figure 1.5 shows visual representation of the poor walking conditions found in quadrant 10. As shown in Figure 1.5, some of the walking paths end abruptly and the walking surface is lacking safe crosswalks throughout the entire quadrant.

Figure 1.5



Quadrant 10:

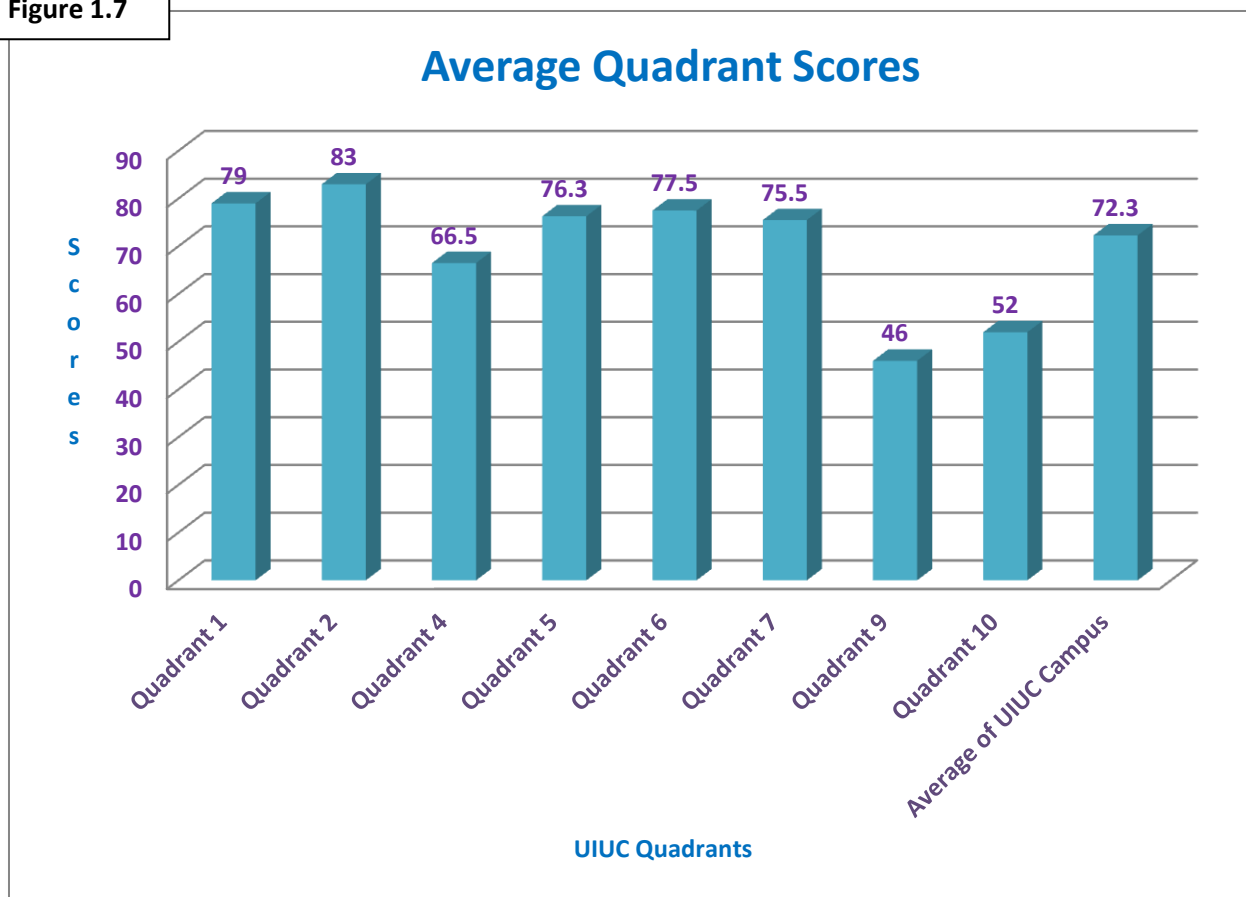
Hazelwood Dr.-Fourth St.-Windsor Rd.-Neil St.

Quadrant 4 had low category scores in pedestrian conflict (2.5/5), crosswalk (2.5/5), shade (3/5), and buffers (3.5/5). All of these quadrants would have less than favorable conditions for walking. Figure 1.6 is a visual representation of the poor walking conditions present in quadrant 4. Based on Figure 1.6, the buffers in quadrant 4 are limited and there is a high amount of pedestrian conflict.

Figure 1.6**Quadrant 4:****Green St.-Fourth St.-St. Mary's Rd.-First St.****Remaining Quadrants**

The remainder of quadrants did not vary significantly from the average overall score of moderately walkable for the entire campus. The majority of quadrants scored near the average walkability score for the entire campus with scores ranging from 75.5/100 to 79/100. Quadrants 1, 5, 6, 7 all had average quadrant scores near the average, which means they are moderately walkable based on the audit. Quadrants 5,6,7 are all found near the main quad, which accounts for their moderately walkable score. Since the quad is used frequently by faculty, staff, and students, the environment is up kept and walkable. Quadrant 1 is North of the Engineering Quad, which is another area that is frequently traveled by faculty, staff, and students. Therefore, UIUC works to keep the environment in this area walkable. See Figure 1.7 below for average scores of each quadrant.

Figure 1.7



Category Scores

High Category Scores

The walkability audit scores showed that the University of Illinois is doing a good job with accessibility, aesthetics, maintenance, and path size. These were the three highest scoring categories in the walkability audit. Although these categories scored the highest for the campus as a whole, there is still room to improve each of these individual categories. The walkability audits showed that maintenance and path size could both be improved in specific areas on campus. Topics such as small path size, or cracked sidewalks were mentioned as areas to improve the walkability of the campus. Figure 1.8 shows visual

representation of good walking conditions on UIUC campus. As shown in Figure 8, the walking surface is in great shape and the overall environment is appealing to walkers. These are great examples of excellent walking conditions on UIUC campus.

Figure 1.8



Low Category Scores

The walkability audit scores showed that the University of Illinois needs to improve in the areas of walking surface, pedestrian conflict, crosswalks, buffers, and shade. These were the lowest scoring categories in the walkability audit. Although these were the lowest scoring categories, none of them scored under a 3.2, which is a satisfactory score. Figure 1.9 shows a visual representation of poor walking conditions on UIUC campus. Based on Figure 1.9, UIUC can improve on crosswalks, buffers, and walking surface.

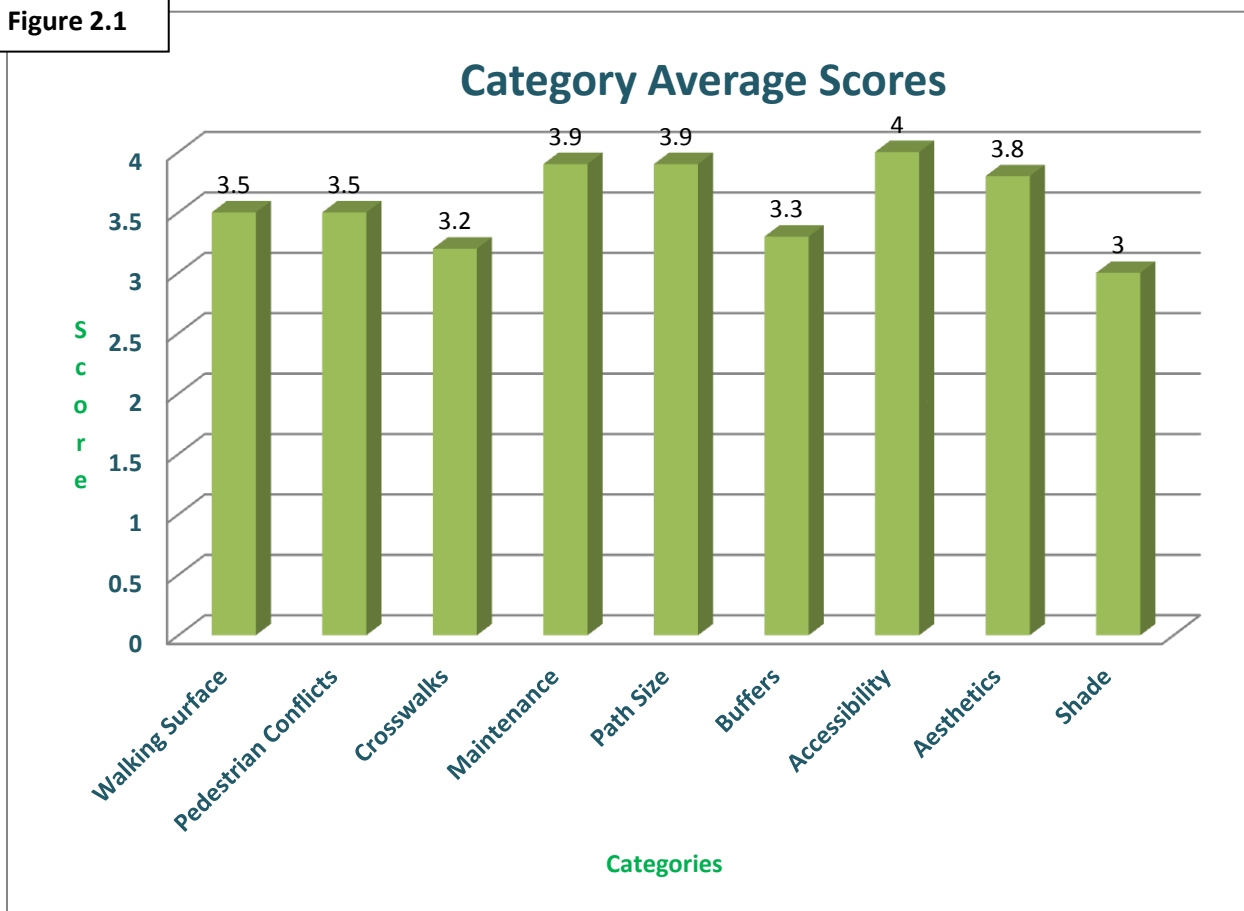
Figure 1.9



Average Category Scores

Each category scores were averaged to find the average category scores for all nine categories. See Figure 2.1 for the average category scores.

Figure 2.1



Discrepancies

Each individual audit included an area where auditors indicated discrepancies within the overall ranking for each segment and an area for additional observations. For example, if the overall score for the Pedestrian Walking Surface category is a four, but one of two of the sections were scored lower, it was important for auditors to note details about specific

discrepancies observed while they conducted the audit. Both of these areas were analyzed to find common themes that emerged from the walkability audit. After the walkability audits were analyzed, both positive and negative themes emerged.

Themes

Many themes emerged after conducting the walkability audit for the University of Illinois Urbana-Champaign campus. Both positive and negative themes were visible after the walkability audits were collected and analyzed.

Most Prevalent Themes

The most prevalent themes that emerged from the observations of the auditors were lack of buffers, lack of sidewalks/curbs, and lack of crosswalks. Buffers, sidewalks/curbs, and crosswalks were the top three themes mentioned from observations of the walkability audits. Bike and pedestrian conflict were other major themes that were mentioned throughout the audits. These themes are important to mention because walking surface, crosswalks, and pedestrian conflict are all items high importance categories that greatly affect the overall scores of the audits because they are the most heavily weighted in terms of scoring. Figure 2.2 shows a visual representation of bike and pedestrian conflict, which was a major theme identified by observers.

Figure 2.2



Other Themes

Other themes that were mentioned through the observations of the auditors were heavy traffic or issues with traffic signals, better signage needed, education for pedestrians, motorists, and bicyclists on rules of the road, and increased lighting/shade.

Recommendations

Many recommendations can be made to the primary entity involved to improve the overall walkability of the entire University of Illinois at Urbana-Champaign Campus. Short-term, long-term, and immediate action recommendations were visible after the walkability audits were collected and analyzed.

Short-Term

Short-term goals to improve the walkability of the UIUC campus include: paint crosswalks, increase signage, and improve lighting. These are short-term recommendations because they are easy to accomplish and have a relatively low cost to implement. Also, these short-term recommendations do not take a great deal of time to fix, and they would greatly enhance the walkability of the entire campus. Figure 2.3 shows visual representation of potential pedestrian conflict located on the UIUC campus.

Figure 2.3



Long-Term

Long-term goals to improve the walkability of the UIUC campus include improved sidewalk conditions, dedicated bike paths, improved curbs/buffers, increased pedestrian, motorist, and bicyclist education on rules of the road, and improved pedestrian and traffic conflict. These are considered long-term recommendations because they will require a great deal of time and high cost to implement. Also, it will take a great deal of effort to implement these changes. However, these long-term goals are important and should be implemented as soon as possible to increase the walkability of UIUC campus. Figure 2.4 shows visual representation of a walking surface located on the UIUC campus that needs to be improved.

Figure 2.4



Immediate

There are multiple immediate action recommendations for the University of Illinois at Urbana-Champaign campus. These are items that are creating an extremely hazardous and unsafe environment for walkers on the UIUC campus. These changes are recommended to be made immediately in order to avoid serious complications and to improve overall safety and walkability of the campus.

One major item that needs to be addressed is that there are very dangerous curbs on Springfield and Mathews. Another major immediate action should be to redevelop the area of Second and Springfield. This is a very busy area in terms of motor vehicle traffic and there is barely a crosswalk for pedestrians to cross Springfield Ave. Also, there is no signage in this area, which creates a very unsafe environment for walkers. Also, at the intersection of Sixth and John the motor vehicle drivers need more time to cross the intersection. As it is currently set, the motor vehicle drivers run out of time to turn and as a result run a red light. This creates a very unsafe environment for both motor vehicle drivers and pedestrians who are trying to cross the street.

Other areas that need immediate action are areas on campus that do not have a sidewalk or crosswalk. It is important to fix this immediately because a lack of sidewalk or crosswalk creates a very hazardous and unsafe environment for motor vehicles and pedestrians trying to walk or cross the street. Areas on campus that do not have a sidewalk include: east side of First, south side of Pennsylvania, Fourth to iHotel, Oak to Neil, Gerty to Oak, and Oak to Littlefuse. There is also one main area on the UIUC campus that does not have a crosswalk. The intersection of Gerty and First Street needs to have a crosswalk painted so that pedestrians can cross the street safely. Figure 2.5 shows examples of walking routes on the UIUC campus that need to be improved immediately. Lack of a sidewalk and lack of a crosswalk create a very dangerous walking environment.

Figure 2.5



Barriers to Implementation

There are some possible barriers to implementation of increasing the walkability of the UIUC campus. Collaboration among various entities on the UIUC campus is critical when implementing changes that affect the entire campus. Also, some departments on campus are currently focused on different elements pertaining to walkability and they fail to collaborate with the UI Wellness Center. There needs to be increased amounts of collaboration in order to successfully enhance the walkability of the UIUC campus. Also, implementing changes takes both time and money. Short-term goals will not be very costly; however long-term and immediate action goals could take a great deal of time and money to implement correctly. Although they may take a great deal of time and effort, all the recommendations are important to implement in order to enhance the walkability and safety of the UIUC campus. It is also important the students, faculty, and staff develop an awareness of the existence of the UI Wellness Center and their goals to increase walkability. Increased awareness among students, faculty, and staff would bring more attention to the project and increase the likelihood that the implementation takes place.

Next Steps

Although the first phase of the walkability audit of the UIUC campus is complete, there are number next steps required for the project. One major next step is to give the walkability report to UIUC, City of Champaign, and City of Urbana. These are the three entities that will be interested in the results and can implement the changes necessary to

increase the walkability of the campus. After the report is given to the various entities, it is important that the UI Wellness Center along with the entire UIUC campus encourages the walkability of campus to be improved. Also, the creation of an online toolkit for walking on campus with a segment on besting walking routes will be established on the UI Wellness Center Website to encourage walking on campus. The overall promotion of walking on campus will be increased through information, programs, and much more. And finally, the UI Wellness Center will plan and implement a second phase of the audit.

Discussion

My capstone experience was a wonderful opportunity to explore the field of public health. This project provided me an opportunity to represent the culmination of my coursework and practice in public health during my Masters of Public Health (MPH) at UIUC. I found this project to be an ideal way to put everything that I have learned during my MPH into one final practice experience.

Working in the UI Wellness Center gave me experience working with worksite health promotion and wellness and allowed me to apply the knowledge and education that I have gained through the MPH program at UIUC. I was able to apply my knowledge of physical activity and health promotion based on the CDC guidelines that I acquired from numerous courses to the walkability audit. I also used my ability to analyze and interpret data that I learned in my Biostatistics course to develop the results of the walkability audit. I also used the ecological model to help explain physical activity behavior change. This is a multi-dimensional model that demonstrates how many environmental elements

can influence a person's willingness to change their behavior. For example, the walkability audit will hopefully improve the community and infrastructure related to walkability so that individuals can make the choice to improve their physical activity and wellness. Also, the UI Wellness Center aims to create a culture of improved physical activity and wellness and increase the knowledge, attitude, and skills on physical activity at the individual and community level, which directly relates to the ecological model.

Based on my MPH experience, I was able to apply relevance to the walkability project and report that I completed. I learned through my courses and internship experiences that there is a direct need for public health professionals in order to create a healthier environment as a whole. This walkability project demonstrates an important public health effort to increase physical activity and wellness in a community. The next steps of this project can be directly related to my class on program evaluation because the UI Wellness Center hopes to increase physical activity and wellness through numerous different walking programs. Therefore, my past class experience has taught me to look ahead in a project and understand how implementation and evaluation will take place to effectively make behavior changes in individuals.

I feel that the combination of all my public health courses prepared me to excel at my capstone. Overall, I feel my experience at the UI Wellness Center creating a walkability audit has helped prepare me to enter the field of public health and explore career opportunities. I am grateful for the knowledge that I have gained from this experience and feel confident that I will greatly contribute to the field of public health.

Work Cited

Center for Disease Control and Prevention. (2011). Healthier Worksite Initiative. Retrieved December

8, 2011 from http://www.cdc.gov/nccdphp/dnpao/hwi/toolkits/walkability/audit_tool.htm

Centers for Disease Control and Prevention. (2011). How Much Physical Activity Do Adults Need?

Retrieved December 8, 2011 from

<http://www.cdc.gov/physicalactivity/everyone/guidelines/adults.html>

Center for Disease Control and Prevention. (2011). Physical Activity and Health. Retrieved December 8,

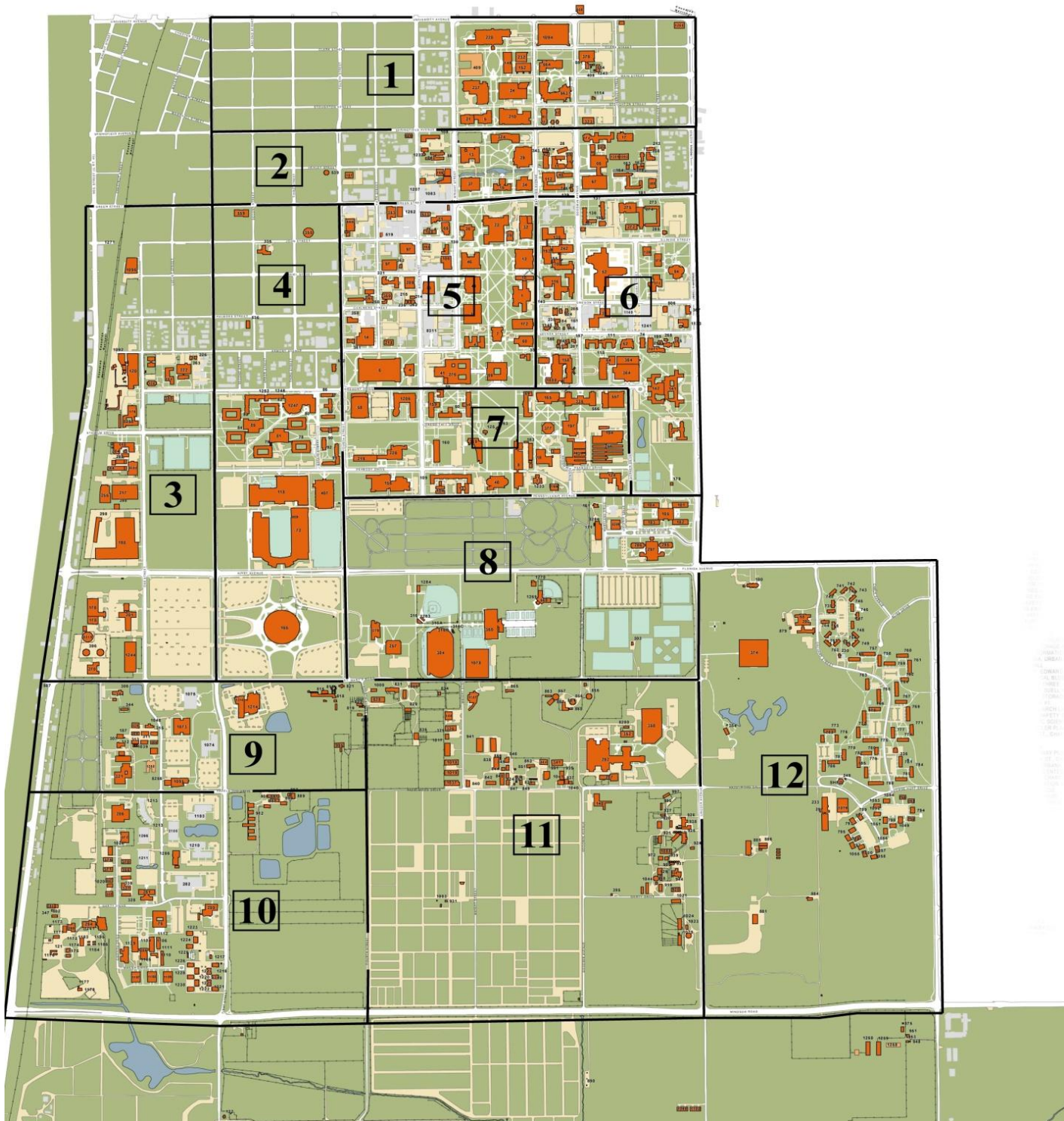
2011 from <http://www.cdc.gov/physicalactivity/everyone/health/index.html>

Victoria Transport Policy Institute. (2011). Evaluating non-motorized transport: Techniques for

measuring walking and cycling activity and conditions. Retrieved December 6, 2011 from

http://www.vtpi.org/tdm/tdm63.htm#_Toc272910906

Appendix A



Appendix B

UI Wellness Center

WALKABILITY AUDIT

Audit Team and Audit Area Information

You may use a separate sheet of paper if necessary

Names of team members

- Team member #1 _____
- Team member # 2 _____
- Team member # 3 _____
- Team member # 4 _____

Audit conditions information

- Date _____
- Day of the week _____
- Start time AM/PM _____
- Weather _____

Audit area information

- Location _____ University of Illinois at Urbana - Champaign _____
- Street name(s) _____
- Building name(s) (nearest building) _____
- Cross streets
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____
 7. _____
 8. _____
 9. _____
 10. _____
 11. _____
 12. _____
 13. _____
 14. _____
 15. _____
 16. _____
 17. _____

UI Wellness Center

WALKABILITY AUDIT

Instructions

Directions:

1. **Get to know your walk audit area, and the maps for your area.** Use the maps provided for your specific walk audit area. Your pack also includes a larger map, for contextual information. The map is used to identify likely pedestrian destinations, such as parking lots, nearby restaurants, parks, shops, etc. Depending on where your walk goes, you may have maps for different sections of campus. You have also been given several maps in case you make mistakes or change your walk audit route during the course of the audit.

Using a highlighter, trace the exact route of your theme walk on the map(s) you will use for the audit. You will turn this map in with your audit. You have extra maps to use if you are still figuring out exactly where your walk will go.

2. **Become familiar with the audit forms.** You will need to complete four forms to complete the audit:

- Walkability grid form
- Photo log form
- Walkability audit form
- Final walkability audit report

Take the walkability grid, photo log form and walkability audit form with you as you conduct your audit (these will be in your pack). Brief instructions on completing these forms can be found below. Contact the UI Wellness Center if you have any questions about how to complete the forms.

3. **Determine each team member's role.** Decide how you want to divide the tasks. For instance you may 1) assign each person different categories to be responsible for (e.g. crosswalks, or maintenance); or 2) assign different sections of the walk area or different sides of the street; or 3) assign people to be responsible for taking photographs, or doing the step count and timing of the route. How you divide the tasks is up to you, but make sure everyone understands what their role is before you conduct the audit.

4. Make sure you have all your supplies before you conduct your audit.

Bring your audit pack, provided by the UIWC

In addition, you are responsible for bringing the following yourself:

- Fully charged cell phone,
- Timing device (stopwatch or stop watch feature on a cell phone),
- Water,
- Sunscreen,
- Snacks (if you want them).

5. Walk your audit area using the grid form. The purpose of the grid form is to provide a place for you to write down preliminary scores for your walk audit area in small sections, and provide the ability to document discrepancies in an audit area. For example you may find that overall the pedestrian walking surface score for your area is a 5, but there may be a couple blocks where the sidewalks are really bad or nonexistent, and you want to account for that.

The best way to use the grid form is to stop every two or three blocks and assess what you have seen. Note the start and stop points for the section you are filling in on the grid form (e.g. First and John to Fourth and John). If there are no cross streets in the section you are noting, write down building or structure names as start and stop points (e.g. the carillon on the South to the Animal Sciences Lab). Write in your score for the section for each of the audit categories. Remember this is not the overall score; it is simply a way for you to keep track of your impressions as you go along. Write any extra observations in the notes sections. For instance, if you gave a section a particularly high or low score, make a note as to why you gave it that score. Write down any specific things you want to remember when you fill out the larger audit form. Also, fill in the bottom sections of the grid, noting any amenities in that section, the quality of lighting and any other observations or thoughts you have about the section.

Then walk the next two – three blocks and repeat the process. Repeat this process every two- three blocks until you have walked your entire walk area, made your observations and have filled in the grid for each individual section. You have been given several grid forms in case your walk area is long and has many individual sections.

6. Take representative photos of your walk area as you walk your audit area. Include pictures of hazardous items, areas that need attention and improvement as well as aesthetically pleasing or particularly walkable areas. Also take photos that “tell the story” or highlight the unique characteristics of your walk area.

Keep track of the pictures as you take using the photo log form. Your pack includes a camera with 27 exposures. In your photo log form, write down a specific description of each photo as you take it, including the exact location the photo is taken, a description of the photo and why you took the photo.

7. Complete the main audit tool immediately after auditing your walk area. Go to a quiet place where you can reflect and discuss the audit rankings and observational questions with your teammates. Don’t wait to complete the walkability audit report – it is important to do this immediately after you’ve walked your area while your memory is fresh and you can note as much detail as possible.

Scoring: Use the ratings and observations for all of the sections in the grid form to remember specifics as you determine the overall score for each of the audit categories. There are no right or wrong answers; just pick the number that most accurately represents your observations.

Observational questions: Include as much detail as you can remember as you answer the observational questions for each category. Continue with each category until you have completed the audit tool. The notes you take in the walkability grid are really important for helping to fill in the observations.

Be sure to answer the additional observation questions. These are found after the scoring and observational questions for the nine audit categories.

7. Assign one person to track the steps and time the walk. Walk your entire audit area at a moderate pace (15 – 20 minute mile). Do not stop to converse or make observations while timing the walk. Do however stop at appropriate crosswalks etc. Use the step counter to track the steps and use the stop watch or timing feature on a cell phone to track the time. Mark the results on the audit form (see page 16).

7. Identify any sections in your walk area that should be included in our list of “The Best” walks on campus (see page 17).

8. Identify any additional areas on campus that you think should be audited. As you conduct your audit, you may notice surrounding areas that you think should be audited. You may for instance notice that an adjoining area has problems that negatively influence walkability (e.g. poorly designed crosswalks). Or you may notice an area that seems like a really great place to walk. Please note these and turn them in with your audit.

9. Use the information on the grid form and audit form to complete the final report. Instructions on completing the final report are found with the report form.

10. Turn in the following to the UIWC:

- Completed grid form
- Completed photo log form
- Completed audit form
- Completed report
- Audit pack
- All maps

Questions: Please contact Michele Guerra at the UI Wellness Center if you have ANY questions. You can reach me at mguerra@illinois.edu or 244-2205

Thanks for your help in making our campus a more walkable place!!!!

UI Wellness Center

WALKABILITY AUDIT

Audit Instrument

Audit Category One: Pedestrian Walking Surface

Overall Ranking: Please rank the presence of suitable walking surfaces, such as sidewalks or paths.

Please circle the number that most closely matches your **overall assessment** of walking surfaces in this segment:

1. Poor - No permanent walking surface; pedestrians walk in roadway or on dirt path.
2. Some problems
3. Satisfactory - Sidewalk on one side of road or minor discontinuities that present no real obstacle to passage.
4. Good
5. Excellent - Continuous sidewalk on both sides of road, or completely away from roads.

Observation Questions:

Was the walking surface consistent throughout this segment? If not, please describe changes.

(E.g. wide, new, smooth concrete walkway turned to narrow, old cracked and buckling cement between Third Street and Fourth Street).

Please describe any hazards or obstructions along the segment.

Please list any additional information about this segment related to pedestrian facilities/walking surfaces that you think is important for us to know.

Pedestrian Walking Surface

UI Wellness Center

WALKABILITY AUDIT

Audit Instrument

Audit Category Two: Pedestrian Conflicts

Overall Ranking: Please rank the potential for conflict with motor vehicle traffic due to driveway and loading dock crossings, speed and volume of traffic, large intersections, and low pedestrian visibility.

Please circle the number that most closely matches your **overall assessment** of pedestrian conflicts in this segment:

1. High conflict potential
- 2.
3. Moderate conflict potential
- 4.
5. Low conflict potential

Observation Questions:

Please, describe how much vehicle traffic you witnessed on this segment? Would you say it is heavy, moderate, or light?

How much foot traffic did you witness on this segment? Would you say it is heavy, moderate, or light?

Pedestrian Conflicts

If you are familiar with this route, please also comment on how heavy you believe foot traffic is during the academic year and if this would change pedestrian conflicts?

Please identify and describe any obstacles you encountered to crossing roads.

Please observe and describe how aware drivers are to the presence of pedestrians. Examples of things to observe include whether or not:

- Drivers stop when pedestrians are in (entering) crosswalks,
- Drivers look before backing out of driveways
- Drivers check and yield so as to not turn into people in crosswalk before turning.
- Drivers drive at a reasonable speed in the vicinity of crosswalks

Please list any additional information about this segment related to pedestrian conflicts that you think is important for us to know.

Pedestrian Conflicts

UI Wellness Center

WALKABILITY AUDIT

Audit Instrument

Audit Category Three: Crosswalks

Overall Ranking: Please rank the presence and visibility of crosswalks on roads intersecting the segment. Traffic signals meet pedestrian needs with separate 'walk' lights that provide sufficient crossing time.

Please circle the number that most closely matches your **overall assessment** of the crosswalks in this segment:

1. Poor - Crosswalks not present despite major intersections
2. Some problems
3. Satisfactory - Crosswalks not marked but fine / Crosswalk marked but needs work
4. Good
5. Excellent - Crosswalks are clearly marked (or there are no intersections)

Observation Questions

Please identify and describe any problematic crosswalks that you encounter. Items to describe include:

- How the problem intersection is controlled for vehicular traffic (e.g. traffic light, stop sign, yield sign, nothing);
- How the crosswalk is marked/labeled (e.g. no markings, high visibility striping, flashing lights, etc.)?

If there is a pedestrian walk signal present does the pedestrian signal have a lead pedestrian phase, an all pedestrian phase, traffic and pedestrian signal change at same time (standard on green), and/or button activated?

If there is a pedestrian walk signal present what type is it (examples: countdown timer, push button, audible warning [describe if it is a chirp, "walk sign is on", or other])?

Please list any additional information about this segment related to crosswalks that you think is important for us to know.

Crosswalks

UI Wellness Center

WALKABILITY AUDIT

Audit Instrument

Audit Category Four: Maintenance

Overall ranking: Please rank the level and quality of maintenance in this segment. Consider things like: cracking, buckling, and overgrown vegetation, standing water on or near walking paths. Do not include temporary deficiencies likely to be resolved quickly.

Please circle the number that most closely matches your **overall assessment** of the maintenance of this segment:

1. Major or frequent problems
- 2.
3. Minor or occasional problems
- 4.
5. No problems

Observation Questions

Please describe any miscellaneous maintenance problems along the segment.

(Such as: a need for lampposts or overhead lighting, crossing surface in poor condition, poor visibility at corners [signs, vegetation, parked cars, or other obstruction blocking view], faded or worn crosswalk markings, missing or faded street signs, and/or any other problems you come across)

Please list any additional information about this segment related to maintenance that you think is important for us to know.

Maintenance

UI Wellness Center

WALKABILITY AUDIT

Audit Instrument

Audit Category Five: Path Size

Overall Ranking: Experts consider a useful sidewalk width to be at least five feet. Taking this into consideration, please, rank the average amount of useful path width, accounting for barriers to passage along pathway.

(Examples of barriers: Stationary - signal poles, fire hydrants, trees, utility poles; Moveable – planters, street signs, trees, furniture, mailboxes)

Please circle the number that most closely matches your **overall assessment** of the path size in this segment (the average amount of path width):

1. Poor - No permanent walkway/sidewalk
2. Some problems - < 3 feet wide with significant barriers
3. Satisfactory
4. Good
5. Excellent - > 5 feet wide, barrier free

Observation Questions

Please list any additional information about this segment related to path size that you think is important for us to know.

Path Size

UI Wellness Center

WALKABILITY AUDIT

Audit Instrument

Audit Category Six: Buffers

Please rank the average amount of space separating pathways from adjacent roadways.

Please circle the number that most closely matches your **overall assessment** of the buffers in this segment (the average amount of buffer):

1. Poor - No buffer from roadway
2. Some problems
3. Good
4. Excellent - > 4 feet from roadway
5. The Best - because it is not adjacent to roadway

Observation Questions

Please list any additional information about this segment related to buffers that you think is important for us to know.

Buffers

UI Wellness Center

WALKABILITY AUDIT

Audit Instrument

Audit Category Seven: Universal Accessibility

Overall Ranking: Please rank the ease of access for the mobility impaired. Look for ramps and handrails accompanying steps, curb cuts, etc.

Please circle the number that most closely matches your **overall assessment** of the level of universal accessibility in this segment:

Mobility impaired includes the accessibility for wheelchairs, child strollers, office carts, walkers, and other devices that face challenges to movement from one place to another.

1. Poor – Completely impassible for wheelchairs, or no permanent facilities
2. Some problems - Difficult or dangerous for wheelchairs - e.g. no curb cuts
3. Satisfactory
4. Good - Wheelchair accessible route available but inconvenient
5. Excellent - Designed to facilitate wheelchair access

Observation Questions

Please mark, on your **map(s)**, the crosswalks that have truncated domes (the colored bumpy warning segments/mats of pavement).

Please list any additional information about this segment related to universal accessibility that you think is important for us to know

Universal Accessibility

UI Wellness Center

WALKABILITY AUDIT

Audit Instrument

Audit Category Eight: Aesthetics

Overall Ranking: Please rank the quality of aesthetics along this segment. Consider things such as proximity of construction zones, fences, buildings, noise pollution, quality of landscaping, and pedestrian-oriented features, such as benches and water fountains.

Please circle the number that most closely matches your **overall assessment** of the aesthetics in this segment:

1. Uninviting, very unpleasant
- 2.
3. Neither pleasant nor uninviting, Neutral feeling
- 4.
5. Very Pleasant, very inviting

Observation Questions

Please list any additional information about this segment related to aesthetics that you think is important for us to know.

Aesthetics

UI Wellness Center

WALKABILITY AUDIT

Audit Instrument**Audit Category Nine: Shade**

Overall Ranking: Please rank the amount of shade, accounting for different times of day.

Please circle the number that most closely matches your **overall assessment** of the available shade in this segment:

1. No shade
- 2.
3. Moderate shade
- 4.
5. Full shade

Observation Questions

Please list any additional information about this segment related to shade that you think is important for us to know.

Shade

UI Wellness Center

WALKABILITY AUDIT

Additional Observations

Please, describe how safe you feel while walking the segment. Please list any specific things that made you feel safe or unsafe. If there is a particular area that feels unsafe note it.

- Safe examples: met many other walkers, people present watching activities, widows facing street, and/or other safe activities you may notice
- Unsafe examples: scary dogs, scary people, gang activity, hostile behaviors, panhandlers, not well lit, lots of trash or litter, abandoned vehicles, air polluted from automobile exhaust or factory smells, and/or other problems you may notice

Please describe the type of improvements that would make this segment more appropriate for pedestrian use. Please be specific.

If the walkways in this segment need to be redesigned, please, describe the best way to do this.

How conducive is this segment is for **exercise, entertainment, or recreational** use? Please describe any features of this segment that make it good for exercise, entertainment, or recreation.

- E.g. Benches or a low wall that allows for stretching, triceps dips, push-ups; enough passing space for walk/jog/run; sculptures, architectural amenities, museums, restaurants

What amenities did you find along the segment?

- E.g. trash bins, benches, bicycle racks, working drinking fountain, working public phone or emergency phone, public restrooms

Please, provide any other comments you would like to add about this segment.

UI Wellness Center

WALKABILITY AUDIT

Route measurement and timing

Please walk each route at a brisk pace (15 – 20 minute mile) using your pedometer and stop watch (or timing device on a phone). Note the amount of time it takes you to walk the route, and the number of steps in the route.

Time to walk route at brisk pace (15 – 20 minute mile): _____

Total number of steps: _____

UI Wellness Center

WALKABILITY AUDIT

The BEST!

Please identify any walks in this quadrant that should be featured our BEST of Campus Walks list in our web-based walking toolkit.

Specifically describe each route (beginning point, end point, turns, road changes, etc). Please also map the routes on your extra quadrant maps.

Please describe why this route should be included in our BEST of Campus Walks list. Include aesthetics, features, etc.

Please take a couple photographs that highlight the advantages of this walk – we would like to include a photo for the BEST walks on our website.

Pedestrian Walking Surface

1. Poor - No permanent walking surface; pedestrians walk in roadway or on dirt path.
2. Some problems
3. Satisfactory - Sidewalk on one side of road or minor discontinuities that present no real obstacle to passage.
4. Good
5. Excellent - Continuous sidewalk on both sides of road, or completely away from roads.

Pedestrian Conflicts

1. High conflict potential
- 2.
3. Moderate conflict potential
- 4.
5. Low conflict potential

Crosswalks

1. Poor - Crosswalks not present despite major intersections
2. Some problems
3. Satisfactory - Crosswalks not marked but fine / Crosswalk marked but needs work
4. Good
5. Excellent - Crosswalks are clearly marked (or there are no intersections)

Maintenance

1. Major or frequent problems
- 2.
3. Minor or occasional problems
- 4.
5. No problems

Path Size

1. Poor - No permanent walkway/sidewalk
2. Some problems - < 3 feet wide with significant barriers
3. Satisfactory
4. Good
5. Excellent - > 5 feet wide, barrier free

Buffers

1. Poor - No buffer from roadway
2. Some problems
3. Good
4. Excellent - > 4 feet from roadway
5. The Best - because it is not adjacent to roadway

Universal Accessibility

1. Uninviting, very unpleasant
- 2.
3. Neither pleasant nor uninviting, Neutral feeling
- 4.
5. Very Pleasant, very inviting

Aesthetics

1. Uninviting, very unpleasant
- 2.
3. Neither pleasant nor uninviting, Neutral feeling
- 4.
5. Very Pleasant, very inviting

Shade

1. No shade
- 2.
3. Moderate shade
- 4.
5. Full shade

