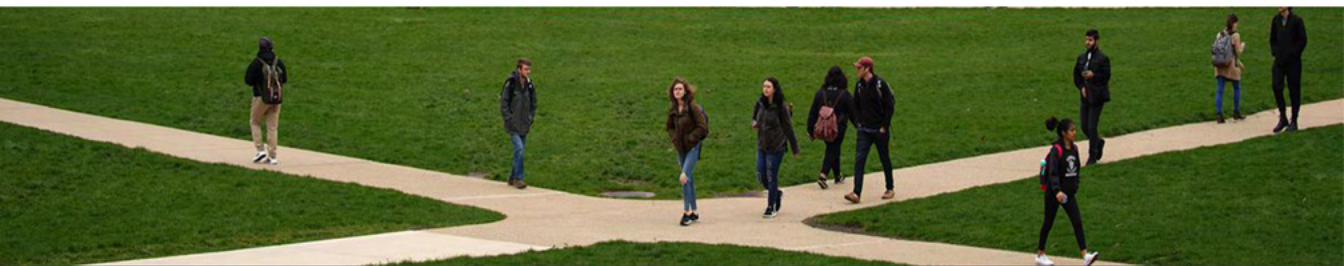




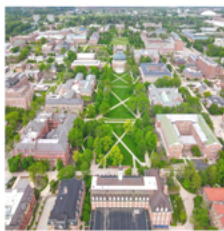
WALKABILITY AUDIT 2021-22

University of Illinois Urbana-Champaign

TRAINING MANUAL



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OBJECTIVE

The primary objective of this project is to conduct a thorough analysis of the University of Illinois Urbana-Champaign (UIUC) campus sidewalk network.

Two surveys will be used to assess the walkway infrastructure on campus:

- 1. 2021 UI Campus Walkability Audit survey:**
Assesses the general walkability of the map blocks
- 2. 2021 UI Campus Deficiency Reporting survey:**
Identifies specific deficiencies within a map block

This project will help us identify the areas that are good for walking and areas that require immediate attention. Data collected from this study will create a prioritization list of sidewalk preservation and improvement projects that will subsequently be used to create a Campus Walking Master Plan.

INTRODUCTION

ABOUT THE PROJECT

Facilities and Services (F&S) is dedicated to planning, building, maintaining, and serving the campus's built environment to support the strategic framework needs. **The Transportation Demand Management (TDM) department at F&S** maintains and improves the transportation infrastructure network for all forms of campus travel, including walking, bicycling, transit, and motor vehicles. TDM also coordinates with university and regional partners on projects impacting campus transportation network.

F&S TDM department at the UIUC is conducting a thorough walkability audit of the University District using the two surveys mentioned in the objectives. This project will help us identify the areas that are ideal for walking and areas that may require improvements. The 2 surveys will enable us to get a complete picture of the walking infrastructure needs and will help address issues at the macro and micro level.

UIUC aims to perform at least one walkability audit every ten years in order to update the prioritization of these projects. The previous audit was performed by University of Illinois Wellness Center in the year 2010-11. It is important to perform periodical assessments of the walking infrastructure to identify current deficiencies and devise a consolidated plan to achieve the best walking infrastructure possible.

For this study, the UIUC campus has been divided into 29 map-blocks which are further divided into smaller blocks for detailed analysis.

This project will help us achieve the university's goal to :

1. increase walking and the walkability quality on campus;
2. increase physical activity and promote healthy lifestyles;
3. ensure the safety of those using walkways;
4. achieve 100% ADA compliancy on campus property.

TIMELINE

Data collection: The goal is to finish the data collection using the 2 survey questionnaires by Saturday, November 20, 2021.

Data analysis and creation of Campus walking masterplan: December 2021- March 2022

Final report and presentation: May 2022

MAPS AND VOLUNTEER ASSIGNMENT

Figure 1 shows the campus map. We have divided the campus in **29 map blocks** (figure 2; view the map blocks: <http://goo.gl/Cbq9Fj>), and they are further divided into **120 smaller blocks** (figure 3; E.g. 1a, 1b, 1c, 2a, 2b, 2c...). These smaller blocks will help analyze the sidewalk infrastructure accurately. The map-blocks have been categorized in High, Moderate, and Low priority order.

Teams of volunteers will cover the entire campus and collect data by November 20, 2021. Each team will consist of 4-5 volunteers. The teams will coordinate amongst themselves to most effectively collect data. The teams will decide who amongst them will collect the general Walkability Audit survey and who will collect the Deficiency Reporting data. Every team will be assigned 2-4 map blocks.

Access this link : <http://goo.gl/Cbq9Fj> to understand your assigned map-blocks better. You can zoom in and out for better clarity.



Figure 1: University of Illinois Urbana-Champaign Campus map

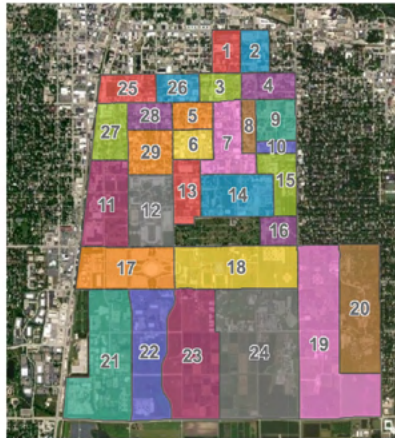


Figure 2: UIUC campus map divided into 29 map-blocks

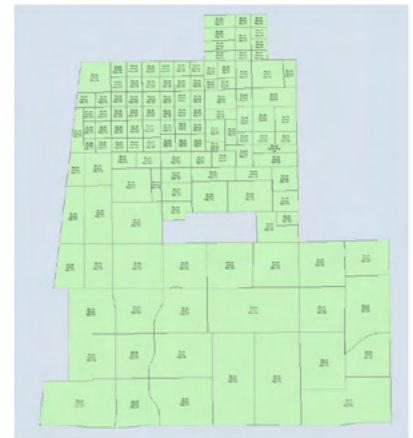


Figure 3: UIUC campus map divided into smaller mini-blocks for detailed analysis

DIRECTIONS



GETTING TO KNOW YOUR AUDIT AREA

Each team will be assigned 4-5 volunteers and 2-4 map blocks. Use the maps provided for your specific walk audit area to familiarize yourself. Study the larger map, for contextual information. Identify likely pedestrian destinations, such as parking lots, nearby restaurants, parks, shops, building entrances, etc. and plan out your walking route.

DETERMINE EACH TEAM MEMBER'S ROLE

Each team will have 4-5 members. The teams will be responsible to assign the tasks. For any team:

- 1) 3 members will complete the survey questionnaire
 - 2) 1 (or maybe 2) members will complete the Deficiency report
- Volunteers can switch roles after consulting with their team, if needed.

MAKE SURE YOU HAVE ALL YOUR SUPPLIES BEFORE YOU CONDUCT YOUR AUDIT

You are responsible for bringing the following yourself:

- Fully charged cell phone
- Appropriate apparel for walking in the environment
- Water
- Sunscreen, if needed
- Masks, if needed
- Snacks, if needed



ACCESS TO ARCGIS SURVEY123 APP

Data collection will be done using ArcGIS Survey123 app in your own mobile devices. Please follow the steps to download the app:

App download links:

1. For android users:

<https://play.google.com/store/apps/details?id=com.esri.survey123>

2. For iOS users:

<https://apps.apple.com/us/app/arcgis-survey123/id993015031>

Once you have downloaded the app,

- Click on "Sign in using ArcGIS Online"
- On the next screen, use the following login information
 - Username:** FandSDataCollector
 - Password:** 2022UIwalk
- On the Top-right corner of the screen, click on the initials
- Click on Download Surveys
 - Download the 2021 UI Campus Walkability Audit survey**
 - Download the 2021 UI Deficiency Reporting survey**

CONTACT INFORMATION

Incase of any questions or queries, please contact:

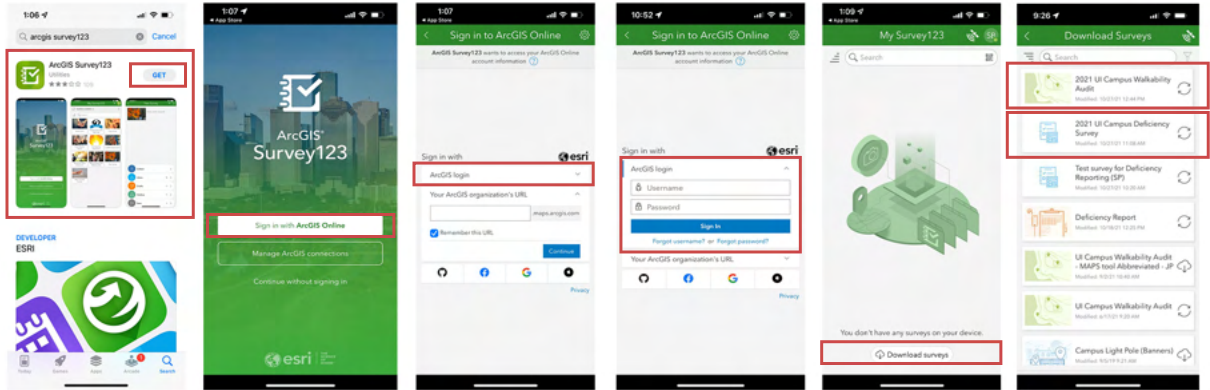
Sarthak Prasad (sprasad9@illinois.edu, 217-904-5954)

Sutapa Banerjee (sutapab2@illinois.edu, 217-419-8078, 217-991-2570)

ACCESS TO ArcGIS Survey 123 APP

Access to ArcGIS Survey123 App

Data collection will be done using ArcGIS 123 Survey App in your own mobile devices. Please follow the steps to download the app:



Open the App store in your smart phone and search for 'ArcGIS Survey123' App

Download ArcGIS Survey 123 App

Open the app and click on 'Sign in with ArcGIS Online'

Click on 'ArcGIS login'

Type Username:
FandSDataCollector
Password:
2022UIwalk

Click on the blue 'Sign in' button

Click on 'Download surveys' at the bottom of the page, sometimes it can be accessed at the top right corner

Select either the '2021 Campus Walkability audit' or the '2021 UI Campus Deficiency Survey' icon from the list and click on the download button (⬇️)

Press back after downloading and start your survey!

SURVEYS

UNDERSTANDING THE WALKABILITY AUDIT SURVEY

Pedestrian Facilities and Design - Universal Accessibility
 How the extent that this map block matches your assessment of the ease of access for mobility impaired users?
 Poor - Difficult or dangerous for people with disabilities - e.g., no curb cuts, ADA ramps not available or not easy to use
 Good - Accessible route available with some differences
 Excellent - Designed to facilitate wheelchair access
 Are there curb cuts present and accessible at each crossing in this map block?
 Yes
 No
 At most crossing locations
 Do the curb cuts along the sidewalks of this map block align?
 Curb cuts align with sidewalks and crosswalks throughout the map block
 Curb cuts align with sidewalks and crosswalks in most areas
 Curb cuts do not align with sidewalks and crosswalks
 Curb cut

Safety
 Are there pedestrians walking nearby in this map block?
 Yes, several
 Some
 Very few
 No
 How safe did you feel walking in this map block?
 Very safe
 Mostly safe
 Somewhat safe
 Lacked sense of safety (unobstructed high-speed traffic, low pedestrian visibility or signal)
 Are the pedestrians walking along the sidewalks easily visible to vehicular traffic?
 Yes, easily visible
 Low visibility
 No visible
 Are the pedestrians entering/leaving a crosswalk easily visible to vehicular traffic?
 Yes, easily visible
 Low visibility
 No visible

Pedestrian Facilities and Design - Sidewalks
 In general, describe the sidewalks in this map block?
 Sidewalks present on both sides of the street throughout the map block
 Sidewalks generally present on both sides of the street but certain areas have sidewalks on one side of the street
 Sidewalks generally present on just one side of the street
 Sidewalks not present
 In general, your overall assessment of walking surfaces in this map block?
 Poor - No permanent walking surface, discontinuous walkways, or major maintenance problems
 Some problems - Sidewalk on one side of the road with a few differences or sidewalk on both sides with several deficiencies
 Satisfactory - Sidewalk on both sides of the street, minor discontinuities and maintenance problems but does not present major obstacles for walking
 Good - Sidewalks on both sides of the street, minor aesthetic deficiencies
 Excellent - Continuous sidewalks on both sides of the street, no access issues

The **2021 UI Campus Walkability Audit survey** is designed to assess the general walkability of each map block. Each question is based on a specific assessment parameter and the training manual explains how to answer these questions. This survey entails 40 questions divided into the following categories:

1. **Surveyor information**
2. **Land-Use**
3. **Pedestrian facilities and Design**
 - a. Sidewalks
 - b. Pedestrian and vehicular conflicts
 - c. Crosswalks
 - d. Universal accessibility
 - e. Transit areas
4. **Safety**
5. **Walk Appeal**
6. **Optional additional comment:**
 Anything else you would like to report for this map block

UNDERSTANDING THE DEFICIENCY REPORTING SURVEY

Map Location
 407°N 88°17W x 4.9 m
 Block ID
 Investigated By
 Date Collected On
 Deficiency Category
 Sidewalk Attributes
 Temporary Obstruction
 Permanent Obstruction
 Sidewalk Maintenance
 Crosswalk Maintenance
 Accessibility

The **2021 UI Campus Deficiency Reporting survey** is designed to assess the specific faults within each map block. Each deficiency falls within a specific category, which further opens a list of dropdown options to choose from. Study the categories before starting your audit.

The categories are:

- A. **Sidewalk attributes**
- B. **Temporary obstructions**
- C. **Permanent obstructions**
- D. **Sidewalk maintenance**
- E. **Crosswalk maintenance**
- F. **Accessibility**
- G. **Connectivity**
- H. **Walk Appeal**
- I. **Other**

2021 UI CAMPUS WALKABILITY AUDIT

INSTRUCTIONS

After getting familiar with your assigned map block areas, plan out a route that covers all the sidewalks, pathways and building entrances within the map block. This includes routes to/from transit stops & parking areas.

Download the survey: **2021 UI Campus Walkability Audit**

Read all the questions of the questionnaire outlined below and get conversant with what to observe while walking along your route.

The best way to address the questionnaire is to stop after you have walked a small map block area (e.g. 1a or 1b), click on the "Collect Now" button. This will take you to the questionnaire. We expect it will take you 10-15 minutes to carefully walk a block and a further 6-8 minutes to answer every question in this the general walkability questionnaire.

Complete the survey questionnaire immediately after finishing each segment of your walk. Go to a quiet place where you can reflect on your observations. Don't wait to complete the questionnaire—it is important to do this immediately after you've walked your area while your memory is fresh and you can recall as much detail as possible.

QUESTIONS

1. Investigated by :

(ID: Unique number given to you)

2. Block number :

(Enter the small block ID here- e.g. 1a, 1b, 1c)

SURVEYOR INFORMATION

3. How are you collecting the audit information? (Select one)

- A. Walking
- B. Using a wheelchair
- C. Using a bicycle
- D. Other _____



LAND USE

LAND USE TYPOLOGY

4. Select the land-uses prevalent in this map-block. (Check all that apply)

- A. UIUC campus institutional buildings
- B. Residential buildings
- C. Commercial or retail (shopping centers, restaurants, cafés)
- D. Industrial buildings (warehouses, factories)
- E. Parking lots or garages
- F. Designated green spaces/parks
- G. Underdeveloped land
- H. Vacant land
- I. Place of worship
- J. Recreation spaces (eg. tennis courts, basketball courts)

RESIDENTIAL LANDUSE

5. What type of residential uses are present in the map block? (Check all that apply)

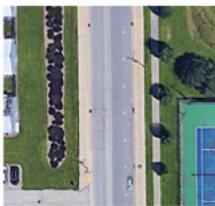
- | | |
|--------------------------------------|------------------------|
| A. Single-family housing | F. Dormitory |
| B. Multi-family housing | G. Fraternity/sorority |
| C. Apartments or condominiums | H. Other |
| D. Apartments above street retail | I. None |
| E. Retirement/senior living facility | |

PEDESTRIAN FACILITIES AND DESIGN

SIDEWALK PRESENCE

6. In general, describe the sidewalks in this map-block (Select one)

- A. Sidewalks present on both sides of the street throughout the map-block
- B. Sidewalks generally present on both sides of the street but certain areas have sidewalks on one side of the street
- C. Sidewalks generally present on just one side of the street
- D. Sidewalks not present



Sidewalks present on both sides of the road



Sidewalk present on one side of the road



Sidewalks not present

PEDESTRIAN WALKING SURFACE

7. In general, your overall assessment of walking surfaces in this map-block:

- A. **Poor** - No permanent walking surface, discontinuous walkways, or major maintenance problems
- B. **Some problems** - Sidewalk on one side of the road with a few deficiencies or sidewalk on both sides with several deficiencies
- C. **Satisfactory** - Sidewalk on both sides of the street, minor discontinuities and maintenance problems but does not present major obstacles for walking.
- D. **Good** - Sidewalk on both side of the street, minor aesthetic deficiencies
- E. **Excellent** - Continuous sidewalk on both sides of the street, well maintained and of sufficient width to accommodate pedestrian traffic.

SIDEWALK ALTERNATE

8. If no sidewalk is present, is there any other place to walk that is safe from traffic? (Check all that apply)

- A. Yes - Sidewalk on the other side of the road
- B. Yes- Unpaved pathways
- C. Yes- Street shoulder
- D. Yes - Buffer parkway
- E. No
- F. N/A- Sidewalk present on both sides of the street



Unpaved pathways



Street shoulder:
The outer edge of the road
and inner edge of the drains

SIDEWALK AMENITIES

9. Which of the following amenities are present along the streets and sidewalks of the map block? Only mark the ones easily identifiable by pedestrians. (Check all that apply)

- A. Overhangs that provide shelter from inclement weather in public spaces
- B. Trees
- C. Green space
- D. Kiosks or information booths
- E. Benches or other places to sit
- F. Bicycle racks
- G. Recycling bins
- H. Trash cans
- I. Working drinking water fountain
- J. Other
- K. None of the above

SIDEWALK WIDTH

10. What is the average path size, in general, in the map block? (Select one)

- A. No permanent walkway/sidewalk
- B. < 3 feet wide
- C. 3-5 feet wide
- D. > 6 feet wide (University standard)



TEMPORARY/ PERMANENT OBSTRUCTIONS

12. In general, are there temporary or permanent obstructions present along the sidewalks of this map-block? (Check all that apply)

- A. No obstructions present
- B. Yes, a few temporary obstructions
- C. Yes, several temporary obstructions
- D. Yes, a few permanent obstructions
- E. Yes, several permanent obstructions



Permanent obstruction examples: trees, telephone poles, fire hydrants, lamp-posts, street lights, man holes etc



Temporary obstruction examples: overgrown shrubs, sandwich boards, parked cars, trash cans, traffic cones etc.

SIDEWALK CAPACITY

11. In general, Is the present width of the sidewalks adequate to handle pedestrian during class change (typically around noon on Tuesday or Wednesday) in this map block? (Select one)

- A. Yes
- B. No, needs to be wider
- C. Not observed during heavy foot traffic

SIDEWALK BUFFER

13. Mark the option that most closely matches your overall assessment of buffers in this map block (average amount of buffer):

- A. No buffer from roadway
- B. Buffer is <3 ft wide
- C. Buffer is 3-5 ft wide
- D. Buffer is > 5 feet from roadway



Buffer: Area between the sidewalk and the street (signified by the arrow above: can be planting strips, street furniture or of any other material)

SIDEWALK LIGHTING

14. In general, is the lighting adequate for the walking surfaces (including sidewalks, crosswalks, and intersections) of this map block?

- A. No, this map block does not have adequate lighting
- B. Some parts of this map block require lighting improvement
- C. This map block has adequate lighting



Different types of lighting present in the UIUC campus

PEDESTRIAN AND VEHICULAR CONFLICTS

PEDESTRIAN AND VEHICULAR ENCOUNTERS

15. Mark the option that most closely matches your overall assessment of pedestrian conflicts in this map block:

- A. **Very High conflict potential** – very high multi modal activity (bus, cars, trucks, pedestrians, bicyclists, etc.) – E.g. Illini Union, Wright St.
- B. **High conflict potential** – High multi-modal activity. E.g. – Springfield Ave by Grainger Library, Main Library on Gregory Dr.
- C. **Moderate conflict potential** – limited motorized vehicular traffic and moderate to high pedestrian traffic
- D. **Low conflict potential** – High pedestrian volume, low motorized vehicular traffic, low speed limit – E.g. Peabody by Law building
- E. **Very low conflict potential** – High pedestrian volume, no motorized vehicular traffic or bicycle traffic

TRAFFIC CALMING MEASURES

16. What type of traffic calming measures are generally present in the map block? (Check all that apply)

- A. No traffic calming measures
- B. Mid- block marked crosswalks present
- C. Traffic signals for dedicated vehicle turns
- D. Pedestrian crossing signs
- E. Push Buttons
- F. Countdown signals
- G. Audible walk signals
- H. Pedestrian islands
- I. Stop signs
- J. Flashing beacons
- K. Speed bumps
- L. Chicanes or chokers
- M. Curb extensions (– bump-outs)



Traffic lights



Pedestrian crossing and countdown signals



Mid-block marked crosswalks



Stop sign



Pedestrian island



Flashing beacon



Push buttons



Speed bumps



Curb extensions
visually and physically narrow the roadway, creating safer and shorter crossings for pedestrians

Chicanes/ chokers
offset curb extensions to slow traffic speed



CROSSWALKS

CROSSWALK CONDITION

17. Mark the option that most closely matches your overall assessment of the crosswalks in this map block:

- A. **Poor** – Marked Crosswalks not present, obstacles present in the crosswalk, intersection is inaccessible, no curb cuts, insufficient crossing time, etc.
- B. **Some problems** – Some crosswalks are unmarked, but fine to walk or marking has faded and there are other issues
- C. **Satisfactory** – most of the crosswalks are marked, and there are some crosswalks with maintenance issues
- D. **Good** – Crosswalks are marked, and there are very few deficiencies
- E. **Excellent** – Crosswalks are clearly marked (or there are no intersections), and there are no tangible deficiencies



Marked crosswalks



Unmarked crosswalks



Curb cuts

Curb cuts: a small ramp built into the curb of a sidewalk to make it easier for people using strollers or wheelchairs to pass from the sidewalk to the road.

DETECTABLE WARNING DETAILS

18. Mark the presence of detectable warning details while entering or exiting the crosswalks?
(Check all that apply)

- A. No, none present
- B. Yes, truncated domes
- C. Yes, vertical strips
- D. Other detectable warnings



Truncated domes: refers to the set of raised bumps along a curb cut or crossing which alerts visually impaired individuals of surface changes and other potential hazards.



Vertical strips: tactile intervention along sidewalks to signify surface change

UNIVERSAL ACCESSIBILITY

WHEELCHAIR ACCESS

19. Mark the option that that most closely matches your assessment of the ease of access for mobility impaired users.

- A. **Poor** – Difficult or dangerous for people with disabilities -e.g., no curb cuts, ADA ramps not available or not easy to locate
- B. **Good** – Accessible route available with some deficiencies
- C. **Excellent** – Designed to facilitate wheelchair access

CURB CUT PRESENCE

20. Are there curb cuts present and accessible at each crossing in this map block?

- A. Yes
- B. No
- C. At most crossing locations

(Refer to Q. 17 for curb cut definition and image)

CURB CUT ALIGNMENT

21. Do the curb cuts along the sidewalks of this map block align?

- A. Curb cuts align with sidewalks and crosswalks throughout the map block
- B. Curb cuts align with sidewalks and crosswalks in most areas
- C. Curb cuts do not align with sidewalks and crosswalks in several areas
- D. Curb cuts do not align with sidewalks and crosswalks throughout the map block
- E. No curb cuts present
- F. Other: _____



Required observation:
Check if the sidewalk surface and the curb cuts are aligned to ensure a smooth transition.

TEXTURE DIFFERENCES

22. Are there texture differences along sidewalks for pedestrians with vision disability?

- A. Texture differences present throughout map block
- B. Texture differences present in a discontinuous way in the map block
- C. No texture differences present

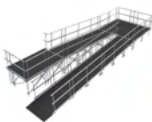


Texture differences along sidewalks alert visually impaired individuals of road proximity, surface changes and other potential hazards.

ADA RAMPS

23. In general, are the buildings in this map block ADA accessible and are the ADA ramps easily identifiable?

- A. Yes, buildings are ADA accessible and ADA ramps are easily located
- B. Yes, buildings are ADA accessible, but ADA ramps are not easy to locate
- C. Some buildings are not ADA accessible
- D. Most buildings are not ADA accessible
- E. No, none of the buildings in the map block are ADA accessible



An ADA compliant ramp is a sloping route constructed with a slope greater than 1:20 for ease of access for wheelchair users



ADA ramp example in UIUC campus

(ADA: Americans with Disabilities Act)

BUILDING ENTRANCES

24. In general, are the entrances leading to the buildings well maintained in this map block?

- A. Entrances to all buildings are well maintained and can accommodate peak pedestrian traffic
- B. Entrances to all buildings are well maintained, but some buildings need wider entrances
- C. Entrances to some buildings have few deficiencies, and they can accommodate peak traffic
- D. Entrances to some buildings have few deficiencies, and they cannot accommodate peak traffic
- E. Entrances to most buildings have several deficiencies, need immediate attention

SIDEWALK CONNECTIVITY

25. Are the sidewalks a part of a larger pedestrian network?

- A. Yes, sidewalks are well connected to pedestrian facilities, adjacent neighborhoods, community-oriented destinations, multi-use trails/paths, transit stops
- B. Sidewalk networks are not continuous or have gaps in connectivity
- C. Sidewalks lack connectivity to pedestrian facilities, adjacent neighborhoods, community-oriented destinations, multi-use trails/paths, transit stops

TRANSIT AREAS

TRANSIT STOP TYPOLOGY

26. What type of transit stops are available in this map block?

- A. MTD bus stops
- B. DRES paratransit shuttle stops
- C. Charter bus stops (Peoria Charter or others)



MTD Bus stop



DRES paratransit stop

TRANSIT STOP DISTANCE

27. How far do you have to walk to reach a transit stop in this map block?

- A. Transit stop(s) present in the same block
- B. Transit stop(s) present within 1-2 blocks
- C. Transit stop(s) present within 3-4 blocks
- D. More than 5 blocks



A block, in geographical terms, refers to the area of land between streets.

TRANSIT STOP AMENITIES

**28. What are the amenities present at transit stops of this map block?
Only mark the ones easily identifiable by users. (Check all that apply)**

- A. Covered bus shelter
- B. Enclosed bus shelter
- C. Benches
- D. Transit schedule information – Kiosk
- E. Bicycle racks
- F. Recycling bins
- G. Trash cans
- H. Lighting
- I. Emergency phones
- J. None of the above

PARKING

**29. What parking facilities are present in this map block?
(Check all that apply)**

- A. None
- B. On street parking (parallel or angled parking)
- C. Small lot or garage (< 30 spaces)
- D. Medium to large lot to garage

PARKING CONNECTIVITY TO WALKWAYS

30. Are the parking facilities connected to the walkways?

- A. Yes
- B. No
- C. N/A

BIKE INFRASTRUCTURE

31. What kind of bikeway infrastructure are prevalent in the map block? (Check all that apply)

- A. On street bike lane
- B. Off-street bike path
- C. In-street bike sharrows
- D. No specified bikeway infrastructure



On street bike lane



Off street bike path



In street bike sharrows

SAFETY

EYES ON THE STREET

32. Are there pedestrians walking nearby in this map block?

- A. Yes, several
- B. Some
- C. Very few
- D. None

PERCEIVED SAFETY

33. How safe did you feel walking in this map block?

- A. Very safe
- B. Mostly safe
- C. Somewhat safe
- D. Lacked sense of safety (perception of high-speed traffic, low pedestrian visibility or crime)

PEDESTRIAN VISIBILITY ALONG SIDEWALKS

34. Are the pedestrians walking along the sidewalks easily visible to vehicular traffic?

- A. Yes, easily visible
- B. Low visibility
- C. Not visible

PEDESTRIAN VISIBILITY ALONG CROSSWALKS

35. Are the pedestrians entering/ exiting a crosswalk easily visible to vehicular traffic?

- A. Yes, easily visible
- B. Low visibility
- C. Not visible

WALK APPEAL

LANDSCAPING

36. Are the landscaping and trees in this map block well maintained?

- A. Landscaping and trees are not well- maintained
- B. Partially maintained landscape areas with a few unevenly placed trees
- C. Well maintained landscape areas with even tree coverage



Landscaped areas at the UIUC campus

SHADE

37. Mark the option that most closely matches your overall assessment of the available shade in this block:

- A. Absence of shaded areas throughout sidewalks
- B. Somewhat shaded with a few trees and/or overhangs
- C. Well-shaded with regular spacing of trees



Unshaded sidewalks



Shaded sidewalks

AESTHETICS

38. Mark the option that most closely matches your overall assessment of the aesthetics in this map block:

- A. **Very Poor** - I will not walk in this area again!
- B. **Below Average** - walkable but has immense scope for improvement
- C. **Average**
- D. **Above Average** - has minor deficiencies but a good area to walk around
- E. **Excellent** - pleasant walk with good infrastructure, maintenance, landscaping, tree cover and architecture

WALK APPEAL RATING

39. How pleasant was your walk in general?

- A. Excellent, pleasant walk with good infrastructure, landscaping, tree cover and architecture
- B. Mostly satisfied
- C. Somewhat satisfied
- D. Needs considerable improvement
- E. I will not walk in this area again!

FINAL COMMENTS

40. [Text answer] – Volunteers can add their final comments about the map block that they would like to report.

2021 UI CAMPUS DEFICIENCY REPORTING

Download : **2021 Campus Deficiency Reporting survey**

Only one deficiency per submission!

Volunteers will walk around their assigned map block, where they will cover the sidewalk network, entrances to the building, and ADA ramps.

Once the volunteer encounters a “deficiency” or issue, they will click the “Collect” button on their ArcGIS Survey123 app’s 2021 UI Campus Deficiency Reporting survey which will take them to the following screen:

Figure: Sample Deficiency reporting questionnaire

DEFICIENCY CATEGORIES

The common deficiencies are categorized under the following 8 parameters:

SIDEWALK ATTRIBUTES

1. No sidewalk - a stretch of road that does not have a sidewalk
2. No buffer present - along a stretch of sidewalk
3. Insufficient lighting along sidewalk
4. Insufficient lighting at the intersection
5. Insufficient lighting throughout the crosswalk
6. Proximity to high-speed vehicular traffic
7. Sidewalk narrowing- sidewalk width reduces mid-block (< 6 ft university standard)

TEMPORARY OBSTRUCTIONS

1. Parked cars
2. Sandwich boards
3. Trash/ recycling bins
4. Benches/ chairs
5. Construction
6. Veo bike (s)

PERMANENT OBSTRUCTIONS

1. Trees obstructing the sidewalk
2. Light poles or utility poles
3. Signposts
4. Overgrown vegetation- shrubs/grass (less than 4 ft of accessible sidewalk)
5. Raised Manhole or utility in the sidewalk

SIDEWALK MAINTENANCE

1. Vertical fault (tripping hazard or more than ¼ inch)
2. Cracks (less than 4 ft of accessible sidewalk)
3. Cracks (more than 4 ft of accessible sidewalk)
4. Vegetation growth on the sidewalk like weeds (not obstructing the sidewalk)
5. Ice / water pooling
6. Snow deposit
7. Sidewalk panel(s) have worn down and /damaged causing obstruction

CROSSWALK MAINTENANCE

1. Unmarked crossing
2. Crosswalk marking has faded
3. Potholes in the crosswalk
4. Loose pavement (top layer of crosswalk has deteriorated)
5. Insufficient timing of crosswalks
6. Lack of curb cuts
7. Detection warning details missing
8. No signage for pedestrian crossing
9. Driveway apron has maintenance issues (potholes, cracks, etc.)

CONNECTIVITY

1. Discontinuous sidewalk- A chunk of the sidewalk is missing
2. Sidewalk ends abruptly and does not continue
3. Sidewalk lacks connectivity to building entrances or parking facilities

OTHER

If there is an issue not covered in the list above, please describe it in the other field.

ACCESSIBILITY

1. Lack of enclosed/covered MTD shelters – bus pads
2. Building entrances marked as ADA do not seem to be compliant
3. ADA ramps leading to the building are not easily located
4. Building's ADA entrance is not indicated
5. Inaccessible push buttons

WALK APPEAL

1. Insufficient shade as seasonally needed
2. Lack of aesthetically pleasing landscape
3. Presence of litter/ trash on ground
4. Presence of graffiti

2021 UI CAMPUS DEFICIENCY REPORTING- EXAMPLE

STEP 1

Open the "2021 UI Campus Deficiency Reporting" survey on the ArcGIS Survey123 App

Make sure your location is on and accurate

Fill in the following details:

- Block ID (your assigned map-block no.)
- Investigated by (unique number given to you)
- Data collected on (today's date) – This field is read only, so you don't have to enter the date.

Block ID*

Your assigned map block no.

Investigated By*

(ID: Unique number given to you)

Data Collected On

mm/dd/yyyy

STEP 2

Deficiency Category*

Select one

☐ SidewalkAttributes

☐ TemporaryObstructions

☐ PermanentObstructions

☒ SidewalkMaintenance

☐ CrosswalkMaintenance

☐ Accessibility

☐ Connectivity

☐ WalkAppeal

When you come across a fault or deficiency during your walk around the blocks assigned to you, go through the 'Deficiency Category' section to identify which category it falls under

For example: If you see vertical faults along a sidewalk in your map block, select 'Sidewalk Maintenance'



Sample deficiency identified:

Vertical faults along a sidewalk

STEP 3

After clicking on 'Sidewalk Maintenance', a list of options will appear with common sidewalk maintenance issues

Select a Sidewalk Maintenance issue present here*

Select one

☒ Vertical faults

☐ Cracks (6 ft or more of accessible sidewalk)

☐ Cracks (less than 6 ft of accessible sidewalk)

☐ Vegetation growth on the sidewalk

☐ Water logging

☐ Snow deposit

☐ Sidewalk is misaligned - sidewalk width reduces mid-block (>6 ft university standard)

Select 'Vertical faults'

STEP 4

Take a picture of the deficiency using the camera (📷) button.

Picture of the issue *

Upload a picture



Click on the check button (✓) on the bottom right corner once you are done to save your submission.



Picture-20211023-025626.jpg



Repeat the same process for all other deficiencies of your map block

In case the deficiency identified by you does not fall under any of the aforementioned category, please describe it in the "Other" field.

If other, please describe the issue here



Thank you for your contribution!

**You have officially helped us improve
the campus walking infrastructure.**

We highly appreciate your time and effort!

CONTACT INFORMATION

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