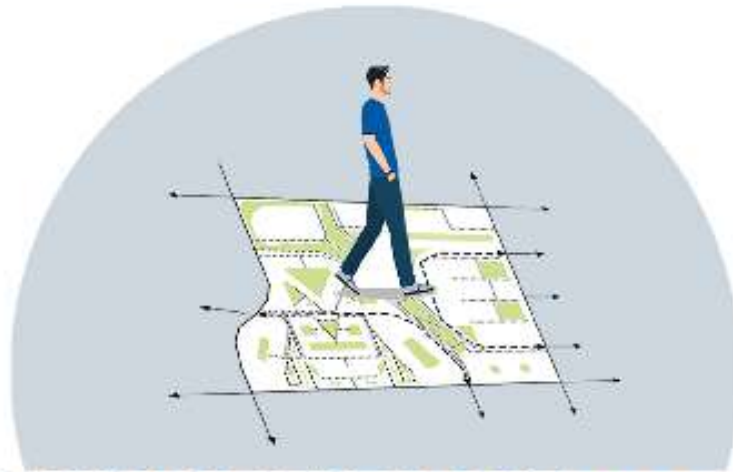




UNIVERSITY OF
ILLINOIS
URBANA-CHAMPAIGN

Facilities & Services

Physical Plant Service Building, MC-800
1501 S. Oak St.
Champaign, IL 61820-6905



WALKABILITY AUDIT 2021-22
University of Illinois Urbana-Champaign



SUTAPA BANERJEE
2ND YEAR MUP GRADUATE STUDENT, UIUC

INTRODUCTION



GOAL: Develop a Walkability Index for the campus of University of Illinois Urbana Champaign

The Facilities & Services Transportation Demand Management (F&S TDM) Dept. of UIUC is conducting a thorough walkability audit of the University District using two surveys:



2021 UI CAMPUS WALKABILITY AUDIT SURVEY:

Assesses the general walkability of the map blocks -[Macro scale]



2021 UI CAMPUS DEFICIENCY REPORTING SURVEY:

Identifies specific deficiencies within a map block -[Micro scale]

This project will help us identify areas that are ideal for walking and areas that may require improvement. 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.

OBJECTIVES

OBJECTIVE
1

**INCREASE WALKING AND
WALKABILITY QUALITY ON
CAMPUS**



OBJECTIVE
2

**INCREASE PHYSICAL
ACTIVITY AND PROMOTE
HEALTHY LIFESTYLES**



OBJECTIVE
3

**ENSURE SAFETY OF
THOSE USING WALKWAYS**



OBJECTIVE
4

**ACHIEVE 100% ADA
COMPLIANCY ON CAMPUS
PROPERTY**



COLLABORATORS



**Facilities & Services Transportation
Demand Management (F&S TDM)**
is collaborating with:

- Department of Urban and Regional Planning
- Disability Resources & Educational Services
- Office of Access & Equity
- F&S Grounds
- F&S FIR
- F&S Sustainability
- Campus Landscape Architect
- Transportation iCAP Team
- Student Planning Organization (SPO)

UIUC - AT A GLANCE



96

miles of sidewalk network
in the UIUC campus



51,000

number of students in
UIUC campus



34%

of total students use public
transit as their primary travel
mode



39%

of total students walk/roll
in UIUC Campus as their
primary mode of travel

WALK AUDIT - AT A GLANCE



75

Number of volunteers
in the walk audit



350+

General walkability
audit records collected
of UIUC campus



2000+

Deficiency Reporting
records collected of
UIUC campus



30

In-person and Virtual
Training sessions
conducted for volunteers

TRAINING PROCESS



Preparation and distribution of **Training manual** to volunteers

+



Uploading surveys to **ArcGIS 123 Survey** App for Volunteer download and use

+



Conducting Virtual and In-person Training sessions for volunteers

=



Data collection by volunteers

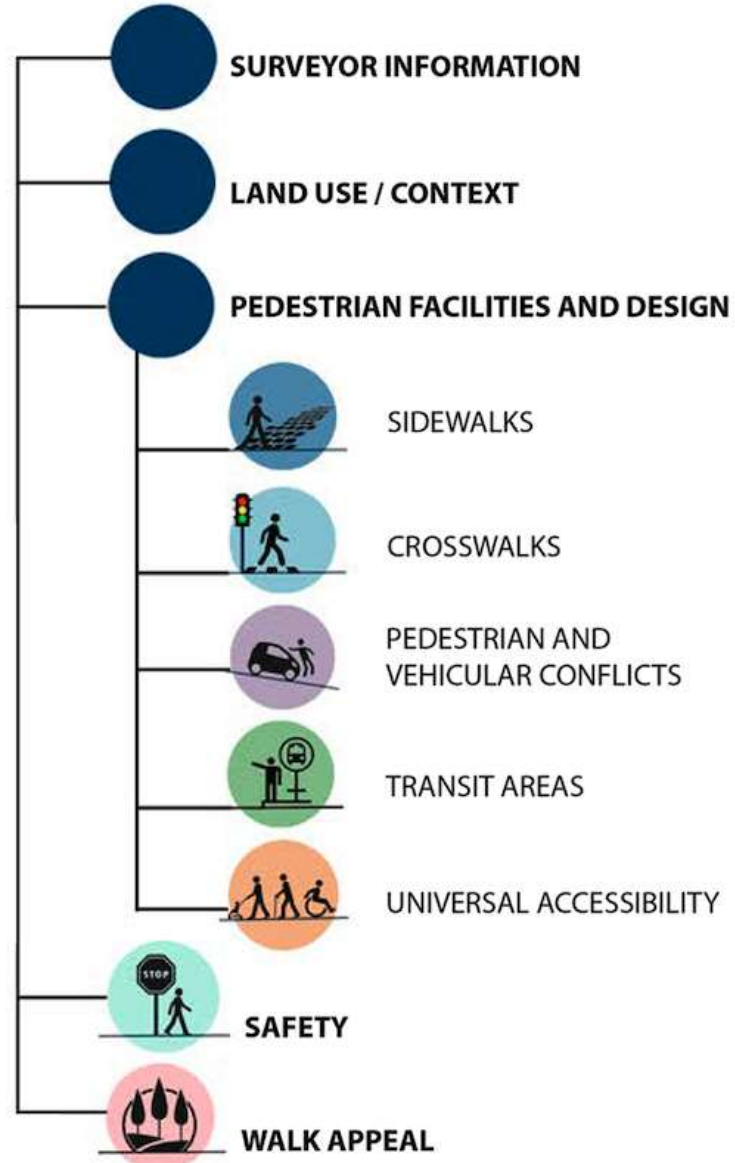
SURVEYS

1

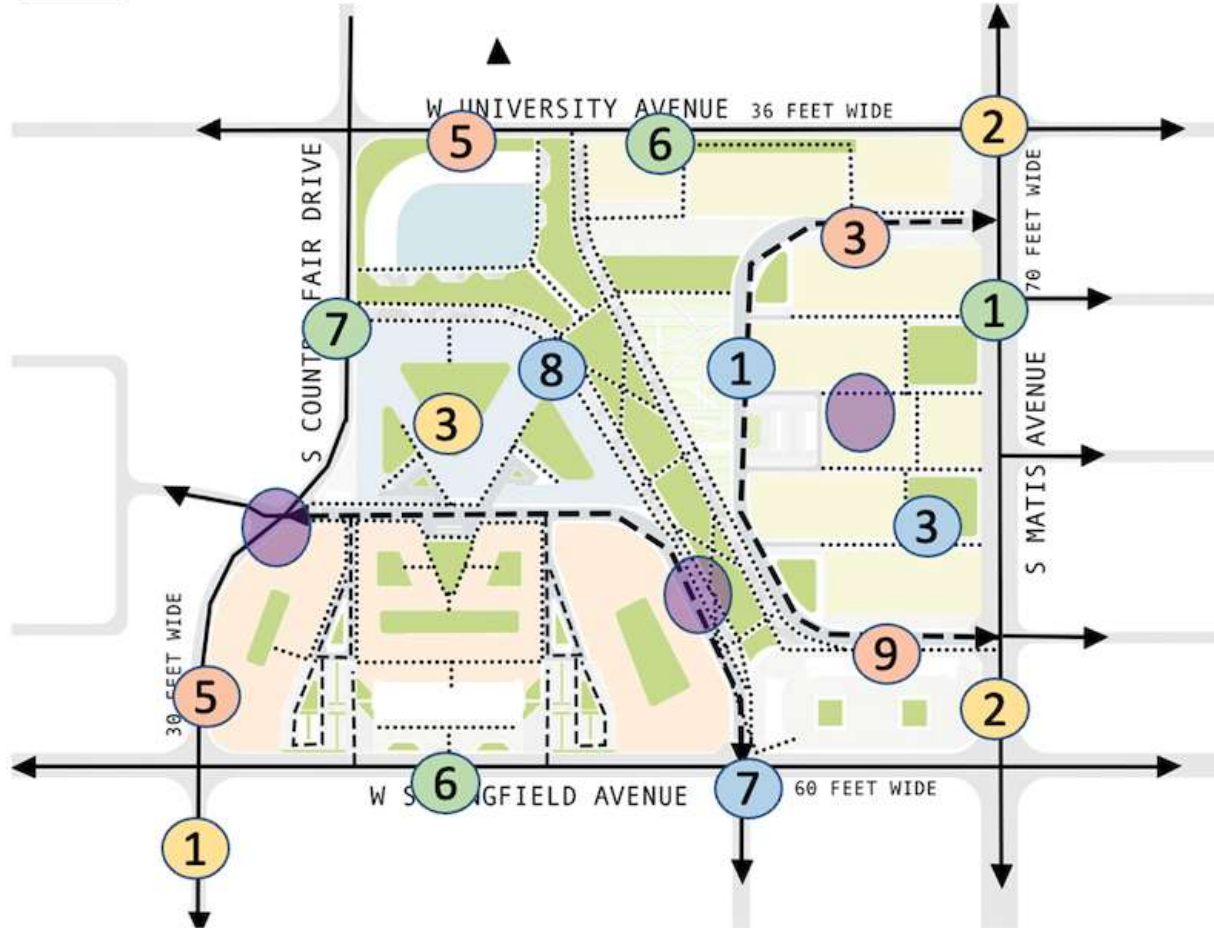


2021 UI Campus Walkability Audit survey:
Assesses the general walkability of the map blocks

ASSESSMENT PARAMETERS



2



DEFICIENCY CATEGORIES

-  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 Deficiency Reporting survey
Identifies specific deficiencies within a map block

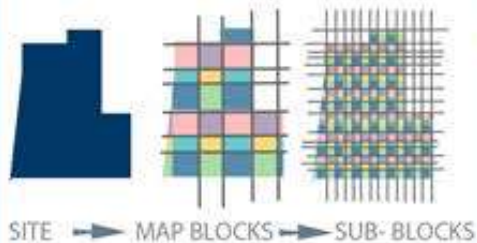
METHODOLOGY

SITE OF AUDIT

- 1 STUDY AREA AND EXTENTS**
Study of audit area and mapping its extents (UIUC Campus)

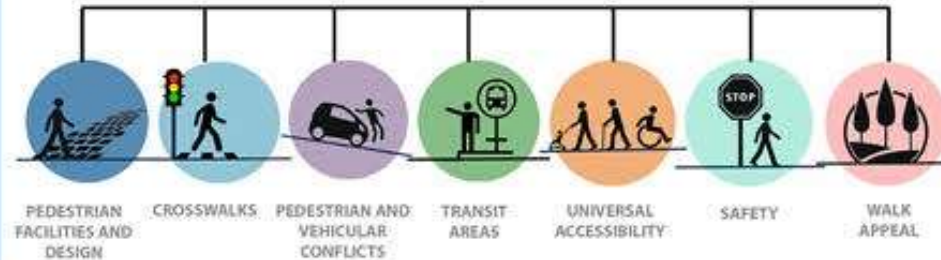


- 2 DIVISION OF SITE**
Dividing the site of intervention for detailed analysis into 29 map blocks (120 sub-blocks)



ASSESSMENT PARAMETERS AND SCORING

- 3 ASSESMENT PARAMETERS**
Determining assesment parameters that impact walkability



- 4 SURVEY QUESTIONNAIRE**
Creating a balanced general survey questionnaire and adopting a 0-5 point scoring system (40 questions)



- 5 DETERMINING WEIGHTS**
Assigning weights to assesment parameters based on impact (High = x3, Medium = x2, Low = x1)



QUANTIFYING WALKABILITY

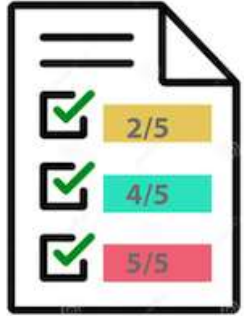
- 6 AVERAGING SCORES**
Averaging scores weighted scores to calculate individual scores of each map block



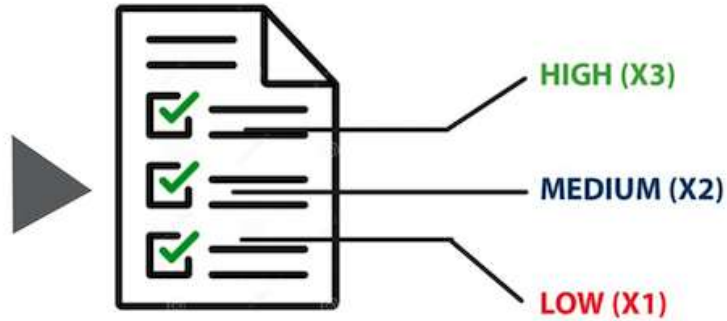
- 7 FINAL WALKABILITY INDEX**
Converting scores to a 0-100 scale to determine walkability index of UIUC Campus.



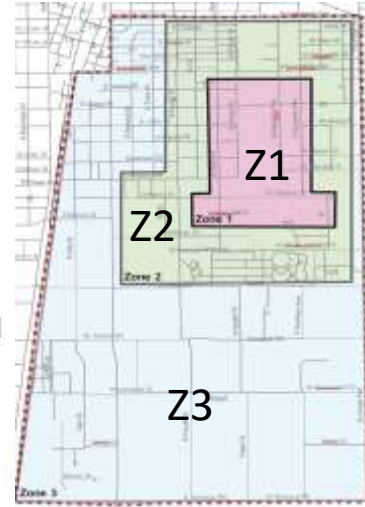
SCORING SYSTEM



Scores assigned on a 0-5 scale

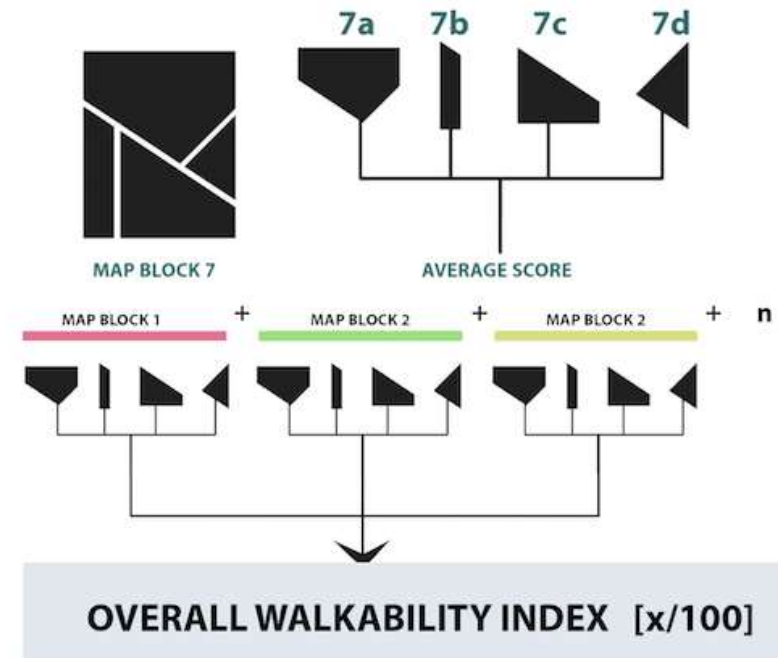


Scores weighted in terms of impact on Walkability



High Priority zones weighted higher than low priority zones of the campus

CATS ZONES





WEIGHTS

- Various categories of the assessment parameters were weighted according to the impact they have on walkability. The finalized weights are as follows:

PEDESTRIAN FACILITIES AND DESIGN	SIDEWALK PRESENCE	H	TRANSIT AREAS	TRANSIT STOP TYPOLOGY	L
	PEDESTRIAN WALKING SURFACE	H		TRANSIT STOP DISTANCE	M
	SIDEWALK ALTERNATIVE	H		TRANSIT STOP AMENITIES	L
	SIDEWALK AMENITIES	L		PARKING	L
	SIDEWALK WIDTH	M		PARKING CONNECTIVITY TO WALKWAYS	M
	SIDEWALK CAPACITY	M		BIKE INFRASTRUCTURE	M
	TEMPORARY/ PERMANENT OBSTRUCTIONS	H		EYES ON THE STREET	M
	SIDEWALK BUFFER	L		PERCEIVED SAFETY	H
PEDESTRIAN AND VEHICULAR CONFLICTS	PEDESTRIAN AND VEHICULAR ENCOUNTERS	H	SAFETY	PEDESTRIAN VISIBILITY ALONG SIDEWALKS	H
	TRAFFIC CALMING MEASURES	L		PEDESTRIAN VISIBILITY ALONG CROSSWALKS	H
CROSSWALKS	CROSSWALK CONDITION	H		WALK APPEAL	LANDSCAPING
	DETECTABLE WARNING DETAILS	H	SHADE		L
UNIVERSAL ACCESSIBILITY	WHEELCHAIR ACCESS	H	AESTHETICS		M
	CURB CUT PRESENCE	H	WALK APPEAL RATING		H
	CURB CUT ALIGNMENT	H			
	TEXTURE DIFFERENCES	L			
	ADA RAMPS	H			
	BUILDING ENTRANCES	M			
SIDEWALK CONNECTIVITY	M				

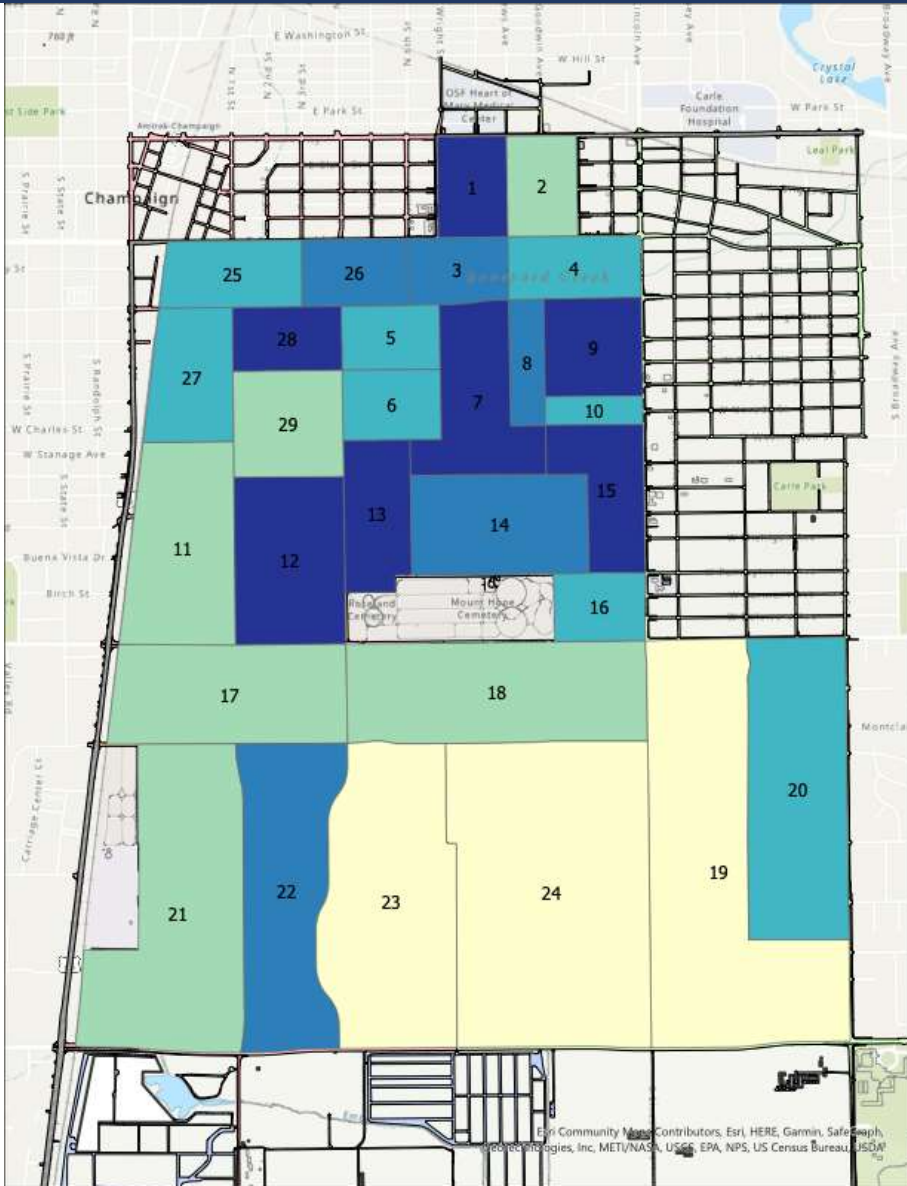
SURVEY QUESTIONNAIRE AND SCORING

1	SURVEYOR INFO	No scoring system	QUESTIONS 1. Investigated by : ID: <u>UNIVERSITY OF MICHIGAN</u>
2		No scoring system	2. Block number : Enter the exact block ID (e.g. 1a, 1b, 1c)
3		No scoring system	SURVEYOR INFORMATION 3. How are you collecting the audit information? (Select one) A. Walking B. Using a wheelchair C. Using a bicycle D. Other 
4	LAND USE	Contextual question	LAND USE LAND USE TYPOLOGY 4. Select the land-uses prevalent in this map-block. (Check all that apply) A. UMIC campus/institutional buildings B. Residential buildings C. Commercial or retail (shopping centers, restaurants, cafes) 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 (e.g. tennis courts, basketball courts)
5			Contextual question
6	PEDESTRIAN FACILITIES AND DESIGN	SCORE	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 

7	PEDESTRIAN FACILITIES AND DESIGN	SCORE	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 sides 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
8		SCORE	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 pathway E. No F. N/A - Sidewalks present on both sides of the street 
9		SCORE	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
10	PEDESTRIAN FACILITIES AND DESIGN	SCORE	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. > 5 feet wide (University standard) 

11	PEDESTRIAN FACILITIES AND DESIGN	SCORE	SIDEWALK CAPACITY 11. In general, is the present width of the sidewalks adequate to handle pedestrians 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
12		SCORE	TEMPORARY/PERMANENT OBSTRUCTIONS 12. In general, are these 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 
13		SCORE	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 
14	PEDESTRIAN FACILITIES AND DESIGN	SCORE	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 

OVERALL WALKABILITY INDEX- PHASE I AND PHASE II RESULTS



- Highest scoring map blocks: 1, 7, 9, 12, 13
- Lowest scoring map blocks: 19, 23, 24

LEGEND

- Poor Walkability
- Average walkability
- Somewhat Walkable
- Very Walkable
- Walkers' Paradise

Overall Walkability Index:
76.2/100

MAP BLOCKS	SCORES	MAP BLOCKS	SCORES
1	87.6	17	70.1
2	67.7	18	64
3	81	19	33.3
4	75.9	20	75.1
5	75.3	21	67.5
6	76.3	22	78.9
7	84	23	53.3
8	78.1	24	44.6
9	83.7	25	76.8
10	76.3	26	79.8
11	71.6	27	76.2
12	86.2	28	82.5
13	83.5	29	67.8
14	80	WEIGHTED AVERAGE	
15	86.8		
16	74.2	13	76.2

Esri Community Maps Contributors, Esri, HERE, Garmin, Swiremap, GeoTechnologies, Inc, MET/NASA, USGS, EPA, NPS, US Census Bureau, USDA

HIGHEST SCORING MAP-BLOCKS- MAP BLOCK 1



Clearly marked crosswalks



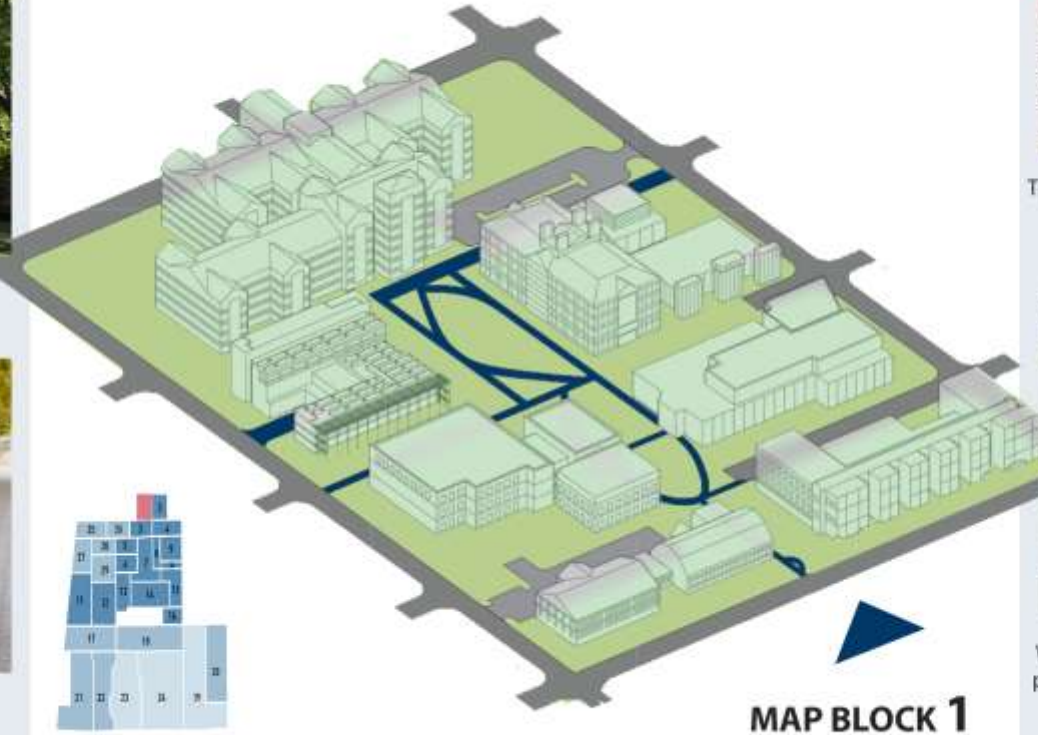
Shaded, visually appealing landscaped areas



Seating areas in spaces of congregation

After averaging the scores of each map block, it was found that map block 1 had one of the best walking conditions with a score of 87.6/100. Map block 1 scored high Sidewalk Presence (5/5), Sidewalk connectivity (5/5), Parking connectivity to walkways (5/5), Pedestrian Visibility along sidewalks (5/5), Walk Appeal (4.9/5). All average scores of the parameters of Map Block 1 were above (4.0/5).

Map block 1 is relatively smaller in size as compared to the rest of the map-blocks and houses the North quadrangle. It has multiple landscaped spaces with presence of shade and its streets have safe crosswalks with multiple traffic calming measures. It also has several transit stops that make it accessible and pedestrian friendly.



Well maintained walkways in the North Quad along with landscaping elements



Transit stops with several amenities to support pedestrians



Well connected sidewalk network present on both sides of the street

MAP
BLOCK
1

SCORE
87.6/100

- Priority: Medium
- Map block includes North Quad, Beckman Institute

HIGHEST SCORING MAP BLOCKS: MAP BLOCK 7



The sidewalk network in the main quad is a design feature and also increases accessibility



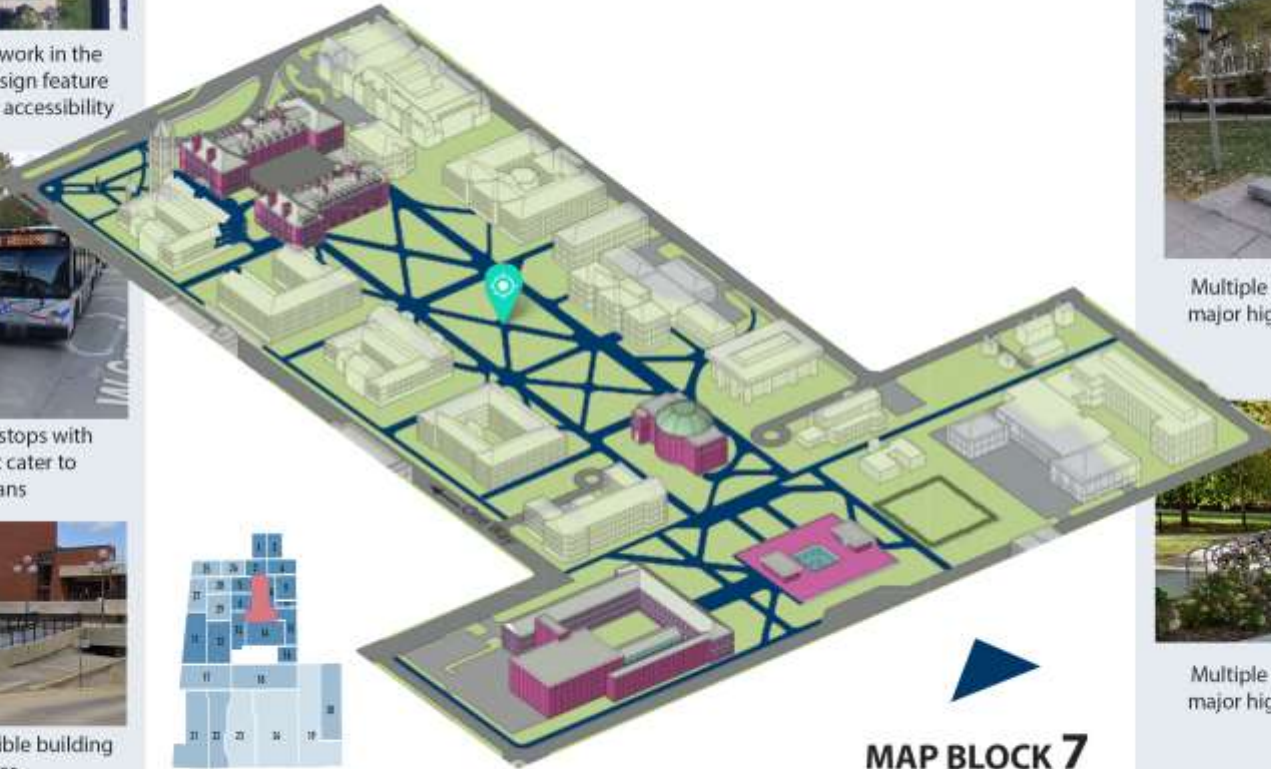
Multiple transit stops with amenities that cater to pedestrians



Universally accessible building entrances

Although the campus was found to be moderately walkable, the scores varied greatly amongst map blocks. **The average weighted score of map block 7 scored 84/100 and had one of the best walking conditions.** Map block 7 scored high in Sidewalk Presence (5/5), Pedestrian Visibility along crosswalks (5/5), Sidewalk Connectivity (5/5), and scores above 4.0/5 in almost all the parameters of assessment.

This map block represents the core of the campus with green open spaces for congregation at its center and has great accessibility of the sidewalk network. Since this area represents the face of the campus, it is maintained regularly. This area also witnesses peak pedestrian traffic between class changes and major events open to the all the university students.



MAP BLOCK 7



Well maintained, wide sidewalk network in the Main Quad.



Multiple bike stands along major high traffic buildings



Multiple bike stands along major high traffic buildings

MAP
BLOCK
7

SCORE
84/100

- Priority: High
- Map block includes Illini Union, Main Quadrangle, Foellinger Auditorium, Undergraduate library etc.

HIGHEST SCORING MAP-BLOCKS- MAP BLOCK 9



Presence of enclosed transit stop shelters and amenities



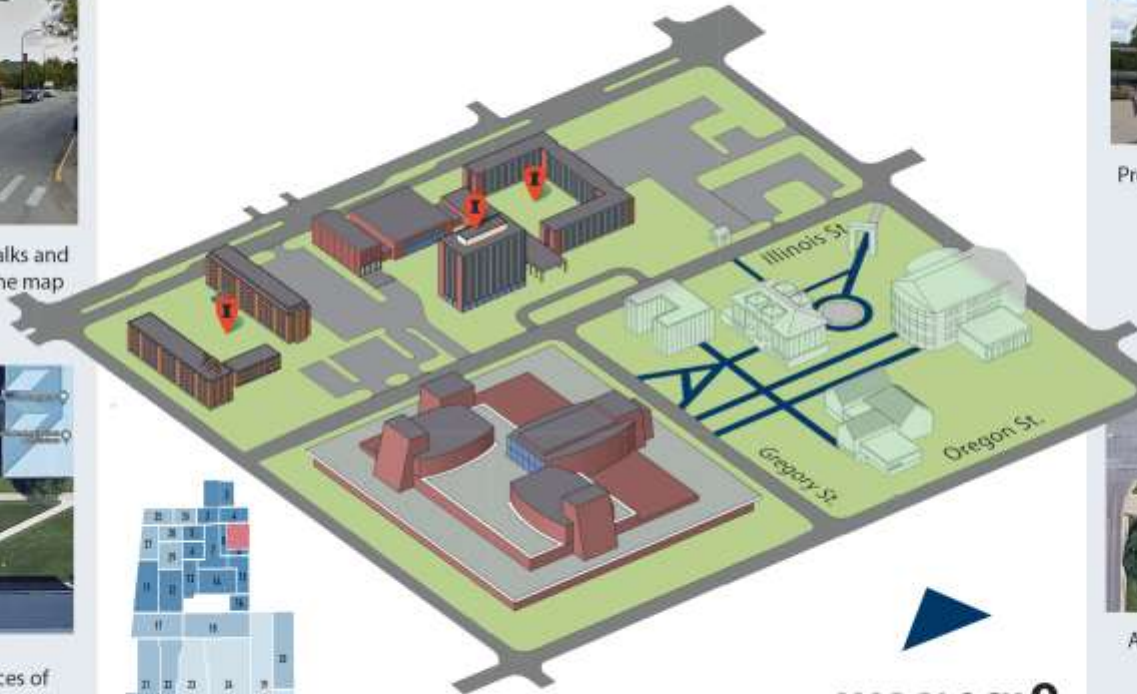
Well maintained crosswalks and sidewalks throughout the map block



Seating areas in spaces of congregation

Map block 9 had one of the best walking conditions with a score of 83.7/100. Map block 9 scored high Sidewalk Presence (5/5), Building entrances (4.89/5), Parking connectivity to walkways (5/5), Transit stop distance (5/5), Pedestrian Visibility along sidewalks (5/5).

Map block 9 houses the Krannert center and has well maintained sidewalks with shaded seating spaces, ADA ramps and curb extensions to ensure smooth transition for pedestrians. i



MAP BLOCK 9



Presence of ADA ramps for wheelchair access



Presence of curb extensions at high traffic locations



Adequate buffer widths from street (Pedestrian and vehicular separation)

MAP
BLOCK
9

SCORE
83.7/100

- Priority: High
- Map block includes Krannert center, Spurlock museum and Goodwin Green apartments

HIGHEST SCORING MAP-BLOCKS- MAP BLOCK 12



Wide sidewalks to accommodate peak pedestrian traffic during games or concerts



Adequate buffers and bike lanes



Bicycle stands

Map block 12 had one of the best walking conditions with a score of 86.2/100.

Map block 12 scored high Absence of obstructions (4.9/5), Sidewalk connectivity (5/5), Parking connectivity to walkways (4.6/5), Pedestrian Visibility along sidewalks (5/5), Walk Appeal (4.3/5). All average scores of most of the parameters of Map Block 12 were above (4.0/5).

Map block 12 houses the Ikenberry commons residence halls and the Memorial Stadium and Campus Recreation center.



MAP BLOCK 12



Well maintained walkways in the North Quad along with landscaping elements



Well shaded sidewalks



Well connected sidewalk network that increases accessibility

MAP
BLOCK
12

SCORE
86.2/100

- Priority: Medium
- Map block includes Ikenberry Commons Residence Halls, Memorial Stadium, Campus Recreation center etc.

HIGHEST SCORING MAP BLOCKS: MAP BLOCK 13



Crosswalks with detectable warning details (Eg. truncated domes) and textural differences



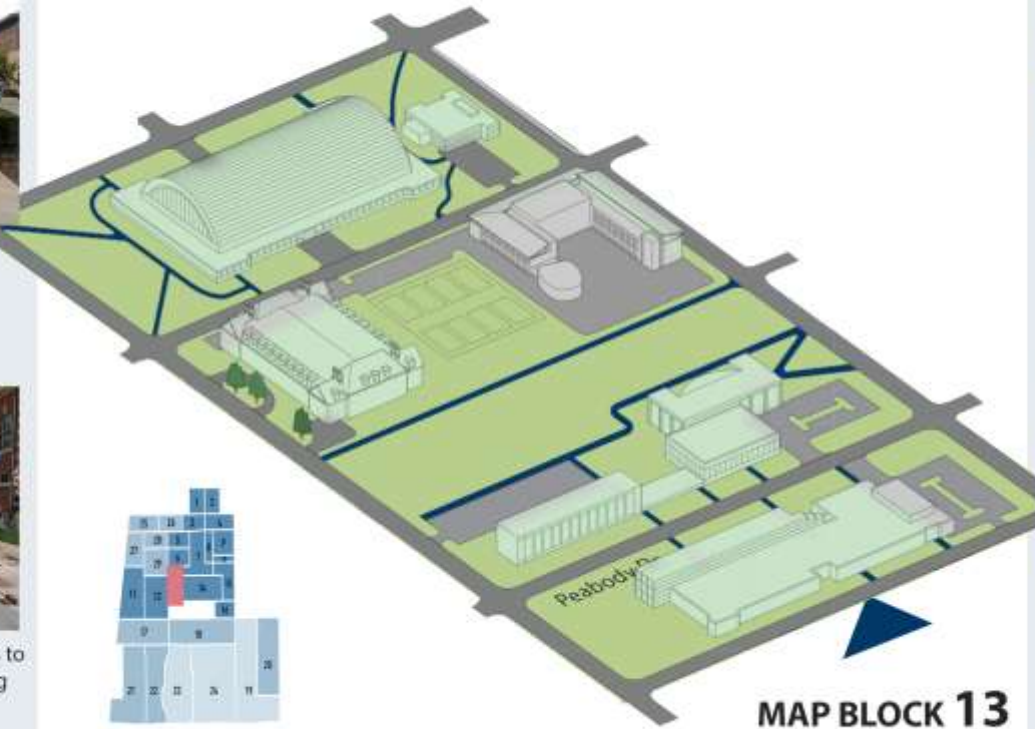
Parking connectivity to sidewalks



Curb extensions along sidewalks to enable safe pedestrian crossing

Although the campus was found to be moderately walkable, the scores varied greatly amongst map blocks. **This score found that map block 13 had the best walking conditions.** Map block 13 scored high in Pedestrian facilities and design(5/5), crosswalks (4/5), transit areas(5/5), universal accessibility (4.7/5), safety (4.5/5) and walk appeal(4.3/5).

The University spent a great deal of time redeveloping multiple walking areas throughout the high priority map blocks between the years 2005 and 2010. This redevelopment could be directly related to the high scores found in map blocks 13, 1, 3, 7, 15. The City of Champaign and Urbana also executed considerable redevelopment projects 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 high priority map blocks created an optimal environment to walk in. Areas near green street were the most well scoring map blocks.



MAP BLOCK 13



Traffic calming measures like signalization, audio signals and push buttons



Traffic calming measures like signalization, audio signals and push buttons



Shaded sidewalks with several landscaped elements

MAP
BLOCK
13

SCORE
83.5/100

- Priority: Medium
- Map block includes University of Illinois Armory, George Huff Hall, Gies College of Business, Univ of Illinois College of Law, Siebel Center for Design

HIGHEST SCORING MAP-BLOCKS- MAP BLOCK 15



Higher frequency of transit stops



Shaded, visually appealing landscaped areas



Off street bike path and crossing

Map block 15 had one of the best walking conditions with a score of 86.8/100. Map block 15 scored high on Sidewalk Presence (5/5), Curb cut alignment (5/5), Sidewalk connectivity (5/5), Parking connectivity to walkways (5/5), Pedestrian Visibility along sidewalks (5/5), Walk Appeal (4.7/5). All average scores of the parameters of Map Block 1 were above (4.0/5).

Map block 15 houses several key elements of the campus. It has a small water detention pond which acts as a natural congregation space, has several tennis courts and major campus buildings.



Presence of Traffic calming measures like Stop signs. Availability of Emergency phone booths



Natural spaces of congregation



Parking connectivity to sidewalks

MAP
BLOCK
15

SCORE
86.8/100

- Priority: High
- Map block includes Allen Hall university housing, Campus recreation center east, Tennis courts, Mc Kinley Healthcare center, Freer Hall

LOWEST SCORING MAP BLOCKS: 19, 23 & 24



Agricultural crop lands



Lack of sidewalks and crosswalks



Scattered and undefined landscape

Map blocks 19, 23 and 24 had extremely low average scores, which were an exception to the overall walkability score of campus. Map block 19 an average of 33.3/100, Map block 23 had an average score of 53.3/100 and Map block 24 scored an average of 44.6/100. These map blocks were generally the parts of the campus that did not have important campus buildings but have a majority of vacant and green space expanses. Therefore, the sidewalks are often unpaved with walkways only on one side. This might have greatly affected the scoring since our surveys have questions that are perception based.



Unpaved pathways



University of Illinois Arboretum and Japan House

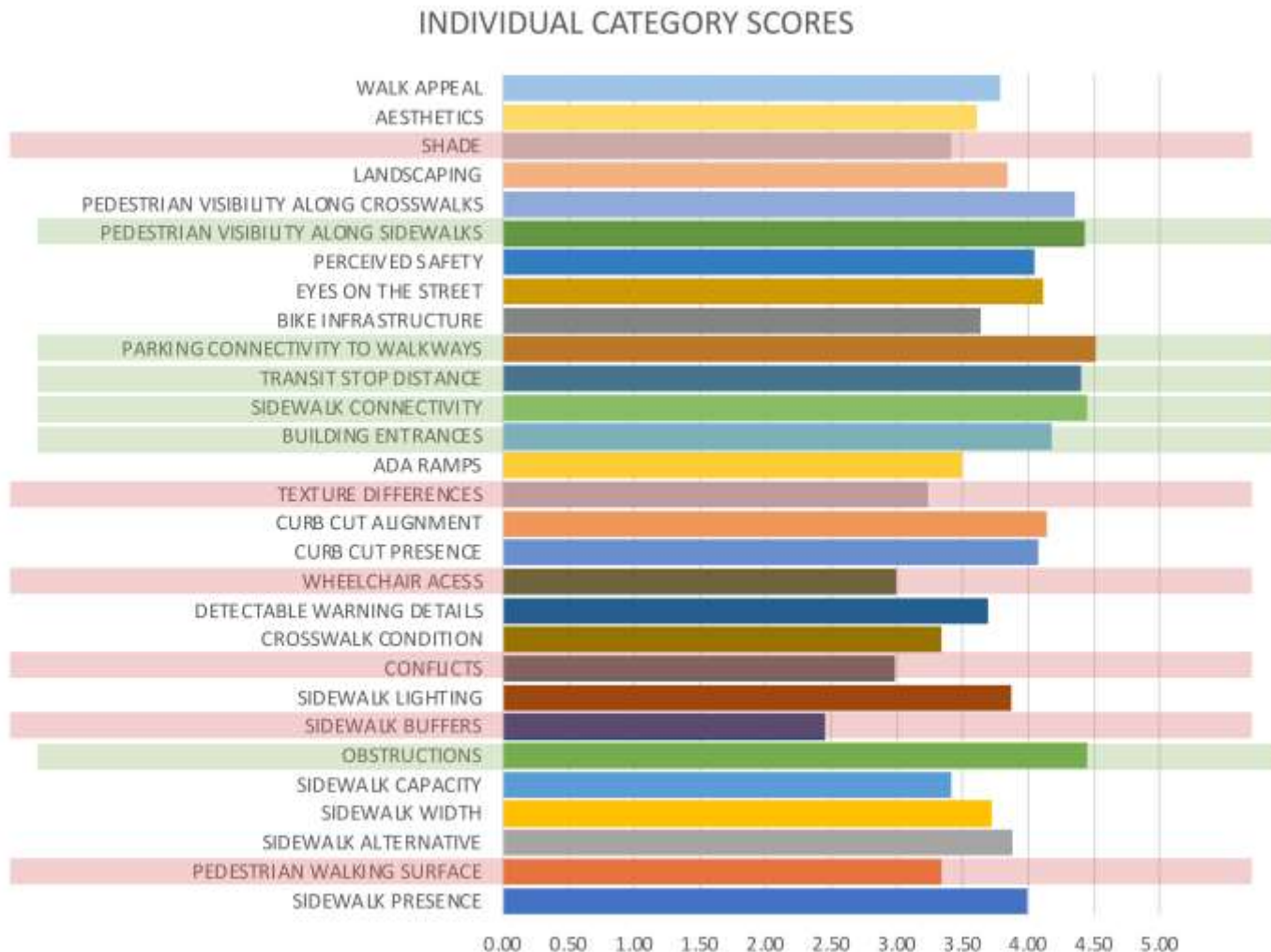


Lack of curb cuts and detectable warning details

MAP BLOCK	SCORE
19	33.3/100
23	53.3/100
24	44.6/100

- Priority: Low
- Map blocks include Arboretum, Pollinarium, Dairy cattle Research Institute, Vacant lands, agricultural crops, Horticulture laboratory, President's house

INDIVIDUAL CATEGORY SCORES- GRAPH



High (Above 3.8/5)

Sidewalk Presence, Temporary and Permanent obstructions, Sidewalk Lighting, Curb Cut Presence, Curb Cut alignment, Building entrances, Sidewalk Connectivity, Transit stop distance, Parking connectivity, Perceived Safety, Pedestrian Visibility along sidewalks and crosswalks, Landscaping, Walk Appeal

Medium

Sidewalk Maintenance, Sidewalk Alternate, Sidewalk Width, Sidewalk Capacity, Crosswalk condition, Detectable warning details, Texture differences, ADA ramps, Bike Infrastructure, Shade, Aesthetics

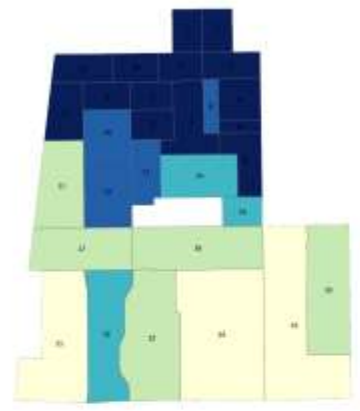
Low (Below 3)

Sidewalk buffers, Wheelchair Access, Pedestrian and Vehicular Conflicts

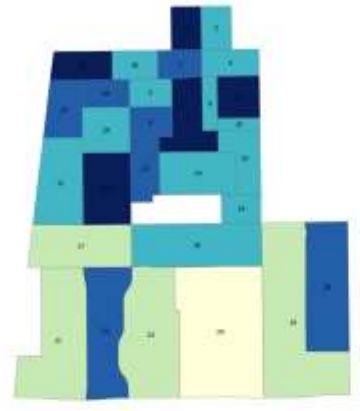
INDIVIDUAL CATEGORY SCORES - 1



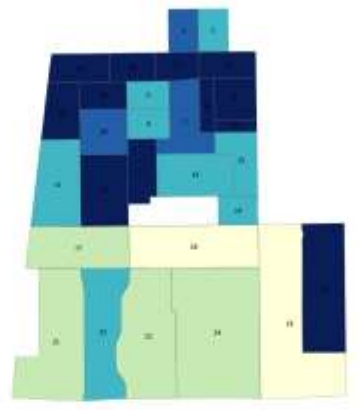
3.9/5 SIDEWALK PRESENCE



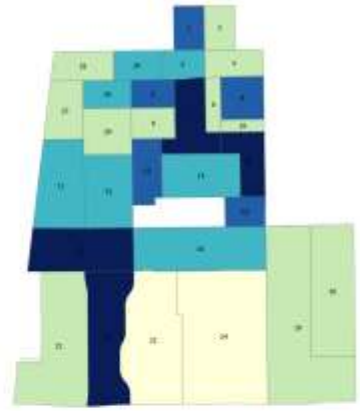
3.3/5 SIDEWALK MAINTENANCE



3.8/5 SIDEWALK ALTERNATIVE



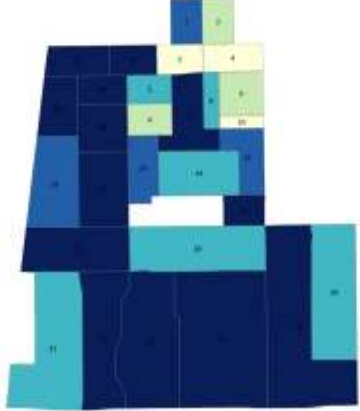
3.7/5 SIDEWALK WIDTH



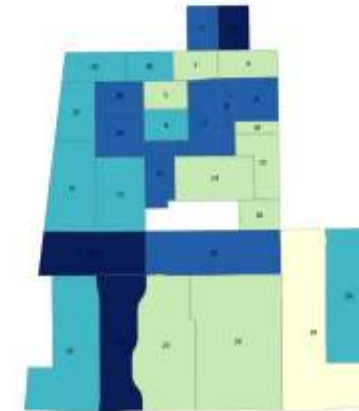
3.4/5 SIDEWALK CAPACITY



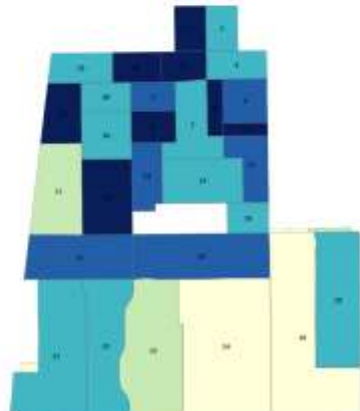
4.4/5 OBSTRUCTIONS



2.4/5 SIDEWALK BUFFERS



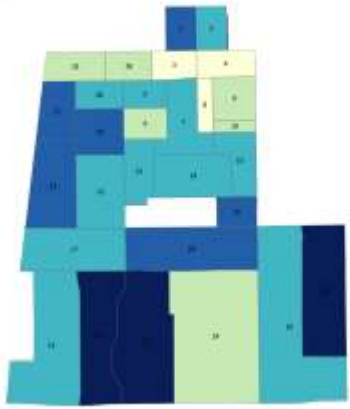
3.8/5 SIDEWALK LIGHTING



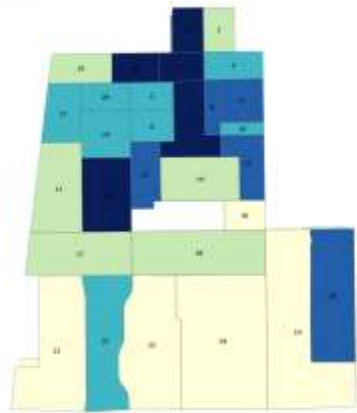
INDIVIDUAL CATEGORY SCORES - 2



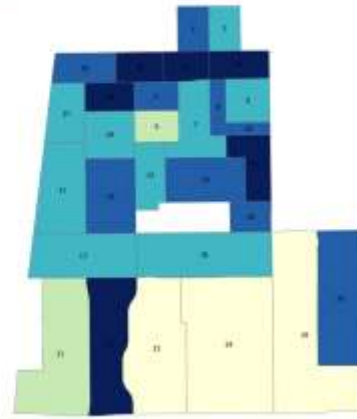
2.9/5 CONFLICTS



3.3/5 CROSSWALK CONDITION



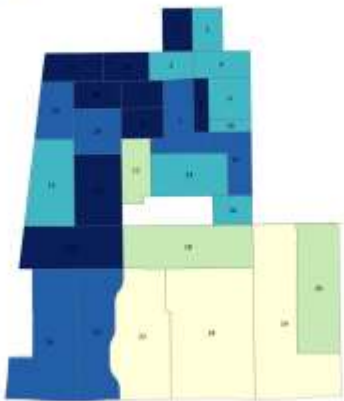
3.6/5 DETECTABLE WARNING



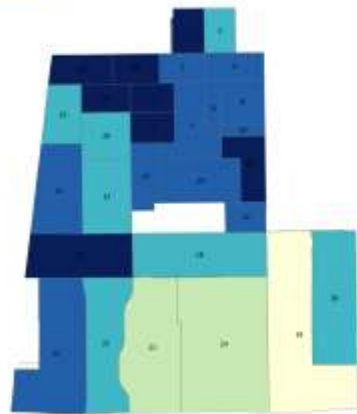
2.9/5 WHEELCHAIR ACCESS



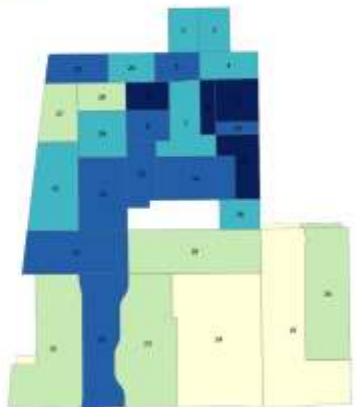
4.0/5 CURB CUT PRESENCE



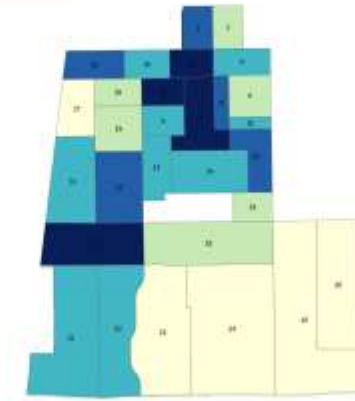
4.3/5 CURB CUT ALIGNMENT



3.2/5 TEXTURE DIFFERENCES



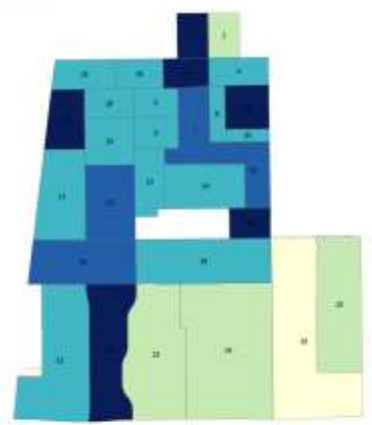
3.5/5 ADA RAMPS



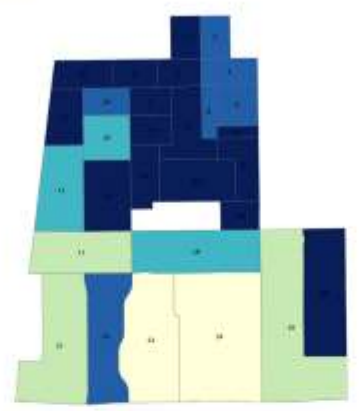
INDIVIDUAL CATEGORY SCORES - 3



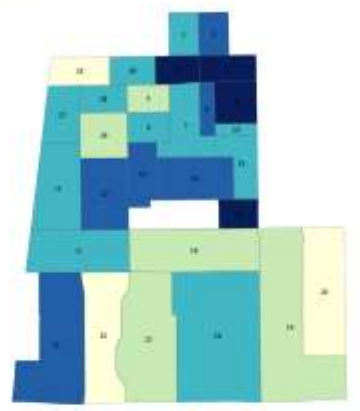
4.1/5 BUILDING ENTRANCES



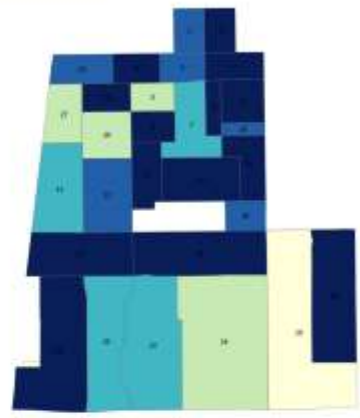
4.4/5 SIDEWALK CONNECTIVITY



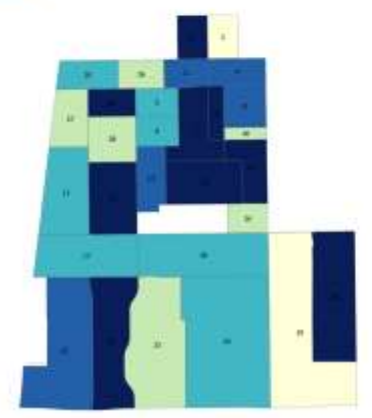
4.4/5 TRANSIT STOP DISTANCE



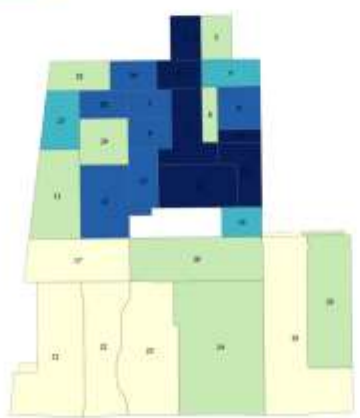
4.5/5 PARKING CONNECTIVITY



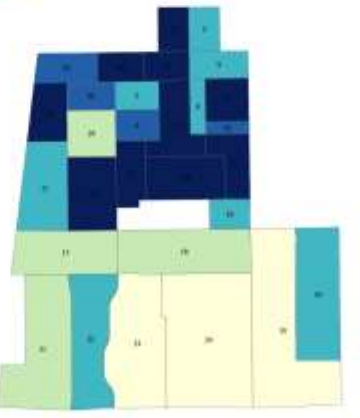
3.6/5 BIKE INFRASTRUCTURE



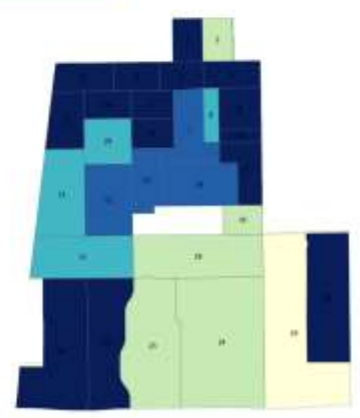
4.1/5 EYES ON THE STREET



4.0/5 PERCEIVED SAFETY



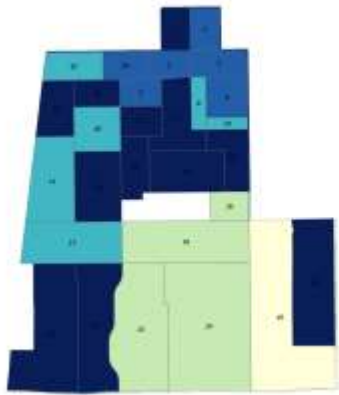
4.4/5 PED. VISIBILITY ALONG SIDEWALKS



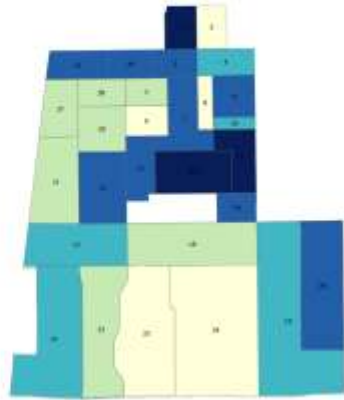
INDIVIDUAL CATEGORY SCORES - 4



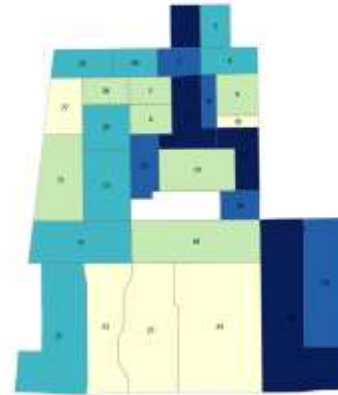
4.3/5 PED. VISIBILITY
ALONG CROSSWALKS



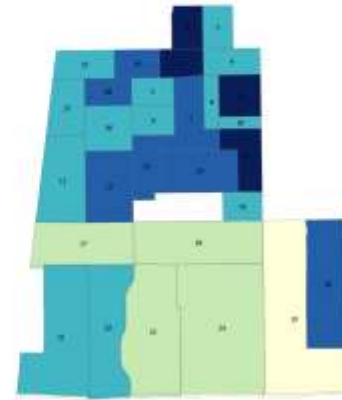
3.8/5 LANDSCAPING



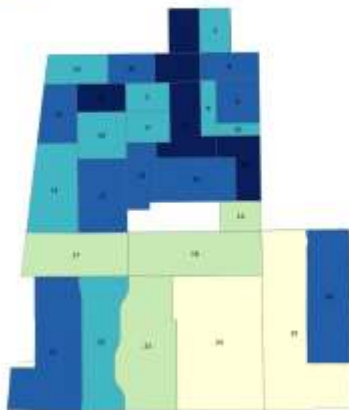
3.4/5 SHADE



3.6/5 AESTHETICS



3.8/5 WALK APPEAL

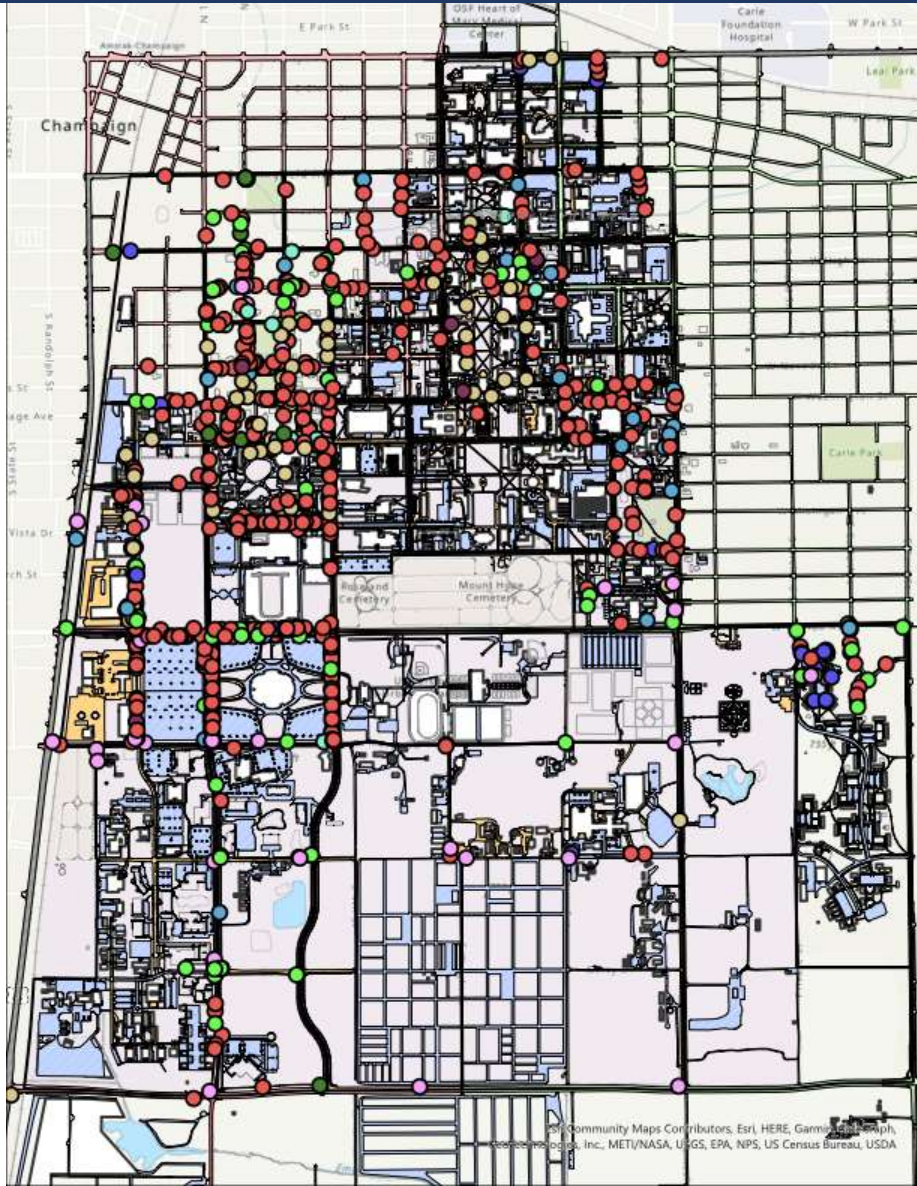


 Sidewalk Presence, Temporary and Permanent obstructions, Sidewalk Lighting, Curb Cut Presence, Curb Cut alignment, Building entrances, Sidewalk Connectivity, Transit stop distance, Parking connectivity, Perceived Safety, Pedestrian Visibility along sidewalks and crosswalks, Landscaping, Walk Appeal







 Sidewalk Maintenance, Sidewalk Alternate, Sidewalk Width, Sidewalk Capacity, Crosswalk condition, Detectable warning details, Texture differences, ADA ramps, Bike Infrastructure, Shade, Aesthetics

 Sidewalk buffers, Wheelchair Access, Pedestrian and Vehicular Conflicts

DEFICIENCY REPORTING SURVEY RESULTS



DIVISION OF RESPONSIBILITY

-  Facilities and Services
-  Auxiliary
-  City of Champaign
-  City of Urbana
-  Village of Savoy
-  Champaign County

DEFICIENCY CATEGORIES

-  A. SIDEWALK ATTRIBUTES
-  B. TEMPORARY OBSTRUCTIONS
-  C. PERMANENT OBSTRUCTIONS
-  D. SIDEWALK MAINTENANCE
-  E. CROSSWALK MAINTENANCE
-  F. ACCESSIBILITY
-  G. CONNECTIVITY
-  H. WALK APPEAL
-  I. OTHER

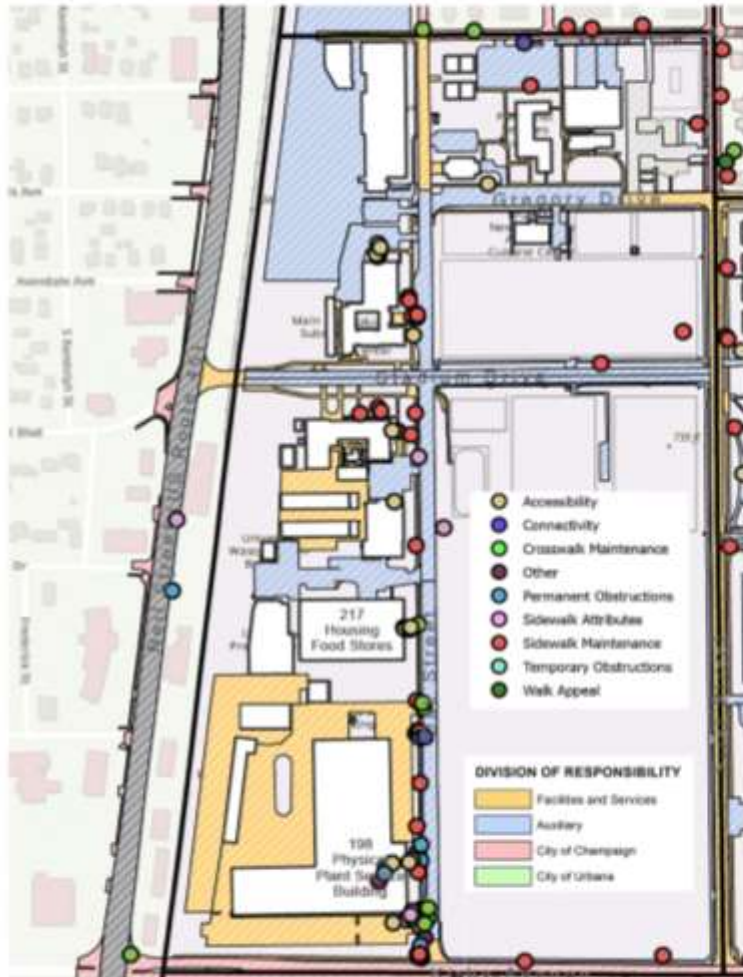
Deficiency points superimposed over Division of Responsibility map

Highest Deficiency categories:

1. Sidewalk Maintenance
2. Crosswalk Maintenance
3. Accessibility Issues

DEFICIENCY REPORTING SURVEY - SAMPLE

DEFICIENCY REPORTING SAMPLE



MAP BLOCK 11



DIVISION OF RESPONSIBILITY

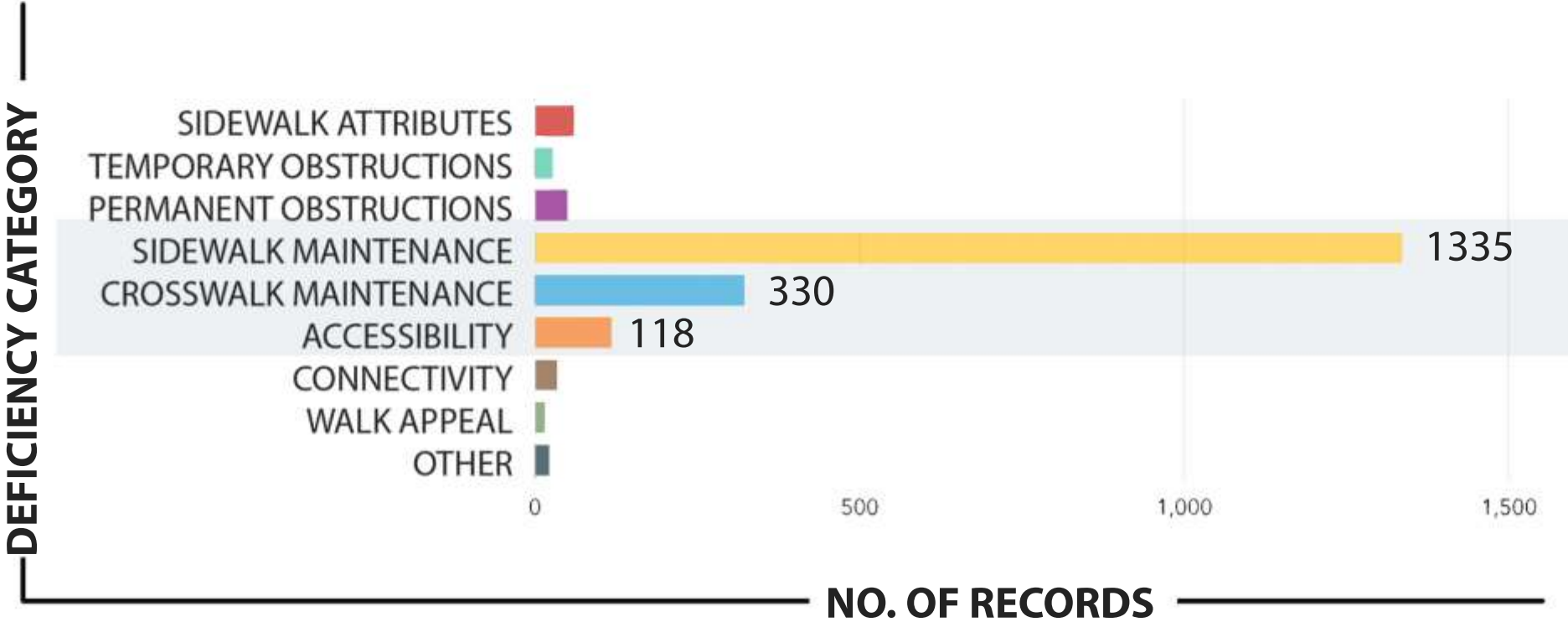
- Facilities and Services
- Auxiliary
- City of Champaign
- City of Urbana
- Village of Savoy
- Champaign County

DEFICIENCY CATEGORIES

- A. SIDEWALK ATTRIBUTES
- B. TEMPORARY OBSTRUCTIONS
- C. PERMANENT OBSTRUCTIONS
- D. SIDEWALK MAINTENANCE
- E. CROSSWALK MAINTENANCE
- F. ACCESSIBILITY
- G. CONNECTIVITY
- H. WALK APPEAL
- I. OTHER

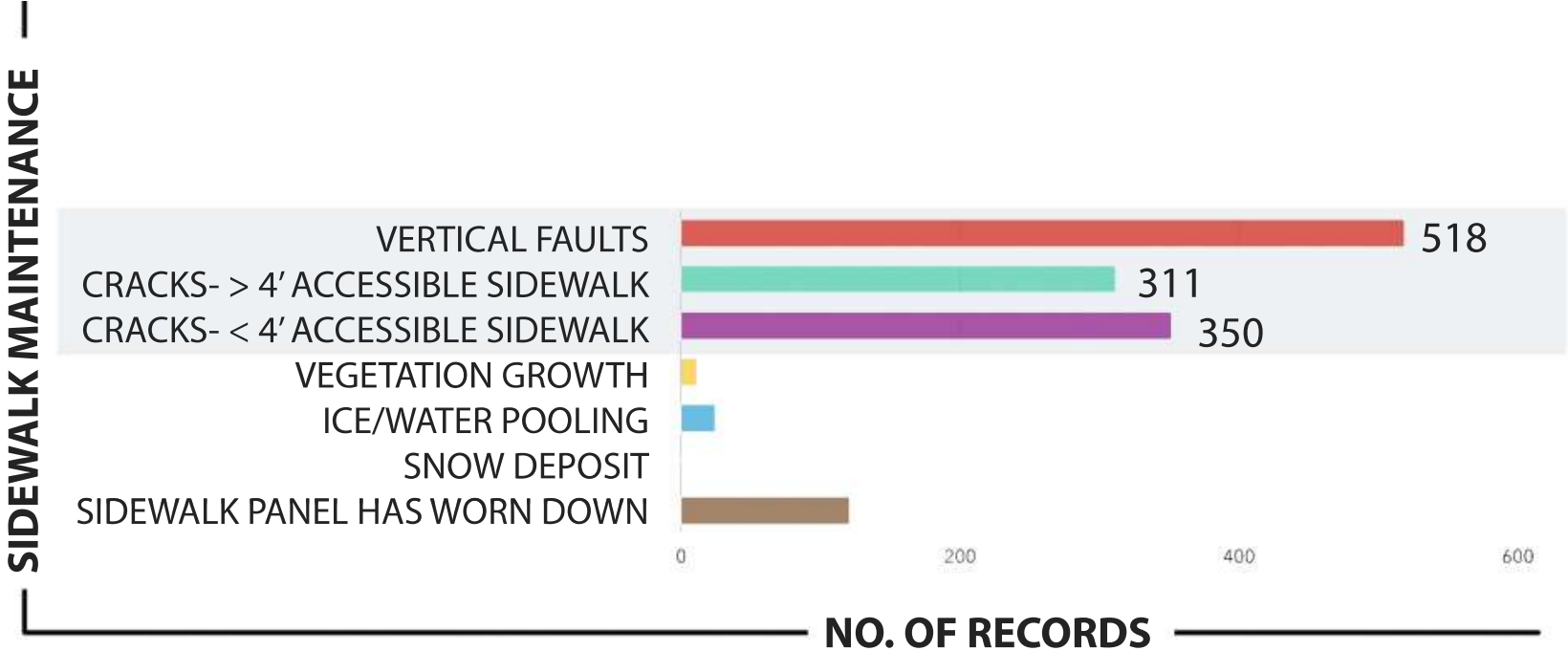
TOP 3 DEFICIENCY CATEGORIES

The most dominant form of deficiency identified fell under **'Sidewalk Maintenance'** with over 1330/2000 points recorded. **'Crosswalk Maintenance'** stands second with over 330 data points followed by **'Accessibility issues'** with 118 points recorded.



Bar graph showing Deficiency category count

SIDEWALK MAINTENANCE



Vertical Faults (Count: 518)



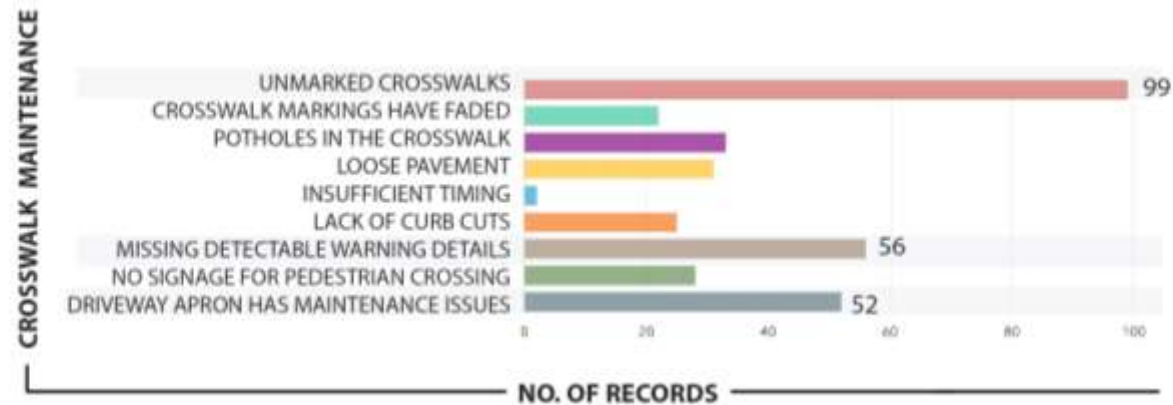
Cracks- more than 4 feet of accessible sidewalk (Count: 311)



Cracks- more than 4 feet of accessible sidewalk (Count: 350)

CROSSWALK CONDITION

Crosswalk maintenance was the 2nd highest Deficiency category identified. Within the category, the highest reported issues were: Unmarked crosswalks, Lack of Detectable warning details and Maintenance issues in the Driveway apron.



Bar graph showing Crosswalk maintenance Deficiency category count



Faded crosswalk markings



Unmarked crosswalks



Driveway apron has maintenance issues

RECOMMENDATIONS



PEDESTRIAN FACILITIES AND DESIGN

- Ensure sidewalk presence on both sides of the street
- Conduct periodical maintenance of sidewalk surfaces
- Provide amenities along sidewalks at regular intervals to support pedestrian walking trips
- Determine sidewalk widths proportionate to peak hour traffic
- Remove temporary and permanent obstructions



PEDESTRIAN AND VEHICULAR CONFLICTS

- Introduce traffic calming measures in high conflict zones
- Separate pedestrian, bicycle and vehicular traffic by assigning paths for each



CROSSWALKS

- Paint unmarked crosswalks
- Repaint faded crosswalk markings
- Start maintenance measures to tackle top-layer deterioration of crosswalks

RECOMMENDATIONS



UNIVERSAL ACCESSIBILITY

- Design each section of the sidewalk network (paths, building entrances, transit stops, parking etc.) to facilitate wheelchair access.
- Install curb-cuts with detectable warning details (truncated domes) at every crossing
- Make sure curb-cuts align and allow a smooth transition from the sidewalk to the crosswalk
- Ensure presence of texture differences along sidewalks that abut streets
- Ensure clear width of new ADA ramps to be 3 feet (36")
- Install handrails along ADA ramps
- Design building entrances to handle peak pedestrian traffic



TRANSIT STOPS

- Increase frequency of transit stops in low scoring map blocks
- Increase the number of DRES transit stops across the campus
- Improve transit stop amenities
- Complete the bicycle network across the campus



SAFETY

- Improve street vibrancy and liveliness by introducing multiplicity of spaces and mixed uses
- Introduce Traffic calming measures in High conflict zones identified by the audit

NEXT STEPS

- Share the results with collaborating units and entities
- Publish the Walkability Audit results
- Share and vet the results for Deficiency Reporting with the collaborating departments responsible for the upkeep of the sidewalk network
- Use the results to create a Campus Walking Master Plan to preserve, maintain, and improve the walkway network on-campus



Sweatshirt design for Volunteer incentive
-Walkability Audit 2021-22



**Thank you!
Questions?**