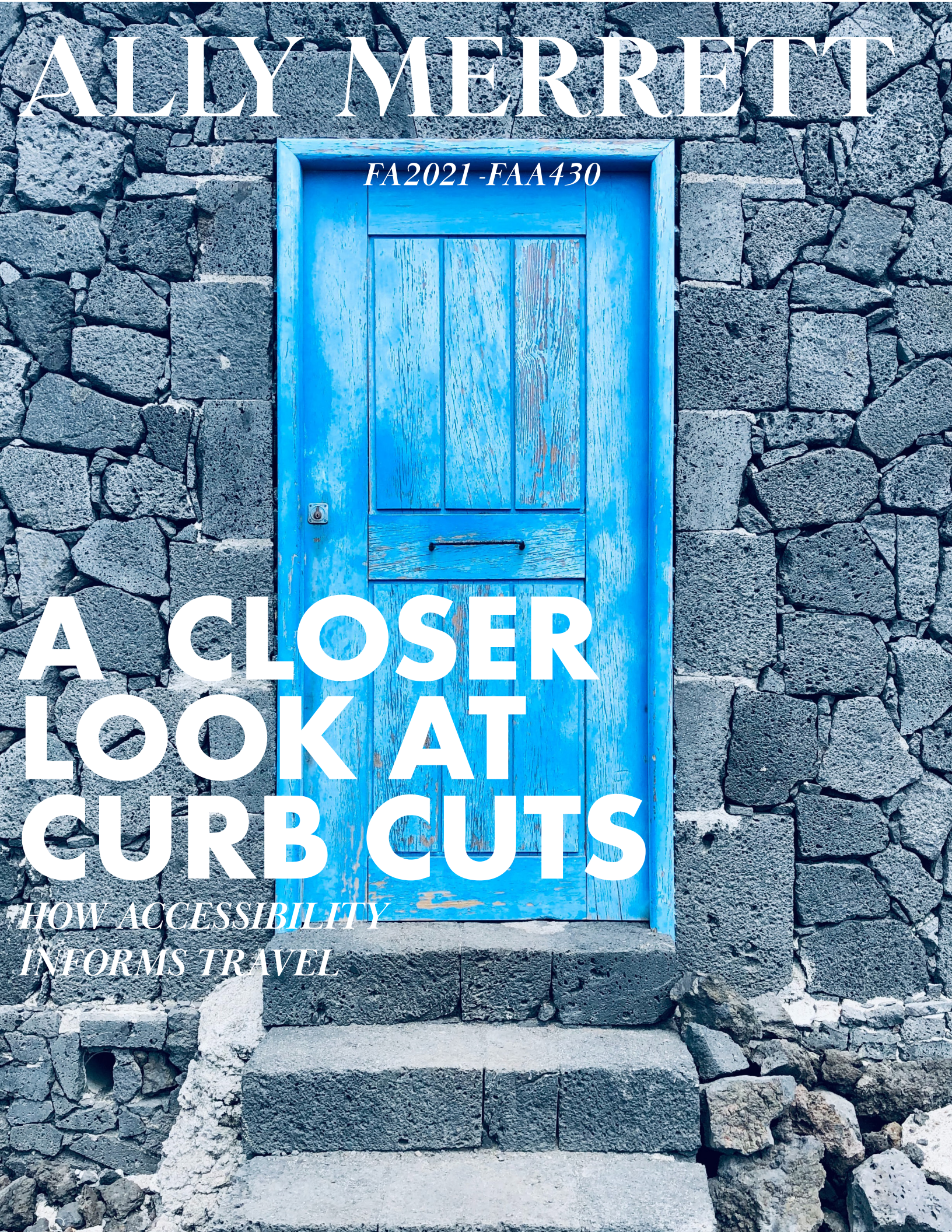

ALLY MERRETT
FA2021 -FAA430
A CLOSER LOOK AT CURB CUTS
HOW ACCESSIBILITY INFORMS TRAVEL

Key words in blue. Cover photo: An old door with no ramp. Source: unSplash

Signed into law in 1990, the Americans with Disabilities Act is a civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life. The purpose of this law is to set all people on a level playing field, whether through a ramp, wider walkways, or effective policies.

Accessibility should be viewed as a human right, especially when around 15% of the world's population lives with disabilities. Instead of putting the ostensible burden of designing accessibly on the directly affected communities, accessibility should be implicit in all scales of design.

The United States on paper views accessibility as a human right but in actuality views it as a perk, a privilege, and an obligation of local organizations. This disconnect can partly be solved through proliferation of accurate research, educating the public.

When a government moves beyond simply installing curb cuts to mandating fully accessible transportation, does it also become happier in terms of increased social capital? Everyone is a beneficiary of accessible design via the lens of neighborhood analysis: parents pushing strollers, movers carrying boxes, and elderly folk using walkers all gain a much-needed ramp. Why are more cities and states not adopting these universal designs?

"This study aims to look locally and analyze the ways in which The University of Illinois Campustown, an eight-block densely urban area, addresses accessibility and how those choices teach a resident to navigate the community."

This study looks locally and analyzes the ways in which The University of Illinois Campustown, an eight-block densely urban area, addresses accessibility and how those choices teach a resident to navigate the community.

What to the untrained eye can seem like infinitesimal interventions can become the key to uniting a neighborhood. This study also aims to research the larger economic and social impacts of increased accessibility at the neighborhood scale.

The University of Illinois is a great case study because it was the first campus to introduce accessibility standards.

As people with disabilities are the world's largest minority group, improving accessibility is the key to better understanding this stakeholder group. Would improved access create a more equitable community?

GREEN STREET IN CONTEXT

Although there are many distinct pockets of campus, Green Street serves as the central hub for all students, regardless of major, year, or background. UIUC offers expansive opportunities throughout campustown. Green Street is the best place come together and talk about them.

The blue area is the area of Green Street represented in the study.

Although the Campustown area is very large, Green Street is an important microcosm of student life.

Source: Google Maps

GREEN STREET IN ACTION

Understanding the local context is important so that a reader can know how the space is utilized. Understanding the immediate context is important so readers can know what needs to be fixed.

Source: Google Maps

1 Panda Express and Alma Mater

This is an extremely busy intersection with a timed diagonal crosswalk. Is this enough time to cross three lanes? Should there be line overflow for Alma and Panda Express? What about painted lines in the street?

2 McDonald's and Spoon House

These two popular restaurants have a large setback which offers shelter for people. Could this space be further utilized to build social capital because of the amount of unused space?

3 South 6th Street Crossings

The historical preservation society strikes again as each of the four corners of the South 6th Street intersections have the original brick with copper inlay plaques. Could these be updated to increase mobility or to represent a changing campus? This could be an opportunity to dedicate a street corner to an important social justice figure on campus! This is also a timed diagonal crosswalk. This makes the intersection much busier.

4 Potbelly's Outdoor Seating

A lack of benches and public seating is one of the many negatives that metastasizes throughout Green Street. As an accessibility measure, public seating is critical! Potbelly's offers an oasis made of black painted steel.

5 Walgreens Entranceway

An essential store for many students and community members to get toiletries and medicine, the ramped entranceway can be dangerous in the winter when it is iced over. Is there a solution?

6 Burrito King and Apartment Complex

A deeply loved institution, Burrito King provides great visual variety with a sign and large windows. However, above their restaurant sits... nothing. A very boring brick wall is tall and imposing.

7 Four Breakfast & More Fenced Area

What is this area? It is the perfect area to have public art, public seating, or something to attract patrons to the restaurant. However, they have chosen a single flag pole and imposing high fences. This should change!

8 309 East Green Street Apartments

In a densely urban area, the apartment complex 309 East Green chose to limit their parking availability so that they could have green space. This area makes it much easier to have pets and to breathe a bit of fresh air.

9 The Red Lion and Wing Stop

On space optimization for safety: There is a shallow offset from the street in front of The Red Lion, where patrons' motor skills are not always in tact. Conversely, Wing Stop needs structured space to inform a safer use.

GREEN STREET UP CLOSE

Green Street, a commercial hub of campus town is also popular destination on the UIUC campus due to the bars, restaurants, and shops. Below: map of where the photo analysis will take place.

By doubling the offset, you make much more public seating space! This space is not being utilized very well because of all the empty space. There is much negative space between the building and the street buffer, creating uncomfortable distances between travelers. While still maintaining enough space for travel, this space could be compacted by offering more green space and public seating in front of these restaurants. Although there is more intimate space through the stairway, there is still no seating up there!

Source: Ally Merrett

Why couldn't this be a nice seat? People watching is a critical part of city life and for those that don't want to go into the abutting Starbucks to do that, this area could offer the perfect place to sit. Even though you could sit, there is no back support which makes it uncomfortable and even dangerous. Because there is no prescribed use, it's more likely that people will use this area unsafely.

Making this area green would have been so easy and simple. Both grass and gravel provide drainage and are visually appealing; however, the grass is the better option because it is soft and provides the street-scape with a variety of surfaces. It could also provide a home for wildlife. Birds, squirrels, and bugs all utilize grass as vegetation or a habitat -- why would you limit this? Especially when you have viewing space next to the area, the natural wildlife could provide more visual stimulation for the guests at the Starbucks. Taking a wide area of land that could provide an intimate travel network between two city blocks and fencing it off and covering it with gravel is a horrible idea.

"These intimate lanes can create a secondary network in the city, with their own separate identities."

-Mary Fialko and Jennifer Hampton on alleys

Source: Ally Merrett

An important thing to consider is, "When traversing this area, wouldn't it be nice to sit down and enjoy some food, some drinks, or some nice conversation with a friend?" Why couldn't this be a place to step out and sit? Children and the elderly often move at slower paces and need shade, places to rest, places to play safely, and places for people watching. Alleys are also great for unique experiences such as public art, vegetation, or even business side entrances. Put a few chairs out and you've got space for customers! But now all you have is rocks :(

A reflective window offers great visual variety for the street. This helps to make the area more inviting when you can see yourself. You can also see your surroundings and peer through the glass to see what's going on inside. This is a great feature of Green Street and one that should be present in more locations.

PRECEDENT STUDIES

By tracing both local and national efforts, I seek to ask, "What happens when members of the community are presented with the flaws of their environment?" Can I inspire change through a visual accessibility portrayal?

A research study conducted by Registered Student Organization (RSO) Design for America worked in conjunction with Open Doors Organization (ODO), an advocacy group promoting fully accessible travel and tourism, to research the University of Illinois campus to find accessibility issues. Over the course of three semesters, the students went through the human-centered design process. This means that they used a bottom-up approach to design by interviewing stakeholders, conducting initial, secondary, and analogous research, and going through an iterative design process.

At the end of this timeline, the students had three product ideas to assist with campus disability. They presented these ideas at the 2020 Health Make-a-Thon and were awarded money to continue their research. Although my research is not product focused, I plan to use their same style of investigative and emotional research.

Brooklyn, NYC.
Popular Washington Park and DeKalb entrance necessitates a curb cut.

A March 8, 2017 entry to the Brooklyn paper talks about the necessity of curb cuts for Brooklyn residents. It cites the universal design benefit that those with strollers, delivery people, and people with any kind of walker gain mobility from a curb cut. The lack of this curb cut makes patrons at the weekly farmer's market travel across the park before eyeing the stalls. Does this put them in a worse mood, less likely to buy, diminishing the local economic capital of the city?

The Americans with Disabilities Act states that any new sidewalks built must include a curb cut. However, those built before 1990 are grandfathered in. This article explores the depth of difficulty in installing curb cuts in some spaces, such as when the sidewalk has octagonal brick or when the sidewalk is on the Historical Preservation List.

Source: Brooklyn Paper

"Walkability 101: A Multi-Method Assessment of the Walkability at a University Campus" evaluates perceived campus walkability as an environmental support for physical activity at a Southeastern university. There were ten routes in this study, and each was analyzed with 24 walkability criteria. Although this study does not directly apply to my research because it is more focused on physical activity attainment rather than exploration, it is useful to me because there is a lot of information about perception of environmental audits from students. This is important so that the students can think critically about their town and to understand their campus as a dynamic place.

Source: Youtube

Champaign, IL
Environmental support (curb cuts, seating) in action at the intersection of Green and Third

PRECEDENT STUDIES, CONT'D

State Street on the University of Madison-Wisconsin's campus is a great example of the campustown archetype: wide and walkable streets, no car traffic, and a densely organized commercial strip.

Although the University of Illinois often outranks the University of Wisconsin-Madison in academics, chiefly UIUC's world-ranked urban planning program, UW Madison ekes out victory in its campus layout. Aided by a military axis design connecting the state capitol building and the campus, State Street is the great bridge of students in this college town. Filled with over 150 commercial stops, State Street offers an extremely diverse array of shopping destinations. It is also physically accessible, as the seven-block stretch is blocked off to civilian traffic and only allows emergency vehicles to travel down the road. There are wide bike lanes that support the college student lifestyle and plentiful outdoor seating (however, a Wisconsin winter is not as supportive of this).

The lack of cars is extremely inviting to students traveling down the corridor because they are not challenged by any modality differences. Furthermore, there are bright, colorful, and inviting signs and shop windows that create a sense of coziness. State Street maintains a balance between imposing and exciting well through eye-catching signage

Source: University of Wisconsin–Madison

STATE STREET

On the University of Madison-Wisconsin Campus

A 1978 candidate for the governor of Wisconsin once called Madison, WA, "30 square miles surrounded by reality." Austin, TX's motto is "Keep it weird!" How does UIUC receive a whimsical moniker like this? These reputations are so valuable to the sustainability of a university. Presenting oneself as hip, fun, and inviting are key components of social capital building. By embracing the quirkiness of college students, Madison creates a sustainable city.

Source: University of Wisconsin–Madison

Another way that State Street is able to create a sustainable, accessible, and inviting space is to hold events that welcome community members to take back the streets. Pictured above is State Street's annual "FreakFest" event, where students flood the street in their Halloween costumes to celebrate. This is important as they do not have to fear any traffic as they peruse the shops and bars late at night.

Although Green Street has many venues to choose from for night life, they are surrounded by a busy street and dangerously fast traffic. By widening the sidewalks and cutting off traffic completely, State Street offers a higher level of accessibility for students. This is a very sustainable choice because students pay less for gas, get in fewer accidents requiring medical service, and spend longer in the downtown area, promoting the local economy.

Source: University of Wisconsin–Madison

Wisconsin's State Capitol Building at the end of State Street

Pictured to the left is the State Capitol building which lies at the end of the street connecting to the UW campus. This is an important element of security called CPTED (Crime Prevention Through Environmental Design). Even though there are no government employees watching, the feeling of always seeing the government as you travel the street is a latent level of security that reminds travelers that they should follow the law. Similar to installing street lamps, environmental security is important for sustainability as people who feel safe will spend more time in public. By creating higher levels of safety through urban planning, a city can be more socially sustainable.

RESEARCH METHODS

Below are the ways in which I plan to survey the student body and community members to figure out how they define accessibility and how traversing the Green Street area makes them feel.

INTERVIEWS:
- Conducted, recorded, and transcribed
- People on the street and recollected experiences

PHOTOS
- Five photo grids
- Spectrum of high- to low- accessibility
- Diagrammatic views

MAPS
- Annotated map of possible interventions

CASE STUDIES
- Both at colleges and in neighborhoods
- National vs. International

A skateboarder takes advantage or the smooth pavement, utilizing his ability to traverse the neighbor an whatever medium he chooses. Source: Medium

RESEARCH METHODS, CONT'D

The combination of interviewing students, mapping the area, reviewing case studies, and creating a visual representation through a photo grid will help me to crystallize my analysis of Campustown accessibility.

The research methods that I plan to use for this project are ones that I am extremely practiced in. Having completed a bachelor's degree in Urban and Regional Planning from the University of Illinois at Urbana-Champaign, I am well-versed in map making for communicative purposes. The past four years of study have trained me to analyze a neighborhood with a critical eye and I want to pass along this periscope so that others may see the way that a city informs travel. A neighborhood with accessibility is a neighborhood that has sustainability. By increasing access to places that were previously cumbersome to go by, a neighborhood can increase its social capital and better utilize the skills of its citizens.

There are more gains to be made than purely social; accessible neighborhoods are easy to travel through, requiring fewer resources to get from point A to point B. This lessens the burden on the local economy and the surrounding environment. By making travel simpler, patterns arise that can be better understood by wildlife, leading to a more symbiotic relationship.

By interviewing students walking up and down Green Street, I can better understand their travel needs. Using my design-thinking skills, I will lead a short interviews with them to understand their feelings about Campustown. By beginning with some "get to know you" questions, I can establish a rapport with my participant. After we are comfortable with each other, I will begin to ask deeper questions that get at the emotional level of Campustown travel: "what makes you happy about campus?" "What parts of Campustown make you feel excluded?" Through these conversations, I plan to more deeply understand the parts of campus that repel college students on a physical level AND emotional level.

The photo grid that I put together from my travels through Campustown will help in these interviews if the participant isn't as familiar with campus as I am. I can show them the parts of Campustown that are empirically inaccessible (heaving sidewalks, lack of curb cuts) to then inspire areas that they feel are inaccessible. If the participant has photos of inaccessible places on campus, I could even add them to my repertoire. I will collect all these photos and organize them in many different ways to tell different stories about the area,

A combination of interviews and the photo analyses will lead to a map that I will create of Campustown that shows the areas of high accessibility and low accessibility. This map will be heavily diagrammed upon so that there are many different points that I can illustrate. After my research, I will submit my map and research to the city planning organization of Champaign and a university body for them to look at and, hopefully, make changes accordingly! The Urban Planning department could help me get in contact with some planners because some faculty members are also on the local planning commission. From there, I would talk to the university! I hope to make the university a more sustainable place through this project.

(Left) A view of the sidewalk of Campustown at the University of Illinois at Urbana-Champaign

SAMPLE INTERVIEW QUESTIONS

- What is campus missing in terms of accessibility?
- How do you think Green Street could improve navigation?
- What groups would these changes help?
- Would these changes exclude any groups?
- Is your hometown accessible?
- What makes it so?
- What's the place you've been to that was physically the easiest to navigate? Why?
- What is your favorite spot on campus? What makes it so nice?

SUSTAINABLE STREETS

Accessibility is a critical part of sustainability. This extends to much more than just physical ability: creating a space that is open to all participants creates a feeling of welcomeness necessary for successful community engagement.

Accessibility is a key factor in sustainability, both the built environment and the natural one; however, there has long been conflict between the needs of mobility restricted-design and design approaches directed to safety or sustainability, sometimes both (Tyler, 2017). N. Tyler and the *International Association of Traffic and Safety Sciences* present a graphic (right) to represent the challenges that a modern city faces: *How can you design cities that are more equitable, thereby more sustainable?*

Furthermore, attention must be paid to macro-level (vision for city) and micro-scale (design of transportation cities) in order to be truly sustainable. *Most* importantly, designers need clear definitions for the key drivers of their project...

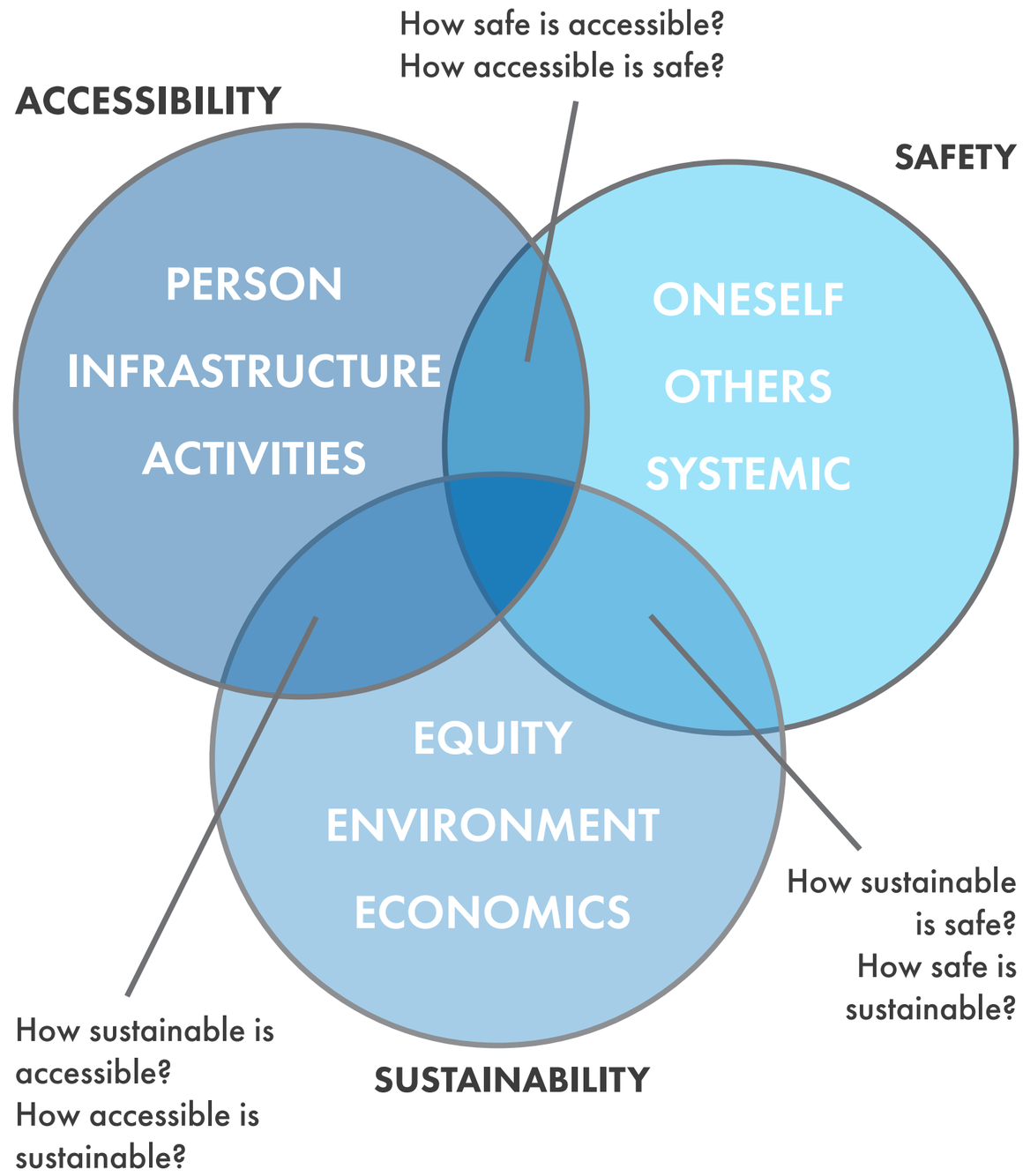
Safety: The ability of a society to provide an environment where the level of risk is acceptable to complete desired activities.

Accessibility: The ability of a person to reach and undertake the activities they desire and require?

Sustainability: The ability of a society to thrive, given the interactions between the equity it affords its population, the impact on the environment, and the ability of the economy to support the future.

These three metrics are all deeply interwoven yet are such disparate actions, thus it can be difficult to see the connections.

This study is very relevant to my capstone project because of its pragmatism in asserting the great truth of urban planning: *large-scale change is near impossible, but compromise is a solid plan B.* A feasible, sustainable city is gestalt city, comprised of thousands of mini-compromises that mitigate conflict between the three themes, asking, *"Which theme can be left unfulfilled?"*



How acceptable is it to be *outside* the center zone?

CAPSTONE TIMELINE

For the Spring '22 semester, I will follow this timeline to be sure that I can create a worthwhile project that makes a difference in the community and provides me with a strong understanding of the field in which I'm working. This timeline will also hold me accountable to keep up with deadlines so that I can complete the project on time.

RESEARCH & PREPARATION
(JANUARY - FEBRUARY)

What does Green Street look like?
Beginning photo analyses.

Case Study Analysis
How have other cities and universities tackled this problem?

Question Time
Formal interviews are set up and questions are finalized.

INTERVIEWS & PHOTOS
(MARCH - APRIL)

Smile!
Photo analysis continues and is guided by interviews

Tell Me More...
Formal and Informal interviews are conducted

COMPILATION
(APRIL - MAY)

Coalescence
Formatting of interviews and collection insights

Where?
Map of accessibility spots is created

Finishing Touches
Insights, map, and photo grid is created

ANNOTATED BIBLIOGRAPHY

By collecting a variety of sources for my project, I am able to learn from the different perspectives of researchers in this topic area. I used many different media types, such as photos, videos, academic articles, and more.

Braille directions on handrails in the award-winning CapitaGreen office block

Source: The Guardian

ACADEMIC ARTICLES

Alhajaj, Nawaf, and Farouk Daghistani. "Hybrid Method for Measuring the Accessibility and Safety of Students' Walking Routes in Car-Dominated Campuses." URBAN DESIGN International 26 (March 1, 2021). https://doi.org/10.1057/s41289-020-00149-z.
This study looks at 4 spots in King Abdulaziz University campus in Saudi Arabia and asks students to rate the accessibility and frequency of paths taken on a 5- and 3-point Likert scale. This study effectively highlights walking routes that require improvements, and administrations worldwide can adopt the method to plan and manage campus facilities. It is such an important study because of the strong correlation between students' mental health, performance, and acuity and physical movement. This study relates to my project because it is looking at campus level accessibility. Furthermore, it makes a proposal to the university for which spots are immediate interventions.

Bartshe, Melissa, Courtney Coughenour, and Jennifer Pharr. "Perceived Walkability, Social Capital, and Self-Reported Physical Activity in Las Vegas College Students." Sustainability 10 (August 25, 2018): 3023. https://doi.org/10.3390/su10093023.
This study begins with a shocking statistic: College students are a vulnerable population whose inactivity rates exceed those reported by U.S. adults. This study wanted to analyze the relationships between perceived neighborhood walkability, social capital, and meeting physical activity recommendations. The findings in this study confirmed that social factors are an important health determinant in achieving health recommendations and increasing perceived walkability.

Brelsford, Christa, Taylor Martin, Joe Hand, and Luís Bettencourt. "Toward Cities without Slums: Topology and the Spatial Evolution of Neighborhoods." Science Advances 4 (August 1, 2018): eaar4644. https://doi.org/10.1126/sciadv.aar4644.
This study aims to show that it is possible to diagnose systematically the central problem of slums -- the lack of spatial access and related services. This is done through a topological analysis of neighborhood maps and resolved by finding solutions to a sequence of constrained optimization problems. I was very intrigued with this study because I had never thought about how to optimize slums. They claim that the key to bettering a slum is creating a street network because this provides universal access at minimal disruption and cost. If a neighborhood is created out of "accesses" and "places", there must be access to both of these. The key to creating a more locally-preferential organization is to create more accesses.

Dehghanmongabadi, Abolfazl, and Şebnem Hoşkara. "Challenges of Promoting Sustainable Mobility on University Campuses: The Case of Eastern Mediterranean University." Sustainability 10 (December 18, 2018): 4842. https://doi.org/10.3390/su10124842.
This study operates through the lens of sustainability which is super important. The authors claim that for a university to be successful, a university must be sustainable, especially in something as big as transportation. The important vocab in this study is TDM (transportation Demand Management). this is the promotion of using active strategies as well as commuters' propensities related to active modes of transportation at the EMU (eastern Mediterranean University). This study used both quantitative and qualitative measures. This study asserts that the rise of private automobile use is directly responsible for the lack of appropriate infrastructures and strategies for shared other modes of transportation.
This study is useful for my research because it covers travel around campus and to / from campus. It also outlines 5 criteria for achieving a sustainable transportation system on a college campus.

Fialko, Mary, and Jennifer Hampton. "Green Alley." National Association of City Transportation Officials, 24 July 2015, https://nacto.org/publication/urban-street-design-guide/streets/green-alley/.
This article is a primer on the importance of alleyways in cities. They provide shade, shelter, and a place away

form the hustle and bustle of a busy city street. Many cities do not use them as effectively as they should, whether it's covering them up, fencing them off, or using them for storage. An alleyway is an important artery of a city that can provide intimate travel networks, private space to commune, or places for great unique experiences, like art or hidden entrances to commercial shops and apartments. This is important to my project because it talks about the importance of using every square inch of space available so that you're not leaving anything out of your design. Every space can find use and can even help neglected groups find accessibility.

King, Sarah B., Andrew T. Kaczynski, Jacqueline Knight Wilt, and Ellen W. Stowe. "Walkability 101: A Multi-Method Assessment of the Walkability at a University Campus." SAGE Open 10, no. 2 (April 1, 2020): 2158244020917954. https://doi.org/10.1177/2158244020917954.
This study evaluates perceived campus walkability as an environmental support for physical activity at a Southeastern university. There were ten routes in this study, and each was analyzed with 24 walkability criteria. Although this study does not directly apply to my research because it is more focused on physical activity attainment rather than exploration, it is useful to me because there is a lot of information about perception of environmental audits from students. This is important so that the students can think critically about their town and to understand their campus as a dynamic place.

Li, Anthony, Manaswi Saha, Anupam Gupta, and Jon E. Froehlich. "Interactively Modeling and Visualizing Neighborhood Accessibility at Scale: An Initial Study of Washington DC." In Proceedings of the 20th International ACM SIGACCESS Conference on Computers and Accessibility, 444–46. Galway Ireland: ACM, 2018. https://doi.org/10.1145/3234695.3241000.
This study analyses the ways in which accessibility measures have been incorporated into walkability assessments. This poster paper aims to explore the initial ways that a city can implement neighborhood accessibility models. Data sources such as Project Sidewalk API allows this study to dig deep into the Washington, D.C. area. This study will help the understand the ways in which planners have tried to improve accessibility in cities. It is also good because it incorporates different kinds of accessibility needs.

Manaugh, Kevin, and Ahmed El-Geneidy. "Validating Walkability Indices: How Do Different Households Respond to the Walkability of Their Neighborhood?" Transportation Research Part D: Transport and Environment 16, no. 4 (June 2011): 309–15. https://doi.org/10.1016/j.trd.2011.01.009.
This study, although not based around college campuses, provides insightful information on how different households perceive walkability. It then narrows different households into certain types to create a spectrum of activity levels. It is clear that socioeconomic factors play a role in this study but the researchers try to take this into account. This is an interesting lens to view walkability because I had not thought about stratifying data into smaller categories that deal with the type of trip, such as personal, work, or home related. This is similar to the University of Lisbon study in that the destination of the walk is an important factor.

Murwadi, Haris, and Bart Dewancker. "Study of Quassessment Model for Campus Pedestrian Ways, Case Study: Sidewalk of the University of Lampung." Sustainability 9 (December 8, 2017): 2285. https://doi.org/10.3390/su9122285.
This study uses a mixed-method of qualitative and quantitative methods to analyze the gap between campus pedestrian regulations and "reality." The study asserts that students' satisfaction with the university was lowered because of unsafe walking standards and this study aims to show how to raise this satisfaction level. This study outlines 5 factors for good travel: path material, absence of obstruction, continuity of path without significant elevation differences, aesthetics, and availability of shelter. The case study university for this study is The University of Lampug in Indonesia. This relates to my research very strongly because both are about campus navigation.

Tsai, Te-I. Albert. "Strategies of Building a Stronger Sense of Community for Sustainable Neighborhoods: Comparing Neighborhood Accessibility with Community Empowerment Programs." Sustainability 6, no. 5 (May 2014): 2766–85. https://doi.org/10.3390/su6052766.
This study tracks how pedestrian-oriented environments can promote stronger social interactions. Travel time is an important element in a city, especially for building social capital. This study tracks 19 neighborhoods in Taipei can create a feeling of community through density. The travel distances can then inform how governmental organizations can create empowerment programs. Compared with frequencies of casual meetings, it shows that a higher level of density can be more effective than providing more social programs.
The source will be beneficial for my research project because it looks at the density of neighborhoods and its emotional benefit. There are few studies that combine these two things. This will help me get a sense of the ways to combine urban planning analyses and social science.

Tyler, N. "Safety Accessibility and Sustainability: The Importance of Micro-Scale Outcomes to an Equitable Design of Transport Systems." IATSS Research, vol. 41, no. 2, 2017, pp. 57–65., https://doi.org/10.1016/j.iatssr.2017.06.002.
This article as extremely eye-opening for me as it concludes the real difficulty in planning for sustainability. I really enjoyed the way that this articles talks about sustainability because it is very practical. There is very little talk about "changing the world for everyone" and "being the next great American city." But there is a lot of mention of the dirge of bureaucracy present in the field of planning. The graphic that this article provided was very interesting and I feel like this put my project in a slightly new direction, that I could better understand the relationship between the three classic drivers of city design: economy, environment, and equity. I loved when it talked about how you have to make compromises to satisfy some groups and really makes the designer contemplate which groups they must prioritize and that some groups' needs directly conflict with the needs of others. Maybe true innovation comes from finding the perfect middle ground, or maybe it comes from creating loopholes in an effort to get everyone where they need to be.

Vale, David, Mauro Pereira, and Cláudia Viana. "Different Destination, Different Commuting Pattern? Analyzing the Influence of the Campus Location on Commuting." Journal of Transport and Land Use 11 (January 5, 2018): 1–18. https://doi.org/10.5198/jtlu.2018.1048.
This study analyzes the relationship between residential and workplace built environment and the commuting staff and students of the University of Lisbon. This study tries to go beyond the typical "built environment -- travel" dialectic and analyzes the dynamic between the destination and travel. Universities play an important role in cities as they are a common travel destination and can promote sustainable urban mobility for students and staff, as well as contribute health benefits, such as reduced depression and decreased risk of overweight and obesity.
The split between the types of trips made based on destination is an important delineation in my study. I really liked this study because it shows how differently students and staff traverse the campus, with students making many short trips and staff making fewer, larger ones. An important distinction is that the University of Lisbon is spread out over 9 different campuses.

Wajdi Wazzan. "Multi-Method Approach to Improving University Accessibility for Blind Students." Zero Project, November 10, 2021. https://zeroproject.org/practice/pra201548sau-factsheet/.
This study aims to make the university campus more accessible to students with visual impairments. This study was conducted at King Abdulaziz University (a public university in Jeddah, Saudi Arabia) and worked to implement physical objects that would help with navigation around the campus. The first implementations were tactile pathways. The next intervention was Bluetooth Beacons (which connect to your phone) and give you visual directions on where you should go.
This study is useful for my capstone project because it deals with campus navigation and disability accessibility. I was very intrigued by the Bluetooth beacons and am curious if they could be extrapolated for visitors to the campus or for freshman wandering the quad for the first time. There is also a part of the study that works with disability education which was very interesting.

VIDEOS

Andrew Koteras. [4K] Walking Downtown: Elgin, Illinois (Narrated) - City in the Suburbs (June 25, 2020). Point-of-View Documentary. Walkability. Elgin, IL, 2020. https://www.youtube.com/watch?v=NxkS09v5KJI.
This point-of-view style video walks the watcher through the history of Elgin, Illinois while providing accurate, engaging, and impressive information about the planning of the city. The narrator of this video is extremely well-informed on the subject and present the information in a very accessible way. I found this video because the narrator was very down to earth and made the viewer feel that they were right there in Elgin. The narrator expands upon the city's history and how the planning affected the way that the city grew into what it is today. I plan to use the same explanatory style in my research paper as the narrator so impressively uses in this video.

LOMAS ATX. Cycling Green Street - Champaign-Urbana, Illinois (4k60). CHAMPAIGN-URBANA, IL, 2020. https://www.youtube.com/watch?v=TKbBvVSF43Q.
Although I was unable to find this content creator's real name, his videos are anything but mysterious. An in-depth, albeit silent, tour of green street is presented in striking visual quality. This is an important resource for my study because it shows the landscape entering and exiting the Campustown area. It also presents the area from the perspective of a non-pedestrian. I only use a short section of this video but the great camera work of this piece is extremely useful for my study so I can understand the space from the bicycle perspective without having to ride.

———. UIUC Campustown Walk - Champaign, IL (4k60). CHAMPAIGN-URBANA, IL, 2020. https://www.youtube.com/watch?v=nRt1F3XUn8Q.
Similar to the previous citation, this video explores the Campustown area on foot. Green street is shown in a COVID environment. This video was shot on October 22, 2020, so it is not as busy as it currently is or was often in the past. This is not a large problem. There was much construction going on at this time that presented accessibility problems like blocking sidewalks and drowning out the sound of the crosswalk signal. These are important considerations for my study: at what time of day and year does my study focus? A year-round study is important but weather conditions present variable challenges. My study will include conditions for both the warm and cold weather seasons.

BOOKS

Christie Johnson Coffin and Jenny Young. Making Places for People: 12 Questions Every Designer Should Ask. 1st ed. Routledge, 2017.———. "Making Places for People: 12 Questions Every Designer Should Ask," n.d.
This book is a cornerstone of modern planning theory. It explores how architecture, planning, and landscape architecture all culminate to create a great and sustainably-designed city. Teaching about how cities were first built all the way to California compact school architecture. Throughout an exploration of 12 questions, the authors challenge traditional planning heuristics and propose a more human-centered focus. They argue that critical understandings of the relationships between the people and their built environments can inspire better design that contribute to health, human performance, and social equity. The questions that I am specifically interested in are "Whose place is this?", "Does this place balance community and privacy?", "What makes this place sustainable?", and "Who likes this place?"

Edward Glaeser. Triumph of the City: How Our Greatest Invention Makes Us Richer, Greener, Healthier, and Happier. 1st ed. Penguin Group, 2011.
This seminal book, written by world-renowned economist and urbanist Edward Glaeser, explores the history of cities, the rise of sprawl, the sustainability of green roofs, and everything in between. Furthermore, it provides case studies on each of these city attributes. The ones that I am the most interested in are the rise of sprawl so that I can compare sprawl travel to dense travel. I am also interested in the stratification of city types that Glaeser explores: the smart city, the well-managed city, the imperial city, the consumer city, and the growing city: how do each of these titles inform how people feel about their city, and how they traverse it? What barriers to these monikers present?

Roman Mars and Kurt Kohlstedt. The 99% Invisible City: A Field Guide to The Hidden World of Everyday Design. 1st ed. Houghton Mifflin Harcourt, 2020.
In The 99% Invisible City: A Field Guide to the Hidden World of Everyday Design, podcast host roman mars and co-author Kurt Kohlstedt zoom in on the various elements that make out cities work, exploring the origins and other fascinating stories behind everything from power grids and fire escapes to drinking fountains and street signs. The stories in the book play out like educational vignettes on urban planning. This book has taught me the historic reason that you see name plates embedded in brick streets. Although these may provide an uneven surface to travel across, many of them have historical preservation protection. Similarly, this book explores the placement of electrical poles, power boxes, and all other municipal objects that create the cityscape.

Sim Van Der Ryn and Stuart Cowan. Ecological Design. 1st ed. Island Press, 1996.
As a sustainable Design major, it only feels fair to include a "capital S" sustainability source! This text is important in outlining the building blocks of a sustainable design. The five principles explored in this book help to inform how to design ethically and sustainably and can be easily applied to my project. The principle that I am most excited to related to my project is the first principles: Solutions Grow from Place. This is a fascinating one because it asserts that the easiest to implement, most effective, and low-cost strategies are the ones that incorporate the necessities of the stakeholders. This can be applied to my project by using the human-centered design process to better understand the accessibility needs of the community.

NEWS ARTICLES

Mayer, Lauren. "The College Campus to New Urbanist Pipeline." Text. CNU, February 1, 2021. https://www.cnu.org/publicsquare/2021/02/01/college-campus-new-urbanist-pipeline.
This article talks about the importance of exploring a new area for the first time after going through a major change (moving away from home) and the heightened level of importance walkability has as it is the primary mode of travel. For college freshman, this may be the first time they are exploring a new place alone so it is critical that they have the tools to do so. The New Urbanism ideas explored in this article are walkable block and streets, housing and shopping in proximity, and accessible public spaces. This article explores how the accessibility of travel can explore how a student explores the town.
This is important to my research because this study quotes the "15-minute neighborhood," an ideal that housing, work, and shopping should all be within a 15 minute walk or bike ride of each other. UIUC is a great example because it is a 15-minute neighborhood.

IMAGES

Door. June 2020. Unsplash. Mark Rubiosonshon. Dec. 1. 2021.
I found this photo so striking that I knew that I needed to put it into my presentation. I love the color scheme and I was lucky enough that it related to city accessibility. On historic preservation, this door could be 300 years old and the ramp would never be repaired. This goes back to the compromises made for the different groups present in a city: some groups may admire the old door from the front, those with able bodies may even pass through it, and those without fully-able bodies can use a side entrance. Is this fair?

OFFICE OF ADMISSIONS AND RECRUITMENT. "Badger Fans Gather on State Street Following The UW Men's Basketball Team Victory in the NCAA Final Four." OFFICE OF ADMISSIONS AND RECRUITMENT, 2021, https://admissions.wisc.edu/campus-virtual-tour/east-campus-downtown/. Accessed 10 Dec. 2021.
State Street was truly a mind-blowing city planning effort. The city of Madison is very blessed to have such a feat of planning. They are also aided by the long history present in Madison. The great State Capitol building gives much gravitas to the area. Through their admissions site, I learned how much of student life and culture revolves around this area. This is an interesting dynamic because on the UIUC, student life is spread throughout the campus and not concentrated in one area. The different approaches to socializing on campus satisfy the needs of different groups!

"The Wisconsin State Capitol." OFFICE OF ADMISSIONS AND RECRUITMENT, 2021, https://admissions.wisc.edu/campus-virtual-tour/east-campus-downtown/. Accessed 10 Dec. 2021.
This is from the same website as above. I will supply the same description. State Street was truly a mind-blowing city planning effort. The city of Madison is very blessed to have such a feat of planning. They are also aided by the long history present in Madison. The great State Capitol buildings gives much gravitas to the area. Through their admissions site, I learned how much of student life and culture revolves around this area. This is an interesting dynamic because on the UIUC, student life is spread throughout the campus and not concentrated in one area. The different approaches to socializing on campus satisfy the needs of different groups!

Tyler, Nick. "Safety Accessibility and Sustainability: The Importance of Micro-Scale Outcomes to an Equitable Design of Transport Systems-NC-ND License." Research Gate, https://www.researchgate.net/figure/The-relationship-between-safety-accessibility-and-sustainability_fig2_318239665. Accessed 7 Dec. 2021.
This image comes from the above cited study. I will supply the same description:
This article as extremely eye-opening for me as it concludes the real difficulty in planning for sustainability. I really enjoyed the way that this articles talks about sustainability because it is very practical. There is very little talk about "changing the world for everyone" and "being the next great American city." But there is a lot of mention of the dirge of bureaucracy present in the field of planning. The graphic that this article provided was very interesting and I feel like this put my project in a slightly new direction, that I could better understand the relationship between the three classic drivers of city design: economy, environment, and equity. I loved when it talked about how you have to make compromises to satisfy some groups and really makes the designer contemplate which groups they must prioritize and that some groups' needs directly conflict with the needs of others. Maybe true innovation comes from finding the perfect middle ground, or maybe it comes from creating loopholes in an effort to get everyone where they need to be.

WEBSITES

Abbat, Pierre. "Curb Cut." Wikiwand, 2002, https://www.wikiwand.com/en/Curb_cut.
Wikipedia, cited here as "Wikiwand" because of an installed web plug-in, is an incredibly important source that is closely monitored for accuracy and Internet trolls. It is very reliable and a vital resource for modern people. The curb cut article offers great information on the history of curb cuts, the different types, and how they have helped different groups.

Nationsonline.org, Klaus Kästle -. "Searchable Map of Madison, Wisconsin." Nations Online Project, 2021, https://www.nationsonline.org/oneworld/map/google_map_Madison.htm.
Having never been to Madison, WI, this site was extremely useful in my understanding of State Street in context with the rest of the city. I loved seeing how central it was to the planning. This makes it that much stronger of a planning endeavor. This is similar to when I used Google Maps to analyze Green Street. It is important to provide your audience with an aerial view of the planning area so that they can understand it as well.

OFFICE OF ADMISSIONS AND RECRUITMENT. "East Campus & Downtown." OFFICE OF ADMISSIONS AND RECRUITMENT, 2021, https://admissions.wisc.edu/campus-virtual-tour/east-campus-downtown/.
This is from the same image as cited above. I will supply the same description. State Street was truly a mind-blowing city planning effort. The city of Madison is very blessed to have such a feat of planning. They are also aided by the long history present in Madison. The great State Capitol buildings gives much gravitas to the area. Through their admissions site, I learned how much of student life and culture revolves around this area. This is an interesting dynamic because on the UIUC, student life is spread throughout the campus and not concentrated in one area. The different approaches to socializing on campus satisfy the needs of different groups!

The Edgewater. "5 Great Things about State Street: Downtown Madison's 'Forever Street.'" The Edgewater, 3 Feb. 2020, https://www.theedgewater.com/the-madison-experience/5-great-things-state-street-downtown-madisons-forever-street/.
I was surprised to see how many articles were written about this one place. Although there are many articles written about Green Street, they do not have the same enthusiasm. I write about the entire campus that many people write about State Street This is an important understanding to see how much of an impact that a real, human-centered "third space" makes. This is important for my project because it shows that a city can be made more economically, socially, and environmentally sustainable by following green principles of design and making a city walkable and inviting.

PODCASTS

Roman Mars and Kurt Kohlstedt. The 99% Invisible City: A Field Guide to The Hidden World of Everyday Design. 1st ed. Houghton Mifflin Harcourt, 2020.
In The 99% Invisible City: A Field Guide to the Hidden World of Everyday Design, podcast host roman mars and co-author Kurt Kohlstedt zoom in on the various elements that make out cities work, exploring the origins and other fascinating stories behind everything from power grids and fire escapes to drinking fountains and street signs. The stories in the book play out like educational vignettes on urban planning. This book has taught me the historic reason that you see name plates embedded in brick streets. Although these may provide an uneven surface to travel across, many of them have historical preservation protection. Similarly, this book explores the placement of electrical poles, power boxes, and all other municipal objects that create the cityscape.

PROJECTS

The Net Positive Studio. “Neighborhood Analysis,” September 26, 2019. https://netpositivestudio.org/2018-19-indian-mound-home/neighborhood-analysis/.
This effort, conducted by the Net Positive Studio, looks at the Indian Mound neighborhood in Kansas to combat the damages caused by absent landlords and poor funding. Their plan was to introduce new models for affordable, sustainable housing. This project is so successful because of the thorough neighborhood analysis. Instead of building a new-age, full-glass modern home, they went with a more modest look to fit the look of the neighborhood.

EXHIBITIONS

“Walkable World,” November 10, 2021. https://www.msichicago.org/explore/whats-here/exhibits/future-energy-chicago/simulation-lab/future-neighborhood/walkable-world/.
This exhibit showcases the great beauty present in good planning. On display for over a year, Walkable World shows non-planners how important it is to create a city with life, with veins, arteries, and a living soul. There are many cities around the world that do not try for beauty, they are too stuck in profit. What they do not realize is that beautiful cities are more profitable, and sustainable cities are the most profitable.

(Top) Various groups benefiting from a curb cut.

(Bottom) A curb cut with an accessibility pad.