

ARCH407 TOPICAL DESIGN STUDIO VI - FINAL REPORT

In the Spring of 2021, University of Maryland Graduate Architecture and Urban Design Studio IV had the pleasure of working with the Prince George's County Office of Planning on a PALS project. The focus of the project was to envision the future of Prince George's Plaza Transit District neighborhood in Prince George's County, Maryland. Primary themes for the work were: 1) Ecological approaches to natural systems and infrastructure and 2) Building typology, street design, and public space design as tools for supporting social justice and anti-racism. The following is a report of the outcomes.

Envisioning the Future at Prince George's Plaza, MD

Table of Contents

3	Acknowledgements
4	Studio Overview
5	Design Goals
6	I Urban Design Warm-u
30	2 Precedent Analysis
47	3 Site Documentation
49	4 Research Mapping
62	Bio-Band at PG Plaza
73	ReGreen
82	Market Street
91	Concourse Network
101	Green Loop
107	Appendix 1: Public Life Study Lite
133	Appendix 2: Appendix Bibliography

Acknowledgements

Instructor

Jana VanderGoot, Associate Professor, University of Maryland

Special thanks to

Selina Dandy

Abigail Mencer

Students

Marvam Bana Zadeh

Austin Benham

Selina Dandy

Andrew Degroff

Nick DiBella

Almas Haider

TaLisha Jenkins

Upasana Kaku

Yan Konan

Abigail Mencer

Daryl Vargas

Tribal Advisors and Advocates

Rico Newman, Piscataway-Conoy Tribe

Kyle Harmon, Nanticoke Tribe

Angela Stoltz, Assistant Clinical Professor, UMD, Advocate

Guest Lecturers

Michael Binder, Associate Clinical Professor, UMD

Michele Lamprakos, Associate Professor, UMD

Jared Schmitz, M. Architecture and Historic Presevation, 2021

Professional Advisors

Christina Hartsfield, Prince George's Office of Planning

Kimberly Fischer, Director, PALS

Alondra Morales, Graduate Assistant, PALS

Maha Tariq, Prince George's Office of Planning

Adam Dodgshon, Maryland-National Capital Park and Planning

Jonathan Greene, Maryland-National Capital Park and Planning

Jordan Exantus, Maryland-National Capital Park and Planning

Faculty Advisors

Michael Abrams, Associate Clinical Professor, UMD

Matthew Bell, Professor, UMD

Michael Ezban, Assistant Clinical Professor, UMD

Garth Rockcastle, Rockcastle Architecture

Naomi Sachs, Assistant Professor, UMD

Studio Overview

ARCH 407 Graduate Architecture and Urban Design Studio IV Spring Semester 2021

In the Spring of 2021, students in *ARCH 407 Graduate Architecture and Urban Design Studio IV* had the pleasure of working with the Prince George's County Office of Planning on a PALS project that focused on envisioning the future of Prince George's Plaza Transit District neighborhood in Prince George's County, Maryland.

Design workshops punctuated the semester and provided an opportunity for students to engage a wider audience of professors, local practitioners, and Black and Indigenous community leaders in the design process. The students met with Prince George's County representatives for four check-ins throughout the semester. In addition to guest lectures and daily individual desk critiques, there were also work progress discussion sessions and peer to peer learning between students.

The ARCH 407 course concentrated on theories of urbanism and urban design techniques. Primary themes were:

- 1) Ecological approaches to natural systems and infrastructure
- 2) Building, street, and public space design as tools for social justice and anti-racism

Learning Outcomes were for student to be able to:

Demonstrate an understanding of the relationship between human behavior, the natural environment, and the design of the built environment.

Demonstrate an understanding of the architect's responsibility to work in the public interest, to respect historic resources, and to improve the quality of life for local and global neighbors.

Demonstrate the analytical means to graphically describe urban contexts and representational skills necessary to communicate architectural ideas at the scale of the block, neighborhood, and city.

The term project was titled "Envisioning the Future at Prince George's Plaza." It was divided into modules, which are listed below and described in more detail in this report.

- 1 Urban Design Warm-up
- 2 Precedent Research
- 3 Existing Site Documentation
- 4 Research Maps
- 5 Design Plans for the Future at Prince George's Plaza

Design Goals

Prince George's Office of Planning Guidance

Representatives from the Prince George's County Office of Planning Placemaking Division outlined design goals at the start of the term project. One of the primary design issues at Prince Georg's Plaza was described by the Office of Planning was the lack of a *centrally located gathering place* that would form neighborhood identity. Public art, temporary materials, and tactical approaches to creative placemaking were identified by the county as having potential to inexpensively address needs in the short-term and establish and test frameworks for the long-term. *Public open space and green space* was also identified by the county as a critical need. The need is understood by the county as especially important because plans for new residential developments in the area are underway.

The Office of Planning asked the UMD group to look into issues of <u>pedestrian access and safety</u> at Prince George's Plaza. Access and safety is particularly relevant in heavy traffic areas of East-West Highway and Belcrest Avenue where automobiles move at high speeds.

Specific locations and opportunities for improvement at Prince George's Plaza were also suggested, including *activating the bridge* that crosses East-West Highway and the *Washington Metropolitan Area Transit Authority (WMATA) properties*. The bridge, which currently is under-utilized, was cited by the county as having potential to be re-envisioned as a neighborhood gateway.

Finally, the county asked that design ideas be developed in terms of phasing over time. The first phase would include those things that can happen by 2022-23. Later phases would envision what could happen in the neighborhood by 2035.

I Urban Design Warm-up

The Urban Design Warm-up exercise was designed to help the students learn about urban design history and theory through the act of drawing and design work. Many of the approaches to urban design that te students discovered in the urban design warm-up studies where carried over to work at Prince George's Plaza.

Students analyzed city plans and examples of the urban design theories by creating figure-ground and landscape ecology diagrams. Through the diagramming activities, students came to understand what the basic components of urban design were in each city and how the components could be used to create city blocks, streets, and public spaces.

Students chose urban design theories from the following list to explore in the warm-up activity.

- · Greek and Roman
- Medieval
- Renaissance
- Baroque
- Garden City
- Weak or Isotropic Urbanism
- Contextualism/Collage City
- New Urbanism/Urban Quarters
- Transit Oriented Development
- Garden City
- Landscape Urbanism
- Ecological Urbanism
- Event Cities
- Relational Planning
- Infrastructural Urbanism
- Informal Urbanism
- Tactical Urbanism
- Delta Urbanism

Students were asked to write narratives to answer the following questions about the urban design theories they chose to study:

- What are the key principles of the theory?
- What are the spatial elements (urban design a,b,c's) that reflect the principals?
- What are the design examples of the theory (both built and speculative cities and projects)?
- How might the key principles of the theory address contemporary urban design issues?

Once the students were familiar with their urban design theories and the built examples of those theories, the students were able to engage in the next series of design exercises to "warm-up" their urban design muscles.

Students were asked to create:

- Drawings that identify the primary spatial sequences of a city (an urban threshold, a public space, infill/secondary/private building fabric, and a major public building).
- A typology catalog that shows the basic spatial components of the city or theory.
- Speculative drawings of a proposed design of an urban neighborhood in a variety of urban design languages.

In the following pages, a small selection of student design theory narratives and proposed urban design sketches are shown as examples.

Urban Design Warm-up: Relational Urbanism Theory

by Upasana Kaku

Relational Urbanism is a strategy developed by Alexandre Chemetoff and his design studio for the redevelopment of Ile de Nantes, France. Rather than proposing a specific vision or aesthetic for an area to be designed, relational urbanism proposes a method: a detailed survey of the existing site, a set of design interventions, and a subsequent survey that inspires a next iteration of design.

As illustrated in the Ile de Nantes project, the new public places and pathways are primary spatial elements and are inserted into the old neighborhood as ways to reconnect disparate existing spaces (which are largely left untouched). In addition, the relational urbanism as a theory promotes the idea of 'finding a place for each thing in today's city' and rejects the idea of a uniform architectural style. The theory embraces the preservation of existing buildings, even if the style may no longer match contemporary ideals of beauty.

Chemetoff and his team developed a "Plan Guide" for Ile de Nantes that continuously changed and evolved, and was designed to remain flexible to allow for future change and development. In addition to creating new public spaces, the interventions focused on opening up the area to the (previously industrial) waterfront. The design team re-used many industrial structures and pieces of infrastructure as raw materials for new types of places by removing the skin from the buildings and reusing the underlying structure. This approach, termed an 'economy of means' represents a radical approach to sustainability and drastically reduced both waste and the amount of new material needed. It also presents a possible approach to redevelopment and revitalization that steers away from radically altering the existing fabric or demolishing buildings and landscapes that may hold meaning to residents or artificially imposing a completely new/ external aesthetic on an existing community. Interestingly, however, the detailed survey approach seems limited to physical conditions and not extended to surveys of people.





The Plan + Guide Map site survey for Isle de Nantes, France, Alexandre Chemetoff et associes, 2000-2010



The forecourt of the Naves seen from the Quai de la Fosse, Isle de Nantes, France



Quai des Antilles, Isle de Nantes, France



Many industrial structures and pieces of infrastructure are re-used as raw materials. Tactics include removing the skin from buildings and reusing the structure or incorporating the concrete of a hangar into new buildings. This approach, termed an 'economy of means' represents a radical approach to sustainability and drastically reduced both waste and the amount of new material needed.

Image source: http://wsdomino.eurocities.eu/v2/news/EUROCITIES-on-COP-21-L-Ile-de-Nantes-WSPO-A4ZNQ6

Urban Design Warm-up: Garden City Theory

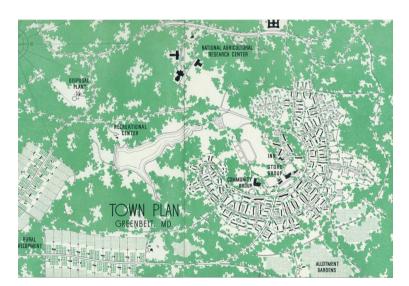
by TaLisha Jenkins and Maryam Bana Zadeh

The Garden City movement emerged in Europe and North America as a response to industrialization and the engine of modern cities. The key idea of Garden City urban design was combining and taking advantage of the best aspects of the country (health) and best aspects of the city (comfort) in a semi-urban environment. The Garden City has a self-sufficient urban design strategy that is open to all classes of people and income groups. Ebenezer Howard was the designer behind the movement. He believed that a Garden City can only grow to contain a certain amount of people and after that a new town is needed. As one garden city was developed and prospered another would neccessarily develop nearby.

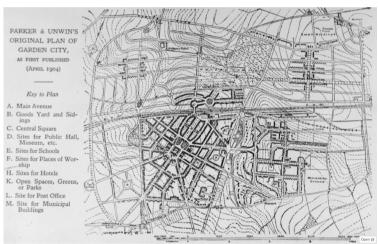
The main spatial elements in an idealized Garden City urban design are a Concentric Pattern with open space, public parks and radial boulevards. A Garden City contains places of worship, education, work and shopping. It should also have a green belt that defines the edge between city and countryside. The first Garden City, Letchworth Garden City, established in 1903 in Hertfordshire, UK is a built example of the theory.

Some features of the theory address contemporary urban design issues. For example, placemaking and inclusive design remain critical factors for placemaking in the 21st century. The sustainable and affordable housing of Garden City projects is built to satisfy all people and is meant to promote healthy community and value for everyone involved and these values are lasting.

In Garden Cities there are carefully proportioned spaces dedicated to residences, agriculture and industrial areas. The Garden City is shaped by its urban center with radial and concentric streets expanding from the center. Greenbelt, Maryland in the United States is an example of a Garden City and was established in 1937 as the first of three greenbelt towns created by the New Deal. It is a 20-Minute Neighborhood.



Greenbelt, Maryland, USA, 1937



Letchworth Garden City, established in 1904, UK



Letchworth Garden City with radial boulevards and open space



Letchworth Garden City, housing with a variety of green space types and sizes from setbacks to backyards to public squares

Urban Design Warm-up: Informal Urbanism Theory

Almas Haider and Yan Konan

Informal Urbanism is an emergent urban design theory based on the idea of a built environment that is highly adaptable and responsive to the challenge of poverty and social stratification. It includes informal economies and fringe communities. Informal forms of urbanism are self-organized and develope outside the existing scope of state sanctioned planning and design. It could be considered an urban design theory of the people, where "informality" describes the condition of relationships that are not as valued on a bureaucratic scale of design but are more reflective of the design needed for interdependent communities to thrive.

Informal Urbanism design tactics include *insertion*, *attachment*, or *settling* into the existing urban landscape. Settling is done on unclaimed land and/or unbounded land. Insertion means coming into abandoned or leftover fragments. And attaching is growth that becomes part of an existing regulated part of the city, for example communities and market areas developed around existing transportation infrastructure. The forms in each of these tactics vary depending on topography, geography, and surrounding resources.



Collage by Yan Konan

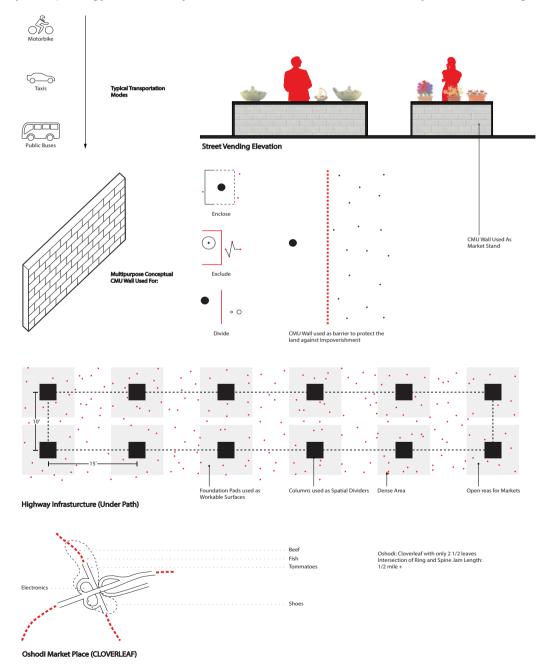
The main cause of the rapid growth in Nigeria, over the past 50 years has been rural to urban migration In South Africa, the processes of informa waste management involves on-street Reclaimers pulling large woven bags attached to a rigged trolley from neighbourhood to neighbourhood, collecting recyclables by mining household waste Examples of Informal Urbanism include unregulated high density housing, the transformation of vacant lots into markets, and community gardening. Informal urban design interventions are functional and goal-oriented. Informal urbanism exists in both the Global South and Global North in economically poor and rich communities. Informal Urbanism offers contemporary urban design thinking a variety of tools: (1) a more accurate understanding of an identity of a space and the role it plays in the relationships and emergent needs of a community, (2) an expansive way of considering design intervention beyond the binary of formal and informal, (3) the potential for implementing multiple urban design responses in a single intervention, (4) the mandate of designing from a place of consistent possibility.

Lagos, Nigeria is home to many urban areas and community infrastructures that are considered unofficial due to their illegitimate techniques. Lagos has a dense street lifestyle. The lack of defined geographical boundaries create disputes over land areas where there are conceptual walls that divide, enclose or exclude. Oshodi, one of the most intense marketplaces in Lagos, is situated between the intersection of Apopa Oworanski and Agege Road and is understood as the collective resistance of the city.

Sources:

"Towards an Informal Turn in the Built Environment Education: Informality and Urban Design Pedagogy", Hesam Kamalipour and Nastaran Peimani

"Forms of Informality: Morphology and Visbility of Informal Settlements," Kim Dovey and Ross King



Above: Cloverleaf highway infrastructure is taken advantage of for the circular void spaces it creates. Highway columns are used as spatial dividers and the foundation pads are co-opted as workable surfaces and open areas for the markets. Image by Yan Konan.



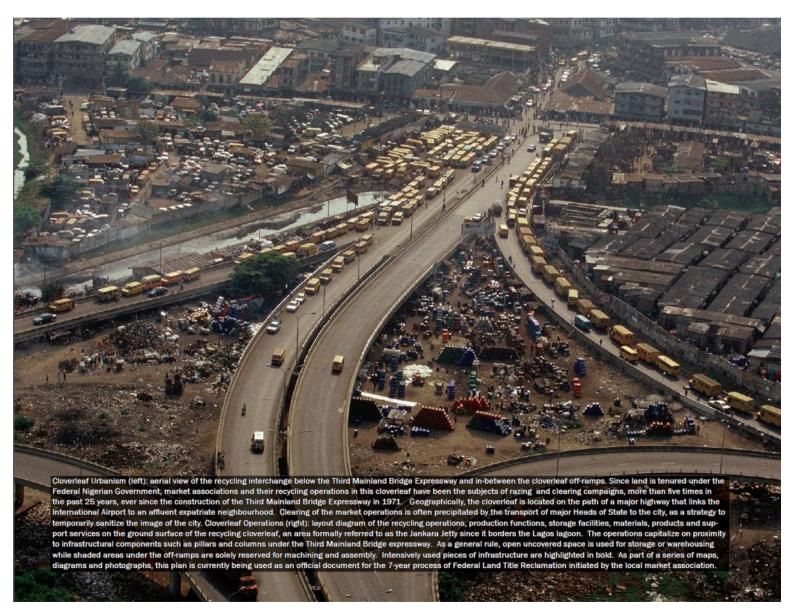


Image top: Cloverleaf Organization. Community leaders of the Idelofun Market Association meeting in the shade of the Third Mainland Bridge Flyover, Lagos, Nigeria. Image credit: Pierre Belanger

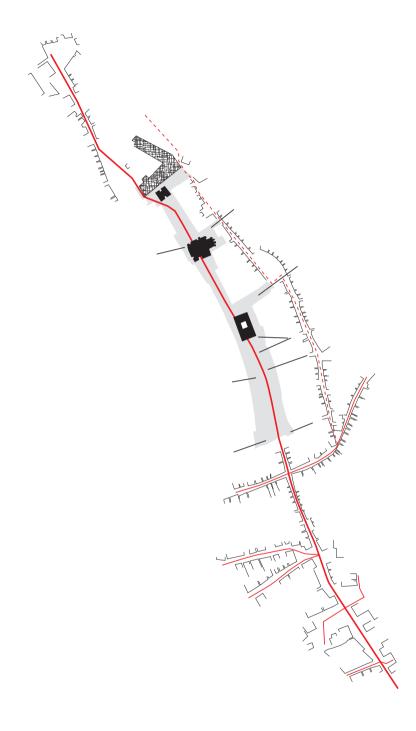
Image bottom: Cloverleaf urbanism, adaptation of infrastructure into market associations and recycling operations, Lagos, Nigeria. Image credit: Pierre Belanger

Urban Design Warm-up: Informal Urbanism Design Proposal

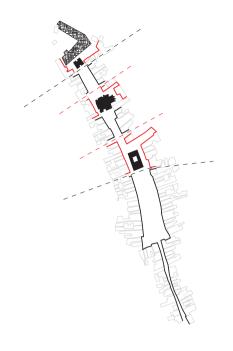
Images by Yan Konan



Patches - a modified figure ground plan. Town of Žatec in the Czech Republic. This example of a built city was used as a test case for an urban design proposal. Typical building blocks are drawn as patches with porous boundaries. The plaza is drawn as a patch with a abrupt and solid boundary. Primary public buildings are drawn as solid.



Corridors. Drawing shows primary and secondary circulation paths. Access to plaza and the edges is defined by building facades



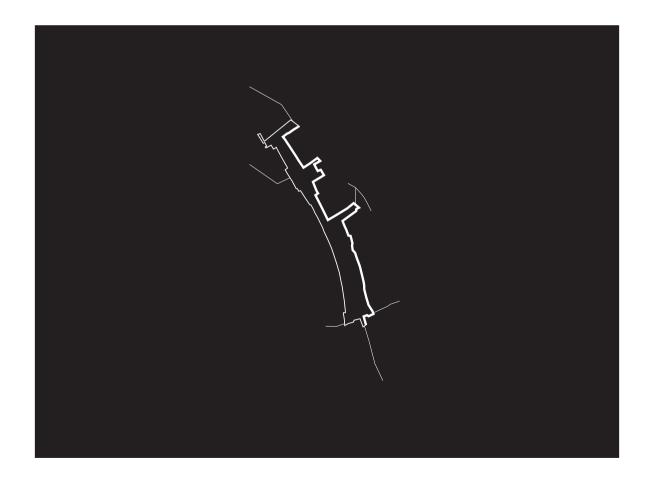
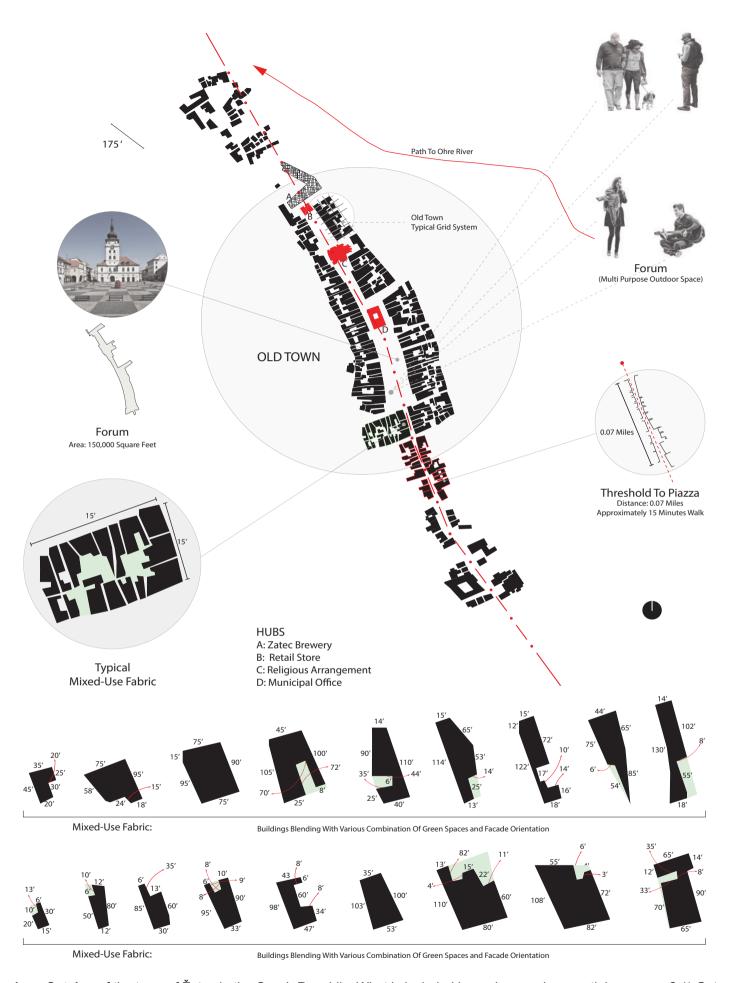


Image top: **Thresholds**, major access points to plaza Image bottom: **Edges**, primary and secondary edges of the plaza space



Typology Catalog of the town of Žatec in the Czech Republic. What is included in a primary urban spatial sequence? 1) Gateways/thresholds into the city and public plazas 2) Major public buildings in the old town center 3) Network of public open spaces 4) Typical blocks with residential and mixed-use buildings. Image by Yan Konan.



Existing Conditions. Figure Ground Plan highlighting an existing area to be replaced by a new proposed design for urban blocks.



Proposed Urban Design. This figure ground plan drawing highlights an area with new proposed urban blocks. The existing urban design language as outlined in the previous Typology Catalog is used to guide the design of the new block configurations, street access, and plaza space.



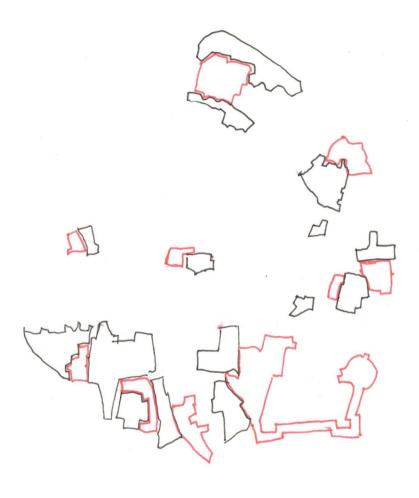
Informal Urbanism - Proposed Urban Design. This figure ground plan drawing highlights the area with new proposed urban blocks and used the Informal Urbanism design theory to guide block configurations, street access, and plaza space.

Urban Design Warm-up: Relational Urbanism Design Proposal

Images by Upasana Kaku



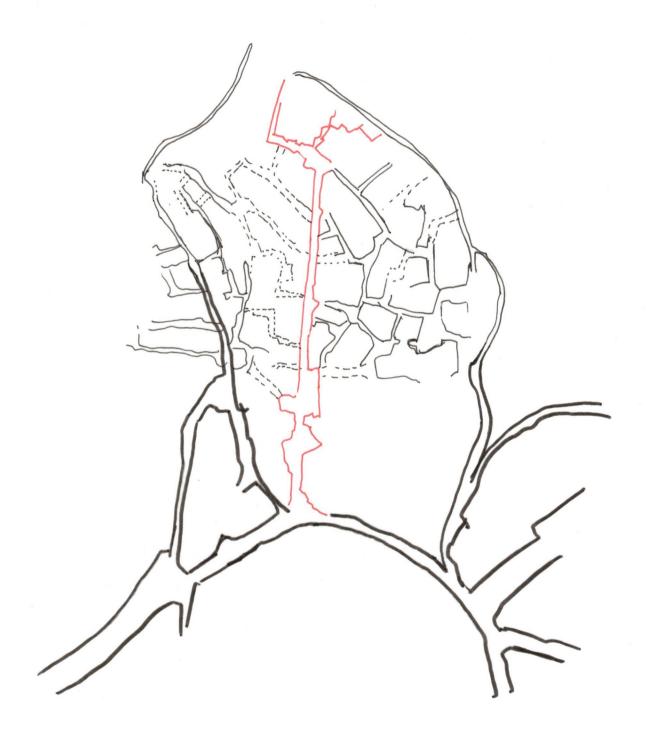
Patches - a modified figure ground plan. Town of Anguillara, Sabazia, Italy. This existing city plan was used as a test case for a new urban design proposal. Typical building blocks are drawn as patches with contiguous lines that represent clear, unambiguous boundaries between building edge and street. City walls are drawn as a dashed line.



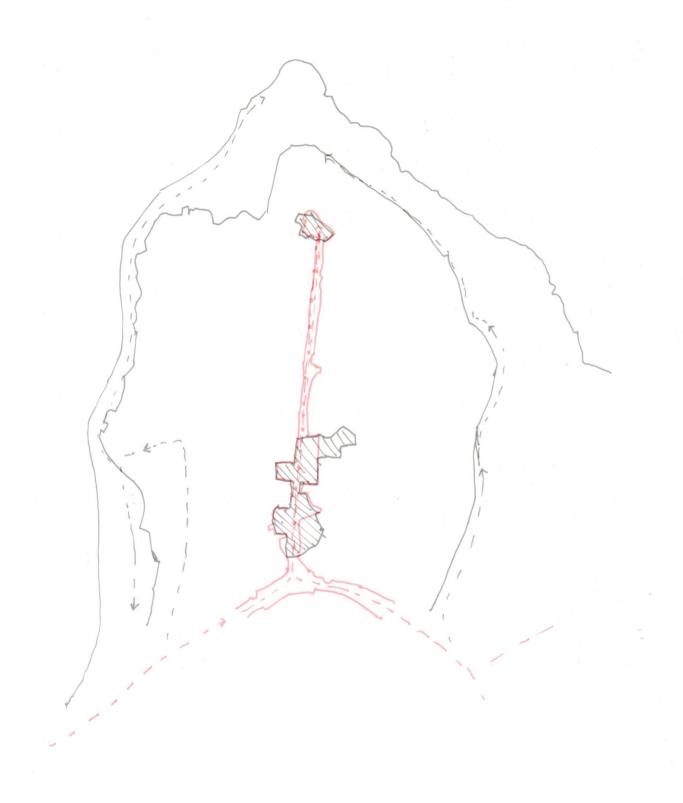
Patches. Implied space of plazas are outlined in black and associated public buildings/facades are drawn in red.



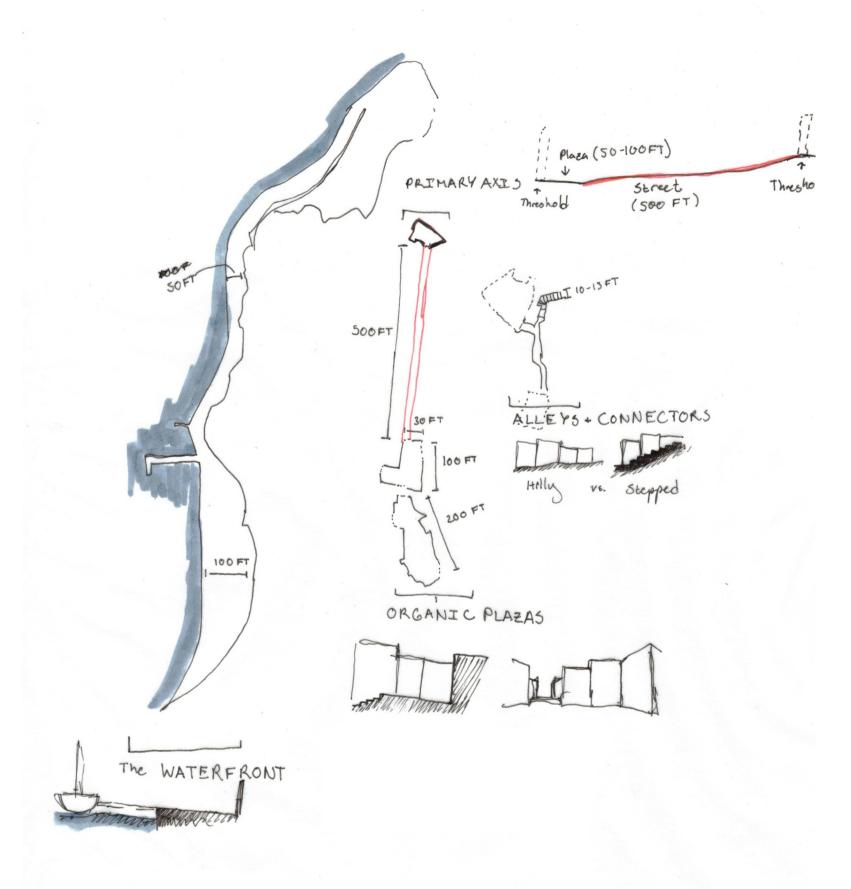
Patches + Corridors. Major public spaces drawn in red with dashed black lines denoting pathways and connections between open spaces.



Corridors. Primary pedestrian route is drawn in red and secondary circulation paths are drawn in black. Corridors provide access to plazas and the edges of the corridors are defined by building facades.



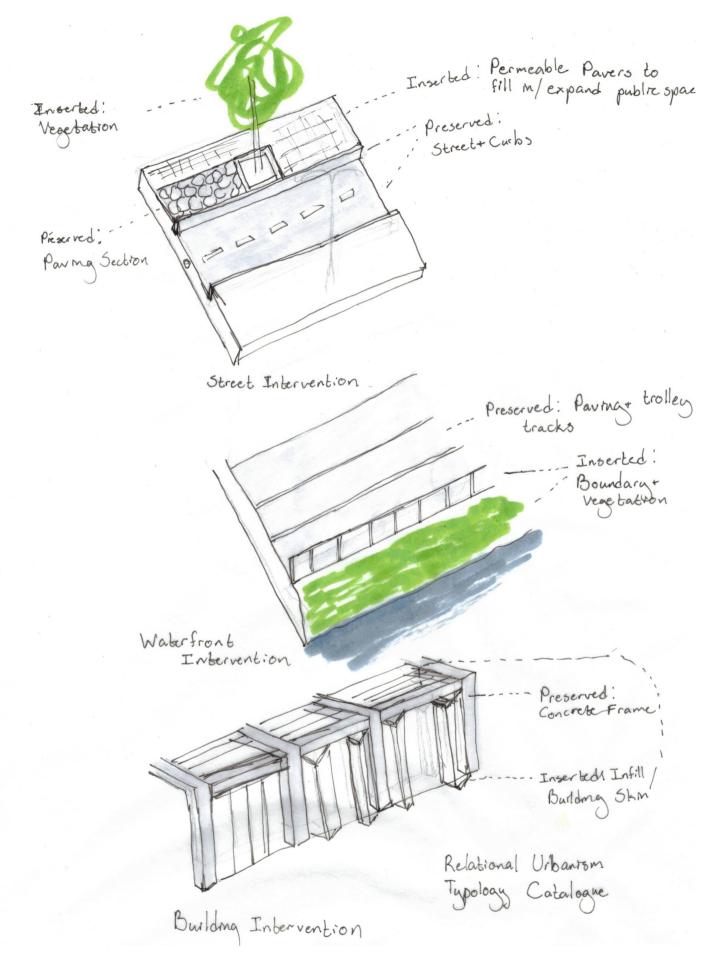
Corridors and nodes. The primary urban spatial sequence is drawn in red and the secondary spatial sequence around the city and along the water's edge is drawn in black. Two city centers are shown along the primary axis, which is drawn with a hatch pattern.



Typology Catalog of the town of Anguillara Sabazia, Italy. The catalog shows the relative size and configurations of public open spaces and streets, which are the primary elements of urbanism.



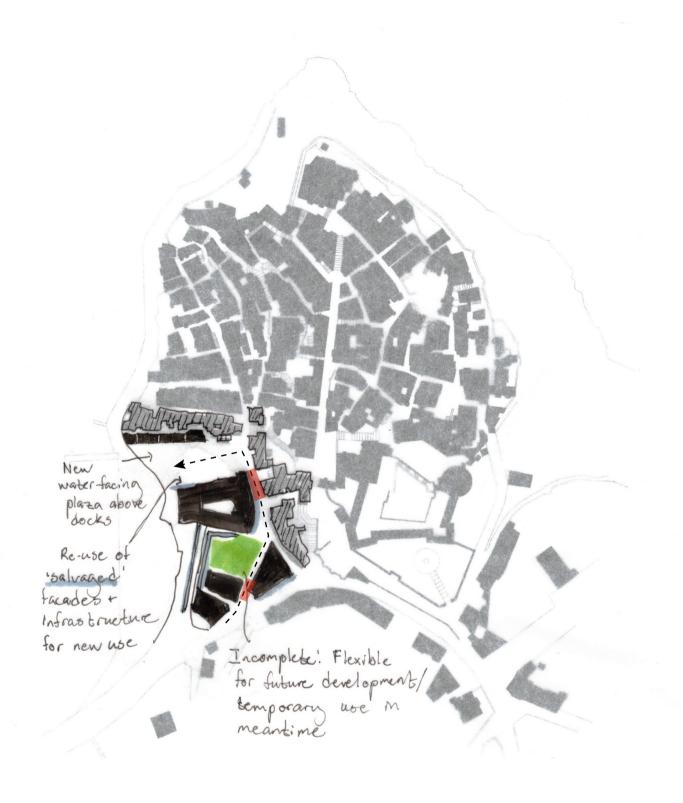
Proposed Urban Design. This figure ground plan drawing highlights the area where new urban blocks are proposed. The existing urban design language of Anguillara (as outlined in the previous typology catalog) is used to guide the new block configurations, street access, and plaza space.



Relational Urbanism Typology Catalog. Basic components of the relational urbanism design language include strategic acupunctural interventions at existing buildings, new vegetation, and public art insertions to enhance existing urban corridor edges.



Relational Urbanism - Proposed Urban Design. This figure ground plan drawing highlights the area where new urban blocks are proposed. The Relational Urbanism design theory is used to guide block edge configurations, street access, and plaza space.



Relational Urbanism - Proposed Urban Design. This plan shows the spatial sequence through secondary building fabric (shown as dashed arrow) and thresholds (highlighted in red) into major public open spaces.

2 Precedent Analysis

The Precedent Analysis exercise involved the documentation and analysis of design projects and cities that the studio understood as relevant models for the buildings and site at Prince George's Plaza.

Students chose a precedent from following list:

- Souks of Marrakech's old medina with covered streets, Morocco (Market Urbanism, Informal Urbanism, Mat Urbanism)
- Medina in Fez (near tannery), Morocco (Market Urbanism, Informal Urbanism, Mat Urbanism)
- Nga Nam floating market in Soc Trang, Mekong Delta, Vietnam (Infrastructural Urbanism, Informal Urbanism)
- Rome, Italy (Trastevere near Tiber River) (Medieval Urbanism, Roman Urbanism, Renaissance Urbanism)
- Lagos, Nigeria (study by OMA Rem Koolhaas) (Informal Urbanism and Tactical Urbanism)
- Amsterdam, Netherlands (Old Center or Bos Park)(Medieval Urbanism and Infrastructural Urbanism)
- Parc de la Villette, Paris, France (designer: Bernard Tschumi) (Event City, Collage City Urbanism)
- Canberra, Australian Capital Territory (designer: Walter Griffin and Marylin Mahoney Griffin) (Landscape Urbanism and Infrastructural Urbanism)
- Beijing Olympic Forest and Park, China (Landscape Urbanism and Infrastructural Urbanism)
- Hantz Woodlands, Detroit, Michigan (Landscape Urbanism)
- Bio-Milano Plan, Milan, Italy (designer: Boerie Studio) (Ecological Urbanism)

The precedent analysis included these deliverables:

Descriptive Diagrams in Plan and Section of

- Streets (primary, secondary, tertiary) (widths)
- Transit routes (minutes of commute time)
- Open space (square footages)
- Water bodies
- Topography (elevation changes)
- Building and/or Block diagram
- Exterior space diagram
- Circulation diagram

Analytical Diagrams in Plan and Section

- Figure Ground and Reverse Figure Ground
- Regulating Lines
- Edges and Center
- Synthesis Diagrams

Landscape Ecology Diagrams

- Corridor
- Patch
- Matrix
- Pattern
- Density
- Flow

Typology Catalog

Additional Design Precedent:

Tactical Urbanism

http://www.dcdc-udm.org/

http://tacticalurbanismguide.com/about/

https://issuu.com/streetplanscollaborative/docs/tu-guide_to_ materials and design v1

https://issuu.com/streetplanscollaborative/docs/openstreetsproject

http://tacticalurbanismguide.com/materials/

Parklets

https://parkade.com/parklet-guide-and-how-to-build-a-parklet#parklet-design-options

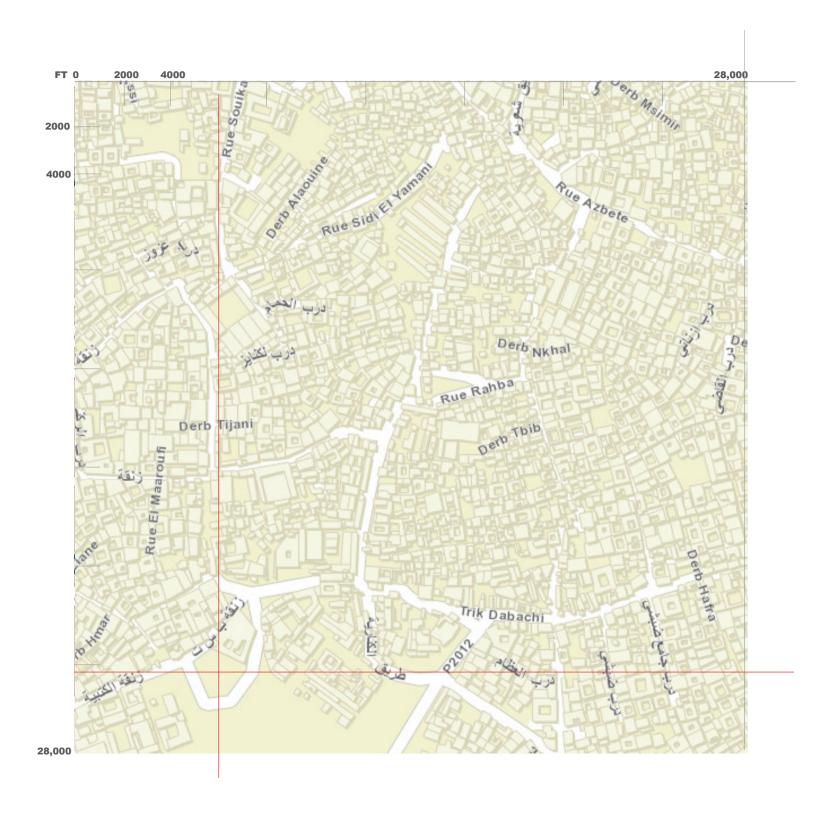
https://parkade.com/parklet-guide-and-how-to-build-a-parklet#parklet-basics

Streeteries

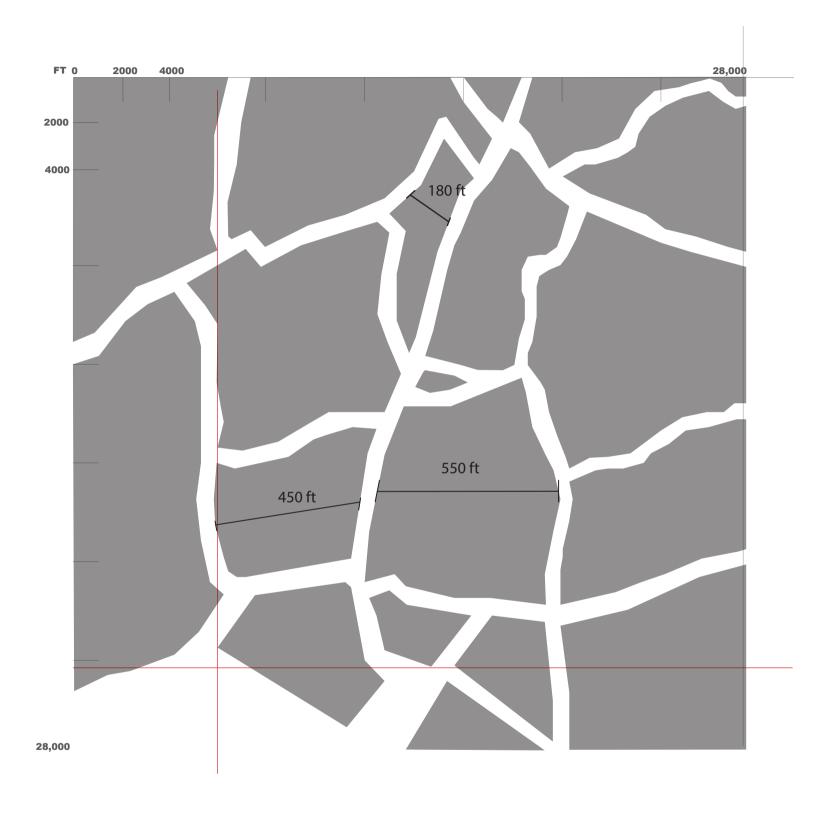
http://www.hooddesignstudio.com/pearlstreet

Precedent Analysis - Souks of Marrakech, Morroco

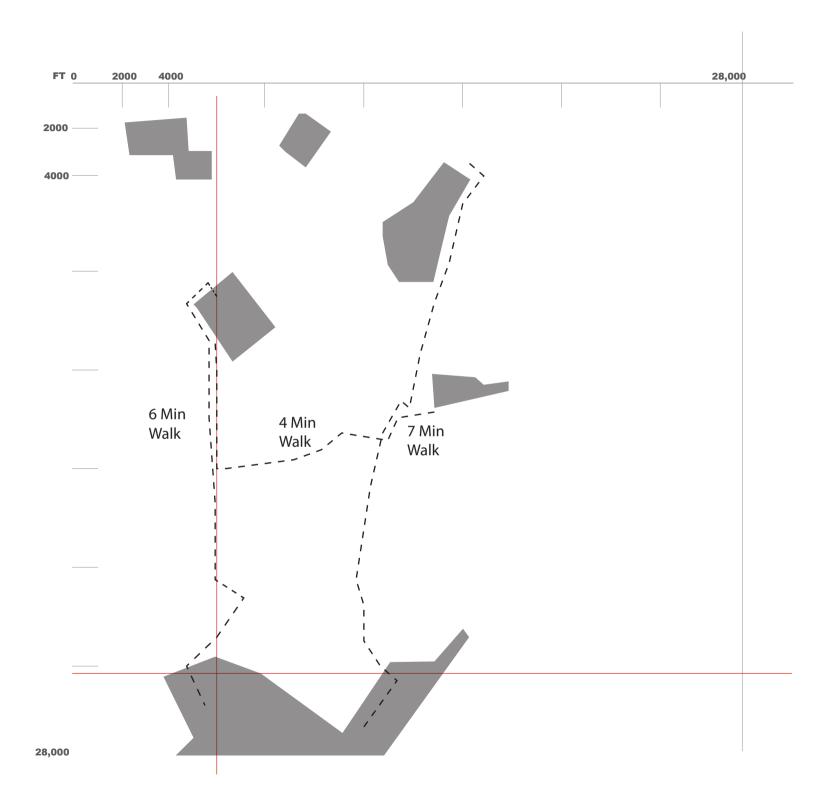
Images by Upasana Kaku



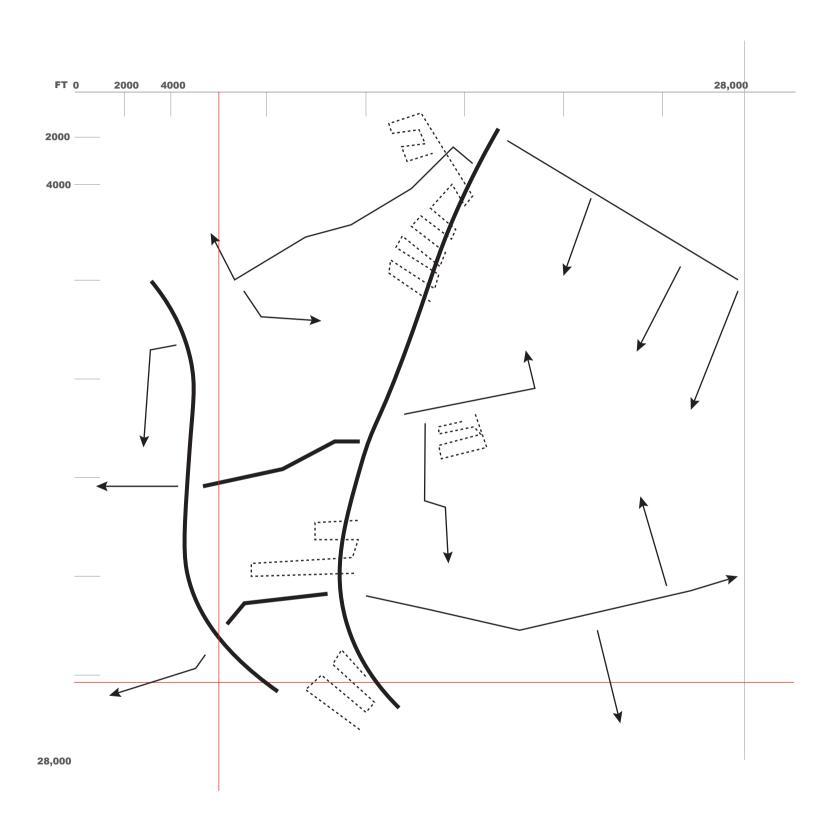
Base Plan of Marrakech Souk District and Jemaa el Fnaa Square. The primary focus of the following case study analysis is to study the question of what makes a thriving, activated market district? More specifically, the analytical drawing sequence in the following pages shows the spatial qualities, scale, and configurations or urban design that support a thriving, pedestrian friendly market with both formal and informal economies.



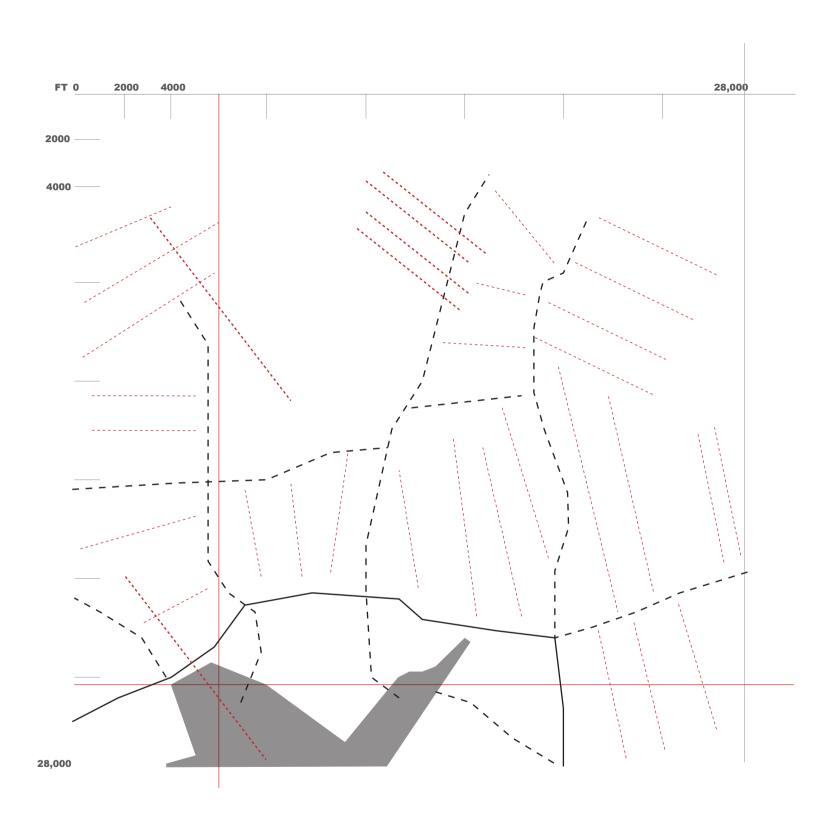
Blocks. Block forms are irregular and have a very dense, organic fabric of buildings and streets within.



Transit Routes. Walking is the primary way to get around the Souk District.



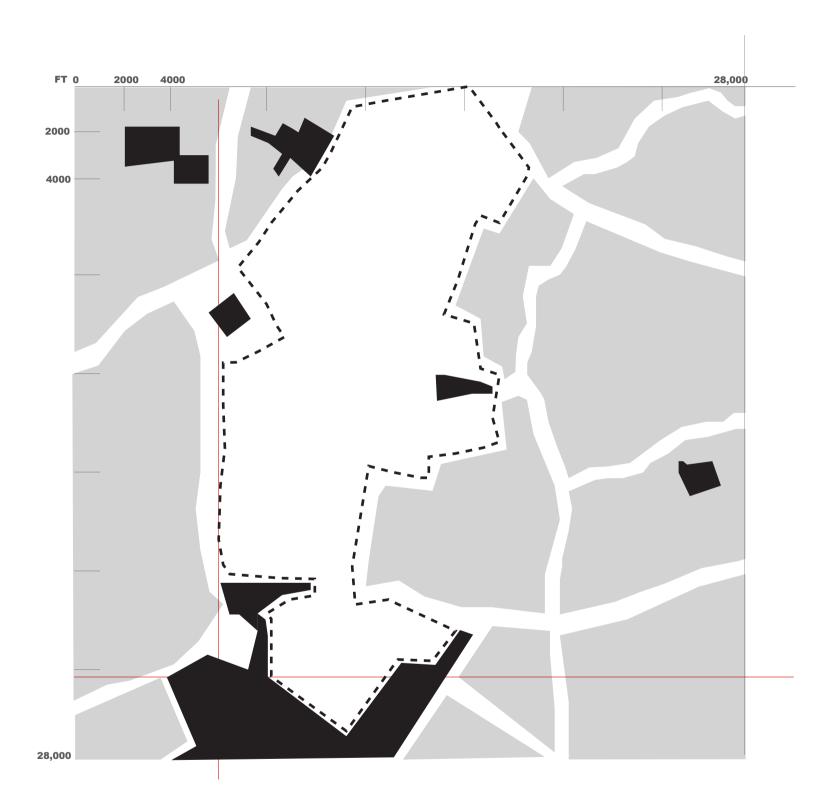
Flows. Major arteries are shown with dark black line, veins reaching into neighborhoods shown as arrows, and zig-zagging souks are shown in a dashed line.



Regulating Lines. The overall urban form has a radial expansion (shown as black continuous and dashed lines) from the center with a finer grain (shown as red lines) of buildings following the larger pattern of the blocks.



Streets. Primary, secondary, and tertiary streets (black) and primary and secondary covered streets (red).



Patches. open space (black), typical urban blocks (gray) and souks (dashed outline).

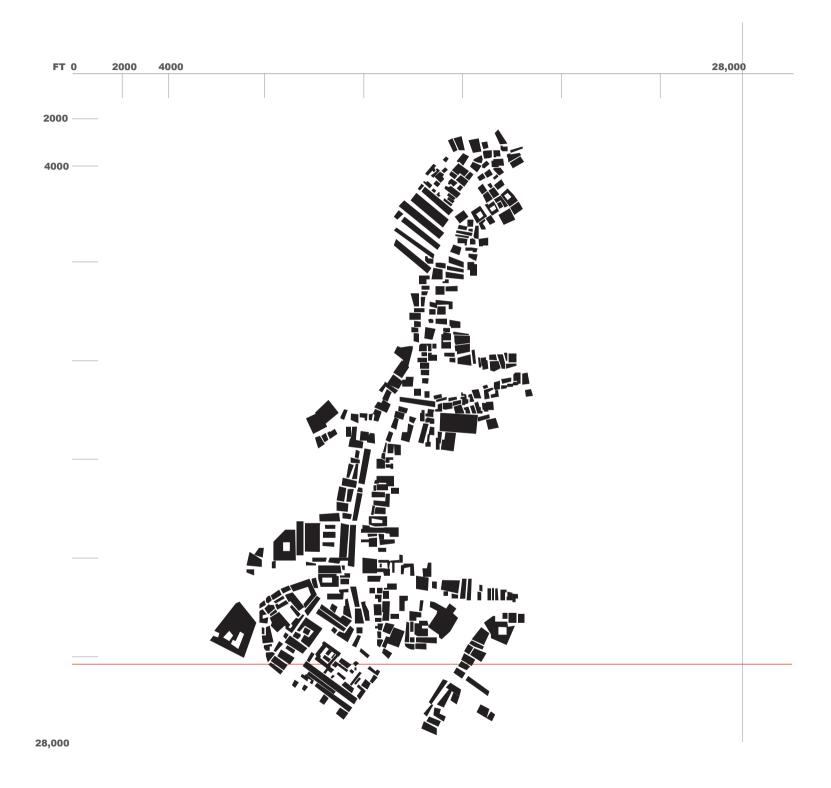
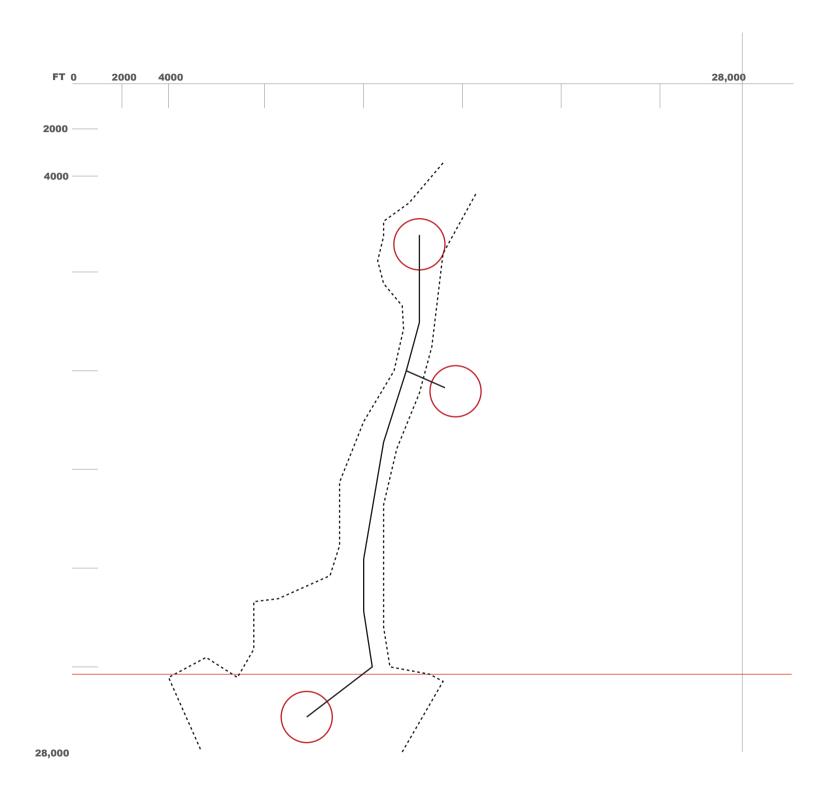
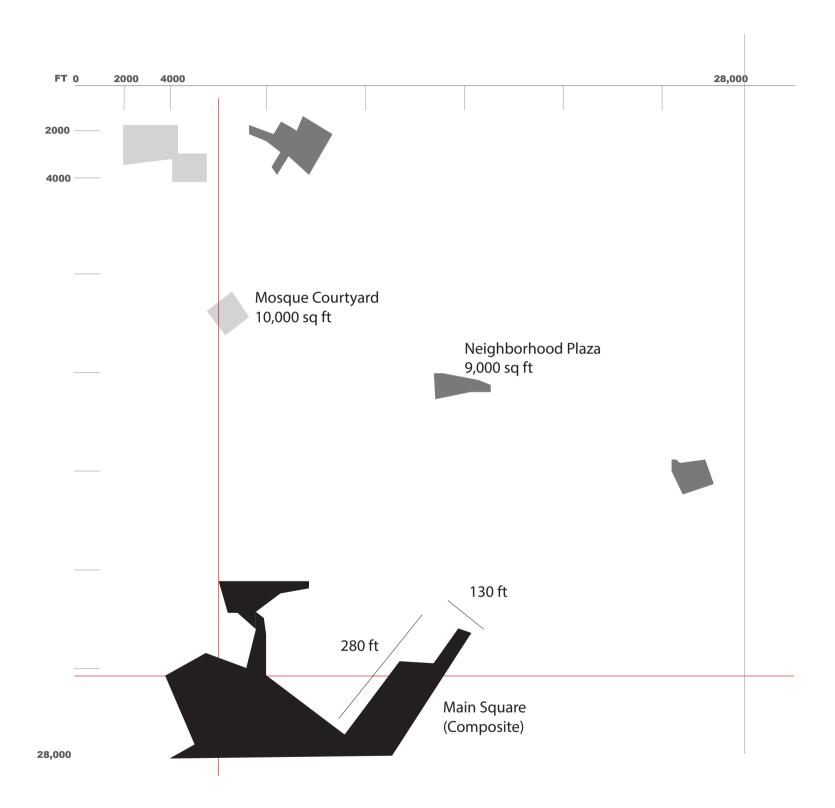


Figure Ground. Central souk zone showing dense grain of buildings, alleys, and the space of the street.



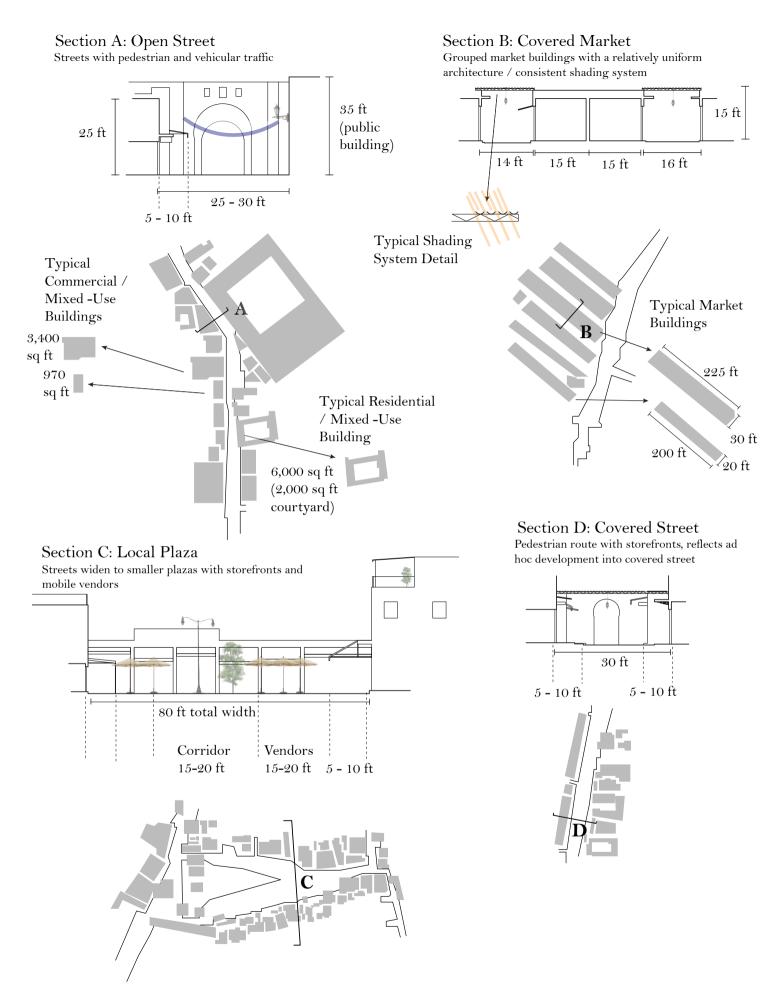
Center and Edge. Configuration of key activity nodes along a central linear spine.



Open Spaces. Comparative sizes of courtyards (light gray), plazas (medium gray), squares (black).



Synthesis. A very dense network of streets and alleys defines the souk district. *Major public open spaces create the edges (rather than the center) of the district.*



Typology Catalog of the Marrakech Souk District in Morocco. The primary spatial sequences are built up by streets of varying width and heights. Image by Upasana Kaku.

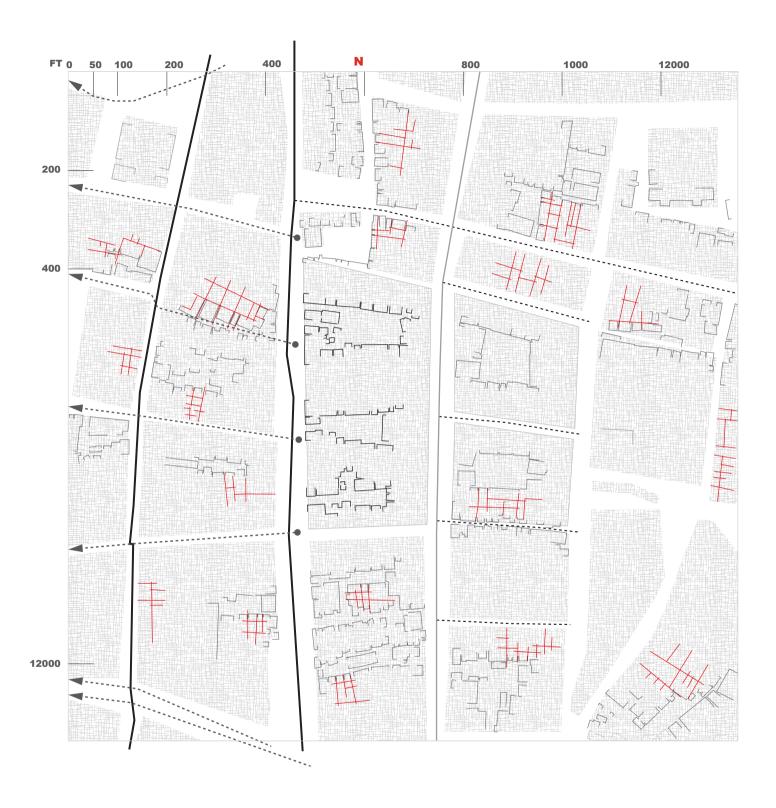




Regulating Lines. Lines (red) denote building block boundaries.



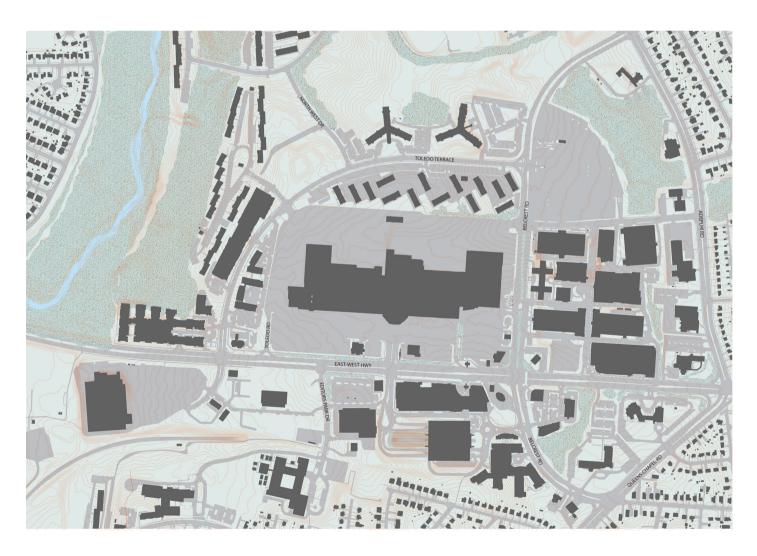
Urban Pattern. Regular grid overlay with smaller courtyards whereas there are much more irregular lines at the scale of individual buildings. Open space/central courtyards organize how the blocks are used and occupied.



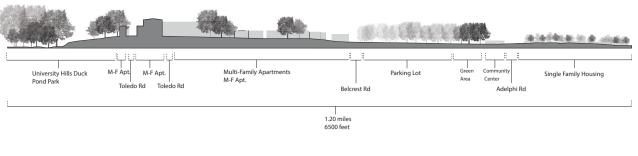
Synthesis. Regular street grid moves North-South while courtyards have a primary East-West orientation. The urban form relies on a variety of nested streets, opens spaces, and building blocks. Smaller pathways, irregular buildings, and central courtyards bring a down the overall scale of the larger building blocks. The informality happens at a smaller scale and achieves great density.

3 Site Documentation

The students worked on Existing Site Documentation for one week. Students worked in teams to prepare a series of existing conditions documents, including a site plan, site sections, and a 3D digital model. One group of students also conducted an abbreviated public life study (see Appendix 1: Public Life Study).



Existing Site Plan of Prince George's Plaza



Existing Conditions: E-W Site Section

1'= 400'

Existing Conditions: E-W Site Section

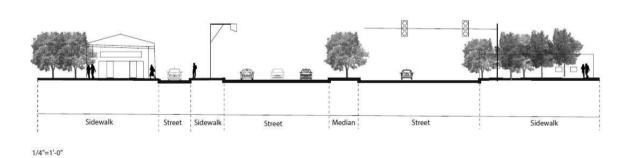
1'= 400'

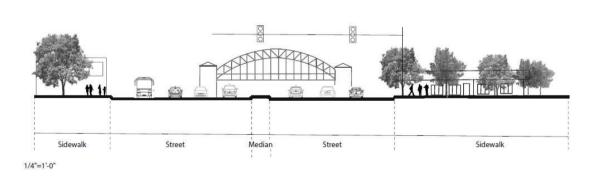
Parking Lot Mall Parking Lot Mod 410
East-West Highway

O.s miles
2640 feet

Existing Conditions: N-S Site Section

1'= 200'



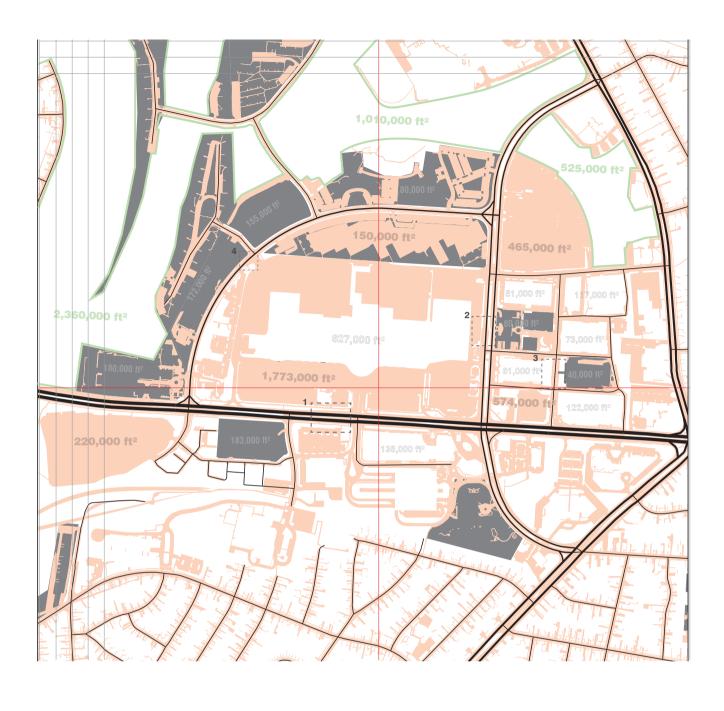


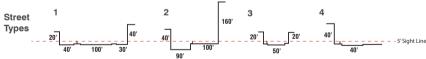
Existing Site Sections of Prince George's Plaza



4 Research Maps

The students worked on Research Maps for one week. Students worked individually to prepare a Research Map using data from GIS and other resources, which were formatted into an annotated bibliography (see Appendix 2: Annotated Bibliography).

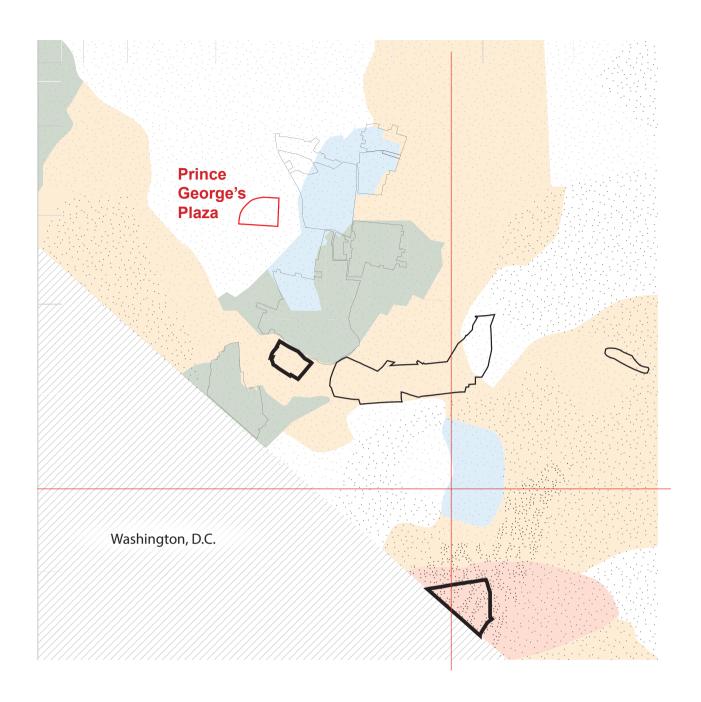




STREET: driveable surfaces inhibit walkability and dominate the site by sheer area

Prince George's Plaza is currently centered around driveability rather than walkability. Drivable Surfaces dominate the site, totaling 3,182,000 ft². The wide expanses of drivable surface are not safe areas for pedestrians to walk and circulate. When the drivable space and Building Area (1,893,000 ft²) is combined, they equal more than the total of all the surrounding Green Area 4,376,000 ft². Taking away much of the drivable surface in favor of green space can help control things like the heat island effect & storm water runoff, but more importantly it can help promote the walkability that the site could have. There is a great number of Multi-Family Housing around the site area totaling 890,000 ft² of the building area. Amenities accompany the multi-family housing and are within walking distance, but because of the nature of the site, these families often drive to these amenities.

See Annotated Bibliography for more resources. Map by Nicholas DiBella.

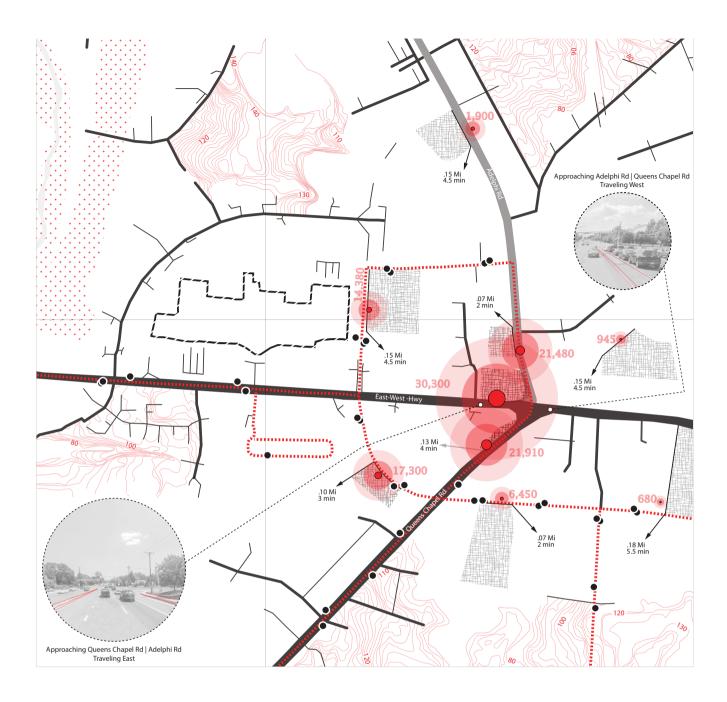


BLACK HISTORY IN PRINCE GEORGE'S COUNTY: redlining and historic districts

Prince George's Plaza is surrounded by historic districts, some of which are historically black communities. This part of the county also has a history of racial discrimination through the use of redlining. Displayed on this map are four grades (Third Grade, Fourth Grade, Fifth Grade, and Sixth Grade) which refer to the degree of 'loan risk' as determined by the Federal Housing Authority in 1937. Historic black neighborhoods were found at the center of the fifth and sixth grade areas, while the historic districts (which would have been largely White neighborhoods in the past) are at the center of land classified as higher-value. The historic areas of black settlement in the county have maintained the highest concentration of black citizens in this region. Given the historic and contemporary demographics of Prince George's County, the task of finding ways to preserve and value Black History is even more urgent than in other counties.



See Annotated Bibliography for more resources. Map by Ben Bernstein.



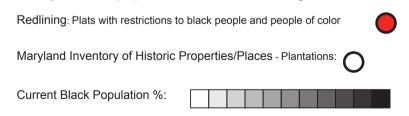
COUNTING CARS: Traffic Density creates Unpleasant Walking Experiences on Streets

Traffic congestion or bottlenecks bring about pollution which endangers the safety of pedestrians and cyclists on their daily commute. At Prince George's Plaza, an area that does not relate to the human scale, implementing a revised approach for public transportation using designated bus paths ----- would reduce the number of traffic counts per day, improving pedestrian security and ameliorating the environment. Cities' blocks was surrounding East West Highway have a lower traffic count ratio than the intersection of Adelphi Road & Queens Chapel Road. Simultaneously, they also have a greater miles distance, still with a lower traffic count ratio. Introducing more traffic calming measures like street trees and more safe setback space at key intersections and along the streets is needed.

See Annotated Bibliography for more resources. Map by Yan Konan.

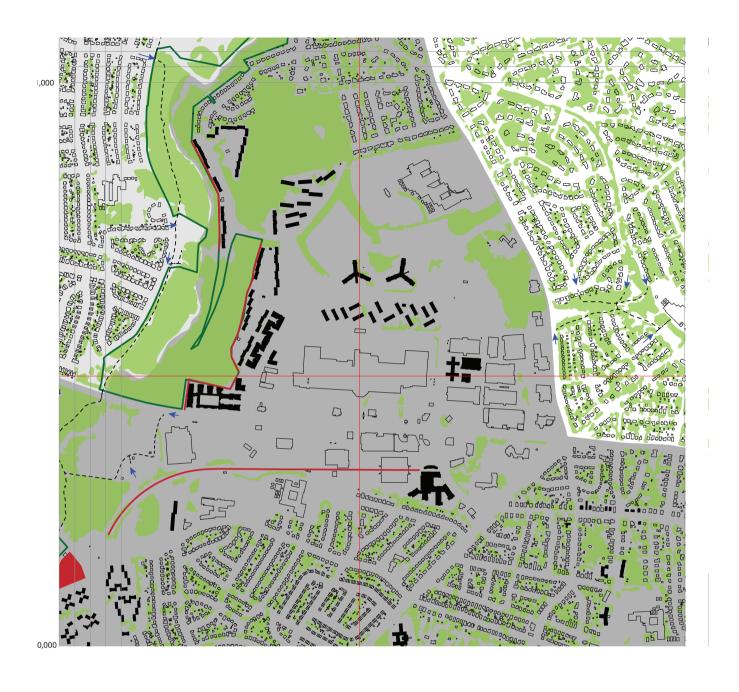


BLACK HISTORY SHAPING THE PRESENT: Aligning the Black History of Prince George's County with present day BIPOC population in Prince George's Plaza



Prince George's County, Maryland is one of the most affluent predominantly Black county's in the country. The county has a deep history pertaining to its Black community. This Research Map explores what Black history could means in terms of highlighting Black, Indigenous, People of Color in PG Plaza and the surrounding area.

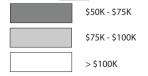
See Annotated Bibliography for more resources. Map by TaLisha Jenkins



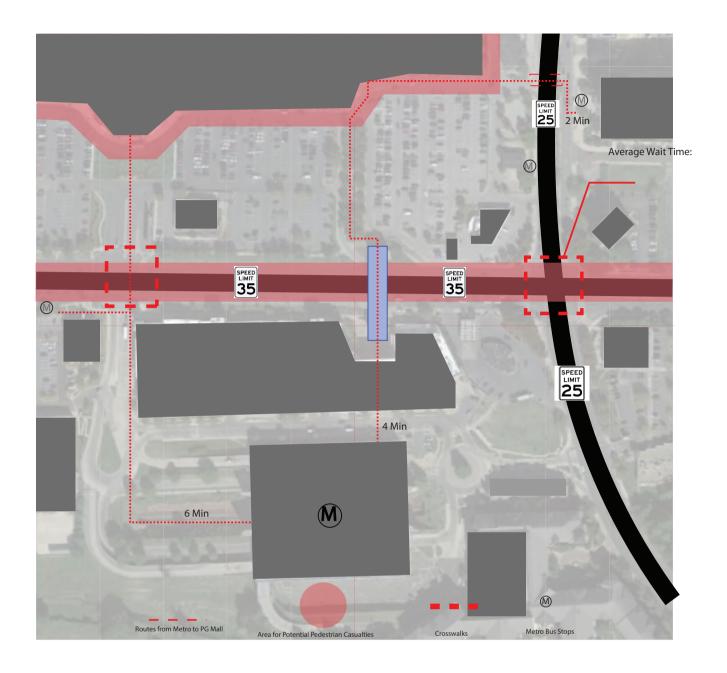
WHOSE PARKS: Income, Housing, and Access to Green Space

The area around Prince George's Plaza includes a network of green spaces, but these parks are not equally accessible to all neighborhoods. The adjacent neighborhoods, which have higher median household incomes than the census tract that includes PG Plaza itself, have a greater tree canopy as well as greater access to the network of formal parks via access points to their trails. The area around PG Plaza, especially the multifamily housing buildings highlighted on this map, do not have easy access to the parks and often are physically separated by barriers like fences or the metrorail tracks to the South.

Median Household Income



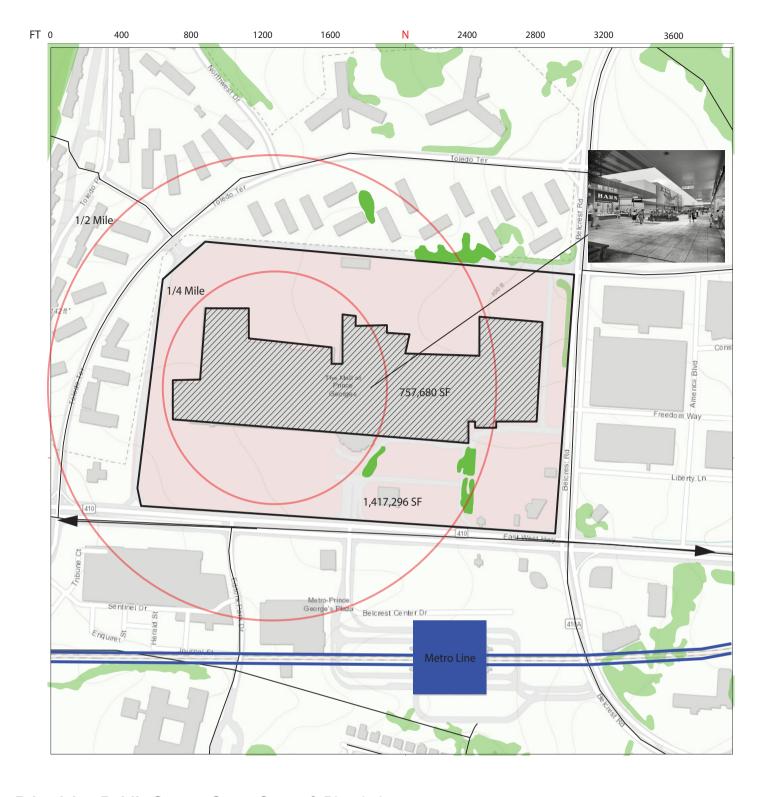
See Annotated Bibliography for more resources. Map by Upasana Kaku.



PEDESTRIAN SAFETY: Pedestrian route times, location of crosswalks and vehicle speeds from the PG Plaza Metro to PG Mall

Around 50% of people who access PG Plaza arrive via the metro or by Metro bus. These pedestrians are required to either cross Belcrest Road or East West Highway to get to the mall. The lack of crosswalks in the area cause many pedestrians to jaywalk across multiple lanes of traffic leading to pedestrian casualties. A bridge connecting the metro to the mall provides safe access but it is currently underused and rather difficult for handi-capped people to access. Providing a safe space for pedestrians traveling to the mall is needed.

See Annotated Bibliography for more resources. Map by Andrew DeGroff

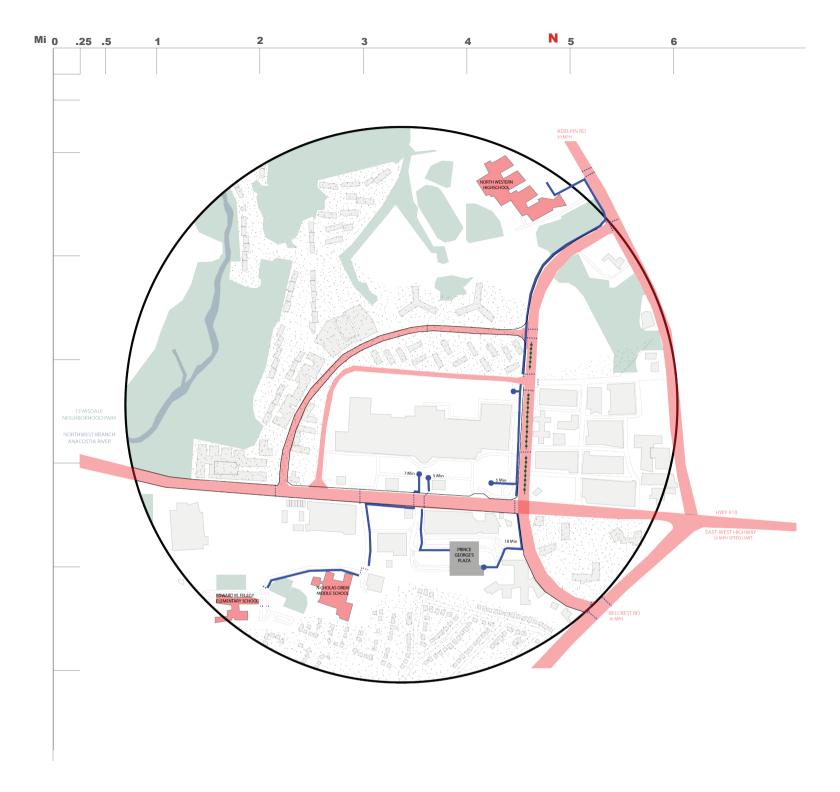


Privatizing Public Space: Green Space & Bicycle Lanes

Many studies indicate that public open space in urban environments leads to improvements in quality of life. So why not privatize these spaces to help pay for more open spaces and better maintenance? If funding through taxes is not available for adequate maintainence of public spaces, then these areas tend to degrade in value and attractiveness to different types of users. Being able to privatize a portion of these areas or having public-private spaces offers opportuntiies for businesses and might also be a way to create more thriving yet still inclusive spaces.

The map above shows a 1/2 mile radius (10 minute walk) and there are only a few tree canopy areas that can act as buffer zones between public open spaces and areas where there is heavy vehicular movement.

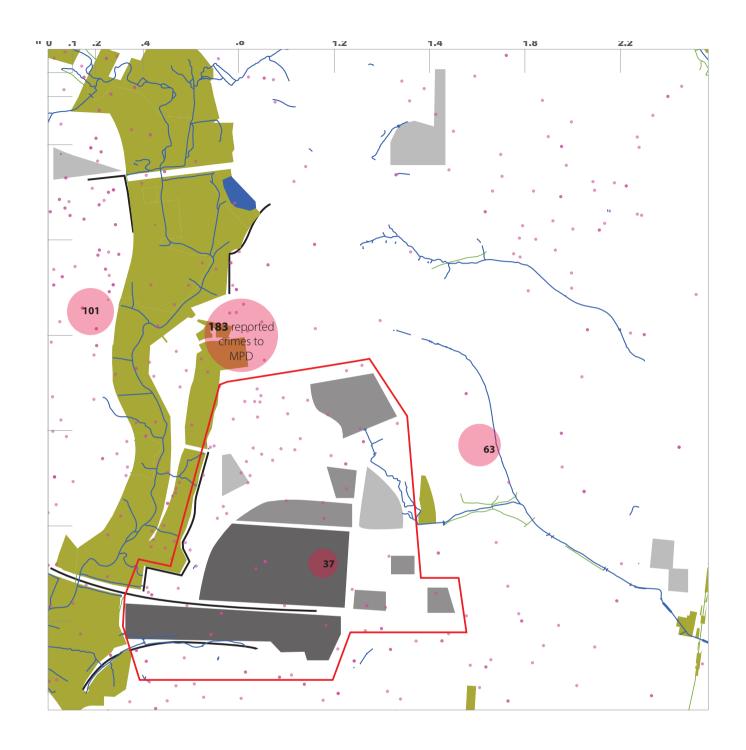
See Annotated Bibliography for more resources. Map by Daryl Vargas.



PEDESTRIAN SAFETY: Main Routes for Kids Under 18

Prince George's Plaza is surrounded by three different grade schools, K-12, which means it is essential to highlight the major pedestrian routes children can take to have access to the center of Prince George's Plaza. Speed limit is on these surrounding roads is a major safety issue for children. Pediatric pedestrians do not have the skills needed to navigate traffic as adults do. This research map shows the lack of buffer zones and safe crossing needed to safely protect the large amount of pediatric pedestrians this area serves.

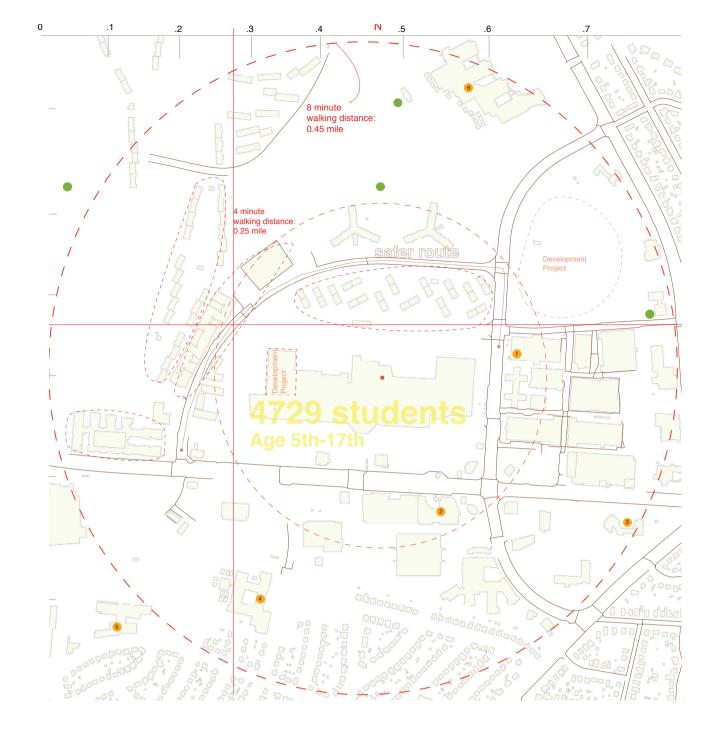
See Annotated Bibliography for more resources. Map by Selina Dandy.



SAFE SPACE: study of race, green space, policing and CPTED tactics.

As Prince George County moves to increase density and access to green space, this study considers the proximity of green space to households of color. Also high-lighted int his map are some Crime Prevention Through Environmental Design (CPTED) tactics including spatial boundaries like fences and railway lines, retail areas, parking lots, and vacant lots. CPTED utilizies techniques to create "natural" surveillance, hierarchies in space, and other spatial design techniques to reduce crimes of opportunity. However, it does nothing to mitigate existing biased policing or the creations of "turfs" which lead to vigilante policing. CPTED design tactics in this area have essentially created zones of biased containment that create nodes of policing. This study offers a reflection of the impact CPTED has had on the Prince George Plaza area and reccomends a consideration of what future design might do spatially to decrease biased policing.

See Annotated Bibliography for more resources. Map by Almas Haider.



KID-FRIENDLY: Safe and accessible activites for youth in PG plaza neighborhood

NARRATIVE

With proximity of six schools housing 4729 students and several multifamily apartments in the area, this study investigates the importance of accessibility and safety of the neighborhood for children and youth. Also, with just few playgrounds in the neighborhood, the study investigates the required space for youth thrive and development. A research map is created to illustrate the schools, outdoor activity hubs, sidewalks, and existing and future housing developments in the area with roughly 8-minute walk. This research aims to promote urban universal design for vulnerable users in the Prince George's Plaza and neighborhood.





MOVEMENT: A study looking into transportation around PG Plaza and street section types

In the context of PG Plaza, traffic calming has the potential to create a safer and more walkable environment around the proposed residential developments and retail spaces. Other methods such as "complete streets" and the Dutch *woonerf* street should be explored in PG Plaza to increase pedestrian safety and help manage vehicle traffic. Additional outcomes such as decreasing non-permeable surfaces and adding green belts around roads and pathways may also improve traffic calming and pedestrian safety.

See Annotated Bibliography for more resources. Map by Austin Benham.

5 Designing the Future

Final Design Project: "Designing the Future at Prince George's Plaza"

Students worked for five weeks in teams to look at Prince George's Plaza and envision how urban development might occur on this site in the next 15 years. The student design proposals were rooted in the historical research found in precedent studies, but the proposals also reflect a sophisticated understanding and response to complex contemporary issues like: the crisis of climate change, urban ecological collapse, public health, local and global economies, and social inequity.

Student teams focused their work on the area around the Prince George's Plaza mall and Metro stop. In particular, students thought about phased development over time and used tactical urbanism approaches that could be carried out quickly and inexpensively and shape the character of development over time. The students also thought carefully about the need for a public space/neighborhood center for this area.

The following pages show the project proposals by each of by the five student teams in the studio.

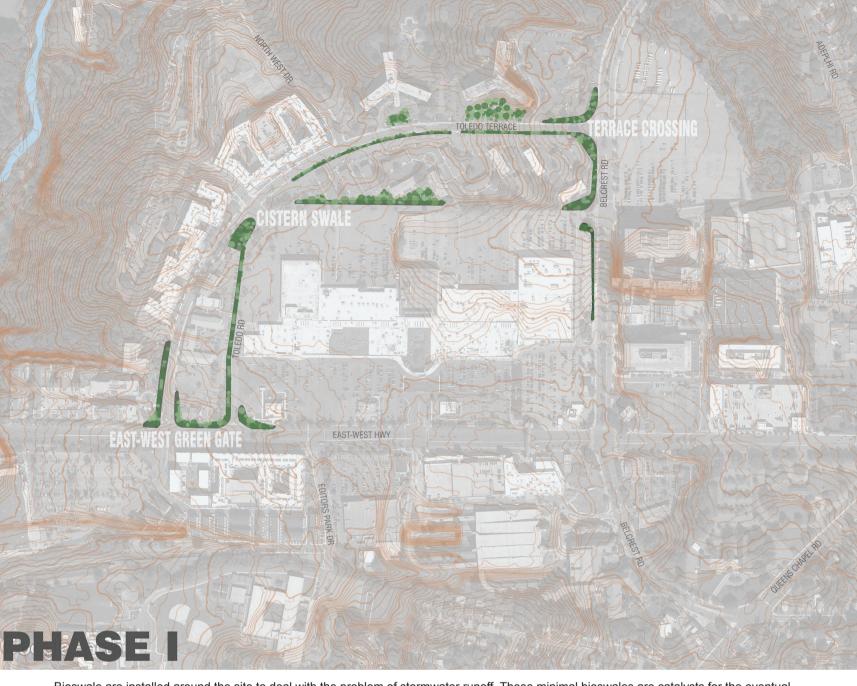
BIO BAND

Austin Benham and Nicholas Bibella

The Bio-Band at Prince George's Plaza aims to better manage stormwater runoff, repair the disconnect between the surrounding multi-family housing and the commercial areas, and bring the site scale down from a mostly automobile-oriented scale to a pedestrian-oriented scale. The proposal includes measures aimed to slow vehicle traffic and increase bike and foot traffic along Toledo Terrace. The **first phase** of the project sees rapid implementation of bioswales along key points of Toldeo Terrace to manage and collect stormwater. The swales add habitat for wildlife and shade decrease heat island effect temperatures for pedestrians. The **second phase** of the project creates a pedestrian-oriented ring road at Toledo Terrace, known as the Bio-Band. The Bio Band runs down the center of the street, thus "daylighting" the water course which is piped currently underground. Finally, the **third phase** of the project takes the 2035 plan for the site and incorporates the bioswale ring road into it. Site hydrology, green space, and pedestrian walkability/safety remian priorities. The Bio-Band ring road acts as a catalyst in Phase III to generate an Ecological Core and Civic Square, which includes a large park space running down the north-south spine of the development. The core brings greenspace, traffic calming, and stormwater management into the heart of Prince George's Plaza.



This Hydrology diagram shows the immense amount of impermeable surfaces around the site and how stormwater collects at the low points and runs east to Belcrest Road and south down to East-West Highway.



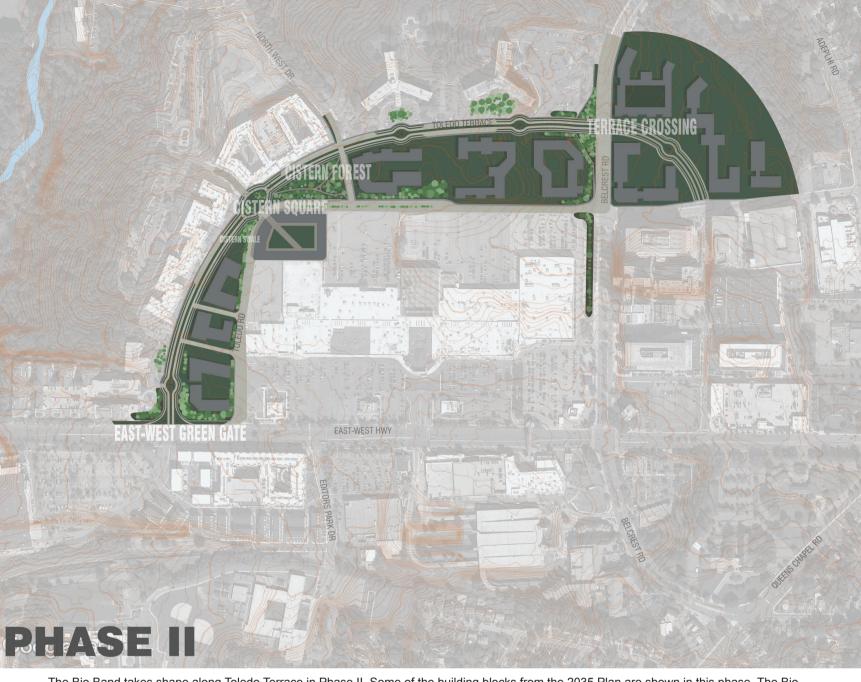
Bioswale are installed around the site to deal with the problem of stormwater runoff. These minimal bioswales are catalysts for the eventual Bio-Band and ecological/civic core areas.



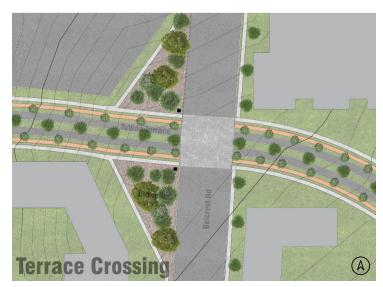
This important entrance into PG Plaza at East-West Highway is called the **Green Gate**. It lets people know they are entering a slower pace residential zone while also performing its function to retain stormwater at a natural low point.



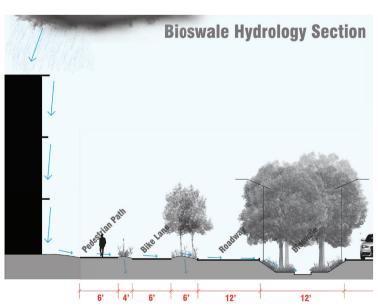
The **Terrace Crossing** rentention area is sited at a natural low point where water pools, but it also becomes a new gateway entry to the residential zone area.



The Bio Band takes shape along Toledo Terrace in Phase II. Some of the building blocks from the 2035 Plan are shown in this phase. The Bio Band ties together the cistern gateways and a more human scale complete street that runs between the two gates. At the mid point of the Bio Band is a topographic high point, which is celebrated with a new public open space called **Cistern Square** and an accompanying park called **Cistern Forest.**



Terrace Crossing becomes more developed in Phase II plan with a complete street section.

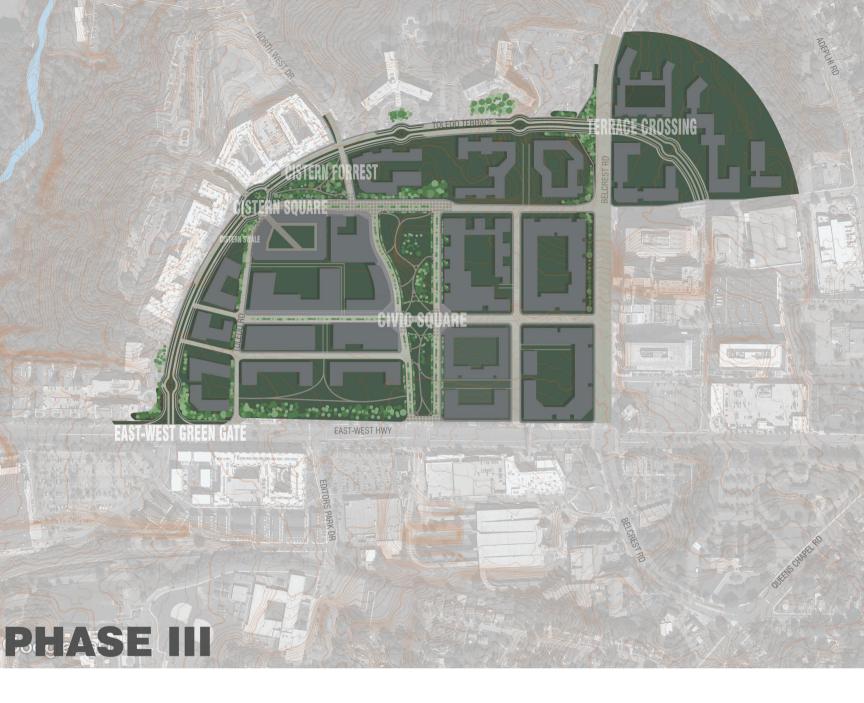


Stormwater would move from roofs of buildings to the bioswale median of the Bio-Band, which slows the collected stormwater and allows it to infiltrates into the ground.





The **Terrace Crossing** rentention area is sited at a natural low point where water pools, but it also becomes a new gateway entry to the residential zone area.



Phase III shows the full scale development of the current PG Plaza 2035 plan with the Bio-Band and ecological core added to it. The Bio-Band acts as a catalyst for the ecological core and other connected green spaces throughout the site.



These two conjoining public spaces create public life within the PG Plaza and act as a center of gravity for people to relax, eat, and interact with the green spaces.



This key civic intersection is similar to the cistern gates at Belcrest and East-West Highway. It follows a north-south axis and helps create the backbone for public life and ecolgical infrastructure.

CISTERN FOREST

Forest Provides shade and cover for wildlife Provides food for wildlife

FOREST PLANTINGS

Hackberry - *Celtis Occidentalis* Flowering Dogwood - *Cornus Florida* Red Mulberry - *Morus Rubra*

BIOSWALE PLANTINGS

Switch Grass - Panicum Virgatum

Trumpetweed - Eupatorium Fstulosum

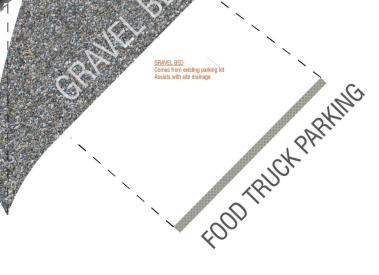
Coastal Plain Joe-Pye Weed - Eutrochium Dubium

Rose Milkweed - Asclepias Incarnata

GROUND COVER PLANTINGS

Switch Grass - Panicum Virgatum
Pinkster Flower - Rhododendron Periclymenoides
American Witch-Hazel - Hamamelis virginiana
Butterfly Weed - Asclepias Tuberosa
Woodland Stonecrop - Sedum Ternatum
Winterberry - Llex Verticillata

This diagram shows a "kit of parts" for cistern collection areas where Toledo Terrace meets Belcrest and East-West Highway. The cisterns are made from crushed, recycled pavement torn up in phase 1 and 2. The cistern acts like a bed of drainage under a new planted flood tolerant tree species that create the feeling of an urban forest.

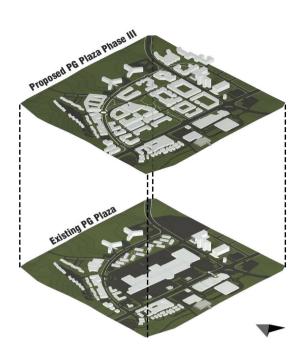




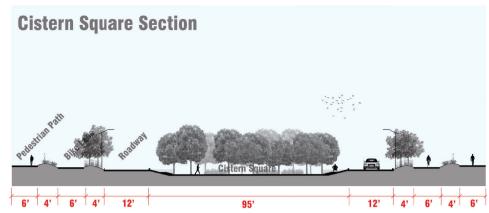
Phase I Perspectives. The implementation of follies bridges Bio Band to the Concourse Network Project (see page 92). The follies help establish gateways into the site and well as work as anchor points and create points of interest along the site.

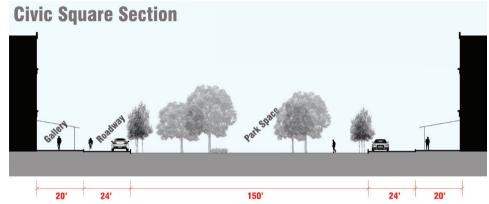


Phase II Perspectives - In the second phase is an area for food trucks to help activate the site.

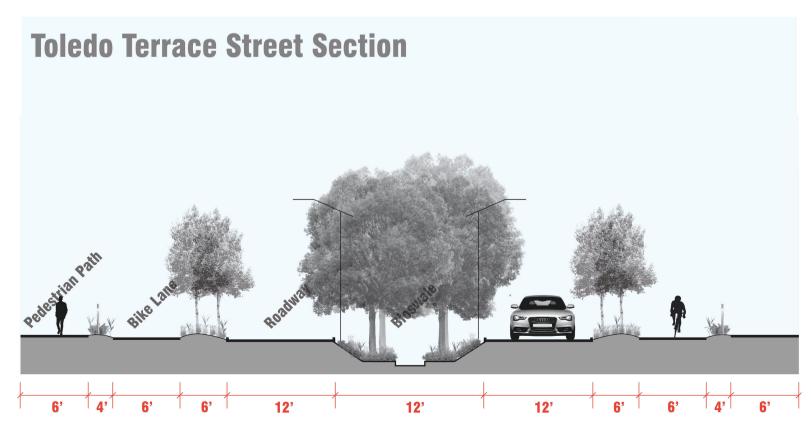


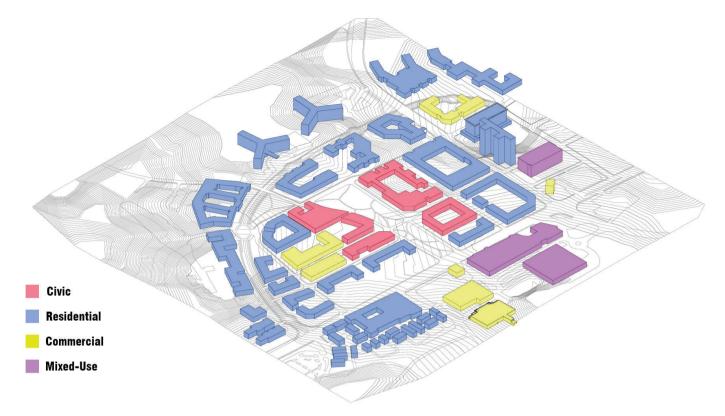
A quick snapshot of what the differences are between the existing conditions and the 2035 Plan.





Shows section view of the civic square within the ecological core and how the galleries, street, and park space are laid out and interact.





This diagram shows building occupancy groups around the new Ecological Core and Civic Square.

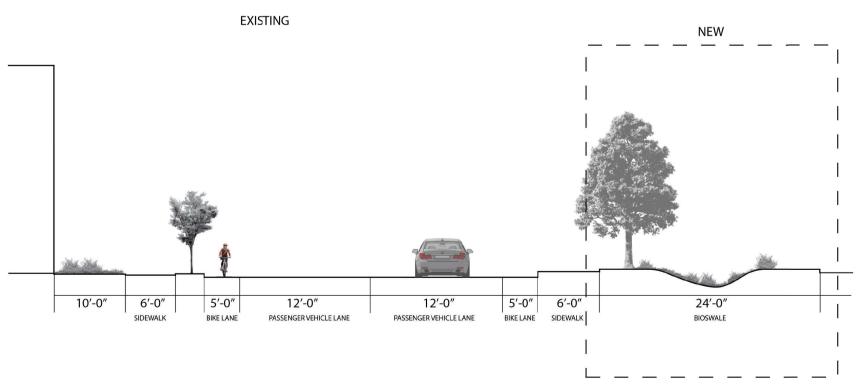


The ecological core and buildings that make up its perimeter. Use-groups and circulation pathways through the part are shown.





THE BAND



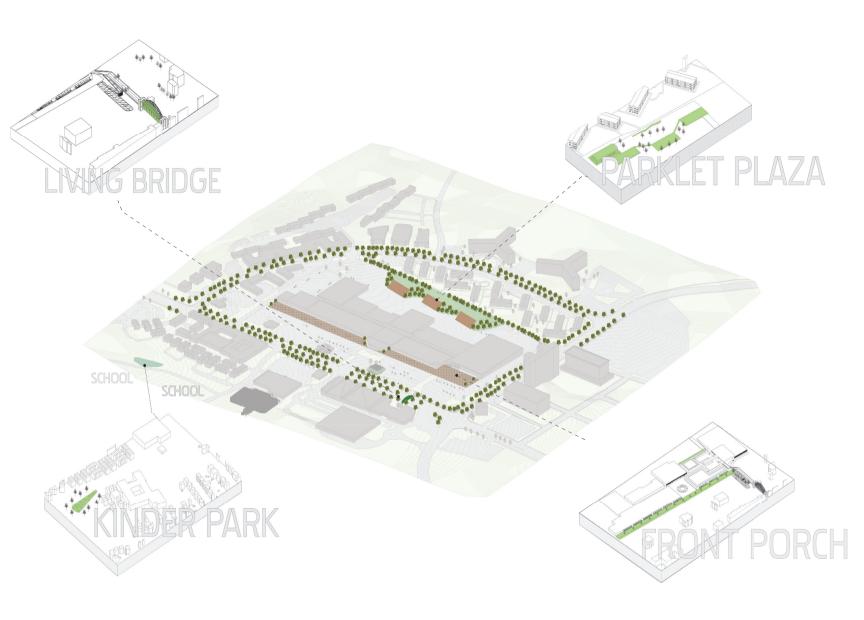
REGREEN

Maryam Bana Zadeh, Ben Bernstein, and Selina Dandy

Prince George's Plaza currently has a vast landscape of asphalt and motor vehicles. The ReGreen project brings the scale of the site down to the pedestrian. **Phase 1** "sprouts" small ideas and initiate growth in the surrounding community by offering an educational garden that centers school children and helps drive a market for locally grown vegetables. Creating a safe gathering space that allows for people to engage nature and witness wildlife on a small and manageable scale is meant to be a centerpiece of the educational experience for children in this neighborhood.

Phase 2 "roots" into history by restoring the outdoor mall. The Mall's rooftop is converted into "Garden Terraces" on the east side of the building and creates a pedestrian free safe place for families to have outdoor activities. A Living Bridge connects the Plaza metro stop to the Garden Terraces.

Phase 3 "branches" out between the two major infrastructural additions and increases overall connectivity within the site. The Living Bridge grows through the metro shops and into the metro garage, creating a full system that crosses from the south end of the site to its center. Areas of the Green Roof expand, with pedestrian bridges creating connections between the newer additions. ReGreen has the potential to adapt the environment of Prince George's Plaza towards a more pedestrian friendly, outdoor driven and education focused experience.



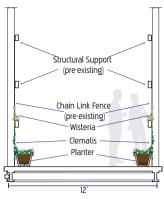
PHASE 1: Sprouting

Main Features:

- Safe Complete Streets for school children
- Greening the "Living Bridge"
- Educational "Kinder Park" Gardens near schools
- "Front Porch" outdoor cafe space in front of the Mall
- Flexible urban "Parklets" in parking lot to the north of the Mall

The Parklets can function as parkign spots with permenable paving or be used on the weekend as park space and cafe seating.





Scale: 1/2''=1'

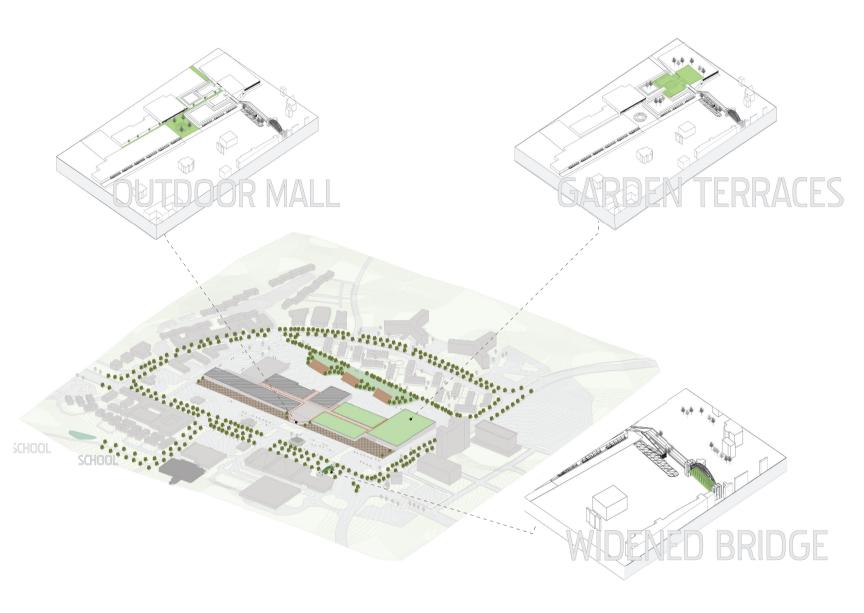
CROSS SECTION: LIVING BRIDGE

LONG SECTION: MALL to METRO



Scale: 1"= 20"





PHASE 2: ROOTING

Main Points:

- Adaptively re-use Mall and bring it back as an Outdoor Mall
 Garden Terrace Blue Roof (for stormwater management) on Mall
- Widening the Living Bridge to add Outdoor Retail/Commercial Space

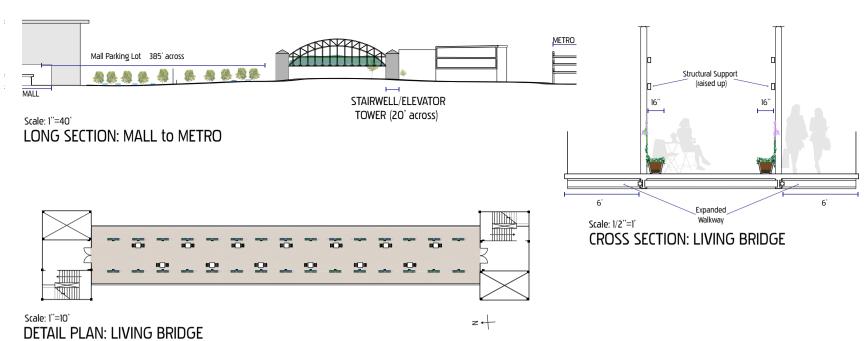


Image above: Widening the Living Bridge to add Outdoor Retail/Commercial Space

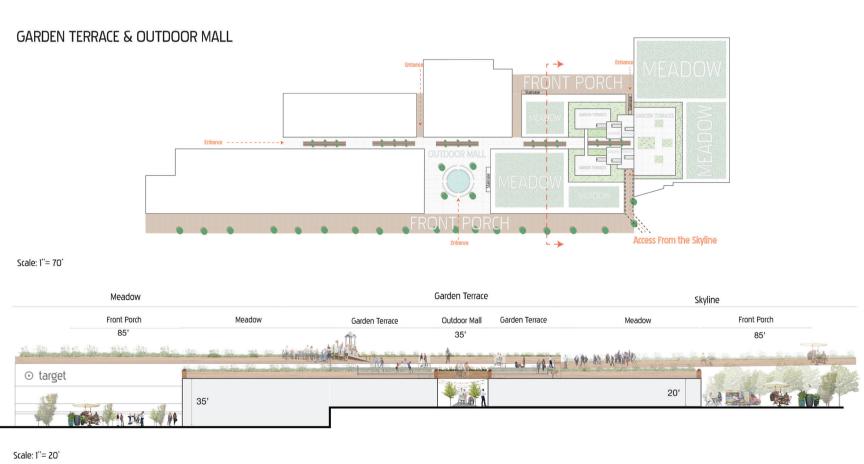


Image Above: Adaptively re-use of Mall to create a new Outdoor Mall + Garden Terrace Blue Roof on Mall



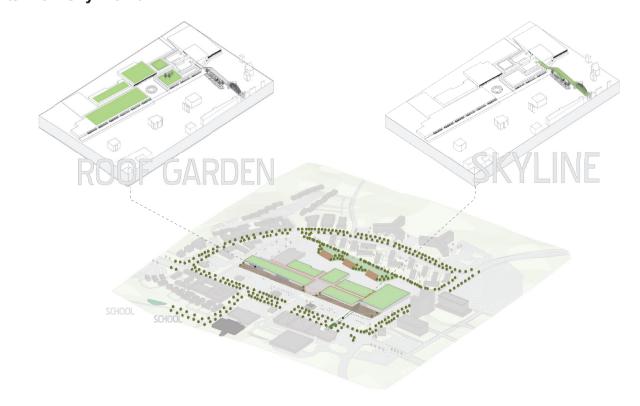


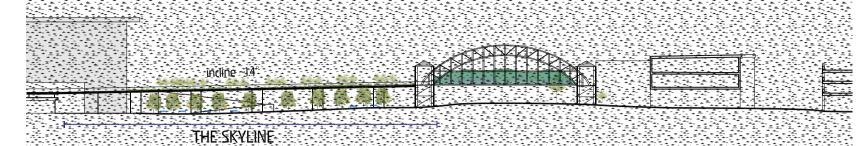


PHASE 3: BRANCHING In a time of COVID and future pandemics, substantial investments in outdoor activities is essential.

Main Points: New Skyline Park

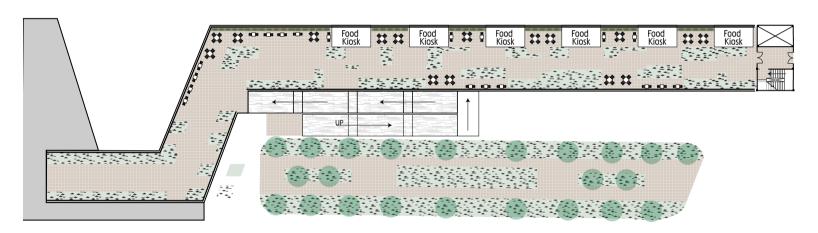
80





Scale: 1"=40".

LONG SECTION: MALL to METRO



Scale: 1"=20"

DETAIL PLAN: SKYLINE

Skyline Park reactivates the existing allee park at ground level that currently connects the bridge exit to the Mall. In this new **double height park space** the public has the opportunity see and be seen. The Skyline structure provides much needed **shade and shelter from rain and summer sun**. It also creates extra **retail space for restaurants to have outdoor seating**. The intention is for this park to be maintained by both tax dollars and rental dollars from retail customers offering a chance to create **inclusive** and **diverse public spaces** that are well-maintained.

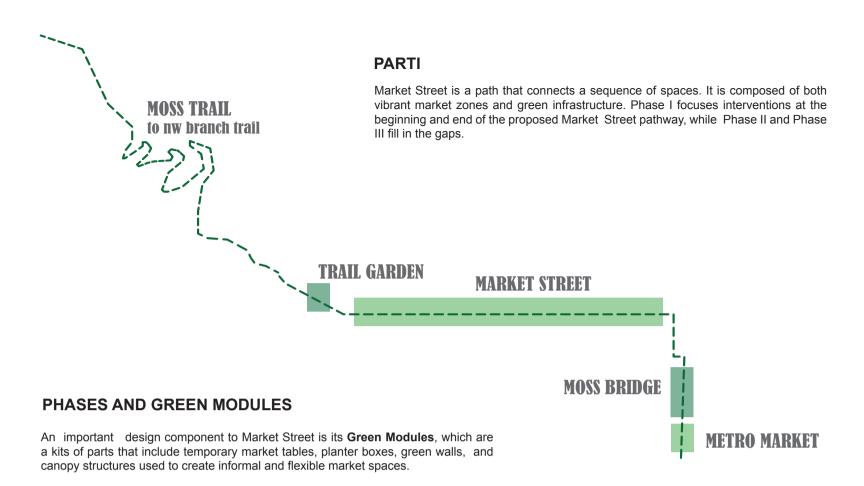
MARKET STREET

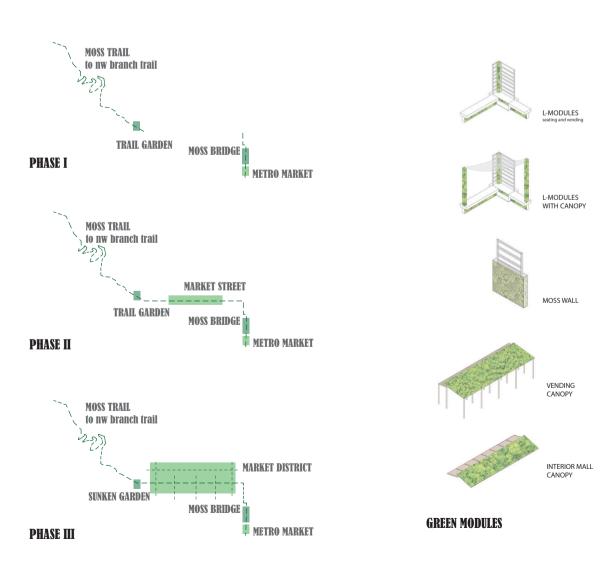
Almas Haider and Upasana Kaku

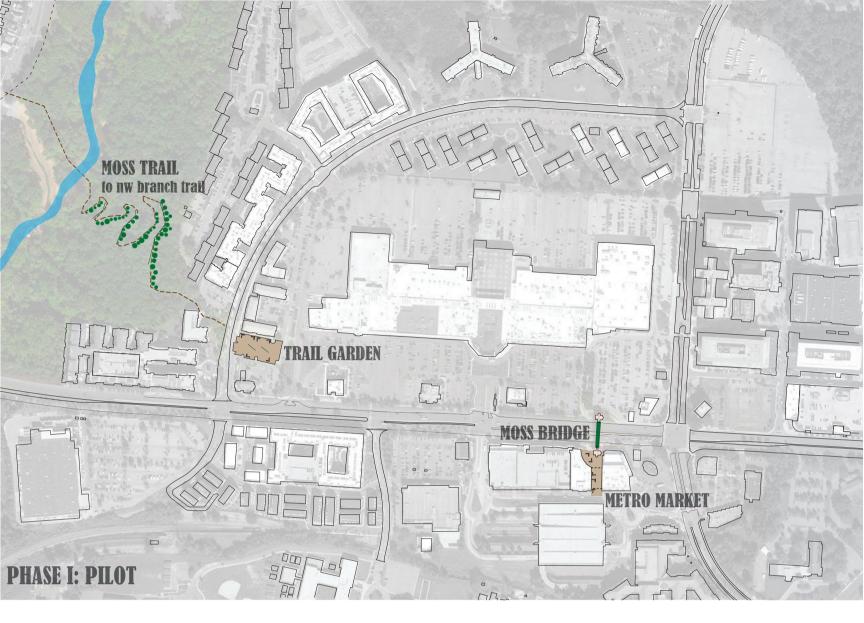
Market Street is a proposed design for Prince George's Plaza that uses the idea of the street to accomplish two goals:

First, the Market Street performs as a new, vibrant indoor and outdoor marketplace featuring small and local businesses, particularly minority owned businesses.

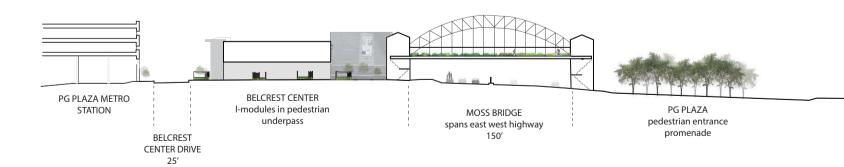
Second, Market Street better connects Prince George's Plaza to the surrounding residential and natural landscape. The primary public spaces in Market Street create a strong sense of urban promenade, leading visitors north from the Prince George's Plaza metro station, across East-West Highway, then westward through the market, and finally connecting the district to the existing county trail system.





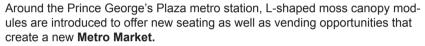


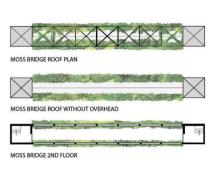
Phase I is a pilot phase that tests out different inexpensive interventions in a variety of locations to see how they impact public life. Initial interventions establish the beginning and end of the intended Market Street promenade. Around the Prince George's Plaza metro station, L-shaped moss canopy modules are introduced to offer new seating as well as vending opportunities that create a new **Metro Market**. Moss is applied to the pedestrian bridge crossing East-West Highway, which brings it to life as the new **Moss Bridge Gateway**. At the west edge of the site, an underutilized parking lot is turned into a temporary **Trail Garden** with additional L-modules and moss walls used for shade and seating. This garden is a threshold for a new trail that leads to the existing Northwest Branch trail network adjacent to the site. Moss retaining walls help make switchbacks along the steep slope.

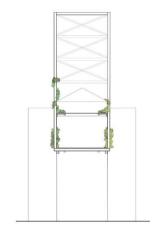


METRO MARKET SECTION







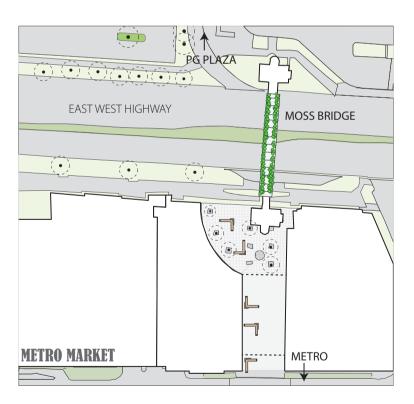


MOSS BRIDGE

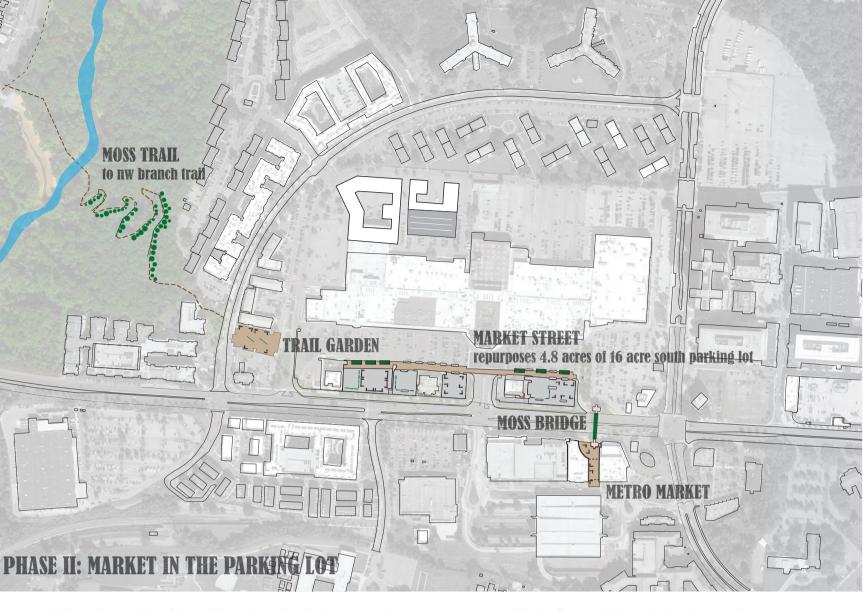
Moss is applied to the pedestrian bridge crossing East-West Highway, which brings it to life as the new **Moss Bridge Gateway**.



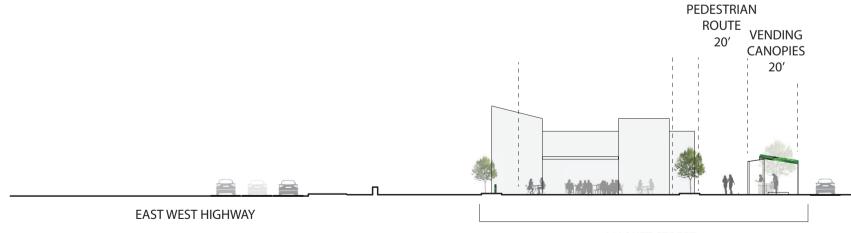
At the west edge of the site, an underutilized parking lot is turned into a temporary **Trail Garden** with additional L-modules and moss walls used for shade and seating. This garden is a threshold for a new trail that leads to the existing Northwest Branch trail network adjacent to the site. Moss retaining walls help make switchbacks along the steep slope.



Around the Prince George's Plaza metro station, L-shaped moss canopy modules are introduced to offer new seating as well as vending opportunities that create a new **Metro Market**.



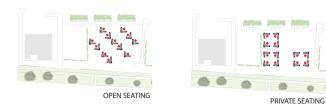
In Phase II, a portion of the mall's south parking lot is repurposed to create a temporary **Market Street**, which can be implemented in parts or altogether. This street takes advantage of existing elements, like restaurants and street trees, with new Green Modules inserted between them, to create the new lively and usable "street." The new **Market Street** integrates patio seating for existing restaurants, a market that lines one edge of the public space, and flexible zones with room for seating, informal vending and pop-up community events.

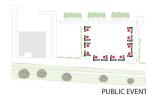


Phase II: Market Street Section

MARKET STREET 160' of 360' total parking lot width repurposed

PHASE 2: MARKET STREET VARIATIONS





PHASE 3: PG PLAZA SOUTH ENTRANCE VARIATIONS









TEMPORARY CANOPY INSTALLATIONS



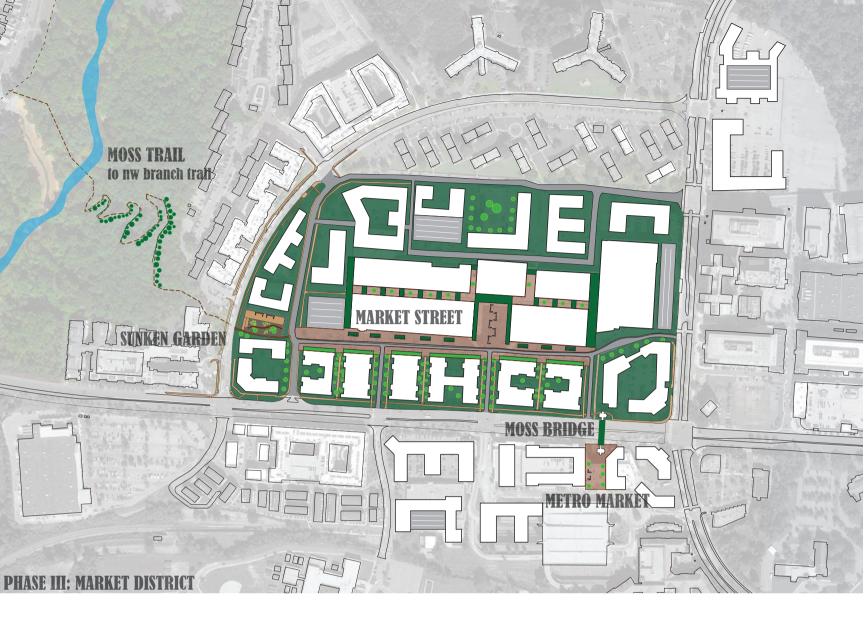


Flex spaces can be configured for multiple uses.



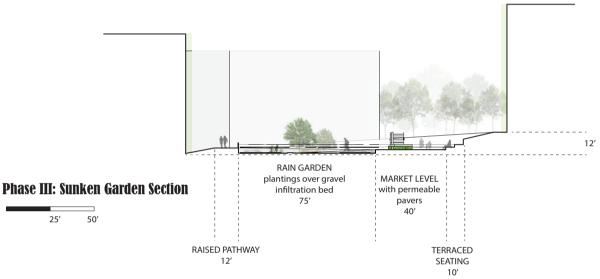


In Phase II, a portion of the mall's south parking lot is repurposed to create a temporary **Market Street**, which can be implemented in parts or altogether. This street takes advantage of existing elements, like restaurants and street trees, with new Green Modules inserted between them, to create the new lively and usable "street." The new **Market Street** integrates patio seating for existing restaurants, a market that lines one edge of the public space, and flexible zones with room for seating, informal vending and pop-up community events.



In its final Phase III, Market Street is permanently established adjacent to PG Plaza Mall, which is adaptively re-used and transformed into an **Open Air Mall**. The buildings south of market street have been divided into two sections with green walkways and courtyards in between to bring a pedestrian scale to each block. Buildings are lined with **Market Arcades** that respond to the massing of the canopies and PG Plaza mall across the street and form shared balconies for the new buildings that look out over Market Street. The market offers many different types of spaces for different scales of business and vending and degrees of informality, from temporary stalls formed by L-modules, to semi-formal structured canopies, to permanent spaces of different scales. Replacing the temporary trail garden is a new sunken garden, which also provides stormwater detention and processing, helping to address the persistent stormwater issues in the area.

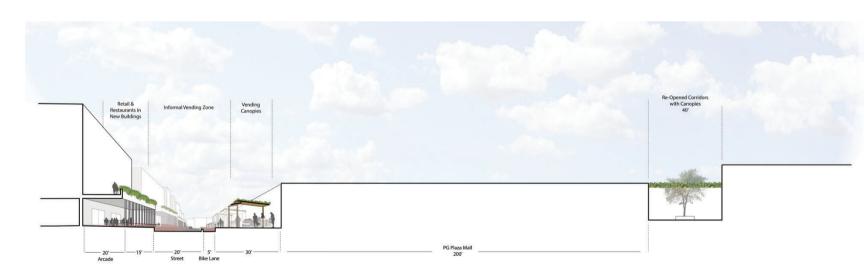




Replacing the temporary Trail Garden is a new **Sunken Trail Water Garden**, which also provides stormwater detention and processing, helping to address the persistent stormwater issues in the area.





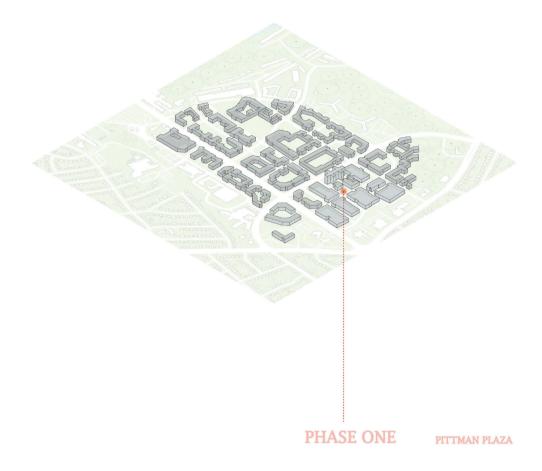


Market Street is permanently established adjacent to PG Plaza Mall, which is adaptively re-used and transformed into an **Open Air Mall**. The buildings south of market are lined with **Market Arcades**.

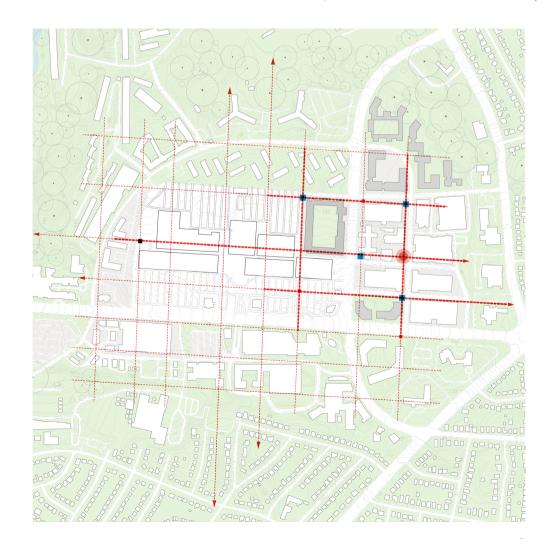
CONCOURSE NETWORK

Yan Konan, TaLisha Jenkins, Abigail Mencer

The Concourse Network is a three-phase project that focuses on the introduction of "follies," which are designed as distinctive and recognizable yet inexpensive ways of activating public space through public art, story telling, and the introduction of vegetation for shelter and shade in strategic locations. Prince George's County was formerly a thriving African American neighborhood. This project pays homage Prince George's County's past by celebrating a diverse and inclusive experience in which the public engages with the history of the district. The follies are meant as a catalyst for the revival of African American culture and history in Prince George's County that also creates safe space to celebrate traditions of newcomers to the area. Implementing new surface materials along building facades and adapting existing street fixtures creates visual connection and cohesion between the sites. The Concourse Network design also reintroduces the idea of the Front Porch, which has historically been an important social space in African American neighborhoods around the county. The space of storytelling and ceremonial Circles is used in key locations to reference the importance of these spaces for bringing renewal and community connection. The follies are the focal point of the pedestrian scale blocks and streets, which frame views to the follies and create the feeling of a Network of activated urban space.



Pittman Plaza is the existing square opposite the library at the corner of Freedom way and American Boulevard. The Plaza is re-envisioned as a vibrant square that feels exciting and fun and has opportunities for flexible use. This plaza highlights **William Sydney Pittman**, an African architect who established communities around Prince George's County. The new vision for the site also include the introduction of **Green Wall Eateries** that surround the square and make use of the former Library building.



POTENTIAL LIBRARY REPLACEMENT WITH GREEN WALL EATERY



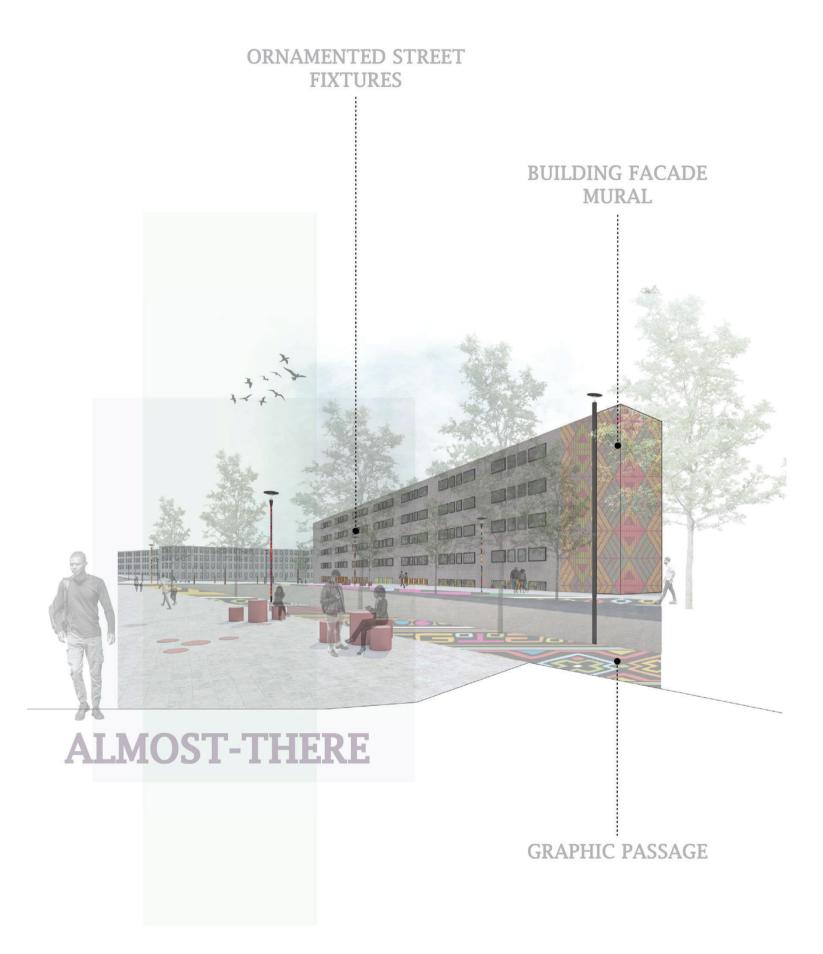
GROUND PLANE

UP-AHEAD

SURFACE

DECAL ILLUSTATION

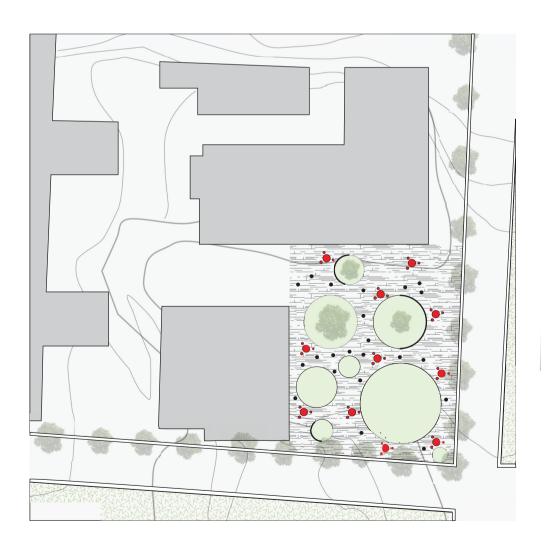
PITTMAN PLAZA



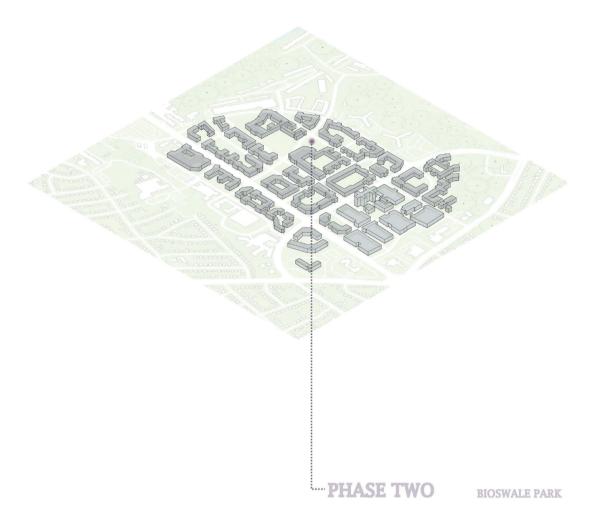
Repainting existing street lights and trash cans as well as building murals helps to create a distinct character in the neighborhood and visually leads people from one public space to the next.



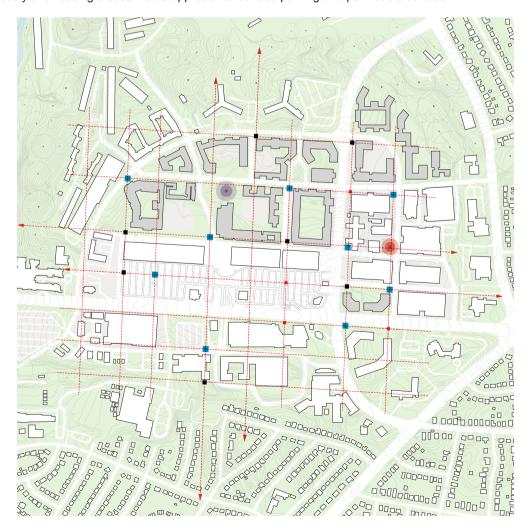
Street Section



PHASE ONE PITTMAN PLAZA



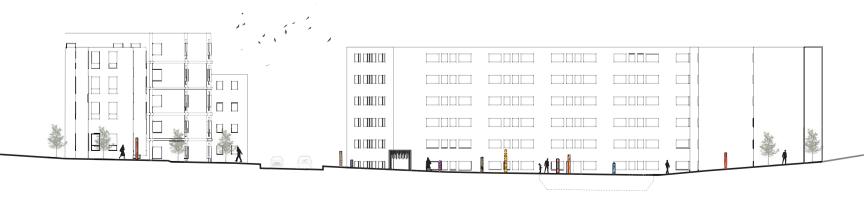
Bioswale Park is a transitional space that is located in the back parking lot of the Prince Georges Plaza Mall opposite Toledo Road. The park responds to the need for water retention and stormwater management. The attraction of this space is the multiple social opportunities that it offers while simultaneously showcasing a sustainable approach to surface parking and permeable surface.



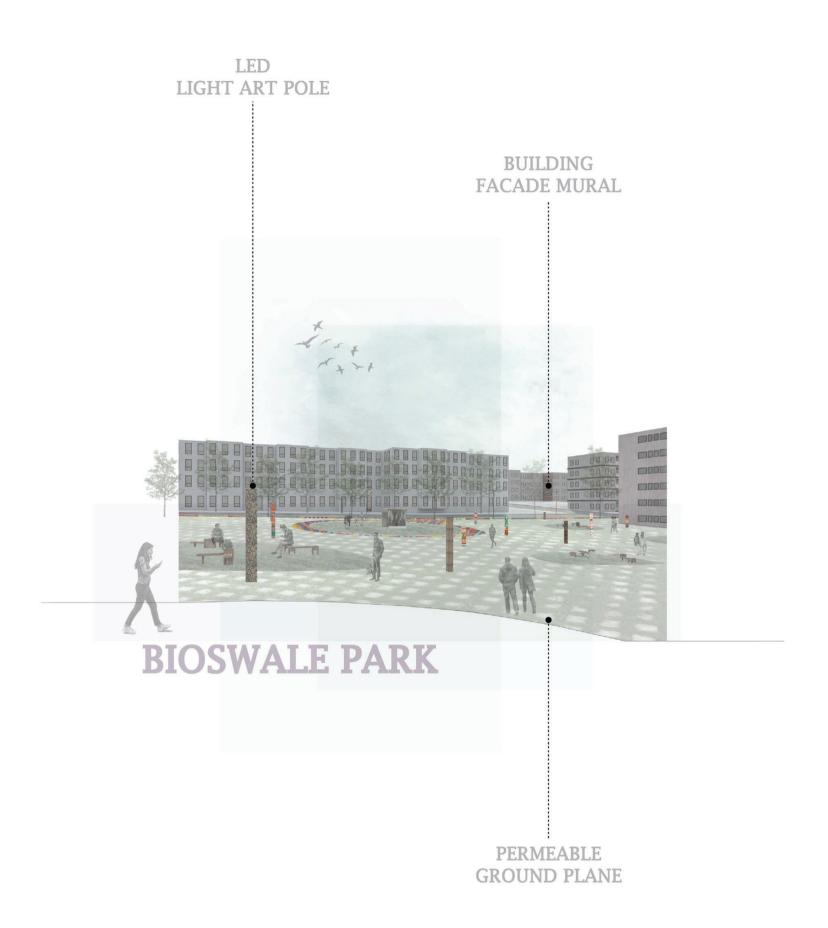


Despite multi use of space ground cover remains permable for consistant stormwater management

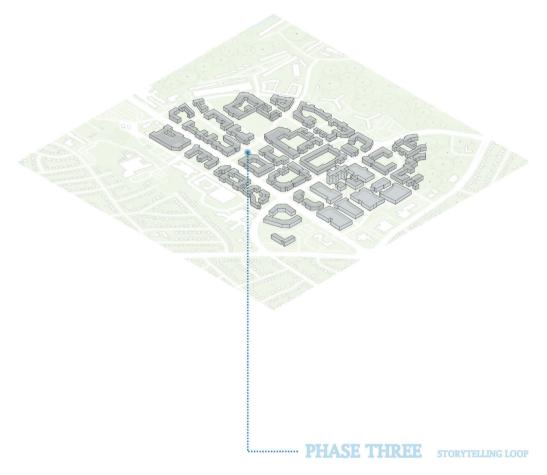
Biowall Follie
Uses scrap materials from near
by constrcution sites. Uses
biofuel created by community waste
to for watering system



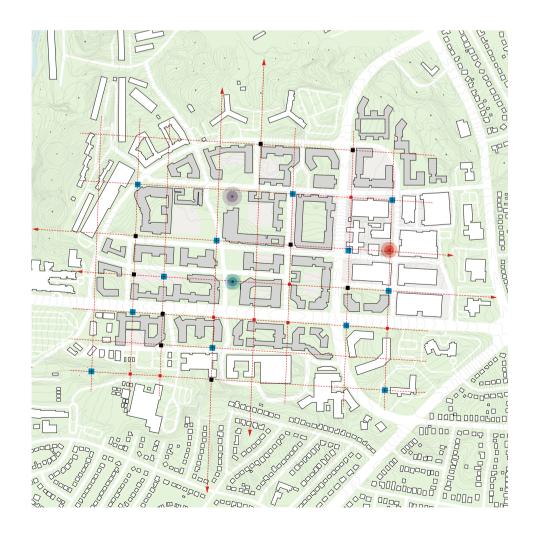
Bioswale Park is a transitional space that is located in the back parking lot of the Prince Georges Plaza Mall opposite Toledo Road.

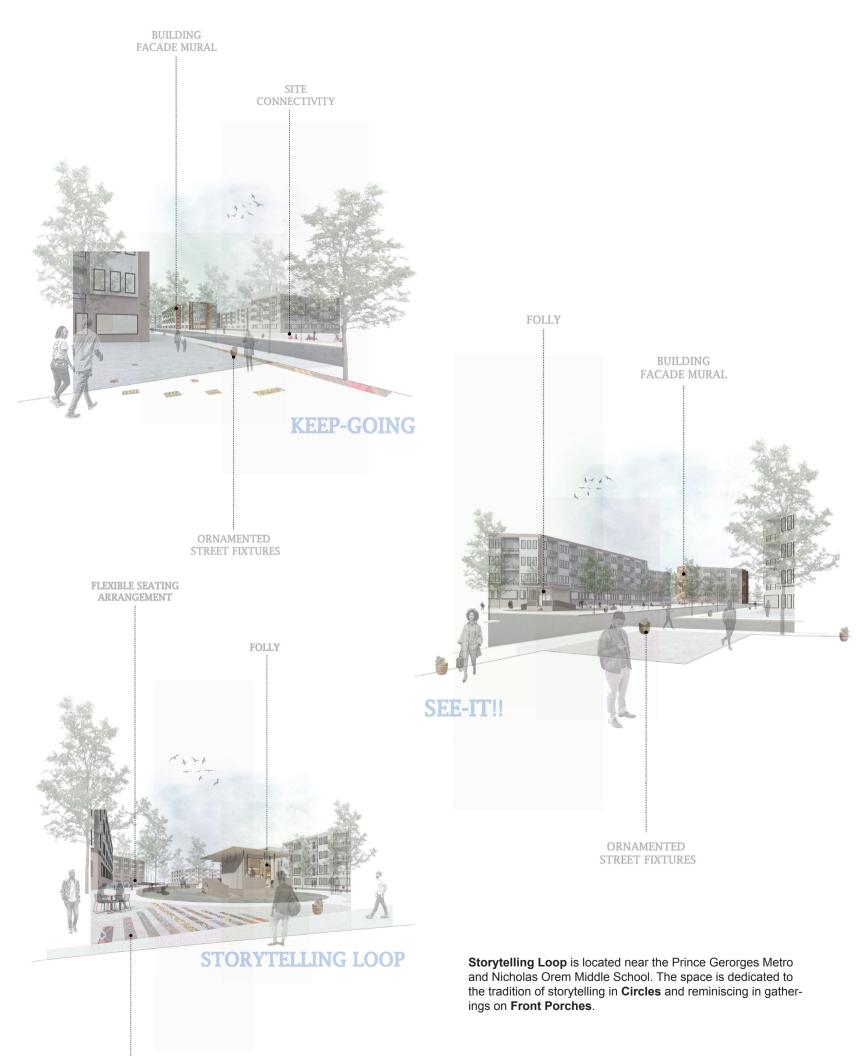


Bioswale Park responds to the need for water retention and stormwater management. The attraction of this space is the multiple social opportunities that it offers while simultaneously showcasing a sustainable approach to surface parking and permeable surface.



Storytelling Loop is located near the Prince Gerorges Metro and Nicholas Orem Middle School. The space is dedicated to the tradition of storytelling in **Circles** and reminiscing in gatherings on **Front Porches**.



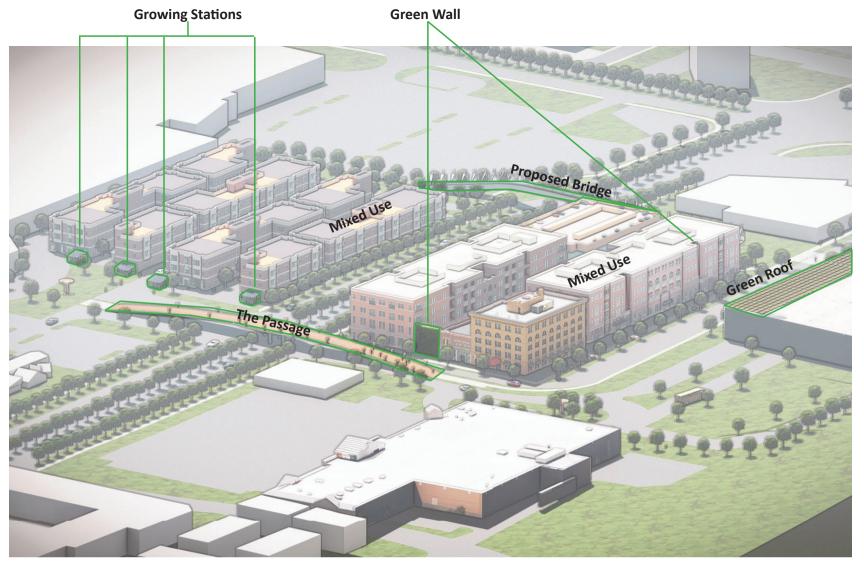


GREEN LOOP

Daryl Vargas and Andrew DeGroff

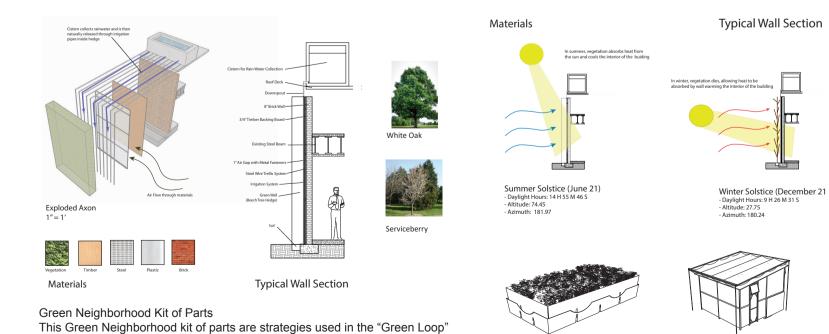
The Green Loop uses three main ideas to reshape PG Plaza:

- 1) Pedestrian safety is imprived by enhanced design of bridges
- 2) Green infrastructure elements are created to handle climate control, food supply and noise buffering
- 3) Affordable housing creates a new mixed-use civic center



Aerial View looking North-East

The proposed "Green Loop" starts at the PG Plaza metro stop with an open green space. The **Passage** is a new bridge that continues the Green Loop and crosses East-West highway. **Green walls**, **street trees with edible fruits** and community **Growing Stations** are incorporated into the architecture and landscape to give the neighborhood and distinct character.



Roof top Growing Beds

Growing Stations

including growing stations, green wall axons and roof-top growing beds.



Phase 1 includes the planting of rees and other vegetation along East West Highway and in the area of metro center. Green walls and growing rooftop gardens are implemented as well. Adding vegetation to this area will help with cooling during the summer months and create noise buffers that improve the pedestrian near vehicular traffic.



METRO STATION

The first viewpoint in the Green Loop is located at Belcrest Center Drive and shows the existing metro station with proposed mixed use development.



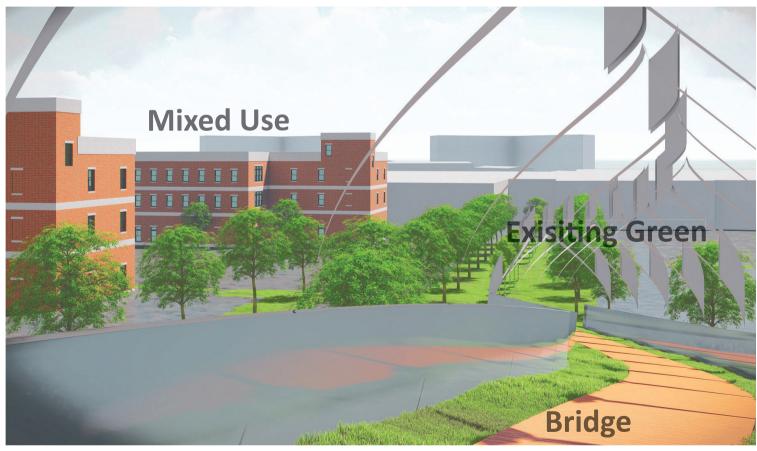
THE PASSAGE

The second viewpoint in the Green Loop is The Passage bridge, which span over East West Highway and connects directly to the front of the PG Plaza Mall. Green walls are used on building facades to improve slow stormwater, create a noise buffer near East-West Highway and provide habitat for wildlife.

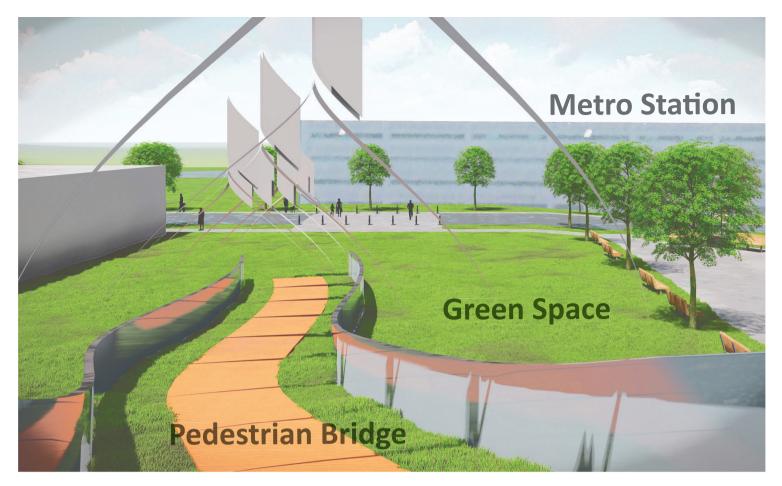


MIXED USE AFFORDABLE HOUSING

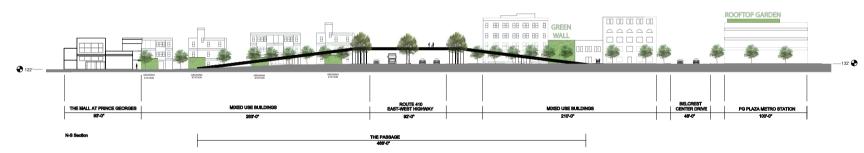
Growing Greenhouse Stations are part of the architectural language of the mixed-use afforable housing. They act as **Front Lobbies** to apartment buildings and community space for residents.



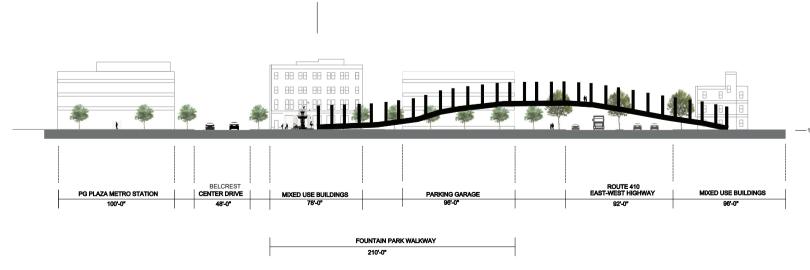
RENOVATION OF EXISTING BRIDGE OVER EAST-WEST HIGHWAY



RENOVATION OF EXISTING BRIDGE OVER EAST-WEST HIGHWAY



SITE SECTION (North-South)



PARTIAL SITE SECTION (Existing Bridge)

Appendix 1: Public Life Study "lite"

TWELVE URBAN QUALITY CRITERIA

LOCATION:

3 = YES

2 = IN BETWEEN

1 = NO

Protection against traffic and accidents.

Do groups across age and ability experience traffic safety in the public space? Can one safely bike and walk without fear of being hit by a driver?

Protection against harm by others.

Is the public space perceived to be safe both day and night? Are there people and activities at all hours of the day because the area has, for example, both residents and offices? Does the lighting provide safety at night as well as a good atmosphere?

Protection against unpleasant sensory experience.

Are there noises, dust, smells, or other pollution? Does the public space function well when it's windy? Is there shelter from strong sun, rain, or minor flooding?

2

Options for mobility.

• • • • • • • • • • • • • • • • • • •

Is this space accessible? Are there physical elements that might limit or enhance personal mobility in the forms of walking, using of a wheelchair, or pushing a stroller? Is it evident how to move through the space without having to take an illogical detour?

2

Does the place have features you can

invites one to spend time next to it, a

bus stop, a bench, a tree, or a small

stay and lean on, like a façade that

Options to stand and linger.

ledge or niche?

Options for sitting.

Are there good primary seating options such as benches or chairs? Or is there only secondary seating such as a stair, seat wall, or the edge of a fountain? Are there adequate non-commercial seating options so that sitting does not require spending money?

3

Options for seeing.

Are seating options placed so there are interesting things to look at?

2

Options for talking and listening/ hearing.

Is it possible to have a conversation here? Is it evident that you have the option to sit together and have a conversation? 1

Options for play, exercise, and activities.

Are there options to be active at multiple times of the day and year?

1

Scale.

Is the public space and the building that surrounds it at a human scale? If people are at the edges of the space, can we still relate to them as people or are they lost in their surroundings?

.

Opportunities to enjoy the positive aspects of climate.

Are local climatic aspects such as wind and sun taken into account? Are there varied conditions for spending time in public spaces at different times of year? With this in mind, where are the seating options placed? Are they located entirely in the shadows or the sun? And how are they oriented/placed in relation to wind? Are they protected?

2

Experience of aesthetic qualities and positive sensory experiences.

Is the public space beautiful? Is it evident that there is good design both in terms of how things are shaped, as well as their durability?

1

2

7

Prince George's Plaza PUBLIC LIFE STUDY

THANK YOU FOR PARTICIPATING IN OUR SURVEY ABOUT PUBLIC LIFE IN THIS AREA. YOUR RESPONSES WILL BE KEPT STRICTLY CONFIDENTIAL.	 If you answered 'just passing through' are you headed anywhere in particular? Home Work School
1 How often do you visit Eastern Market Metro Park? □ Daily ■ Weekly □ Monthly □ Rarely (once per year or less) □ First time here	 ☐ Cultural institution ☐ Restaurant/Bar ☐ Store ☐ Another public space ☐ Other. Please describe
	6 How much time do you plan on spending here today?
 How did you get here today? (Select option traveled for longest distance) Walk Bike Bus Light rail/Streetcar 	 Less than 10 min. 10 min. 20 min. 30 min. 1 hour or more
 □ Private car □ Taxi/Rideshare □ Private bus/Shuttle □ Metro 	7 How do you feel about this neighborhood?
□ Other. Please describe ————————————————————————————————————	Strongly Somewhat Neutral Somewhat Strongly negative negative positive positive
3 What best describes your relationship to this area? (check all that apply)	8 How do you feel about Eastern Market Metro Park?
 ■ Neighbor/Resident □ Employee (of nearby institution/business) □ Student (of nearby school) □ Tourist □ Attendee (cultural event or institution) □ Other. Please describe 	Strongly Somewhat Neutral Somewhat Strongly positive positive
	9 What three words would you use to describe Eastern Market Metro Park?
4 What brings you to Eastern Market Metro Park today?	Nice, Quiet, Fun
 ☐ Just passing through ☐ Shopping/Market ☐ Spending time with my family ■ Meeting up with friends ☐ Spending time by myself ☐ Sightseeing ☐ Recreation/Sports/Exercise 	10 What two things would you like to do in Eastern Market Metro Park that you can't do now? Park Area & Less Traffic
 □ Walking my pet □ Cultural event/Performance □ Political event/Protest 	CAIR AIEA

^

Prince George's Plaza PUBLIC LIFE STUDY

SI Y	HANK YOU FOR PARTICIPATING IN OUR URVEY ABOUT PUBLIC LIFE IN THIS AREA. OUR RESPONSES WILL BE KEPT STRICTLY	5 If you answered 'just passing through' are you headed anywhere in particular?
C	ONFIDENTIAL.	■ Home□ Work□ School□ Cultural institution
	How often do you visit Eastern Market Metro Park? □ Daily □ Weekly □ Monthly ■ Rarely (once per year or less)	☐ Restaurant/Bar ☐ Store ☐ Another public space ☐ Other. Please describe
	□ First time here	
2	How did you get here today? (Select option traveled for longest distance)	6 How much time do you plan on spending here today? ☐ Less than 10 min. ☐ 10 min.
	 □ Walk □ Bike □ Bus □ Light rail/Streetcar □ Private car 	□ 20 min. □ 30 min. ■ 1 hour or more
	 □ Private car □ Taxi/Rideshare □ Private bus/Shuttle ■ Metro □ Other, Please describe 	7 How do you feel about this neighborhood?
		Strongly Somewhat Neutral Somewhat Strongly negative negative positive positive
3	What best describes your relationship to this area? (check all that apply)	8 How do you feel about Eastern Market Metro Park?
	■ Neighbor/Resident □ Employee (of nearby institution/business) □ Student (of nearby school) □ Tourist □ Attendee (cultural event or institution) □ Other. Please describe	Strongly Somewhat Neutral Somewhat Strongly negative negative positive positive
		9 What three words would you use to describe Eastern Market Metro Park?
4	What brings you to Eastern Market Metro Park today?	_ Accesbile, Lots of Shops, Family Friendly
	■ Just passing through □ Shopping/Market □ Spending time with my family □ Meeting up with friends □ Spending time by myself □ Sightseeing	10 What two things would you like to do in Eastern Market Metro Park that you can't do now?
	 □ Sightseeing □ Recreation/Sports/Exercise □ Walking my pet □ Cultural event/Performance □ Political event/Protest 	Normal Mall Life & Socialize

PARK/PLAZA Prince Geor		LOCATION (MA1, SB 3, I Bridge		
DATE 4/1/2021	☑ WEEKD	AY WEEKE	ND	
NAME Andrew De	groff Yan Ko	nan		
WEATHER	CONDITION			
o	· • • •			
TEMPERAT 40°	URE			
TIME IN	1	IME OUT	_	
9:00 A		9:10 A.M		

NOTES:

Numerous commuters use the bridge instead of using crosswalks when arriving to PG Plaza from the metro station

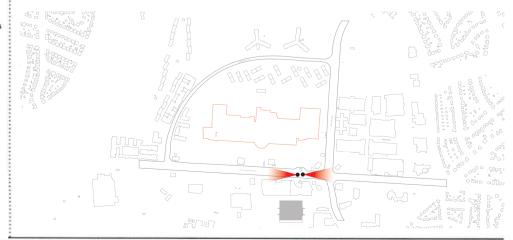
Bridge is rundown, also elevator does not always work causing issues for those whith disabilities.

DIRECTIONS

This count will be conducted on each of the screenline locations for 10 minutes every hour (see basemap + schedule)

The surveyor will stand at the location and proceed to count every pedestrian that passes through, making a tally mark for their age, gender and if they are performing an action other than walking (jogging, biking, etc.)

ı	PEDESTRIANS				SUBT	OTAL	TOTAL
	DIRECTION		LEET TO DIGIT	A DIGUETA CONTRACTOR	9200	1994	
	PERCEIVED GENDER	MALE	LEFT TO RIGHT →	← RIGHT TO LEFT	2	4	6
		FEMALE			0	6	6
	0-6 YEARS OLD						0-6
	7-14 YEARS OLD						7-14
	15-19 YEARS OLD						15-19
١	20-30 YEARS OLD		3				20-30
	31-64 YEARS OLD		9				31-64
	OVER 65 YEARS OLD						65+
1	CYCLING		+				٨
	RUNNING/ JOGGING						×.
	SKATEBOARDS, ROLLERBLADES, ETC.						À
	WHEELCHAIR/ SPECIAL NEEDS						k
	GROUPS						†††
	WITH PETS						加
	WITH STROLLERS						*



PARK/PLAZA	NAME	LOCATION
Prince Geor	ge's Plaza	(MA1, SB 3, ETC.) Gas Station
DATE 4/1/2021	☑ WEEKDAY	✓ □ WEEKEND
NAME Andrew Deg	groff Yan Kona	n
WEATHER	CONDITION	
0 G		
TEMPERAT	URE	
TIME IN	TIM	1E OUT

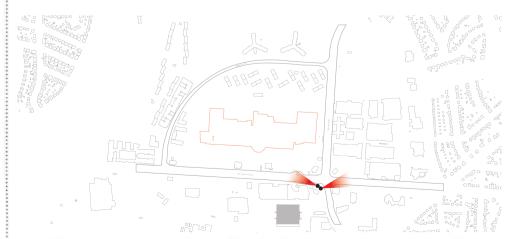
NOTES:

DIRECTIONS

This count will be conducted on each of the screenline locations for 10 minutes every hour (see basemap + schedule)

The surveyor will stand at the location and proceed to count every pedestrian that passes through, making a tally mark for their age, gender and if they are performing an action other than walking (jogging, biking, etc.)

1	PEDESTRIANS				SUBTOTAL		TOTAL
ı	DIRECTION OF TRAVEL		LEFT TO RIGHT →	← RIGHT TO LEFT	→	←	
)	PERCEIVED GENDER	MALE			1	4	5
		FEMALE			1	3	4
1	0-6 YEARS OLD						0-6
	7-14 YEARS OLD						7-14
	15-19 YEARS OLD						15-19
١	20-30 YEARS OLD		1				20-30
	31-64 YEARS OLD		7				31-64
	OVER 65 YEARS OLD						65+
	CYCLING		+				&
	RUNNING/ JOGGING						8º
	SKATEBOARDS, ROLLERBLADES, ETC.						À
	WHEELCHAIR/ SPECIAL NEEDS						Ġ.
	GROUPS						†††
	WITH PETS						*
1	WITH STROLLERS						∱ *



PARK/PLAZ	A NAME	LOCATION
Prince Geo	rge's Plaza	(MA1, SB 3, ETC.) Mall (Target)
DATE 4/1/2021	☑ WEEKD	AY WEEKEND
NAME Andrew De	egroff Yan Ko	nan
WEATHER	CONDITION	
0 0	~ 9	
TEMPERA'	TURE	
TIME IN		TIME OUT
9:40	A.M	9:50 A.M

NOTES:

Target's entrance appears to be the main entry point to the mall as it is the closest to the metro bus stop and the metro station

DIRECTIONS

This count will be conducted on each of the screenline locations for 10 minutes every hour (see basemap + schedule)

 The surveyor will stand at the location and proceed to count every pedestrian that passes through, making a tally mark for their age, gender and if they are performing an action other than walking (jogging, biking, etc.)

1	PEDESTRIANS				SUBT	OTAL	TOTAL
	DIRECTION OF TRAVEL		LEFT TO RIGHT →	← RIGHT TO LEFT	→	←	
1	PERCEIVED GENDER	MALE			3	5	8
		FEMALE			8	8	16 •
1	0-6 YEARS OLD		2				0-6
1	7-14 YEARS OLD						7-14
إ	15-19 YEARS OLD						15-19
(20-30 YEARS OLD		6				20-30
1	31-64 YEARS OLD		8				31-64
(OVER 65 YEARS OLD		4				65+
1	CYCLING						٨
1	RUNNING/ JOGGING						æ
	SKATEBOARDS, ROLLERBLADES, ETC.						À
3{	WHEELCHAIR/ SPECIAL NEEDS						Ġ.
	GROUPS						†††
	WITH PETS						i.
(WITH STROLLERS		1				∱ *



The same was a sufficient	LAZA N George	LOCATION (MA1. SB 3, ETC.) Mall (Marshall's)				
DATE 4/1/20		√ WEEK	DAY	□WEE	KEND	
		off Yan				
WEAT	HER CC	NDITIO	N			
0	G-			*	7	
TEMPE 45°	RATUR	RE	<u> </u>			
TIME II	N		TIME	OUT		
	0:00 A.I		3	10:10 A.I	М	

NOTES:

Mall Security makes continuous rounds around the mall's parking lot

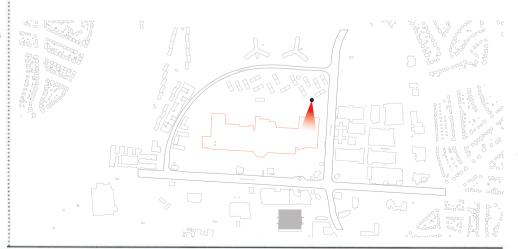
Landscapers performing civic work on greenery surrounding 3° adjoining apartment complexes

DIRECTIONS

This count will be conducted on each of the screenline locations for 10 minutes every hour (see basemap + schedule)

 The surveyor will stand at the location and proceed to count every pedestrian that passes through, making a tally mark for their age, gender and if they are performing an action other than walking (jogging, biking, etc.)

1	PEDESTRIANS					DTAL	TOTAL	
	DIRECTION OF TRAVEL		LEFT TO RIGHT →	← RIGHT TO LEFT	→	+		
1	PERCEIVED GENDER	MALE			13	2	15	
		FEMALE			11	3	14	
1	0-6 YEARS OLD		2				0-6	
	7-14 YEARS OLD		2				7-14	
<u>ا</u>	15-19 YEARS OLD		1			15-19		
^	20-30 YEARS OLD		8				20-30	
	31-64 YEARS OLD		12				31-64	
(OVER 65 YEARS OLD		2				65+	
1	CYCLING						&	
	RUNNING/ JOGGING						ge .	
	SKATEBOARDS, ROLLERBLADES, ETC.						À	
3	WHEELCHAIR/ SPECIAL NEEDS						Ġ.	
	GROUPS						†††	
	WITH PETS						i.	
(WITH STROLLERS		1				∱ *	



PARK/PLAZA	NAME	17	LOCATION			
Prince Georg	N	(MA1, SB 3, ETC.) Metro Park & Ride				
DATE 4/1/2021	☑ WEEKD	AY	□WE	EKEND		
NAME Andrew Degr	•	nan				
WEATHER C	ONDITION					
00		***	-	-		
				7		
₫ □						
TEMPERATU 45°	2070					
TEMPERATU	RE	IIME (DUT			

NOTES:

Various people waiting for buses from the metro sit on benches underneath the metro parking garage

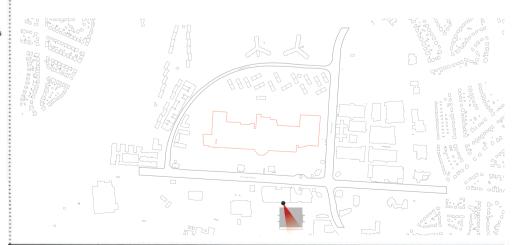
This is also where many homeless people sleep on park benches out of the harmful effects of the elements

DIRECTIONS

This count will be conducted on each of the screenline locations for 10 minutes every hour (see basemap + schedule)

 The surveyor will stand at the location and proceed to count every pedestrian that passes through, making a tally mark for their age, gender and if they are performing an action other than walking (jogging, biking, etc.)

- (PEDESTRIANS				SUBT	OTAL	TOTAL
1	DIRECTION OF TRAVEL		LEFT TO RIGHT →	← RIGHT TO LEFT	→	+	
	PERCEIVED GENDER	MALE	0		7	5	12
		FEMALE			4	4	8
	0-6 YEARS OLD		1				0-6
ı	7-14 YEARS OLD						7-14
Į	15-19 YEARS OLD		2				15-19
	20-30 YEARS OLD		4				20-30
١	31-64 YEARS OLD		4				31-64
	OVER 65 YEARS OLD		3				65+
1	CYCLING		2				&
ı	RUNNING/ JOGGING						æ
	SKATEBOARDS, ROLLERBLADES, ETC.						À
\langle	WHEELCHAIR/ SPECIAL NEEDS		1				Ġ.
	GROUPS						†††
	WITH PETS						*
1	WITH STROLLERS		1				∱ *



PARK/PLAZA Prince Geor			LOCATION (MA1, SB 3, ETC. Royal Cinema				
DATE 4/1/2021	₫ WEE	CDAY	□WE	EKEND			
NAME Andrew De							
WEATHER	CONDITIC	N					
<u></u>				5			
TEMPERAT 47°	URE		10000				
TIME IN		TIME	OUT				
10:40	A.M		10:50 A.I	M			

NOTES:

This area features a movie theater, library and central plaza

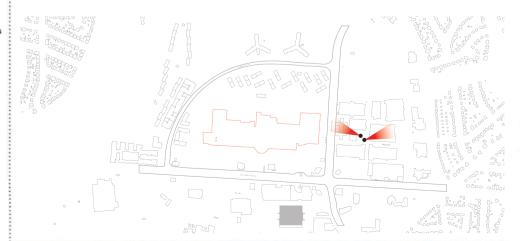
There are also restaurants that form a sort of "small strip mall" $oldsymbol{3}$

PEDESTRIANS	SUBTOTAL	TOTAL	
DIRECTION OF TRAVEL	LEFT TO RIGHT → ←	RIGHT TO LEFT → ←	
PERCEIVED GENDER	MALE	5 8	13
	FEMALE	3 4	9
0-6 YEARS OLD	2		0-6
7-14 YEARS OLD			7-14
15-19 YEARS OLD	1		15-19
20-30 YEARS OLD	4		20-30
31-64 YEARS OLD	9		31-64
OVER 65 YEARS OLD			65+
CYCLING	+		&
RUNNING/ JOGGING			ge.
SKATEBOARDS, ROLLERBLADES, ETC.			
WHEELCHAIR/ SPECIAL NEEDS			ė.
GROUPS			†††
WITH PETS			本
WITH STROLLERS			4

DIRECTIONS

This count will be conducted on each of the screenline locations for 10 minutes every hour (see basemap + schedule)

 The surveyor will stand at the location and proceed to count every pedestrian that passes through, making a tally mark for their age, gender and if they are performing an action other than walking (jogging, biking, etc.)



PARK/PLAZA NA Prince George's	LOCATION (MA1, SB 3, ETC. Mall (Macy's)				
DATE	WEEKDAY	□ WEEKEND			
NAME Andrew Degrof	f				
WEATHER CON	NOITION				
0 0- 1					
TEMPERATURE 55°					
TIME IN	TIM	E OUT			
11:20 A.M	IINS)	11:30 A.M			

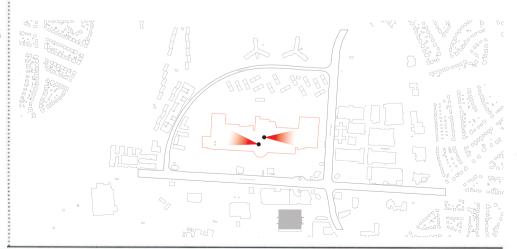
NOTES:

DIRECTIONS

This count will be conducted on each of the screenline locations for 10 minutes every hour (see basemap + schedule)

The surveyor will stand at the location and proceed to count every pedestrian that passes through, making a tally mark for their age, gender and if they are performing an action other than walking (jogging, biking, etc.)

1	PEDESTRIANS					DTAL	TOTAL
ı	DIRECTION OF TRAVEL	17	LEFT TO RIGHT →	← RIGHT TO LEFT	→	+	
J	PERCEIVED GENDER	MALE			10	8	18
		FEMALE			13	13	26
1	0-6 YEARS OLD		1				0-6
١	7-14 YEARS OLD		2				7-14
Į	15-19 YEARS OLD		4				15-19
	20-30 YEARS OLD		19				20-30
١	31-64 YEARS OLD		17				31-64
	OVER 65 YEARS OLD		6				65+
1	CYCLING						٨
١	RUNNING/ JOGGING						æ
	SKATEBOARDS, ROLLERBLADES, ETC.						À
3	WHEELCHAIR/ SPECIAL NEEDS		1				ė.
	GROUPS						†÷†
	WITH PETS						i.
1	WITH STROLLERS		1				∱ *



The transport of the certain terms of the street	ARK/PLAZA NAME rince George's Plaza			
DATE	WEEKDAY	WEEKEND		
NAME Yan Konan				
WEATHER COI	NDITION	No. 1220 No. 100		
O G		7 7		
TEMPERATURE 55°				
TIME IN	TIM	1E OUT		
11:20 A.M	· ·	11:30 A.M		

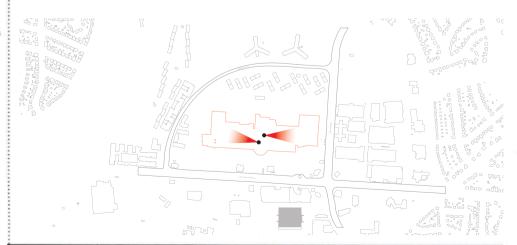
NOTES:

DIRECTIONS

This count will be conducted on each of the screenline locations for 10 minutes every hour (see basemap + schedule)

 The surveyor will stand at the location and proceed to count every pedestrian that passes through, making a tally mark for their age, gender and if they are performing an action other than walking (jogging, biking, etc.)

1	PEDESTRIANS				SUBTO	DTAL	TOTAL
	DIRECTION OF TRAVEL		LEFT TO RIGHT →	← RIGHT TO LEFT	→	+	
1	PERCEIVED GENDER	MALE			7	8	15
		FEMALE			13	12	25
1	0-6 YEARS OLD		3				0-6
	7-14 YEARS OLD		3				7-14
2	15-19 YEARS OLD		1			15-19	
1	20-30 YEARS OLD		13				20-30
	31-64 YEARS OLD		13				31-64
(OVER 65 YEARS OLD		3				65+
1	CYCLING		Ŧ				À
	RUNNING/ JOGGING						æ
	SKATEBOARDS, ROLLERBLADES, ETC.						À
3{	WHEELCHAIR/ SPECIAL NEEDS						ė.
	GROUPS		2				†††
	WITH PETS						i.
	WITH STROLLERS		2				∱ *



PARK/F	LAZA	NAME		OCATIO	96124074	:
Prince	Georg	ge's Plaza	(1	MA1. SB	3, ETC.)	1
			N	1all		: '
			(1	Marshal	l's)	:
DATE 4/3/20	21	WEEKD	AY	₫ WE	EKEND	:
NAME	u Doo	woff Van Va	nan			
Andre	w Deg	roff Yan Ko	IIaII			
WEAT	HER (CONDITION				
0	9			-	-	:
₫					7	2
TEMPE 50°	RATU	JRE				
50						
TIME I	N		TIME C	TUC		
(F) 1	2:05 F	P.M (1	2:15 P.N	и	
(500 50	ACTIV	10 MINS)				:

NOTES: 10:00 A.M

10:00 A.M

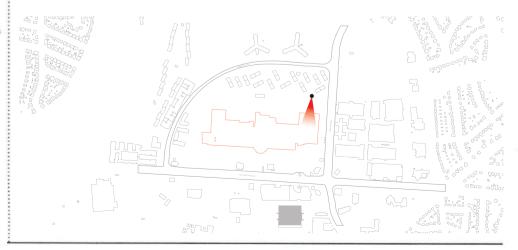
10:00 A.M

DIRECTIONS

This count will be conducted on each of the screenline locations for 10 minutes every hour (see basemap + schedule)

The surveyor will stand at the location and proceed to count every pedestrian that passes through, making a tally mark for their age, gender and if they are performing an action other than walking (jogging, biking, etc.)

PEDESTRIANS				SUBTO	DTAL	TOTAL
DIRECTION OF TRAVEL		LEFT TO RIGHT →	← RIGHT TO LEFT	→	←	
PERCEIVED GENDER	MALE			6	7	1: †
	FEMALE			14	18	3
0-6 YEARS OLD		6				0-6
7-14 YEARS OLD		5				7-14
15-19 YEARS OLD		3				15-19
20-30 YEARS OLD		13				20-30
31-64 YEARS OLD		22				31-64
OVER 65 YEARS OLD						65+
CYCLING		2				٨
RUNNING/ JOGGING						X.
SKATEBOARDS, ROLLERBLADES, ETC.						À
WHEELCHAIR/ SPECIAL NEEDS			_			Ġ.
GROUPS						†††
WITH PETS						∱ *
WITH STROLLERS		1				٠١



PARK	/PLAZA	NAME	LOCATIO	211577
Prince	e Geor	ge's Plaza	(MA1, SB	3, ETC.)
			Mall	
			(Target)	
DATE 4/3/2		WEEKDAY	₫ wee	KEND
NAMI	-			
Anar	ew De	groff Yan Kona	1	
WEA.	THER	CONDITION		
0	0	-		-
₫		0 0		⁷
	ERAT	URE		
55°				
TIME	IN	TIM	IE OUT	
(1)	10.00	6.	3	
(: r ·)	12:30	P.M	12:40 P.N	1 :

NOTES: 10:00 A.M

10:00 A.M

3

10:00 A.M

DIRECTIONS

This count will be conducted on each of the screenline locations for 10 minutes every hour (see basemap + schedule)

 The surveyor will stand at the location and proceed to count every pedestrian that passes through, making a tally mark for their age, gender and if they are performing an action other than walking (jogging, biking, etc.)

1	PEDESTRIANS				SUBT	OTAL	TOTAL
ı	DIRECTION						
ı	OF TRAVEL		LEFT TO RIGHT →	← RIGHT TO LEFT	\rightarrow	←	
) 	PERCEIVED				4	5	9
Į	GENDER	FEMALE			8	15	23
(0-6 YEARS OLD		4				0-6
l	7-14 YEARS OLD		1				7-14
	15-19 YEARS OLD		1				15-19
	20-30 YEARS OLD		13				20-30
l	31-64 YEARS OLD		12				31-64
l	OVER 65 YEARS OLD		2				65+
ĺ	CYCLING		4				&
l	RUNNING/ JOGGING						8º
	SKATEBOARDS, ROLLERBLADES, ETC.						À
\	WHEELCHAIR/ SPECIAL NEEDS						Ġ.
	GROUPS						†††
	WITH PETS						CONTRACTOR OF THE REAL PROPERTY.
	WITH STROLLERS						∱ *



PARK/PLAZ/ Prince Geor			LOCATIC (MA1, SB Bridge	
DATE 4/3/2021	□WEEK	DAY	₫ wei	KEND
NAME Andrew De				
O G	CONDITIO	×	*	5
TEMPERAT	URE			
TIME IN		TIME	OUT	
12:50		3	1:00 P.M	

NOTES: 10:00 A.M

10:00 A.M

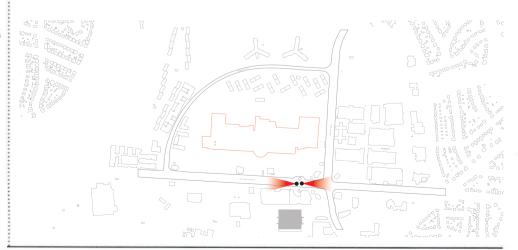
10:00 A.M

DIRECTIONS

This count will be conducted on each of the screenline locations for 10 minutes every hour (see basemap + schedule)

The surveyor will stand at the location and proceed to count every pedestrian that passes through, making a tally mark for their age, gender and if they are performing an action other than walking (jogging, biking, etc.)

1	PEDESTRIANS			SUBTOTAL		TOTAL	
ı	DIRECTION OF TRAVEL		LEFT TO RIGHT →	← RIGHT TO LEFT	→	+	
	PERCEIVED GENDER	MALE			5	7	12
		FEMALE			6	8	14 •
$\left(\right)$	0-6 YEARS OLD		6				0-6
l	7-14 YEARS OLD						7-14
	15-19 YEARS OLD		3				15-19
)	20-30 YEARS OLD		8				20-30
l	31-64 YEARS OLD		6				31-64
l	OVER 65 YEARS OLD		3				65+
(CYCLING		,				٨
l	RUNNING/ JOGGING						Æ
	SKATEBOARDS, ROLLERBLADES, ETC.						X
$\left\langle \right\rangle$	WHEELCHAIR/ SPECIAL NEEDS						Ġ.
	GROUPS						†††
	WITH PETS						i.
	WITH STROLLERS						∱ *



PARK/PLAZA NA Prince George's		LOCATION (MA1, SB3 Gas Statio	3, ETC.)
DATE 4/3/2021	WEEKDAY	₫ wee	KEND
NAME Andrew Degroff	f Yan Konan		
WEATHER CON	NOITION		
		• •	•
TEMPERATURE 60°			
TIME IN	TIME	OUT	
1:05 P.M	(=	1:15 P.M	

NOTES: 10:00 A.M

10:00 A.M

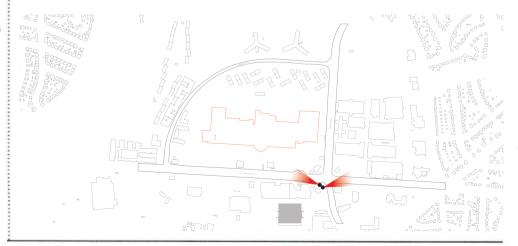
10:00 A.M

DIRECTIONS

This count will be conducted on each of the screenline locations for 10 minutes every hour (see basemap + schedule)

The surveyor will stand at the location and proceed to count every pedestrian that passes through, making a tally mark for their age, gender and if they are performing an action other than walking (jogging, biking, etc.)

PEDESTRIAN	S			SUBT	OTAL	TOTAL
DIRECTION OF TRAVEL		LEFT TO RIGHT →	← RIGHT TO LEFT	→	←	
PERCEIVED GENDER	MALE			4	4	8
	FEMALE			4	2	6
0-6 YEARS OLD						0-6
7-14 YEARS OLD						7-14
15-19 YEARS OLD						15-19
20-30 YEARS OLD		3				20-30
31-64 YEARS OLD		8				31-64
OVER 65 YEARS OLD		2				65+
CYCLING		2				٨
RUNNING/ JOGGING						æ
SKATEBOARDS ROLLERBLADE ETC.						À
WHEELCHAIR/ SPECIAL NEEDS						Ġ.
GROUPS						†††
WITH PETS						∱ *
WITH STROLLERS						4



PARK/PLAZA Prince Geoi			LOCATIC (MA1, SB Metro Park & Ri	3, ETC.)
DATE 4/3/2021	□WEEK	DAY	₫ WE	EKEND
	groff Yan K			
WEATHER	CONDITIO	N COL	_	_
∀ □			-:·	7
TEMPERAT 60°	URE			
TIME IN		TIME	OUT	
1:20 F		3	1:30 P.M	

NOTES: 10:00 A.M

10:00 A.M

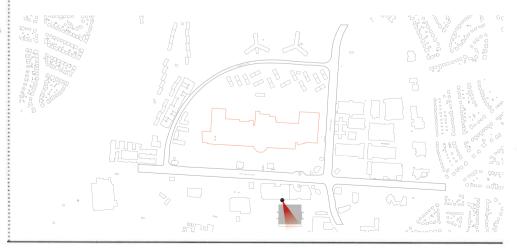
10:00 A.M

DIRECTIONS

This count will be conducted on each of the screenline locations for 10 minutes every hour (see basemap + schedule)

The surveyor will stand at the location and proceed to count every pedestrian that passes through, making a tally mark for their age, gender and if they are performing an action other than walking (jogging, biking, etc.)

ı	PEDESTRIANS				SUBTO	DTAL	TOTAL
	DIRECTION OF TRAVEL		LEFT TO RIGHT →	← RIGHT TO LEFT	→	←	
	PERCEIVED GENDER	MALE			6	5	8
		FEMALE			12	7	19 •
	0-6 YEARS OLD		1				0-6
	7-14 YEARS OLD						7-14
	15-19 YEARS OLD						15-19
	20-30 YEARS OLD		12				20-30
	31-64 YEARS OLD		16				31-64
	OVER 65 YEARS OLD		2				65+
	CYCLING		1				À
	RUNNING/ JOGGING						æ
	SKATEBOARDS, ROLLERBLADES, ETC.						À
	WHEELCHAIR/ SPECIAL NEEDS		1				Ġ
	GROUPS						†††
	WITH PETS						∱ *
	WITH STROLLERS		1				4



PARK/PLAZ	A NAME	LOCATION	
Prince Geo	rge's Plaza	(MA1, SB 3, ETC.)	1
		Royal Cinema	
DATE 4/3/2021	□WEEKDAY	₫ WEEKEND	
NAME Andrew De	egroff Yan Konan		
WEATHER	CONDITION		
1 1 1 2	· -	717 5	١.,
∀ □			
☐ ☐ TEMPERAT		0 0	
TEMPERAT	TURE	EOUT	

NOTES: 10:00 A.M

3

10:00 A.M

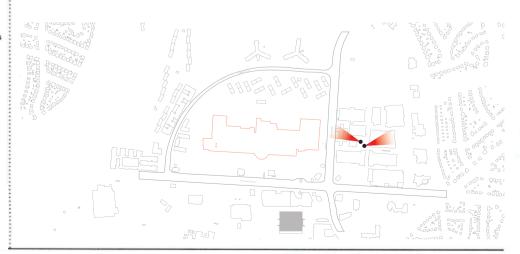
10:00 A.M

DIRECTIONS

This count will be conducted on each of the screenline locations for 10 minutes every hour (see basemap + schedule)

 The surveyor will stand at the location and proceed to count every pedestrian that passes through, making a tally mark for their age, gender and if they are performing an action other than walking (jogging, biking, etc.)

PEDESTRIANS				SUBT	OTAL	TOTAL
DIRECTION OF TRAVEL	LEFT TO RIG	SHT →	← RIGHT TO LEFT	→	+	
PERCEIVED GENDER	MALE			4	4	8
	FEMAL E			4	2	6
0-6 YEARS OLD						0-6
7-14 YEARS OLD						7-14
15-19 YEARS OLD						15-19
20-30 YEARS OLD	4					20-30
31-64 YEARS OLD	12					31-64
OVER 65 YEARS OLD	3					65+
CYCLING						À
RUNNING/ JOGGING						æ
SKATEBOARDS, ROLLERBLADES, ETC.						X
WHEELCHAIR/ SPECIAL NEEDS						Ġ.
GROUPS						†††
WITH PETS						i
WITH STROLLERS						∱ *



Prince George's Plaza

NAME: Andrew | Yan

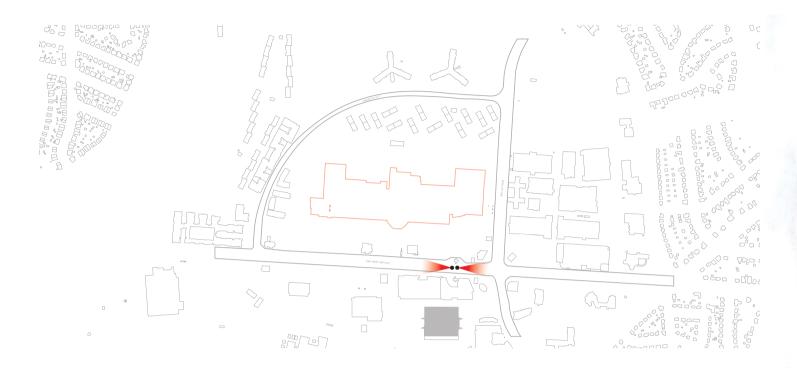
DATE: 4/1/2021

WEATHER: Cloudy

40°

LOCATION: Bridge

TIME: 9:00 A.M | 9:10 A.M



		5/					12	Almoute .	(Alt olen)	0,	/		1	OTHER		04		ITURE	est.	HAD SEL	3		
PERSON	Dr. OR OR OR	Engl.	S., KENES	areasold areasold	Sept Sept Sept Sept Sept Sept Sept Sept	THE STANDARD	State of the state	State of the state	Strate of the st	THE PROPERTY OF	S JAMES	Tauth of	THO WE WELL	The Transfer of the Party of th	SENCE	SEAL STREET	OR MAIN	CO RECENTATION OF THE PERSON O	AST ME TO MARK	State of the State	NAME OF THE OF THE OF	SEEP PRAIL	The state of the s
	PERCEIV	ED		GE			POSTUR		GRO	UP					TIVITIE		,					CTIVITIES	
1		$\sqrt{}$			V												$ \sqrt{} $						1
2 3 4	√,	1 8			13	,					,	H	N3				,			1 705			2
3	√,	\vee			V						$\sqrt{}$		1				$\sqrt{}$			Ţ,			3
4	\vee	16		$ \vee $	V	/]	1		1				\vee						1	$\sqrt{}$			4
5																							5
6								THE ST					150				March.						6
7																							7
8		113											123										8
9																							9
10																							10
11																							11
12												9 00				6							12
13																							13
14												M		TO SE						7 63		3117	14
15																							15
16																							16
17																							17
18					a. (L.		19																18
19																							19
20								F															20
DTAL																							

PROCEDURE:

Walk through the area indicated in red above to capture a snapshot of the stationary activities and age / gender of the people present in the public space.

Mark exact locations of people on the map using a number for each, starting with 1

For each person, quickly 'X' the box that fits best in each category lage, gender, posture, activities)

Prince George's Plaza

NAME: Andrew | Yan

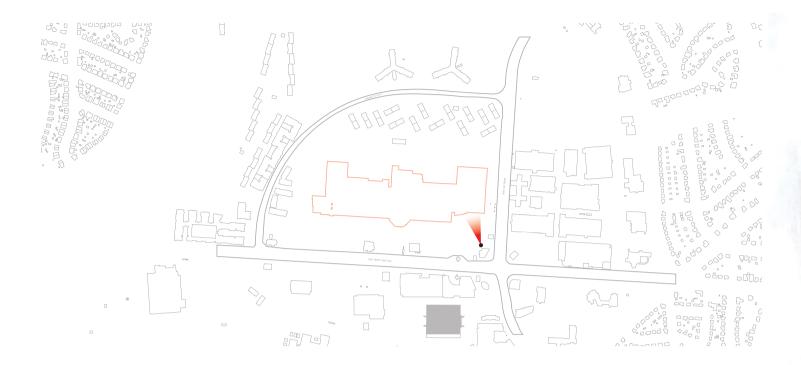
DATE: 4/1/2021

WEATHER: Cloudy

43°

LOCATION: Target

TIME: 9:40 A.M | 9:50 A.M



	OBJECT	/	/	1	2 6	, O.	/	STATE OF THE PARTY	SAIMO	E STROU	a QUIST		/	THE STATE OF	ONE	OTT STAN	ENCE	REATION	WANG C	LICUT	RANSI	INFORM	BARELIS			. /
PERS		The land	Sept. S.	25. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5	Ser Asses	Charles of the Control of the Contro	OH STIN	S. W. S. W. S. W. S. S. W. S.	A STATE OF THE PARTY OF THE PAR	of the state of th	M. S. CH.	38 3	TALY TALY	W. W. Sec	THE THE THE THE THE THE	TAN TO THE TANK	CISERE	DREAD DE LA STER	Wall of Wall	N. CO.	RANGE	What He	The to the town	MOT	CATION PANY	September 1
	PERCEIVED GENDER		AGI	E	/		P	OSTUR	E	G	ROUP						TIVIT								TIVITIES	l
1							$\sqrt{}$																$\overline{\ }$			1
!	\vee	F.65-			\vee	\vee							\vee		\vee											2
3																										3
4		10			(-			100						W.												4
5																										5
6					53										180			1	10							6
7																										7
8		U.S.													137							Am				8
9																										9
10					100					(5)				71								TIO				10
11																										11
12											The second		1	Lut.											1 182	12
13																										13
14							5									THE R	TE						A.S.			14
15															7											15
16	18/18									5 30				M	1	Party.	2								011	16
17																										17
18						00						150		in the	113			11-11		M		2 m				18
19																										19
20	19193										A SI		Fil				-	3				151				20
DTAL					\neg																					

PROCEDURE: SI

Walk through the area indicated in red above to capture a snapshot of the stationary activities and age / gender of the people present in the public space.

Mark exact locations of people on the map using a number for each, starting with 1

For each person, quickly 'X' the box that fits best in each category lage, gender, posture, activities)

Prince George's Plaza

NAME: Andrew | Yan

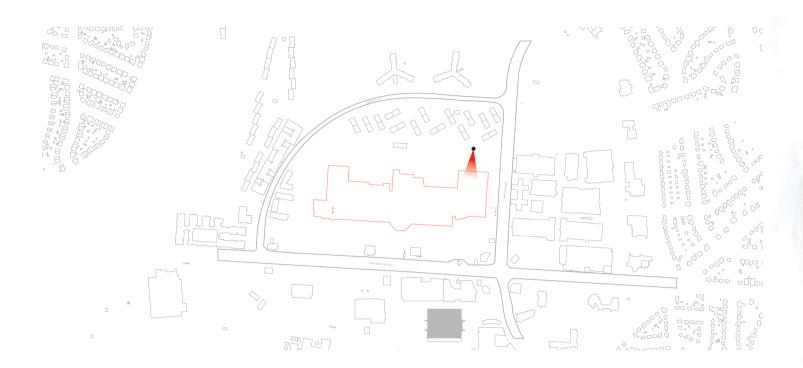
DATE: 4/1/2021

WEATHER: Cloudy

45°

LOCATION: Marshall's

TIME: 10:00 A.M | 10:10 A.M



	St.				0	0	1	SAIN SAIN	SUST	16/20	POLY	SUSE	/	/	N	CHEP	NG	ME	CATION	No	CIL	OANS!	INFORTA	of SE		
OFFE	THO OR OR OF THE PARTY OF THE P	EMPLE S	S. PARSON	S. A. S. C.	Day of the state o	of the land	O STEEL	Constant Stant	The state of the s	die of the state o	24.6. M.	S. C.	3 3	ING ORI	IN WEST	N. W. C. W.	Child Charles of the Control of the	SERE	DEL POR PER PER PER PER PER PER PER PER PER PE	R. Marit	S. Co. M. Co.	MERCE	N. D. C. L. C.	THE WAY WAY	S CHERIDA CHERING	The state of
	PERCEIV	ED	A				PC	OSTUR	E		GRO	DUP	90. SS					TIVITI				-	1000		RACTIVITIES	ſ
1				,		$\sqrt{}$,												,			1
	$\overline{}$	F.81-		$\sqrt{}$							\checkmark			1111		10						Units	\vee			2
3																										3
1											94															4
5																										5
6								01				FT.				188			12	10						6
7																										7
8		1189					Ш																			8
9							Ш																			9
1 2 3 4 5 6 7 8 8 9										11																10
11																										11
12				30											LAG.							1				12
3										_																13
14												100									_			Das		14
15																										15
16																										16
17											_															17
18	Edi		6	110	1							165							101				10			18
19										_																19
TAL									IPE.									1								20

PROCEDURE:

Walk through the area indicated in red above to capture a snapshot of the stationary activities and age / gender of the people present in the public space.

Mark exact locations of people on the map using a number for each, starting with 1

For each person, quickly 'X' the box that fits best in each category lage, gender, posture, activities)

Prince George's Plaza

NAME: Andrew | Yan

DATE: 4/1/2021

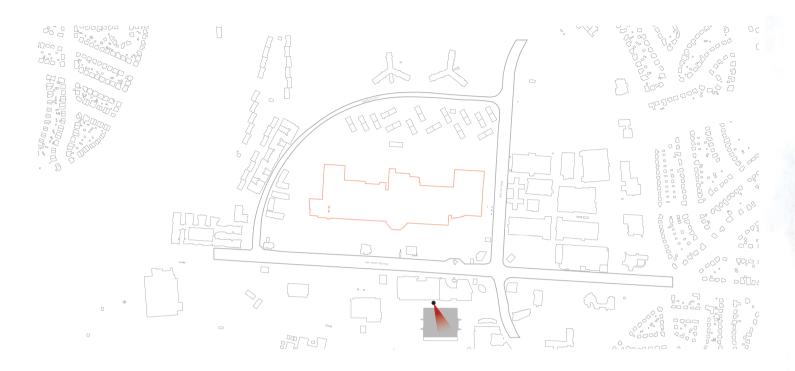
WEATHER: Cloudy

45°

LOCATION: Metro

Park & Ride

TIME: 10:20 A.M | 10:30 A.M



		0)		1			0		NI NI	30	on Co	SPOUL	1156	/		8	NE PY	50	ne.	TION	56	CUL	MSI	FORM	196			
PERS	NOR MAN	BECT	1 / M	TO Sale St. S	15. C. P. P. C. S.	D AND STEP ST	SU S	O STATE OF THE STA	TO BE SHARE STATE OF THE PARTY	Charles of	Sold of the state	Sale Inc.	Sept of the sept o	33 13	TAY TAY	South All	O WAS THE	THE STATE OF THE S	SERVE	THE PARTY OF THE P	R. Mall	Sold of the sold o	and the state of t	W. W	So day was	NAME OF THE OWNER OWNER OF THE OWNER	Children Par	THE PARTY OF THE P
	PERC	EIVED		AGI		,	,	P	OSTUR	E		GRO	OUP	. A. SI					IVITIE					1			TIVITIES	
1	\vee	,		П	,	\vee																			,	\vee		1
2			F81-		$\sqrt{}$		\vee								911		13						100		\checkmark			2
																												3
1			10			10										M												4
5																												5
5									1	114	9		H.															6
7																												7
3																	17											8
11 22 33 44 55 66 77 78 88 99																												9
10											U.S.													110				10
1																												11
3												PIS,				O.O.												12
3				_																								13
5								00														_			D.S.			14
_				_																								15
16	18		14-																									16
17				_																								17
18						100	100				1		10-	E						161				an I				18
19																												19
20								16/		P											FILE							20

PROCEDURE: snapshot

Walk through the area indicated in red above to capture a snapshot of the stationary activities and age / gender of the people present in the public space.

Mark exact locations of people on the map using a number for each, starting with 1

For each person, quickly 'X' the box that fits best in each category lage, gender, posture, activities)

Prince George's Plaza

NAME: Andrew | Yan

DATE: 4/3/2021

WEATHER: Sunny

55°

LOCATION: Target

TIME: 12:35 P.M | 12:45 P.M



,	NORO	BECT	4	S. Land	15. KR C	IN STEPS	10 00 mg/25	O NO	Edwind Consection	State of the other o	and State	on on the second	37 3	TAUT TAUT	THE WAR WAY	ONE DY PARTY	THE STAND OF THE S	See Children	No AND	S MANCE O	OR REAL OR THE REAL OF THE PARTY OF THE PART	A HORING CO	Sell State of State o	CONCEPTOR SECTION	
ed.	PERCE	IVED	03	AC		5	E. S.	P	OSTURE	Car Billy	E G	ROUP	3	The Tail	400	the		VITIES	of the same	MAIL	Own PC	- CANC		ACTIVITIES	
																$\sqrt{}$									1
	,	\ <u>\</u>	F.6.		,	\vee		$ \vee $				$\sqrt{}$				13									2
3	\vee	\vee			\vee		\vee				V	/													3
2 3 1 5				,		,									No.				,			3			4
•	\vee	ν,		\vee		\vee	\vee							$ \vee $				\	/						5
		\\ \ <u>\</u>			\vee			\vee								_/									6
_		\vee				\vee	\vee									V									7
3																									8
9																									9
LO								Ш			1														10
11											\perp														11
12															100										12
13																									13
4																							MA S		14
5																									15
16	18																								16
.7																									17
.8							1				1		JE (18
.9																									19
20										P			m)												20

PROCEDURE:

Walk through the area indicated in red above to capture a snapshot of the stationary activities and age / gender of the people present in the public space.

Mark exact locations of people on the map using a number for each, starting with 1

For each person, quickly 'X' the box that fits best in each category lage, gender, posture, activities)

Prince George's Plaza

NAME: Andrew | Yan

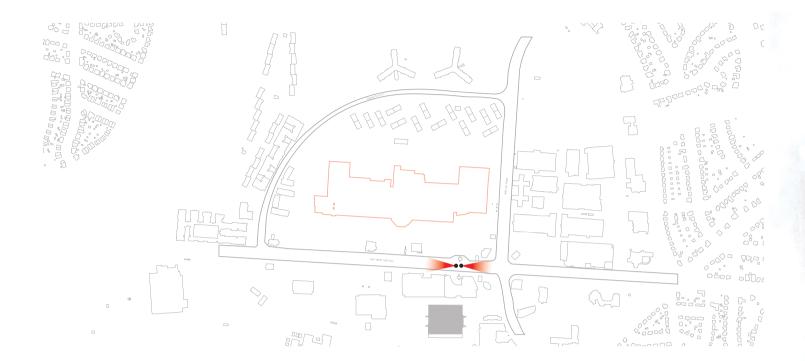
DATE: 4/3/2021

WEATHER: Sunny

60°

LOCATION: Bridge

TIME: 1:05 P.M | 1:15 P.M



	*	SBIECT		1	200	D 50	310 N	/8	Control of the Contro	SEATTRE	LE LA SE	Julea PROVI	\$/	/	MANAGE	ONE	Child of the state	ence .co	EATION	THE THE	CULIBRA	of the party of the second	OSTREUS		2
PERSON	PERC	SHECT SHE SEL	14/20	AG AG		D. A. S.	OL OLO OLO	OH STIN	S ANGELO STURE	The state of the s	Se S	GROUP	E PORT	ALING ON TAIL	ALING WE CO	SIEMP		SERVICE		PANATH	COMME	COMPANY			The state of the s
1		DER		AG.		-	\checkmark		JSTORE		-	GROUP	+				AC	IIVIIIE	:5	$\sqrt{}$			DIHE	R ACTIVITIES	
_	V	1	2/17			\forall	V				-		-	2013		(070)				٧					1
		V	100-9			٧					-		2		-	elu.				1					3
				FEU		177			1035			0 6 6			ID CAR		-			V					4
2 3 4 5							-																		5
,						100						100	9 70 0		0.10	1.11	Care			600	7.0		353		6
															10000										7
3									10.00		Side of		F 1537			75.77			-					11 - 2 - 3	8
9																									9
0					117						157		114		77	IF						1 111			10
1																									11
2												Bire	189	13						1		2 100			12
3																									13
4								198											333		111		8.8		14
5																									15
16	TE														T	1	100						13	ENTER S	16
17																									17
18									15		W)	10			TA E	117			161		1	1			18
19																									19
20	19											1							-			3 31			20
TAL																									

PROCEDURE:

Walk through the area indicated in red above to capture a snapshot of the stationary activities and age / gender of the people present in the public space.

Mark exact locations of people on the map using a number for each, starting with 1

For each person, quickly 'X' the box that fits best in each category lage, gender, posture, activities)

Prince George's Plaza

NAME: Andrew | Yan

DATE: 4/3/2021

WEATHER: Sunny

60°

LOCATION: Metro Park & Ride TIME: 1:20 P.M | 1:30 P.M

, 6	NORO C	BECT	21	S. Park.	Je Hand Co	D S HAR A	DO OF STATE	O LO	State of the Party	S. S	de la	Stanta Stanta	THE THE PERSON OF THE PERSON O	23	The Ori	WHITE WITH	ONE AS	SHOW THE SHOP STATE	SENCE	REAL PROPERTY.	Ornand Ornand	Christ	Trinfonte	D ARELIES	S. October St.	and for the same of the same o
E. S.	PERCE	EIVED	No.	A.		2 5	S	AN STI	OSTUR	SE SE	AL CAL	GR	e" ge	33 43	MATA	S. Sec	T. Tier		TIVIT		WATT	OW P	COLOME		R ACTIVITIES	
1	\checkmark	,																			√,					1
	,		F.8.		\vee											198	13				V.					2
	\checkmark				,	$\sqrt{}$															$\sqrt{}$					3
	,	$ \vee $			\bigvee_{i}				W			- 94									V.		180			4
	\vee				$ $																$\sqrt{}$					5
									W.	114	9		FR				180			120	10					6
																										7
			18						15.5																	8
																										9
											I I					7		EL I					100	8		10
																										11
												78				Lut.						1 15				12
																										13
								9				100	DO		THE									B.S.		14
																										15
6	(6)											15				M		172								16
,																										17
							De la		1			16				P	13						1			18
9																										19
)										IF.			1.57								FILE		151			20
AL																										

PROCEDURE:

Walk through the area indicated in red above to capture a snapshot of the stationary activities and age / gender of the people present in the public space.

Mark exact locations of people on the map using a number for each, starting with 1

For each person, quickly 'X' the box that fits best in each category lage, gender, posture, activities)

Prince George's Plaza

NAME: Andrew | Yan

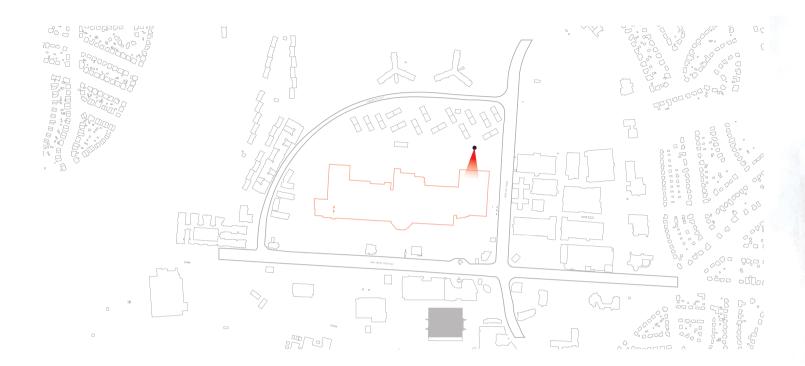
WEATHER: Sunny

60°

LOCATION: Marshall's

TIME: 2:05 P.M | 2:15 P.M

DATE: 4/3/2021



	Se.			/		0 6	0	/	ENT	CAR	TE S	80.	ONSE		1	NA	ONE	NING SE	THE .	ENTIN	NO &	Conta	THEOP.	8700		
Ofto.	1/20	BIECT	1 / M	S. S	15. 10 Page 1. 2.	18 18 18 18 18 18 18 18 18 18 18 18 18 1	OF SHE WAS	OH STATE	St. Wall Control of the Control of t	S. S	de die	210 120	San San	33	TAY TAY	NI WEST	E. WALL	Str. Com Con	SEREC	SEATON SE	PANALIT	COMM	act of the party o	The de de la	THE SEEDING SEEDING	THE PARTY OF THE P
	PERCEIVED GENDER			AGE			POSTURE			E	GROUP			60. SS	ACTIVITIES								in lette	отн		
1 2 3 4 5 6 7 8 8 9					,							,			,		$\sqrt{}$									1
2	\vee	$ \vee $	F.85-		\vee	113	\vee					\vee			\vee		13									2
																										3
						1			100			84			Ti											4
,																										5
									01				FT.													6
1																										7
																										8
9																										9
0											10															10
1																										11
2																										12
3																										13
4								5																D.A.		14
5																										15
16	TS								100							T										16
7																										17
8						7	(Const		(6)			TH								161						18
9																										19
0	19		84							I P.I.			153		15			F								20

PROCEDURE:

Walk through the area indicated in red above to capture a snapshot of the stationary activities and age / gender of the people present in the public space.

Mark exact locations of people on the map using a number for each, starting with 1

For each person, quickly 'X' the box that fits best in each category lage, gender, posture, activities)

Appendix 2: Annotated Bibliography

Asadi-Shekari, Zohreh, Mehdi Moeinaddini, and Muhammad Zaly Shah. 2015. "Pedestrian Safety Index for Evaluating Street Facilities in Urban Areas." Safety Science 74: 1–14. https://doi.org/10.1016/j.ssci.2014.11.014.

It is proven that green travel can promote the development of green and sustainable urban areas. In this article they evaluate the methods for assessing pedestrian safety conditions. The Pedestrian Safety Index (PSI) is introduced, which can evaluate the facilities along the streets for pedestrians. Fewer travel lanes, on-street parking lanes, traffic calming, raised medians, buffer zones, suitable curb ramps, these are all examples of effective solutions toward increasing pedestrian safety and decreasing fatalities.

Bishai, D, P Mahoney, S DeFrancesco, B Guyer, and A. Carlson Gielen. 2003. "How Willing Are Parents to Improve Pedestrian Safety in Their Community?" Journal of Epidemiology and Community Health (1979-) 57 (12): 951–55.

In this article it is asking the question "If parents had the opportunity to help improve the safety of their children would they?" There are strategies that can help reduce pedestrian risk. A study was done in Baltimore, asking parents to volunteer as a crossing guard, attend neighborhood meetings, or attending a safety workshop. The more parents that were asked to contribute the less likely they were to do so. Parents were more likely to contribute in neighborhoods with hight ratings of support. The median willingness to pay for speed bumps in the neighborhood came to \$6.43. In conclusion, parents can place such a high importance to improving child pedestrian safety if they try.

Boostrom, R., & Henderson, J. (summer 1983). Community Action and Crime Prevention: Some Unresolved Issues. Crime and Social Justice, 19, 22-34.

A reflection piece on community involvement and policies driving crime prevention. A focus is on three tactics, including utilizing environmental design principles. It underlines that CPTED is successful through the activeness of the surrounding residents who establish "turfs" and to "expand their sense of property rights from their private dwelling to the street." Some of the unresolved issues related to this include the possible co-optation by collaborations between police and government planners to shape and dictate the built environment, political debate about the control of the policies, encourages predatory behavior, and the sanctity of private property rights (those who own property versus those who don't.

Cep, Casey. "The Fight to Preserve African-American History." The New Yorker: American Chronicles, January 27, 2020

This article is tackling the importance of fighting to preserve African American History. Brent Leggs, architectural historian and preservationist, and his colleagues are changing what history needs to be preserved and what it means to preserve it. Of over ninety-five thousand entries on the National Register of Historic Places, only 2% focuses on the experience of Black Americans.

Cervero, Robert, Erick Guerra, and Stefan Al. Beyond Mobility: Planning Cities for People and Places. Washington, DC: Island Press, 2017. doi:10.5822/978-1-61091-835-0

This book focuses on the challenges faced with sustainable transit-oriented design. Beyond Mobility jumps around looking at different examples of transit-oriented design from across the world. While looking at each place it highlights certain aspects about each city's design. It also brings up social, political, and economic problems that arise and must be looked at. Throughout Beyond Mobility, they authors maintain an optimistic attitude about the potential to transform places for the better

Clifton, Kelly J., and Kandice Kreamer-Fults. "An examination of the environmental attributes associated with pedestrian—vehicular crashes near public schools." Accident Analysis & Prevention 39, no. 4 (2007): 708-715.

This study investigated different environmental factors that enabled the vehicular crashes around the schools and neighboring routes. As an illustrator, the authors illustrated how driveways and turning bay could be beneficial features for the entrance to school by providing a safe space for dropping off or picking up children. Also, these features generally helped create a clear direction for parents to go around the school. On the downside, they noted that distracting activities and places such as entertainment centers could cause crashes and injuries.

Connelly, Marie L., Robert Isler, and Barry S. Parsonson. "Child Pedestrians' Judgments of Safe Crossing Gaps at Three Different Vehicle Approach Speeds: A Preliminary Study." Education and Treatment of Children 19, no. 1 (1996): 19-29. Accessed April 2, 2021.

This article begins to present the data collected for children ages 7-9 and how they interpret safe crossing gaps when crossing busy intersections. The test was conducted at speeds of 12, 18 and 30 mph, and the children were asked to distinguish what they thought was a safe crossing gap. Results were scattered as some children provided safe judgement for vehicle gaps, while others provided a more high-risk crossing gap, particularly at higher vehicle speeds. These studies conveyed that children are at a higher risk to being involved in a vehicle vs pedestrian accident then their adult counterparts, as an adults judgment level of safe crossing gaps is more coherent. Considering the number of schools that are nearby Prince Georges Plaza and the number of elementary school kids that enter the mall, it is important to maintain safety measures for these children pedestrians and provide safe modes of travel to and from the plaza.

Curran, Winifred & Trina Hamilton (2012) "Just green enough: contesting environmental gentrification in Greenpoint, Brooklyn." Local Environment 17 no. 9 (2012): 1027-1042, https://doi.org/10.1080/13549839.2012.729569

This article uses the case study of Greenpoint, Brooklyn, to discuss environmental gentrification. According to the authors, while sustainability has gained importance in urban planning, there has not been sufficient discussion around what is considered green and who gets to make that decision. They note that popular perception of green development leaves out industrial uses and the working class. Instead, they propose a strategy they call "just green enough", in order to achieve environmental remediation without environmental gentrification, arguing that sustainability can create space for diversity and democracy.

Crowe, T. D., & Fennelly, L. J. (2013). Introduction to CPTED. Crime Prevention Through Environmental Design, 3-14. doi:10.1016/b978-0-12-411635-1.00001-2

An overview of CPTED theory which emphasizes the relationship between physical environments, learning organisms, and behavior. Modern theory includes an emphasis on "natural" surveillance, clearly defined spacial hierarchies, and resolution of conflicting place usage and activities. Some CPTED strategies include a focus on transitional zones between public and private usage.

Day, Kristen. "Active Living and Social Justice: Planning for Physical Activity in Low-Income, Black, and Latino Communities." Journal of the American Planning Association 72 no. 1 (March 2006): 88-99. DOI: 10.1080/01944360608976726

This article notes that urban planning and design to promote physical activity and health has historically targeted mostly middle-class, suburban communities. The author argues that such efforts, however, must especially address low-income, Black, and Latino communities, where obesity and related health risks are greatest and existing resources least available. The paper describes the ways in which physical environment and access to amenities create barriers to physical activity in low-income communities and communities of color, and presents strategies to mitigate this and better address the needs of historically underserved communities.

Deb, Shuchisnigdha, Daniel W Carruth, Richard Sween, Lesley Strawderman, and Teena M Garrison. 2017. "Efficacy of Virtual Reality in Pedestrian Safety Research." Applied Ergonomics 65: 449–60. https://doi.org/10.1016/j.aper-go.2017.03.007.

This article shows an importance on what VR can present for pedestrians and the risk factors. When travelling on foot, people must share the roadway with other vehicles. This is an exposure to risk of traffic accidents. In this study it identifies that 80% of all pedestrian-motor-vehicle crashes, that pedestrian error was the leading cause. VR can help understand why pedestrians take risky actions that could lead into a fatal accident.

DiMaggio, Charles, Spiros Frangos, and Guohua Li. "National safe routes to school program and risk of school-age pedestrian and bicyclist injury." Annals of epidemiology 26, no. 6 (2016): 412-417.

Safe Routes to School (SRTS) is a federal transportation program to facilitate school-aged children, who are considered the most vulnerable users, to commute to and from schools. This tudy investigates the impact of SRTS on school-aged pedestrian and bicyclist safety in the United States.

Elizer, R. Marshall, Jay Bockisch, Michael Sewell, Ingrid B Potts, Darren J Torbic, Joe Gilpin, National Academies of Sciences, Engineering, and Medicine (U.S.). Transportation Research Board, National Cooperative Highway Research Program, American Association of State Highway and Transportation Officials, and United States. Federal Highway Administration. Design Guide for Low-Speed Multimodal Roadways. Nchrp Research Report, 880. Washington, DC: Transportation Research Board, 2018.

This book assists designers establish a balance between operational efficiency, comfort, and safety on roads that are 45 mph and lower. The book was created by the National Cooperative Highway Research Program, a group of individuals and organizations that are the foremost expert on transit and transit oriented design. This book is more of a manual to understand the balance of pedestrian and transportation right of ways.

Fu, Lianning, and Nan Zou. "The influence of pedestrian countdown signals on children's crossing behavior at school intersections." Accident Analysis & Prevention 94 (2016): 73-79.

This study discusses about the negative and positive impacts of pedestrian signal timers on children behavior at school intersections. In fact, it was noted children exhibited more violation and conflict with vehicles when the red man starts flashing while the countdown during the flashing green man helped them to complete crossing safer. The author suggests that the countdown at the end of red man is removed and other measures are used to increase the children safety at school intersections.

Gooden, Mario. Dark Space: architecture, representation, black identity. New York, New York: Columbia Books on Architecture and the City. 2016.

In Dark Space, Gooden begins to explore the construction of African American identity and representation in architecture through a series of essays. Gooden begins to present ways of translating the African Diaspora's experience into space. He also poses questions that shed light on other narratives of "African American architecture" aside from that of African American cultural institutions designed in recent years.

Ink, Social. "Speed Reduction Mechanisms." National Association of City Transportation Officials, https://nacto.org/publication/urban-street-design-guide/design-controls/design-speed/speed-reduction-mechanisms/.

This source goes into the physical implementations that can be used to help slow, and limit vehicle traffic in and around a site. Although the website talks about how each measure works to correct traffic it does not go into much other details such as how this effects pedestrian use and what it may look like in real life.

Ink, Social. "Traffic Calming Strategies." Global Designing Cities Initiative, https://globaldesigningcities.org/publication/global-street-design-guide/designing-streets-people/designing-for-motor-ists/traffic-calming-strategies/.

Jacobs, Allan B. Great Streets. MIT Press, 1993.

This is a great book for looking into the real-world applications of street and traffic design. Jacobs looks at several existing streets across the world and shows the reader ways in which the design was successful at implementing the intended goal. He also discusses the importance of streets in creating communities and identifying criteria for "great streets". The only downside to this article is its age and could probably be updated to show more recent case studies for areas such as TOD's.

Kabisch, Nadja, Horst Korn, Jutta Stadler, and Aletta Bonn. "Nature-based Solutions to Climate Change Adaptation in Urban Areas: Linkages between Science, Policy and Practice." Cham, Switzerland: Springer Nature, 2017.

This book is a collection of chapters that explore nature-based solutions to address challenges arising from climate change and urbanization in a sustainable way. Nature-based solutions rely on natural elements to achieve environmental and societal goals, as opposed to conventional engineering solutions, which the editors argue may not be cost-effective or sufficiently effective. It includes a section covering several topics related to the health and social benefits of nature-based solutions in cities, including health, equity, and resilience, as well as one chapter on the unequal distribution of urban green spaces as an environmental justice issue.

Kayden, Jerold S. Privately Owned Public Space: the New York City Experience. New York: Wiley, 2000.

Kayden begins the book by talking about their 1961 zoning resolutions that occurred in New York. New York began fueling itself by advertising itself of tall buildings and within doing so, created a decrease in sense of openness, referred to as light and air in Kayden's book. This openness was no longer sensed in the street level. In the reading it continues to talk about how then zoning private sectors began in the right direction but then there were developers that wanted profit and privatized areas with no allowable space for the public. This then led to the community to work on new zoning regulations and having developed areas for the public. The reason why I believe there were issues is because of the developers and maybe the urgency that the zoning department had. People make cities but with limitations in the city, people pull away for spaces, and areas become isolated. But with the right team and a distribution of public and private open spaces that offer people different experiences, one might be able to design a great urban space.

Kimpton, Anthony. "A spatial analytic approach for classifying greenspace and comparing greenspace social equity." Applied Geography 82 (2017): 129-142. https://doi.org/10.1016/j.apgeog.2017.03.016.

This article goes beyond evaluating the location and size of green spaces in order to examine the quality of these spaces. Using Australian cities, the author classifies green spaces according to functional and physical characteristics and maps this against several equity considerations (provision, accessibility, and population density surrounding). The study finds that affluent areas are not only closer to green spaces, but in particular have better access to amenity-rich green spaces. This reflects a problem with the prevailing concept of "park minimum standards" used by urban planners which dictates a certain quantity of park space be provided but not a minimum quality.

Liu, XiaoHang, and Julia Griswold. "Pedestrian Volume Modeling: A Case Study of San Francisco." Yearbook of the Association of Pacific Coast Geographers 71 (2009): 164-81. Accessed April 5, 2021. http://www.jstor.org/stable/24043772.

Identifying pedestrian volume information is vital to study traffic safety as well as to strategize for pedestrian friendly environmental design. This article focused on a model built to estimate the pedestrian volumes for the street intersections in the city of San Francisco, California. By generating different analysis at multiple geographical scales, three factors emerged as justification for the variances of high pedestrian volume: population and job density, local transit access and land use mix. The most populated area of pedestrian traffic is around a one-block radius of an intersection, which makes walking become the initial form of transportation.

Low, V. (2020, June 15). Designing for: Racism. Medium. Retrieved 2021, from https://medium.com/@vyechilow/designing-for-racism-1a9d2ebf6fe6

An article outlining the connections between urban renewal tactics and racism. The focus here is on Crime Prevention Through Environmental Design (CPTED). These design principles are commonly used in public and private sectors to design buildings, entrances, and circulation to "deter and prevent" crime. However, this does eliminate implicit bias which results in CPTED reinforcing harmful and violent prejudices. This article makes the recommendation of rather than investing in CPTED tactics, to focus first on ways to increase investments in highly policed neighborhoods.

Lowe, Marcia D. "Calming Motorized Traffic." Alternatives 18, no. 1 (1991): 16-17. Accessed April 2, 2021. http://www.jstor.org/stable/45031280.

This article highlights issues of owning a driving vehicle within a city. It welcomes the idea of public transportation, bicycle and pedestrian travel, and the use of restrictions like "Street calming" techniques. Our society is trying to make cities more sustainable and safer for pedestrians, but these cities are already developed to accommodate automobiles. The physical infrastructure of roads links essential elements of our lives, example food, work, recreation which are all activities that sometimes involves the use of a vehicle. Therefore, how can we integrate the new ideas with an existing city design for cars?

Mayor, Jim, Benjamin Coleman, and Brighton & Hove City Council Public Realm. "The Socialand Emotional Benefits of Good Street Design." The Value of Good Design - Design Council, Last modified 2011. https://www.designcouncil.org.uk/sites/default/files/asset/document/the-value-of good-design.pdf.

This article examines the social and emotional benefits of balanced street design while developing methods for interpreting these affects. This article is based on a study performed in England in 2011. The article outlines the extents of the study and breaks each category down by sections. In the end they conclude saying that new road design that incorporates business and pedestrians have a better effect on the emotional well being of people rather than car-oriented streets.

Mirgani, Suzi. "Securing the Shopping Mall." In Target Markets – International Terrorism Meets Global Capitalism in the Mall, 75-94. Bielefeld: Transcript Verlag, 2017. Accessed April 2, 2021.

In today's world, global terrorism is a threat that no one can see coming and can strike anywhere without warning. This has turned cities into catalysts for the ever-wondering threat of warfare and protection. Shopping Malls are the largest of these spaces as they feature the most shops, food restaurants and feature the most pedestrian population, as many shopping malls require foot-access throughout the mall. These malls have included many security updates when regarding there architectural design. Located within an 8-mile radius from the Capitol of the United States, the PG Mall is one of the largest in the District and could be the potential spot for one of these attacks in the future. It is important to not only protect the people that visit the mall, but also the public spaces that are associated with shopping malls, and to maintain a safe paradigm between shopping malls and the pedestrian realms.

Morley, David. Planning for Equity in Parks with Green Infrastructure. Chicago: American Planning Association, 2017.

This briefing paper discusses the benefits that parks can provide to underserved communities, and in particular the advantages of including green infrastructure in these parks. Green infrastructure can help improve health outcomes by improving air quality, mitigating heat island effects, and promoting more active and healthier lifestyles by providing better opportunities for outdoor activities. The paper also notes improved academic performance by students with better access to green space in their surroundings. However, the author also discusses the importance of collaboration with the community to design green spaces to ensure that they are accessible to users, safe (and perceived as safe), and do not instigate green gentrification.

Nasution, Achmad Delianur, and Wahyuni Zahrah. "Public Open Space Privatization and Quality of Life, Case Study Merdeka Square Medan," April 19, 2012.

In the article by Achmad and Wahyuni, they discuss what public privatization and the quality of life is like. They use the case study of Merdeka Square Medan as an example. They begin by describing what public open space is and how successful public space promotes psychological comfort and safety to its users. They point out that one factor that causes privatization of public space is financial issues. In their case study, they looked at a public open space and a private open space and results showed that because of high quality and well designed, managed spaces, that the "Private sector did a better job than the public sector. This was because of livability at night that occurred in the private open sector that failed in the public open sector. This article went to give extended research on both private and public open spaces and shows that with good choices in developers and good design, there can be a great outcome for open spaces. The article goes on to say that both public and private open spaces have their pros and cons, which is correct, but dependent on the situation there might be a better option or having a combination of both sectors.

National Association of City Transportation Officials. Transit Street Design Guide. Washington: Island Press, 2016.

This book is a design guide to making transit the heart of the city street design. This book breaks down each individual aspect of transit streets and discusses the benefits or problems each may create. It also does a good job of diagraming each specific topic it talks about so that the viewer can really understand. There is also a recommendation for designing each one of the street types.

National Association of City Transportation Officials. Urban Street Design Guide. National Association of City Transportation Officials. Washington: Island Press, 2013. doi:10.5822/978-1-61091-534-2.

This book is a design guide to reimagining each street type and how it can reprioritize safe driving. Again, this book breaks down each street type going over individual strengths and weaknesses. The book also produces great graphics to really help the reader grasp the key concepts. It delves into different design strategies for improving different street types.

Neckerman, Kathryn M., Gina S. Lovasi, Stephen Davies, Marnie Purciel, James Quinn, Eric Feder, Nakita Raghunath, Benjamin Wasserman, and Andrew Rundle. "Disparities in Urban Neighborhood Conditions: Evidence from GIS Measures and Field Observation in New York City." Journal of Public Health Policy 30 (2009): S264-285. Accessed April 5, 2021, http://www.istor.org/stable/40207263.

Various low-income urban areas are highly walkable by tradition such as population density or land use mix. Inequalities in neighborhood conditions may render deprived areas less attractive environments for outdoor experiences. This study focuses on the comparison between poor and wealthy neighborhoods in New York City. Poor neighborhoods had significantly fewer street trees, landmarks buildings, clean streets, and vehicular crashes.

Ni, Ying, Menglong Wang, Jian Sun, and Keping Li. 2016. "Evaluation of Pedestrian Safety at Intersections: A Theoretical Framework Based on Pedestrian-Vehicle Interaction Patterns." Accident Analysis and Prevention 96: 118–29. https://doi.org/10.1016/j.aap.2016.07.030.

An overview of the evaluation of pedestrian safety at intersections talks about the proposed methods that are helpful for better understanding underlying levels of safety from behavioral perspective. Pedestrians are the most vulnerable when it comes to road users. In this article they've described three different interaction patterns: hard interaction, no interaction, and soft interaction by analyzing profiles of speed and conflict indicators during interactive processes. In this article it states that 30% of total traffic fatalities were pedestrians. Each environment is unique and that is why it has been difficult so determine which measure to use. They've identified four: Time to Collision (TTC), Deceleration-to-Safety Time (DST), Post-Encroachment Time (PET), and Gap Time (GT). Therefore, analyzing pedestrian conflict, in which conflict indicators are calculated by processing trajectories and the same individual or multiple indicators are used to identify conflicts for all conditions.

Pearlman Hougie, Debbie J. "Can Family Outdoor Recreation Help Reconnect Children with the Outdoors? Affluent Middle Childhood Perspectives of Outdoor Recreation in the UK." Journal of Outdoor Recreation, Education, and Leadership 2, no. 3 (2010): 3.

This article promotes use of countryside for outdoor activities by families that are important in terms of children health and well-being. The author starts with investigating affluent parents' perception about countryside recreation safety. Although it cannot be generalized to all population, the results showed while the children were willing to spend their time in countryside recreation activities, their affluent parents were less supportive. The study suggests that some policies must be implemented to enhance the family countryside recreation activities in UK.

"Pedestrian Safety." 2009. Pediatrics 124 (2): 802.

The National Highway Traffic Safety Administration has recorded the there has been by a 49% decrease in pedestrian fatalities. This percentage can be attributable to less walking and lower exposure to traffic. The issue of pediatric pedestrians under the age of 19 years old who are involved in vehicular injuries is could be greater in school districts. A record of 51,000 children are injured as pedestrians and 5,300 of them are hospitalized because of their injuries. The importance of shortening trips for pedestrians could lower the number of injuries occurring to minors. There have been studies done showing that children do not have the needed skill to correlate more awareness of traffic the way an adult can.

"Pennsylvania's Traffic Calming Handbook." Bureau of Maintenance and Operations, July 2012. https://www.newtown-township.org/DocumentCenter/View/146/PennDOT-Publication-383---Pennsylvania-Traffic-Calming-Handbook-PDF

Although not based within Maryland, this "handbook" goes into great detail about the ways PA handles its traffic calming and design. Since everything within the book was generated from actual construction sites and case studies, the lessons learned, and other information is well outlined. However, since this article is only for one particular state its information may be fairly limited to PA based laws and other guidelines and may not transfer well over to other state jurisdictions.

Prince George's County Planning Department. African-American Historic and Cultural Resources in Prince George's County, Maryland. 2012

This book presents the significant history of the black community in Prince George's County, Maryland. 181 historically black properties and 19 historically black neighborhoods are presented throughout the book. To accompany the written history of these properties and neighborhoods are illustrations, graphic illustrations and maps to further explain their significance. There are three major sections to this book which include Illustrations and Essays, Historic Communities, and Other Resources.

Rowe, Carolyn, Jane Thomas and Beverly Woods. Black America Series: Prince George's County Maryland. Arcadia Publishing, 2003.

The unique story of how Prince George's black community has developed over time is told through vintage photographs in this book. Photographs of buildings of worship, a historically black aviation airfield, and many other areas of life in between are located in this book. Due to the great work of the Prince George's County Maryland Chapter of the Afo-American Historical and Genealogical Society, this book covers history dating back to the 17th century.

Russell, John. "Viewpoint: Traffic Calming and Town Planning." The Town Planning Review 61, no. 2 (1990): lii-Vi. Accessed April 2, 2021. http://www.jstor.org/stable/40112885.

The importance of Traffic Calming is becoming a topic of conversation in several nations. What is Traffic calming? Everyone as their own interpretation of it. It may be defined as an effort to achieve calmness, safety, and an environmental improvement on streets conditions. It could also be interpreted as a philosophical approach to transport planning in urban areas, appreciating both traffic restraint and the promotion of public transportation.

Saporito, S., & Casey, D. (2015). Are there relationships among racial segregation, economic isolation, and proximity to green space? Human Ecology Review, 21(2). doi:10.22459/her.21.02.2015.06

This study begins with the affirmation of neighborhoods of color and low-income neighborhoods have lower access to green space. The study goes on to determine the association with this lower level of access. Results show that cities with lower levels of racial segregation have lower levels of racial disparities related to green space access. The same pattern is true for poverty groups.

Shepley, M., Sachs, N., Sadatsafavi, H., Fournier, C., & Peditto, K. (2019). The impact of green space on violent crime in Urban Environments: An evidence Synthesis. International Journal of Environmental Research and Public Health, 16(24), 5119. doi:10.3390/ijerph16245119

This paper investigates the impact of green space in urban environments, and its relationship to crime. Green space is defined as vegetation, combined areas of land, land use that has a notable contribution to urban environments, areas with substantial green elements, recreational or undeveloped land, and predominantly covered with vegetation. Research pointed towards the most consistent crime reduction methods to be vegetated streets and walkways.

Smeed, R. J. "Some Aspects of Pedestrian Safety." Journal of Transport Economics and Policy 2, no. 3 (1968): 255-79. Accessed April 2, 2021.

This article begins to collect and share data collected by Professor R.J. Smeed from the University of Bath, England on the aspect of pedestrian vs vehicle casualties in different countries around the world. The main point presented in this article is the factors that lead to these pedestrian accidents and an account of steps that can be taken to avoid these accidents. The results began to show that pedestrians aged 5-14 and 75+ suffered the most casualties in different European countries, caused by lack of judgement and handicaps that prohibited there crossing, i.e wheelchairs, canes, etc. Much of the Hyattsville population is either young school children or elderly people who require safe access to the PG Plaza area.

Sorkin, Michael. Variations on a Theme Park: the New American City and the End of Public Space. New York, NY: Hill and Wang, 2011.

Sorkin begins his book by talking about the biggest mall, West Edmonton Mall, which is 5.2 million square feet. He explains that in Urban environments, malls solutionalized their building issue by building vertically. Comparing it to a theme park, Sorkin says that malls can adapt the same appropriation of place as a theme park by creating a suspended reality. Malls now look inward, turning their backs on public streets. This article represents the failure in design when looking at private public spaces that look only into profitizing. With the right type of development, there should be enough green space, open space, commercial space, etc. to offer a diverse environment for people to go to without feeling left out or draining their profits and their community. Privatizing open spaces to non profit organizations might shine light on the ongoing issues while still providing a comfortable living space.

Staeheli, Lynn A., and Don Mitchell. "USA's Destiny? Regulating Space and Creating Community in American Shopping Malls." Urban Studies 43, no. 5/6 (2006): 977-92. Accessed April 2, 2021.

In North America, Pedestrian shopping malls are hailed as the new public square within the urban fabric. This comes with the backing of the multiple ethnicities that come to shopping malls and the many different experiences that are associated by different people. In many American cities, Shopping malls have been known as the distinction between downtown and the Urban Suburbs. PG Plaza provides that barrier between downtown Washington DC and the remaining DC suburbs of College Park, Berwyn, and Riverdale. Malls appear to be the new heart of social life within a community, and it is important that people in this space feel a sense of safety and that they have safe access to the space as well from multiple modes of public transportation.

Thompson, Mayes M and National Trust for Historic Preservation in the United States. Why Old Places Matter: How Historic Places Affect our Identity and Well-Being. American Association for State and Local History Book Series. Lanham, Maryland: Rowman & Littlefield, 2018.

Thompson explains in this book the importance of historic preservation for people. He explores how it gives people the feeling of belonging, continuity, stability, identity and memory. Architecture, national identity and history are also explored throughout this book.

"Traffic Calming." Institute of Transportation Engineers, www.ite.org/technical-resources/traffic-calming/.

Although brief, this website has a great bullet-point sort of organization to it that makes its information about traffic calming and design easy to understand. The article is straight to the point with no bias and clearly shows the reader what traffic calming includes and other ones of its objectives. However, due to the shortness of the article the author didn't go into any detail about each of the bullet-points and what they may look like in practice. The website also only explores the positives aspects of each objective and does not show other possible negative side effects the vehicular and/or pedestrian traffic may experience.

VBH. "Pedestrian Safety and Access Study." The Maryland-National Capitol Park and Planning Commission. (2019). Accessed April 2, 2021.

This article is an account by the Maryland Planning commission that presents data collected from the Prince George's Plaza transit commission. The report begins to draw on the need for better "connectivity" between pints of destination and public transit. This includes the installation of improved lighting, surveillance and spatial sequence. There is also a call for the improvement of pedestrian walkways and circulation paths surrounding the Prince George's Plaza metro station. These elements they believe would create a safer, more walkable community in the Hyattsville area surrounding the Prince George's Plaza. The lack of these elements may explain the absence of pedestrians in moments of urban rest and why most people just pass through the space and don't use it as it was originally intended to be.

Wood, Denis. "Free the children! Down with playgrounds!" McGill Journal of Education/Revue des sciences de l'éducation de McGill 12, no. 002 (1977).

This article is a design guide for creating welcoming playgrounds where children enjoy spending their time. The author states the importance of conducting interviews and engagement with children as playground users and considering their voice in the design process.

"Virtual Cities, Social Polarization, and the Crisis in Urban Public Space." Journal of Urban Technology. Accessed April 1. 2021.

Stephen and Alessandro write about the public realm and what it means. They define it as a space to support human interaction and debate, and free from the control of firms or the state. They urge that public spaces have never been fully inclusive. They point out that malls tend to confine public social life to certain locations, hours, and acceptable activities that are controlled to maximize consumption and profitability. But with this reading in mind, I asked myself, are there spaces that earn profit to keep it maintained but also offer real public space to everyone? As I continued reading, I noticed that cities in the United States seemed to approximate more to the dystopian urban predictions of science fiction, which was described as a justified isolation of elite members. Open spaces, public or private, need to celebrate not only human interaction, but ecological interactions that provide people with life outside of the commercial spectrum and show the fruits of the natural world around them.

Wood, Denis. "Free the children! Down with playgrounds!" McGill Journal of Education/Revue des sciences de l'éducation de McGill 12, no. 002 (1977).

This article is a design guide for creating welcoming playgrounds where children enjoy spending their time. The author states the importance of conducting interviews and engagement with children as playground users and considering their voice in the design process.

Wu, Hao, Yong Chen, Zhaoxi Zhang, and Junfeng Jiao. "The Impact of Street Characteristics on Older Pedestrians' Perceived Safety in Shanghai, China." Journal of Transport and Land Use 13, no. 1 (2020): 469-90. Accessed April 5, 2021. doi:10.2307/26967255.

Land-use patterns and fast urban sprawl greatly affects the older generations mobility in China. Older pedestrians' safety is a growing concern frequently leaving them injured in traffic accidents. This research focuses on the investigation of street characteristic used to identify safety among elder pedestrian on Shanghai, China.

Zegeer, Charles V, and Turner-Fairbank Highway Research Center. Pedestrian Facilities Users Guide: Providing Safety and Mobility. McLean, Va.: U.S. Dept. of Transportation, Federal Highway Administration, Research and Development, Turner-Fairbank Highway Research Center, 2002.

The purpose of this book is to provide information on how to identify the safety and mobility needs of the pedestrian within different street types or roadways. The brook is broken down into a few different sections, traffic safety, pedestrian safety, pedestrian movement, and traffic calming. The book gives designers the tools to mitigate pedestrian crash factors and make the roadways a safer place.

