JUNE 2023

EQUITABLE ACCESS TO SIX SAVANNAH PARKS REPORT & RECOMMENDATIONS





This project was supported by the Centers for Disease Control's Racial and Ethnic Approach to Community Health (REACH) Grant.



Table of Contents

- I. <u>Executive Summary</u>
- II. Introduction
- III. What is CPTED?
- IV. What are Complete Streets?
- V. <u>City of Savannah</u>
 - A. History
 - B. Characteristics of Savannah
 - 1. Regional Context
 - 2. Tourism
 - 3. Transportation
 - 4. Environmental Context
 - 5. Community Health and Exercise
 - C. Study Area
 - 1. Parks Selection Criteria
 - 2. Tide to Town
 - 3. Overview of Parks
- VI. Complete Streets and CPTED Safety Audit and Assessments Methodology
- VII. Survey and Focus Groups Methodology and Results
- VIII. Complete Streets and CPTED Parks Analysis
- IX. Individual Park Recommendations
 - A. Blackshear Park
 - B. Bowles C Ford Park
 - C. Cann Park
 - D. Feiler Park
 - E. Kennedy Park
 - F. W.W. Law Park
- X. Overall Recommendations & Prioritized Implementation Table

Acknowledgments

Equitable Cities would like to extend our gratitude to Healthy Savannah for the opportunity to improve park access and healthy equity in Savannah through Complete Streets and Crime Prevention Through Environmental Design (CPTED). Their support and guidance were crucial for gaining access to helpful resources, knowledge, and community members for the success of this project.

We also extend our thanks to the full team at Fall 2022 Transportation Studio at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University. The studio team's efforts were vital to the completion of our project, and their contributions and work with half of the project parks helped to bring the project to its full potential.

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Executive Summary

The City of Savannah, GA collaborated with Healthy Savannah, a public/private partnership of community organizations, to conduct a Crime Prevention Through Environmental Design (CPTED) and Complete Streets analysis and audit of their local parks. For this purpose, Equitable Cities LLC was tasked with auditing six parks determined through prior park evaluations to spearhead a project focused on the intersection of equity and accessibility. The six parks which underwent the project's audit and assessments are Blackshear Park, Bowles C. Ford Park, Cann Park, Feiler Park, Kennedy Park, and WW Law Park. To restore these six parks to their full potential, Equitable Cities and Rutgers University – Edward J Bloustein School of Planning and Public Policy partnered with Healthy Savannah as a consultant to fulfill the City of Savannah's mission of improving equitable access to these parks.

This report identifies several recommendations to promote the use of six identified parks: Blackshear Park, Feiler Park, W.W. Law Park, Bowles C. Ford Park, Cann Park, and Kennedy Park. To assess these six Savannah parks for recommended improvements, the Equitable Cities team performed a series of qualitative assessments. The team conducted two site visits to Savannah from September 8, 2022 to September 10, 2022 and from October 14, 2022, to October 16, 2022. In preparation for the site visits, resources were identified for assessment, including CPTED checklists created by Chicago Metropolitan Agency for Planning and the AARP Walk Audit Tool kit for Complete Streets data collection. These resources were distributed to site visit teams, and all members were briefed on the assessment steps and strategies. To hear from nearby residents of the parks directly about their observations and requested improvements, the team conducted focus groups following the September site visit, and we deployed a park intercept survey during the October site visit.

Our analysis determined that all six parks, Blackshear Park, Bowles C. Ford Park, Cann Park, Feiler Park, Kennedy Park, and W.W. Law Park, have substantial issues affecting their current and future usage. The most notable challenge across the parks was the need for community identity. Next, all six parks needed amenities that appeal to adult users. The parks also needed to catch up on key physical safety features, like wayfinding signage and multimodal connections.

Our key recommendations suggest six areas of focus:

- Building a Sense of Community Identity and Ownership in the Parks
- Providing Additional Park Activities and Amenities
- Ensuring that all Parks Have Safe Pedestrian Connections
- Increasing Park Security and User Comfort

- Providing Proper Wayfinding and Multimodal Connections
- Installing Signage on the Surrounding Streets

These recommendations aim to bring Blackshear Park, Bowles C. Ford Park, Cann Park, Feiler Park, Kennedy Park, and W.W. Law Park on par with those closest to the city center or in other parts of Savannah. The proposals broadly suggest facilities and amenities that are in most parks located within the predominately white or wealthier neighborhoods of Savannah but are missing in predominately black neighborhood parks. Conclusively, the Equitable Cities team hopes these recommendations will be mobilized to provide equitable access to these parks and build stronger and safer communities in the City of Savannah.

Introduction

Savannah, Georgia is home to almost seventy (70) different parks and squares located within the city limits. In an effort to better utilize those that are in more underserved communities, the City of Savannah collaborated with local organizations to determine six (6) parks that will spearhead a project focused on the intersection of equity and accessibility. In partnership with Healthy Savannah, the team at Equitable Cities is tasked with conducting a CPTED and Complete Streets analysis for parks in Savannah Georgia. Six parks were selected for analysis using numerous data and criteria. The six parks that will undergo the project's audit and assessments are as follows: Blackshear Park, Bowles C. Ford Park, Cann Park, Feiler Park, Kennedy Park, and WW Law Park.

The goal is to translate these observations into actionable items and recommendations for improving the parks and community. Crime Prevention Through Environmental Design, or CPTED, is a concept exploring how to design the built environment to influence people's behavior. Complete Streets is an approach that centers around change to ensure all users have equitable access to various mobility modes. The project team used the CPTED observation tool and the AARP Walk Audit form to conduct detailed, focused observations of Blackshear Park, Feiler Park, W.W. Law Park, Bowles C. Ford Park, Cann Park, Kennedy Park through the lenses of access and safety.

This report describes the Crime Prevention Through Environmental Design (CPTED) and Complete Streets observations for the six identified City of Savannah parks. These observations were developed during two 2-day site visits by the Healthy Savannah project team. During our site visits, we received input about the park and nearby areas from park users or nearby residents or property owners. This is important in the audit in order to ensure future changes are customized to the needs of the users. Upon completion, we immediately debriefed to further elaborate and document our observations. It should be noted that we encountered various amounts of rainfall during our assessment of the parks. The impact of the weather conditions on potential user activity were considered in our observations and in the full park assessment.

Healthy Savannah is a public/private partnership of over 200 businesses, nonprofits, and more who have partnered with the City of Savannah in making a healthier and safer place to live for people of all races and ages. The organization has a mission of building a collaborative network that identifies and shares resources, collects and disseminates information, promotes best practices, and supports innovative programs, and advocates for effective policies that lead and support a culture of health in the City of Savannah and its surrounding area. In addition to equitable access to underserved parks, Healthy Savannah, partnered with the city, has been steadily working on a Tide to Town multi-use path project. The project aims to design a 30-mile-long system to connect seventy-five percent (75%) of Savannah's neighborhoods to safe, affordable, and cost-effective walking and biking infrastructure to encourage long-term socio-economic development.

Equitable Cities LLC, a small U.S.-based firm with over fifteen years of experience in leading and collaborating with public agencies in work such as urban planning and design and technical assistance provided Healthy Savannah with a comprehensive analysis, using the principles of Crime Prevention Through Environmental Design (CPTED) and Complete Streets, for six parks: Bowles C. Ford Park, Cann Park, Kennedy Park, Blackshear Park, Feiler Park, and WW Law Park. Under the direction of Equitable Cities, the Rutgers University Masters candidates assisted the team with audit and assessments in three of the six selected parks. The ultimate goal of this project is to create a plan that includes upgrading the parks through a more equitable and accessible lens while raising the parks to the standards of the Healthy Savannah and the Tide to Town missions.

What is CPTED?

Crime Prevention Through Environmental Design or CPTED is an approach to urban architectural and environmental design that aims to provide several forms of crime prevention through smart and natural landscaping within the built environment. There are three generations of CPTED with each generation building upon the previous one, rather than replacing it. First Generation CPTED involves the proper design and effective use of the built environment and its influence on the reduction of fear, incidents of crime, and improvement in quality of life. One of the main goals of First Generation CPTED is to reduce opportunities for crime that may be inherent in the design of structures or neighborhoods.

The benefits of First Generation CPTED include a reduction in crime and potential crime, improvement and beautification of the physical environment, improved quality of life, and increased business activity. First Generation CPTED is based on four overarching concepts: Natural Surveillance, Natural Access Control, Territorial Reinforcement, and Image Maintenance/Management.

- 1. Natural Surveillance involves the placement of physical features, activities, and people in a way that maximizes visibility across a space.
- 2. Natural Access involves controlling access to a site by any or all of the following: Defining entrances, making sure entrances are visible, highlighting the main entrance, marking public walkways/paths, etc.
- 3. Territorial Reinforcement involves people's sense of ownership, like the use of physical objects to portray ownership such as a fence, landscaping, or paving. Territorial reinforcement can also be portrayed by providing specific programming and activities that reinforce a sense of ownership specific to the surrounding neighborhood.
- 4. Image Maintenance/Management involves the upkeep of a site so that it looks active and owned by rightful users. Management and maintenance also allow for and encourage the continued use of space for its intended purpose rather than becoming dilapidated and depleted over time.

Second Generation CPTED has a larger focus on the community building and involvement aspect of the built environment, where it is benefitting the entire surrounding community rather than only a small portion. Second Generation CPTED is based on four concepts: Social Cohesion, Community Connectivity, Community Culture, and Threshold Capacity.

1. Social Cohesion involves enhancing mutual respect and understanding within a community along with an appreciation for differences and diversity. Social cohesion focuses on the

community's involvement in a positive and supportive environment that can bring everyone together.

- 2. Community Connectivity involves providing opportunities to strengthen resident relationships and help their ability to build partnerships within the community and external to it.
- 3. Community Culture involves encouraging opportunities for communities to get together in order to foster a sense of belonging which might make them want to "defend" their area, while also encouraging the feeling of having a sense of ownership of the space.
- 4. Threshold Capacity involves maintaining a balance in the types of uses in an environment in order to preserve a community's identity and sense of ownership.

Third Generation CPTED involves a more holistic and strategic approach by addressing public health, sustainability, environment, and crime to construct safe and high-quality environments. For the purpose of this report, we will be focusing on First Generation and Second-Generation principles, as they provide a comprehensive guide for our analysis.

What are Complete Streets?

The idea of Complete Streets started in the 1970s and was coined as a term in 2003. Complete Streets is very closely connected with Vision Zero which was created in Sweden in 1997 in hopes to reduce pedestrian car deaths to zero in the country. Complete Streets is defined simply as streets that are designed for everyone. Based on local context, a complete street refers to who uses the street, how the street is used, how type and density are reflected, the area's consistency with the built and natural environment, as well as if the street supports the local economy and activity.

Complete Streets are an important concept due to the high costs associated with Incomplete Streets, defined as streets that prioritize performance over people. Incomplete Streets have limited mobility options, which can lead to negative safety, health, and environmental impacts. On average, thirteen (13) people a day are killed by traffic accidents and oftentimes marginalized communities are substantially more affected by the negative impacts of incomplete streets. Those communities include minorities, children, the elderly, and the poor. Whereas a Complete Street can benefit all communities, some of the most important benefits can include improved health, economic vitality, equity, safety, environment, choice, mobility, and livability.

The implementation process of Complete Streets involves transforming the environment from incomplete to complete through a new street design. Implementation is more than just physical design as you cannot expect to add a crosswalk or bike lane and automatically achieve the desired results. Complete Streets design includes key principles such as improved safety, mobility, and access. The inclusion of Complete Streets also leads to the promotion of healthy lifestyles and livable communities, environmental benefits, the mitigation of long-term capital costs, and the support of local economies/businesses. The end goal of enforcing these designs is that eventually, Complete Streets would become the default way of doing business, as it balances the needs of all modes, users, and abilities while offering municipalities a more qualitative approach to safety through environmental design.

City of Savannah

History of Savannah

Savannah's first recorded history begins in 1733 when General James Oglethorpe and the 120 passengers of the good ship, 'Anne', landed nearby. It was General Oglethorpe who was responsible for laying the city out in a series of grids that allowed for wide open streets intertwined with shady public squares and larger parks that served as town meeting places and centers of business (Visit Savannah, 2019). When the city was first founded, the State of Georgia was originally free of slaves,

but after American independence from England in 1776, Georgia's economy became heavily dependent on slave labor. Moving into the 1800s, Savannah became an important commercial hub through the invention of the cotton gin, the machine that quickly separates cotton from seeds, which propelled the formation of trade within the region.

Savannah's prominence grew around the Civil War, as blockades and conflicts occurred around the city. As the Union Confederacy moved in, General William Sherman grew close to the city, developing a soft spot that kept it said to have kept it safe from the numerous fires that damaged other cities like Atlanta, Birmingham, and Richmond, which suffered significant expansive fires that led to decades of reconstruction to their pre-Civil status (Sullivan, 2003). Although Savannah was not burned like most cities, its economy was forever changed due to the newly established freedom of African Americans and the end to slave labor.

The Reconstruction Years revived Savannah's economy and unveiled the clear cultural and racial divide between African Americans and Whites. Savannah became the world's leading exporter of naval stores such as timber or rosin during the Civil War and Great Depression. The previous cotton revival was hampered by boll weevils at the same time as the Great Depression, which led to the city's adoption of paper pulp and food processing as a means of trade (Historic Tours, 2022). After World War I, streetcars dominated the streets of Savannah. The expansion of streetcar suburbs south of Victory Drive signaled Savannah's first significant growth outward from the city's historic and Victorian districts that were previously developed by General James Oglethorpe in the 1700s. After the streetcar lines were dismantled, Savannah expanded significantly to handle the population growth of the twentieth century.

After the Great Depression, the Port of Savannah grew exponentially becoming one of the country's largest ports by the 1940s. During World War II, Savannah's ports were among the most active in the country with shipbuilding for the allied countries. An output of 1950s federal highway expansion and subsequent suburbanization led to the sprawling sunbelt cities that exist today. Strip malls and active avenues were built throughout the city and highways, such as Interstate 16 built in 1966 (Interstate Guide, 2022), were constructed to keep the population flowing in and out of the Downtown Area. Later in time, the City of Savannah would soon play a key role in the civil rights movement with its strategy rooted in nonviolence, pushed forward by Ralph Mark Gilbert (Georgia Historical Society, 2019).

In 2022, Savannah continues to be a national leader in paper pulp processing and the Port of Savannah is still consistently ranked as one of the top five busiest container-shipping ports, and the top ten seaports in the United States (Georgia Ports, 2021).

Characteristics of Savannah

Regional Context

The City of Savannah is in Chatham County, Georgia, just below the South Carolina border. Much of the city's oldest and densest portions are located along the Savannah River, which runs inland between the Georgia and South Carolina border, home to Savannah's busiest port. The Savannah Metropolitan Statistical Area (MSA), defined by the US Census Bureau, includes Chatham County, in addition to nearby Bryan and Effingham Counties, Georgia². Although not part of the MSA, Savannah lies in relative proximity to Hilton Head Island which is in the southernmost portion of South Carolina and is responsible for much of Savannah's tourism. Much of the population is concentrated in Chatham County, however, particularly in the areas in and around the City of Savannah (US Census Bureau, 2021).



Figure 1. Savannah Georgia Reference Map. Map created by GIS Geography, 2022.

As of 2020, the city of Savannah has a population of 147,088 residents, while the Savannah MSA had around 410,000 total residents (US Census Bureau, 2021). In both cases, this represents an increase over the 2010 figures, showing that the city is growing in terms of population (US Census Bureau, 2021). The MSA has a population density of roughly 303 people per square mile, compared to 1,383 per square mile for the city itself (US Census Bureau, 2021). The two largest racial groups in the city are Black (54.4%) and White (35.3%) (US Census Bureau, 2021). The MSA however, was roughly fifty-four percent (54%) White, and thirty-three percent (33%) Black in 2020 (US Census Bureau, 2021).

The median age in Savannah is 32.9, where about twenty percent (20.8%) of the total population is under 18 years old. The city itself is evenly split among genders, as fifty-two percent (52.1%) of the

population is female. The city is neither heavily pulled toward male nor female-dominated or a younger or older demographic. (US Census Bureau, 2021).

At the city level, approximately eighty-eight percent (88.1%) of the population are high school graduates or higher and twenty-nine percent (29.1%) have a bachelor's degree or higher. Sixty-three percent (63.3%) of the population is a part of the civilian labor force, age sixteen (16) years or above, yet the city's poverty rate stood at about twenty percent (20.4%) in 2020, which is higher than both the Georgia and national averages. Poverty rates for the MSA are just over twelve percent (12.4%). The median household income for the City of Savannah was \$46,149 in 2020, compared to \$66,245 for the Savannah MSA (US Census Bureau, 2021).

The city has a mixed economic base. Savannah's historic attractions are a major tourist draw where prior to the COVID-19 Pandemic, the City of Savannah saw an estimated 14.8 million visitors, who were estimated to generate \$3.1 billion in visitor spending (Visit Savannah, 2021). Special taxes on items such as hotels are a major revenue generator for the city. The City's location along the Savannah River also allows the city to generate revenues through trade. In 2021, the two deep-water terminals at the port moved over 20 percent of all east coast container trade, and over 11 percent of US container-based exports (Savannah Area Chamber, 2022).

In addition to the port, the city is located near major transportation corridors, such as I-16 and I-95, and several different rail lines which have made it an attractive location for manufacturing industries to call home. In 2021, over 17,000 people were employed by regional manufacturers and this number is expected to grow in the coming years.⁵ Examples of major manufacturers based in the Savannah area include JCB, a heavy construction equipment builder, Gulfstream Industries, an aerospace manufacturer, Hyundai, an automotive manufacturer, and International Paper, a sustainable packaging and pulp company (Savannah Area Chamber, 2022). Finally, the Savannah area is also home to two major military installations, Fort Stewart, and the Hunter Army Airfield, which employ a combined total of more than 25,000 individuals and contribute tens of millions of dollars annually to the local economy (Savannah Area Chamber, 2022).

Tourism

Savannah exudes beauty and charm that few destinations can match. Savannah's tourism and hospitality industry continue to be one of the largest economic drivers for the region. Although the busiest months in terms of visitation are April to June, tourism activity is spread evenly across the year due to Savannah's southern location and warm weather.

For overnight visitors, the activity mix is eighty-nine percent (89%) of leisure travel and eleven percent (11%) business and business leisure, paired with a stay that is approximately two to three (2.5) nights in Savannah (Smith, 2022). In top interest categories for overnight visitors, Savannah remains far ahead of typical national levels in exceptional culinary experiences, cultural activities, and historic places. Tourism experiences in Savannah can include activities such as Hop on Hop Off Trolley Tours, various Art and History Museum tours, a visit to the Savannah Theatre, Riverboat Cruises and more (Busy Tourist, 2022). Savannah is also home to twenty-two (22) unique squares (Visit Savannah, 2018) nestled within city blocks and eight (8) national historic landmarks (Official Savannah Guide, n.d.) which draw tourists to the City for their unique and beautiful features.

Transportation

The City of Savannah offers public transportation service through the Chatham Area Transit (CAT) service, which has been in operation since the beginning of Savannah's earliest street cars (Chatham Area Transit, n.d.). Within the Savannah Downtown area, residents and tourists have access to free public transportation through the DOT Express shuttle buses, which serve eighteen (18) different stops throughout the Savannah Historic District. Residents and visitors can also catch the free Savannah Belles Ferry that runs between Downtown and the Savannah International Trade and Convention Center on Hutchinson Island, which is accessible otherwise by personal vehicle. The rest of the city is connected through sixteen (16) CAT bus routes that primarily operate between the residential city neighborhoods and the Intermodal Station near the city center, as shown in **Figure 2** (Chatham Area Transit, 2016). Savannah is also home to its own mid-sized airport and Amtrak station which connect the city to the rest of the country through non-motorized travel.

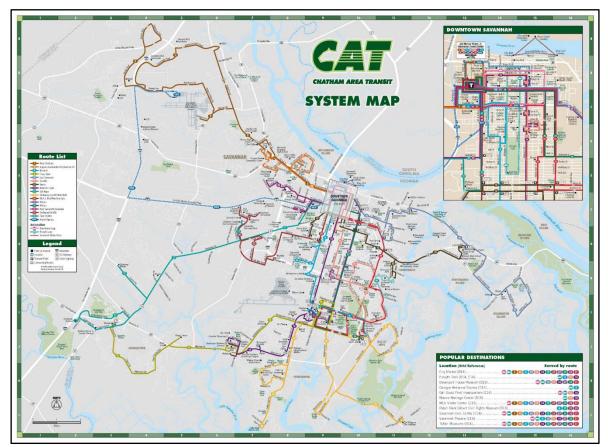


Figure 2. Chatham Area Transit system route map for the City of Savannah. Map created by Chatham Area Transit, 2016.

Contrary to public transportation and the CAT service, eighty-two percent (82%) of residents commute to work via car (Policymap, 2020), and there are on average 1.5 cars per household within the city limits. As shown below, Cann Park neighborhood residents commute to work via car much less than the city average of 81.61% and have a lower number of cars per household, while the other two neighborhoods are slightly higher than the rest of the city and have similar numbers of cars per household. I-16 separates Cloverdale and Carver Village from each other and the rest of the city, and additionally both neighborhoods are abutted by I-95. No major interstate highway separates Cann Park from the rest of Savannah, and just under 70% of the neighborhood's residents work compared to the city average of 81.61%.

Census Tract Neighborhood	Tract ID	Park Name	Percent (%) Who Drive to Work	Number of Cars per Household	
City of Savannah	-	-	81.61%	1.5	
Cloverdale	13051003302	Bowles C Ford	84.24%	1.8	
Carver Village	13051003301	Kennedy	84.38%	1.4	
Cann Park	13051002800	Cann	69.63%	1.2	
Blackshear	13051001100	Blackshear	61.91%	1.2	
Feiler/ Hussars Terrace/ Dittmerville	13051004400		84.86%	1	
Eastside	13051002100	W.W. Law	81.77%	1.2	

 Table 1. Percentage of people who drive to work compared to the number of cars per household within the selected parks census tract neighborhoods. Data collected from Policymap, 2020.

Beyond the Historic Downtown district, there is a lack of quality biking and pedestrian-friendly infrastructure. As of 2022, the City has a WalkScore of forty-four (44) and a BikeScore of fifty-two (52), making it a "Car Dependent City" (WalkScore, n.d.). There are only a handful of streets with dedicated bike lanes for residents or tourists to utilize and ride safely, but groups such as BikeWalk Savannah are working to provide resources for bikers to use for wayfinding, bike parking, servicing, and education, as well as advocates for bike improvements. The organization is also working with

Healthy Savannah and several other community groups to develop the Tide to Town multi-use path which will be discussed in a later section of this report.

Environmental Context

As mentioned in the Regional Context, the city of Savannah is located within the southeastern United States along the Savannah River, which runs east through heavy marshland out to the Atlantic Ocean. Savannah's location makes for a humid and subtropical climate with high temperatures and frequent rainfall throughout the summer months (US Climate Data, 2022).

Flood Risk

Between June and September, the city of Savannah experiences more than half of its annual rainfall, averaging about fifty (50) inches per year. Due to Savannah's location on low lying marshland with an elevation of only forty (40) feet (City of Savannah, n.d.), in addition to its proximity to the Ogeechee River, the Savannah River, and the smaller waterways of the estuary, the area is especially prone to flooding. Flooding events have had detrimental effects on the economic and social well-being of the city leading to the prioritization of flooding mitigation over recent years. One strategy utilized by the city was the creation of canals throughout the city which act as catchments for stormwater. The proposed Tide to Town plan mentioned later in this report runs along many of these canals. The city has also acknowledged that the susceptibility to flooding is a result of impervious surfaces throughout the urban areas (City of Savannah, n.d.), but further action has not been taken.

The city's flooding challenges are valuable to consider within the context of this project, as flooding disrupts mobility, accessibility, and the usage of each park within the case study. According to FEMA, Cann Park, though not located within the 100-year flood risk area, is surrounded by areas with a 0.2% annual chance of flooding, which is an indicator of a flood hazard. Blackshear Park is located within the area with 0.2% annual chance of flooding. Bowles C. Ford Park is located within a higher-risk area, the Hazard Flood Zone, or the 50-year flood risk area. Neither Feiler Park, Kennedy Park at Carver Heights, nor W.W. Law Park are at risk for flooding (FEMA National Flood Hazard Map, 2020).

The environmental vulnerabilities of these areas and the worsening environmental conditions of the climate make it necessary to include park improvement recommendations aimed at mitigating and controlling flood risk. Our recommendations include the creation and maintenance of drainage systems, usage of permeable surfaces wherever possible, and avoiding additional development of impervious surfaces within the parks.

Heat Risk

Savannah's southeastern location is known for warm weather with the temperatures in the city ranging from 60 degrees Fahrenheit in January to 92 degrees Fahrenheit in July (Weather and Climate, n.d.). In the summer of 2022, the city reached a high of 102 degrees, and most days

throughout June and July were beyond 90 degrees Fahrenheit. Savannah's relative humidity rarely drops below 60% creating a heat index of around 100 degrees Fahrenheit typically on the 90-degree Fahrenheit days (Weather and Climate, n.d.).

This elevated heat is harmful to all residents within the City of Savannah, especially those who lack access to air conditioning and those who work in direct sunlight between 10 am and 2 pm when the sun is at its peak. Considerations like shade availability and water availability are essential for increasing the accessibility of parks for residents during the hotter months and for older individuals who are more vulnerable to the negative effects of heat. Additionally, the recommendations are helpful to not just the residents of Savannah but are mitigations against the ongoing threat of climate change globally.

Community Health and Exercise

Non-profit organizations such as Healthy Savannah and several others are working to encourage healthier living habits in the City of Savannah. Nationally, the State of Georgia has some of the highest rates for Type 2 diabetes, hypertension, and physical inactivity (County Health Rankings, n.d.). Statistics for Chatham County show that it has slightly higher rates of physical inactivity and Type 2 diabetes than the state (County Health Rankings, n.d.). Racially disproportionate access to care and wellness has led to poor health outcomes for Black Savannah residents. Age-adjusted death rates for Type 2 Diabetes amongst Black Savannah residents are higher than county-wide, statewide, and nationwide averages (City of Savannah, n.d.). The same holds true for stroke death rates and hypertension hospitalization rates. These factors are likely major contributors to the lower average life expectancy of Black Chatham County residents, and their lower-than-average levels of physical health.

A pressing issue that impacts community health in Savannah is barriers to food access. Particularly, some of the city's low-income, majority-black neighborhoods (especially those in West Savannah) can be characterized as "food deserts". Food deserts are neighborhoods that lack access to adequate grocery stores and other healthy food options. Adequate grocery access is often defined as having a grocery store within one (1) mile of a place of residence (Medical New Today, 2020). Therefore, individuals who live in a food desert and lack access to a car may have difficulty eating a healthy diet. A recent study commissioned by the City of Savannah indicated that higher-than-average rates of heart disease and diabetes in the population are often correlated with the areas of the city that lack adequate food access, which is present in communities like West Savannah (Fraser, 2021).

Physical exercise rates are also an important item to consider when analyzing community health. As noted earlier, Georgia has one of the highest rates of physical inactivity in the United States. The state also has lower physical activity requirements for middle and high school students than many other states (Healthy Savannah, 2017). This may be partly associated with the state's relatively high childhood obesity rates. A major obstacle to increased exercise activities in cities like Savannah is the presence and quality of bike and pedestrian infrastructure. A recent Healthy Savannah study concluded that additional infrastructure improvements will likely have to be made at the

neighborhood level, to make improved recreational options more accessible to the residents who need them most (Healthy Savannah, 2022).

A final health factor to consider is environmental justice issues. Unlike many other oceanside cities, Savannah residents are exposed to several environmental hazards due to the city's proximity to transportation networks (especially the port area) and various manufacturing industries. Air pollution is associated with health problems, such as increased asthma rates and other respiratory illnesses. The presence of busy highways and freeways is also of special concern, given that most of the communities being analyzed in this report lie in close proximity to such roadways.

Study Area

Parks Selection Process

The Equitable Cities team used publicly available data on the Savannah Area Geographic Information System (SAGIS) to conduct the parks selection process. Based on existing data in September 2022, there are 187 parks within Chatham County. The Parks Selection process filtered these parks by ownership and type to 67 parks. Only parks owned by the City of Savannah Mayor & Aldermen and classified as "Community Parks & Playgrounds", "Preservation & Nature," or "Sports & Recreation" were considered for further Complete Streets and CPTED assessments. For the purpose of the Parks Selection analysis, the project team used data on the City of Savannah website, Chatham County website, and defined attributes in the parks spatial data retrieved from SAGIS.

The Parks Selection process included identifying specific criteria and performing spatial data analysis at the city level. The purpose of using these variables is to indicate which parks in Savannah are surrounded by communities that are likely to have historically been denied infrastructure and/or quality-of-life improvements and investments. The criteria below were confirmed by Healthy Savannah and used as current indicators of these historic inequities in the Park Selection process. The listed criteria provided a framework for the Parks Selection Criteria Matrix. It should be noted that the "Park Amenities", "Crime Incidents", and "Traffic Incidents" criterion were not used as a scoring metric in the Parks Selection process. These attributes provided additional contextual information about each park and were used as supplementary information in the Parks Selection process.

Selection Criteria	Benchmark	Resource			
Racial Demographics	Top 50% quartiles of % non-white population (block group level)	2020 5-year American Community Survey Estimates, US Census			
Median Income	Lower than citywide average median income (block group level)	2020 5-year American Community Survey Estimates, US Census			
Activity Generator (land use)	Nearby proximity within 0.25 miles (e.g School, major public institution, etc)	Savannah Area GIS Open Data			

Crime Incidents	Crime incidents for 0.25 to 0.5 miles from the park	- <u>Weekly Crime Report</u> - <u>Community Crime Map</u>
Traffic Incidents	Traffic incidents for 0.25 to 0.5 miles from the park	- <u>Weekly Crime Report</u> - <u>Community Crime Map</u>
TTT Neighborhood Prioritization Ranking	Top ten prioritized neighborhoods	Provided by Healthy Savannah & Symbioscity
Park Amenities	Lack of presence or fewer amenities within park	 Parks & Playgrounds Savannah, GA Official Website Chatham County Parks and Recreation
Health Risk Behavior	No leisure-time physical activity among adults aged ≥18 years (census tract level)	2021 PLACES Data, CDC
Health Outcome	Depression Among Adults Aged ≥18 Years (census tract level)	2021 PLACES Data, CDC

 Table 2. Selection Criteria used in the park selection process. Criteria identified by Equitable Cities, 2022.

Each of the 67 parks in Savannah (filtered by ownership, maintenance responsibility, and park type) were scored by each criterion depending on whether or not they met the corresponding benchmark. For example, if the park is located in a Tide to Town priority neighborhood, then the park was given a score of 1 for that specific criterion. Scores were totaled for each park to determine the top ten identified parks for Complete Streets and CPTED assessments. For the park selection methodology for all parks considered in Savannah.

The Parks Selection Matrix shows scores of the six parks identified for Complete Streets and CPTED assessments. The final selection took into account the geographical locations of each park to ensure as much geographical spread of selected parks as possible within top-scoring parks.

Park Name	Park Characteristics		Within 0.25 Miles			Tide to Census Data Town (Block Group)			CDC Places Data (Census Tract)			
	Туре	Amenities	School	Library	Community Center	Grocery Store	Within a TTT prioritized neighbor- hood?	Percent (%) Non- White	Median House- hold Income (Adj)	No Leisure- Time Physical Activity	Depression Rate	Final Score
Blackshear Park	Community Parks & Playground	Yes					1	1	1		1	4
Bowles C. Ford Park	Community Parks & Playground	Yes			1			1	1		1	4
Cann Park	Community Parks & Playground	Yes	1				1		1	1		4
Feiler Park	Community Parks & Playground	Yes	1			1	1	1	1	1	1	7
Kennedy Park	Community Parks & Playground	Yes			1		1		1	1		4
W.W. Law	Sports & Recreation	Yes		1	1	1	1			1		5

Table 3. Parks Selection Matrix for the six (6) selected parks. Matrix created by Equitable Cities, 2022.

Tide to Town

Tide to Town is a coalition of Savannah and Georgia-based organizations with the goal to connect Savannah's neighborhoods to safe, affordable, and cost-effective bicycle and pedestrian infrastructure, which will strengthen the local economy and dignify all transportation users. It will provide over thirty (30) miles of paved multi-use trails circling Savannah and connecting the downtown to marshes and waterways, thirty (30) schools and colleges, hospitals, parks, and sixtytwo (62) different neighborhoods. This project is a REACH, Racial and Ethnic Approaches to Community Health beneficiary, with a grant that supports the development of Tide to Town, education, and outreach, especially focusing on low-wealth neighborhoods. Tide to Town is projected to provide easier access to two of the three parks within this case study and more of the connections will be discussed throughout this report.

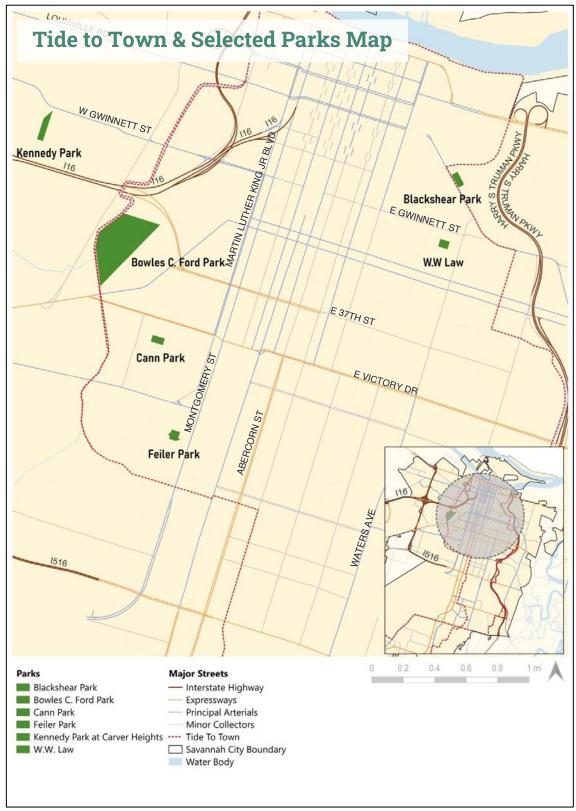


Figure 4. *Map displaying the proposed Tide to Town path throughout the City of Savannah and in proximity to the six parks within the case study. Map created by EC, 2023.*

Overview of Parks

Blackshear Park

Blackshear Park is bordered with housing units to the south and Savannah's first veteran tiny-home community, The Cove at Dundee, with 24 units to the east. An active auto mechanics shop occupies the northern edge of the park, while Wheaton Street, a minor arterial 3-lane roadway, borders the western edge. The nearest transit stops are located just south of the intersection of Dundee Street and Wheaton Street. These inbound and outbound stops are served by Chatham Area Transit routes 10 and 27. The park's main feature is the basketball courts. The basketball courts and most additional amenities, such as restrooms, trash cans, and water fountains, are enclosed by a locked wire fence. Berms, or tall mounds of earth, within the park present sightline issues during the day, and a lack of lighting at night presents visibility issues in the dark. The immediate area surrounding the park (Census Tract 11) is fifty percent (50%) African Americans with a median household annual income of \$37,277 (US Census Bureau - Tract 11, ACS2019).

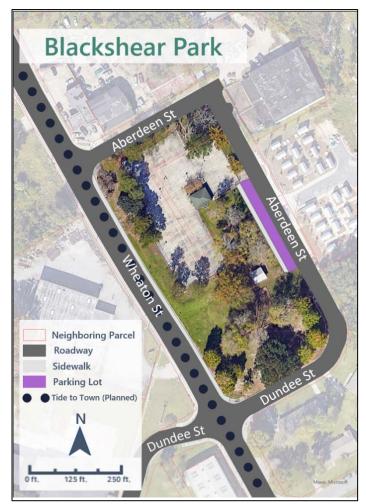


Figure 5. Overview Map of Blackshear Park's existing conditions and surrounding streets.

Feiler Park

Feiler Park is located at the corner of Alamo Street and Meding Street on the west side of Savannah. The park is set within the Feiler Park Neighborhood, bordered to the west and north by apartment complexes, to the south and east by single-family homes, and across Meding Street from a factory warehouse operated by the Pepsi Bottling Group. The park design is open space with signage, lighting, benches, a water fountain, and a walking path within the park. The focal point of the park is the playground area near the street and parking area. One dedicated trash receptacle is located near the playground. The playground area and walking path have adequate lighting and visibility, but there are a few concealed areas towards the north section of the park. Overgrown underbrush presents visibility and natural surveillance issues, even with adequate lighting. The immediate area surrounding the park (Census Tract 44) is ninety-five-point seven percent (95.7%) African Americans with a median household annual income of \$28,428 (US Census Bureau - Tract 44, ACS2019).

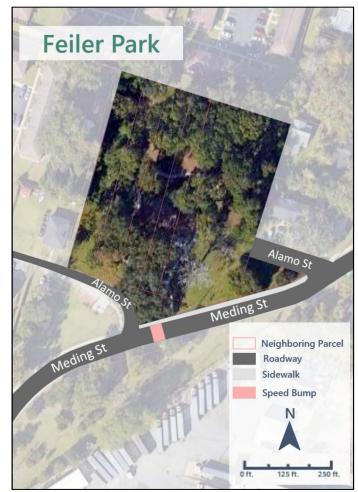


Figure 6. Overview Map of Feiler Park's existing conditions and surrounding streets.

W.W. Law Park

W. W. Law Park is set within the Eastside neighborhood on the east side of Savannah. The park is bordered on all four sides by local streets and single-family residential structures. Most houses appeared occupied with a few vacant and neglected structures located on the east side of the park. The main amenities at W.W. Law Park are the W.W. Law Community Center which also houses a daycare and the W.W. Law Library. Other facilities at the park are the W. W. Law Community Garden and the public, outdoor swimming pool. A landscaped bench seating area is also located between the community garden and the front entrance of the community center. The immediate area surrounding the park (Census Tract 21) is seventy-nine-point four percent (79.4%) African Americans with a median household annual income of \$39,450 (US Census Bureau - Tract 21, ACS2019).



Figure 7. Overview Map of W.W. Law Park's existing conditions and surrounding streets.

Bowles C. Ford Park

Bowles C. Ford Park is in the West Savannah and Cloverdale neighborhoods of Savannah, GA, which lie just southwest of downtown Savannah. Bowles C. Ford Park is located directly off Stiles Avenue and has one point of road access. The park itself has ample parking in a strip near the front of the park. There are walking paths throughout the park that circle a small pond. In addition, there is a large swimming pool available for use. There is a mostly fenced walking path that circles the pond, used for exercise and as a dog run. However, alligators are present within the waters, so caution is advised. This park is only accessible by car; it cannot be accessed on foot since there is a lack of sidewalks that lead up to or into the park. This park can be accessed by bike, but only if the bicyclist travels along the main roads of Stiles Avenue or Cloverdale Drive, which do not have their own bike lanes. The immediate area surrounding the park (Census Tract 33.02) is ninety-seven percent (97%) African Americans with a median household annual income of \$40,536 (US Census Bureau - Tract 33.02, ACS2019).



Figure 8. Overview Map of Bowles C. Ford Park's existing conditions and surrounding neighborhoods.

Cann Park

Cann Park is in the Cann Park neighborhood of Savannah, GA, directly southwest of the historic Savannah core. Cann Park is located within a neighborhood core and is bounded by four streets, West 45th Street to the north, West 46th Street to the south, Stevens Street to the west, and Bulloch Street to the east. Within the park, there are two basketball courts, a playground, a gazebo with picnic tables, and a worn baseball diamond. There are trees that line the street to enter the park and fence lines from the baseball field and basketball courts secure most of the park off to pedestrians. The immediate area surrounding the park (Census Tract 28) is seventy-seven-point one percent (77.1%) African Americans with a median household income of \$32,008 per year (US Census Bureau - Tract 28, ACS 2019). Within the park's vicinity is the Alfred E. Beach High School which lies roughly 200m from the park.

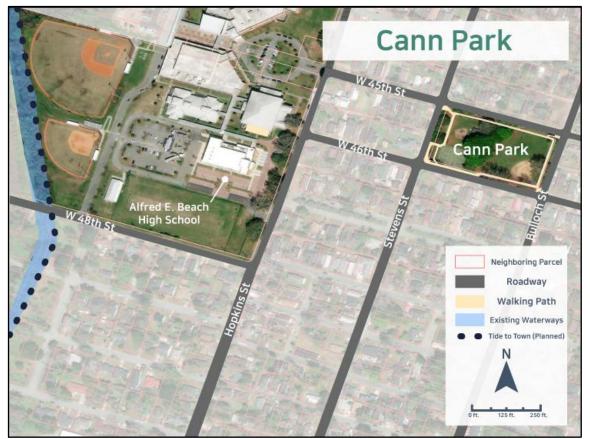


Figure 9. Overview Map of Cann Park's existing conditions and surrounding neighborhoods.

Kennedy Park

Kennedy Park is in the Carver Heights neighborhood of Savannah, just southwest of downtown Savannah. The Carver Heights neighborhood is one of Savannah's most historic neighborhoods; it was the first federally funded affordable housing community given to black military veterans, in 1948. The neighborhood is still home to many of the original families and the neighborhood has since been listed on the Registry of Historic Places, making it a nationally known historic site (WSAV, 2020). Kennedy Park is surrounded by Endley Street, Carroll Street, Collat Avenue, and Winburn Street. Within the park, there are multiple recreational facilities including two basketball courts, two tennis courts, a baseball diamond, a playground, a gazebo with picnic tables, and multiple patches of open grass for activities and events. The park has very open access with sidewalks surrounding the park and houses directly across the street. The immediate area surrounding the park (Census Tract 33.01) is eighty-seven-point eight percent (87.8%) African Americans with a median household income of \$34,102 (US Census Bureau - Tract 33.01, ACS 2019). Directly adjacent to the park is the Carver Village Community Center.



Figure 10. Overview Map of Kennedy Park's existing conditions and surrounding neighborhoods.

CPTED and Complete Streets *Methodology*

Safety Audits and Assessments

Overview

The Equitable Cities team conducted two site visits to Savannah from September 8, 2022 to September 10, 2022 and from October 14, 2022, to October 16, 2022, to assess six Savannah parks for improvements. In preparation for the site visits, resources were identified for assessment, including CPTED checklists created by Chicago Metropolitan Agency for Planning and the AARP Walk Audit Tool kit for Complete Streets data collection. These resources were used by Equitable Cities team to conduct CPTED and Complete Streets assessments at six parks during the September and October site visits.

CPTED

The CPTED audit form focused on on-site assessment. A site assessment is an essential tool for determining community safety factors that increase actual and perceived vulnerability for users. These factors help to identify potential design applications which will deter likely offenders. The factors include CPTED first- and second-generation concepts.

During the site assessments, we looked for community safety-related issues within our areas of expertise in transportation, housing, and community planning. Blackshear Park, Feiler Park, and W.W. Law Park were assessed on September 8 and 9, while Bowles C. Ford Park, Cann Park, and Kennedy Park were assessed on October 15 and 16. At each park, general observations were discussed and noted at the end of each visit. The team then made final notes at the end of the day for all parks.

Observations of vulnerable locations such as restrooms or bus stops were noted during each site assessment. Site assessments also involved a safety audit, which helped us assess the park areas' perceived safety. At Bowles C. Ford Park, Cann Park, and Kennedy Park, the safety audit involved a survey of community members to identify those factors that negatively and positively impact their feelings of safety. The participants, who were residents from the area, were given an overview of the purpose of the audit prior to undertaking it, but there was no professional input during the audit.

Site visit teams conducted the CPTED assessments during daylight hours, and also carried out an additional assessment of the park at night, where the team observed the park for all safety-related

parameters like lighting, access, and use of the park. Along with the site, the teams also looked at the area's broader context, such as main pedestrian routes to the site and car parking lots, if present.

We used two CPTED checklists during the site assessment and audit process. We referred to the CPTED checklists created by Chicago Metropolitan Agency for Planning to guide our audits. The first checklist focused on general impressions, as well as design, usage, and maintenance. This checklist noted lighting, signage, isolation, movement predictors, entrapment sites, activity uses, maintenance, and territorial definition. The second checklist was more in-depth, providing a section to determine what was satisfactory vs. unsatisfactory. The satisfactory parameters were the ones that had a clear yes to the statement question like "Lighting of safe routes." If the answer was a clear no, then the parameter was deemed to be unsatisfactory. Note here that most of the parameters fell somewhere in-between which was noted as a yes with a reference to the area where the parameter was satisfactory. The rest was detailed in the observation notes and added to the analysis later. The parameters we studied under this checklist were wayfinding, surveillance, visibility, landscaping, lighting, territorial definition, image, planning, management, building materials/ structures/ furniture, access/egress control, and activity uses.

We used the Problem and Suggested Improvements Form to guide our observation analysis. The first page of this form was relatively simple, with a section for location, a description of the problem, and suggestions for improvement. The second page was the audit findings and was more detailed with sections:

- 1. Identified site
- 2. Issues arising (Differentiation between Actual vs. Perceived)
- 3. Suggestions for crime prevention strategies
- 4. CPTED principle solved
- 5. Stakeholder Involvement recommended.

We created a digital version of the Problem and Suggested Improvement form for our examination and marked problem areas with relevant recommendations for each park. Our final site assessments and audits tried to anticipate future trend impacts on the parks. This audit aimed to ensure that the changes made to any park, like improved lighting or increased police, are relevant to their individual context and meet the needs of their visitors.

Complete Streets

The Complete Streets audit was performed using the AARP Walk Audit Toolkit. A walk Audit is an activity in which participants observe and evaluate the walkability of a location to identify and document if and how pedestrians can safely travel along a street, navigate an intersection, and get from Points A to B and C, and so on *(Source: AARP tool kit).* These elements include street design and pedestrian interaction. Pedestrian demographics and abilities are considered when gathering data on who is utilizing the crossings. The assessment included these sections:

1. Who's using the street and why?

This section helps identify who's walking and how are they walking from which specific time frame. It also helps collect information about what could be the possible reason, whether they are walking, commuting, or out for a jog.

2. Crossings and sidewalks first for Single Location audit and another for Walking audit

This section is important to collect information about the conditions of the sidewalk whether it is continuous, or full of interruptions. It also helps identify the type of ground surface and curb present.

3. Safety and Street Appeal

This section is important to gather information about what elements the street has. Whether it has places to sit, enough shade of trees, the presence of signages, drinking fountains, street space, etc. It also gives ideas about whether the street impression is appealing as a destination or travel route, whether is it safe for pedestrians during day and night, etc.

4. Public transit access

This section helps identify the impressions while accessing public transit facilities on the street. Details about the type of amenities around the bus stop in terms of the shelter it has and whether it is accessible and safe for pedestrians and users.

5. Build a Better Block

This section contains a checklist for safe walkability and appeal of the walk audit location or route to be improved by the use of any of the 30 points listed in the AARP toolkit.

6. Winter weather

This section helps identify what is the condition of the sidewalks, streets, and buildings when there is snow and which agency is responsible for clearing and winter maintenance of the pedestrian walkway or pathway.

These sections were filled out for each street within each park. The audit tool closes out with a summary that rates the overall walkability of a street using a Likert scale ("Great", "Acceptable", "Mixed" and "Poor"). Additional descriptions of factors like Connectivity, Safety, Equity, and Climate were included during the audit of each park. These four factors are a part of the Federal Transit Administration (FTA)'s guidelines for the Complete Streets Strategy. That includes safety, connectivity, climate, and equity. The analysis will help to understand the community and network context, identify safety, connectivity, and equity concerns, implement improvements over time; and evaluate impacts by monitoring and measuring success (*Source: Complete streets in FHWA*).

Park Surveys and Focus Groups Methodology and Results

Survey Methodology

Park assessment surveys were administered to residents at Bowles C. Ford Park, Cann Park, and Kennedy Park during site visits on Sunday, October 15th, 2022. The survey was designed to gauge the usage of the park different groups of residents and surrounding community members view and utilize the park. The survey questions included themes like the following: usage within the park; how often the park is visited; ways to access the park; amenities available or wanted within the park, and lastly park safety.

All surveys were collected using a Google Form linked on a tablet with the project team members. The survey questions were verbally asked the respondents and the team members filled in the Google Form with the corresponding answers. Below is a recap of the survey results broken down by park. Since these survey results received such a low turnout, they cannot determine the needs of the entire residential population within the area but are rather used as insightful first-hand notes about needs within the parks.

Survey Results

Bowles C. Ford Park

A total of three (3) survey responses were collected at Bowles C Ford Park. On average, respondents visit the park between once a week to twice a month for about 1-2 hours mainly for fishing and/or boating activities. Respondents prefer to drive to the park, but one respondent stated they enjoyed walking to the park, as well. Their walk can take 20 minutes or more. No respondents biked to the park.

The respondent did not share any major safety concerns and they indicated that they preferred little to no police presence within the park. Just one respondent shared their concern not with human safety, but with animal/insect safety and attacks.

All respondents would prefer having paths separated from cars, and access to more amenities, like restrooms, benches, signs, lighting, and parking lots. When asked about group activities, the respondents did not encourage organized group activities, or amenities for field activities like soccer

fields, baseball fields, or tennis courts, despite the majority of the respondents being between 18-29 years old.

Cann Park

A total of two (2) survey responses were collected at Cann Park. According to the respondents, people residing near Cann Park visit with children once a week and spend about 1-2 hours in the park. The average age of the respondents was 40 years old, and both are of Black or African American descent. The respondents prefer to walk or drive to the park and shared that it can take around 5-10 minutes when walking from the park to their homes.

The respondents' purpose for visiting the park is to play, relax and spend some time with family and friends. According to them, it is easy to walk on the sidewalk around the park and most of them believe that there is nothing to worry about in terms of being harassed in the park or hit by a car driving nearby. However, respondents do not allow their children to visit the park alone. Like the respondents at Bowles C. Ford Park, respondents at Cann Park shared their concerns with animal/insect safety and attacks.

According to those surveyed, the park must have year-round restrooms, benches to sit and relax, fun and picnic areas, parking lots, police presence, streetlights along the paths, organized group or social activities, and fitness equipment.

Kennedy Park

A total of two (2) survey responses were collected at Kennedy Park. Out of the two respondents, one had actually never visited the park before and the other respondent visits once a week on the weekend for about 30-60 mins. Both respondents were Non-Hispanic Black or African American, with one male and the other female, and within the 30 to 39-year-old age range.

Both respondents described walking or biking in the vicinity of the park to be either difficult or very difficult. Though difficult, the female respondent visits the park once a week by walking from her home, which takes about 5-9 minutes. The female respondent's main purpose within the park is to look after her kids while they are in the playground area.

Neither respondent had concerns about safety within the park nor would not prefer a police officer presence but encouraged infrastructural changes such as having paths/trails separated from cars. The respondents also mentioned having access to amenities like restrooms, benches, and lighting and signs would also be welcomed.

The respondents said they would like it if there were more organized group activities, sports games, and/or exercise equipment, as one of the respondents said her child visits the park 2-4 times a week for playing sports. Contrary to increased activities, both respondents would not prefer the park to

have additional parking, which might be due to the already available parking within the community center lot across the street.

Focus Group Methodology

Healthy Savannah and Equitable Cities conducted a total of three focus groups via Zoom after the September and October site visits to increase direct input from users of the parks. One focus group consisted of adult park users, and two focus groups consisted of students who attended a school nearby at least one of six selected parks. The youth focus groups were conducted with Hodge Elementary School and Hubert Middle School students based on their proximity to Cann Park and W.W. Law Park, respectively. The purpose of the focus groups was to gain insight from residents on their user experiences to inform safety and access improvements in City of Savannah parks.

During each focus group, participants were presented with a project overview, including the project goals, schedule, and project status, followed by discussion prompts for the remainder of the session. During the student focus groups, a teacher or educational staff member within the classroom helped to cue students when responding to discussion prompts. Responses were captured and shared on a Google Jamboard in real-time. No identifying information was recorded on the Jamboard to maintain participant anonymity. Among all hosted focus groups, participants were focused on Forsyth Park, Cann Park, Bowles C. Ford Park, or Feiler Park as they are most familiar with or live nearby these parks.

Focus Group Results

Bowles C. Ford Park and Feiler Park

Hodge Elementary School

Forsyth Park, Wells Park, Cann Park, and Summerside Park were all locations mentioned as parks that were visited by the elementary school students. Some participants visit this park because it is in walking or bus stop proximity. Forsyth Park was mentioned multiple times as a park that most respondents have to travel to via car with their families. Students felt that walking to the park would take too long depending on their starting location, but were in favor biking.

Personal safety concerns were expressed as reasons for not walking or biking. Specifically, kidnapping while traveling alone and shooting incidents near Wells Park had respondents afraid to walk or bike to the park. However, one student expressed interest in biking to and at Forsyth Park. Students indicated that obstructions such as cars on the sidewalk would not welcome biking, as is usually the case at Forsyth Park.

With regard to personal safety within parks, students mentioned feeling safer while at the park if their parents or other friends were present and if there wasn't alcohol use at the park. They suggested occasional surveillance or even restricted access to the park as ways to keep the parks safe from unwanted activity. When asked about desired amenities at the parks, students indicated a skateboarding area, bike riding area, garden, trampoline, gazebo, sunroom, pool, and multiple playgrounds as part of a dream park.

Hubert Middle School

Daffin Park, Forsyth Park, and Tatumville Park were all mentioned as locations respondents visit with their families and/or friends. One respondent did mention that they don't really go to the park for reasons unsaid. Most of the participants travel to the parks by car. However, they recognize the benefits of biking and walking but safety concerns make them hesitant. Students noted sidewalk issues and traffic as discouraging to bike or walk to the parks.

Regarding personal safety concerns, students cited potential negative interactions with the unhoused population, stray dogs, and fear of kidnapping or assault as reasons not to bike or walk. Students noted feeling safer at parks when around familiar people such as friends or family. On a scale of 1 to 5, with 5 being the safest, all respondents stated 4 or 5 when at a park with parents, family, or even friends; without parents or other familiar people, their scores were stated at 2 or 3.

Students raised comments about broken features in the park and poor upkeep, such as the lack of pool cleanliness, as deterrents from using a park. When asked about what improvements could improve safety, participants suggested adding gates around the perimeter of the park to control access and adding safety patrol and security cameras to the park.

Most notably, the responses from middle school students about their dream parks predominately included improvements to existing features, such as stabilizing playground slides, cleaner water fountains, more trash cans, better lighting focused on the park, and better shading for rest areas. Other desired amenities at the parks include activity spaces for park users of different ages, sensory activities for autistic users, turf, an indoor facility, and sandboxes. Similar to the elementary focus group responses, the middle school dream parks include a splashpad, an in-ground trampoline, a zipline, and a place to get snacks and drinks during when visiting the park.

Complete Streets and CPTED *Parks Analysis*

Blackshear Park



Figure 11. Blackshear Park aerial with annotations to identify the surrounding uses and street names. Image created by Equitable Cities, 2022.

I. CPTED Analysis

General Park Impressions

Blackshear Park is roughly 2.8 acres, located just east of the Savannah Historic District. It is adjacent to a 3-lane minor arterial road, Wheaton Street, a small auto-repair and other industrial businesses that make the area feel less residential in character. The main activity areas in the park include six basketball courts, a children's play area, a gazebo, and a shelter with water fountains and toilets next to the courts. The park's amenities provide a variety of activities for the surrounding neighborhood, with the veteran's tiny-homes community directly to the east of the park as likely having the most immediate users. The premises feels very disconnected from the city's otherwise vibrant parks network, even though the park is located at only a 22-minute walking distance from Forsyth Park in the city's Historic District. The parks maintenance overall is adequate with few trees around the courts and children's play area to provide shade during summers. With some key improvements, the park's programming can easily be enhanced and integrated with the city's park network, creating a well-maintained asset for the community around it.



Images: The children's play area in Blackshear Park (left) and the basketball courts (right). Photo taken by EC, 2022.

Natural Surveillance

Strengths

Natural surveillance is the placement of physical features, activities, and people in a way that maximizes visibility. The current overall location, layout, and placement of physical features and activities within Blackshear Park maximize opportunities for natural surveillance during the day, but less so during the night. The park has direct sightlines from the north, west, and east sides since it lacks any elevated fencing or boundaries. The north and west sides enable eyes on the park from the auto repair shop, and passersby on Wheaton Street, respectively. While a tall berm, or mound of dirt, limits sightlines into the park from the sidewalk along the park's southern edge, the trees in the park and on the berms are tall and do not obstruct sightlines.



Images: The clear views of the properties from the park (left) and the children's play area (right). Photo taken by EC, 2022.

The park's usability and safety and significantly reduced at night because of insufficient lighting and the types of land uses surrounding the park, especially for women and children. This increases the possibility of illegitimate activities occurring in the park, especially near the gazebo. It is also important to note that surveillance from the arterial road would not be as effective given that fast moving traffic buffers the establishments on the other side of the and would obstruct visibility on occasion, during the day. While the shelter with toilets and water fountains is fenced-in with the courts, which reduces the occurrence of illegitimate activities near it, this also deters regular use of the park by nearby residents at any time.

Lighting

Lighting levels highlight the court, but not the playground. One of the residents mentioned a lack of lighting during the nighttime specifically mentioning the lights on the court being off at night. Thus, the lighting is not strong enough for neighbors to see the park at night. Some lights are even cracked or missing. Community members spoke about how when it gets dark, they can't see anything and don't feel safe.

Natural Access Control

This refers to the employment of methods for controlling pedestrian, bicyclist and vehicle access to the park. The park's entryways are not clearly celebrated, marked, or branded in a way that ensures and defines entryways into the park. There can be wayfinding signage installed on the road to direct users into the park.

Strengths

The park's boundary is defined by the curb on three sides and a sidewalk with curb cuts on only the road side. There is a painted bike lane and sidewalks along the front of the park on the minor arterial, Wheaton Street. This promotes biking and walking to the park. However, speeding traffic on Wheaton Street without managed crossings, such as rapid flashing beacons or a traffic light, from the residential neighborhoods across Wheaton Street is an accessibility restriction despite a posted speed limit at 30 mph. The park is served by city bus routes 10 and 27, providing connectivity between Downtown Savannah and Island Towne Centre, or Downtown Savannah and Oglethorpe Mall, respectively. Park destination signs are present on both ends of the park on Wheaton Street, although they are not in very good condition.



Images: The existing bike lane along Wheaton St (left) and the bust stop near the park (right). Photo taken by EC, 2022.

Wayfinding at Blackshear Park could use improvement through upkeep and additional signage. The current signage lacks visibility, and the design is not very legible from afar. Upon entering from the parking area on the eastern edge, it is not clear what the operating hours are for the park. The main park destination sign is slightly damaged as well. The sign for the basketball court requires you to walk into the park and does not mention the operational hours. There are two controlled entry points to the caged basketball courts. However, the entrance on Wheaton Street is obstructed by overgrown vegetation and is not clearly visible even from the adjacent sidewalk. The restrooms and water fountain are located inside the fenced-in basketball courts while the playground and picnic area are easily accessible. There is a lack of walking paths or bicycle paths in the park that renders the park less accessible by design, especially to people with physical disabilities or using a wheelchair.



Images: The park signage (left) lacks visibility, and the design is not very legible from afar. Photo taken by EC, 2022.

Territorial Reinforcement

This refers to people's sense of ownership and the use of physical attributes that express that ownership. The current overall design, layout, and activities in the park are not sufficient to serve the needs of the demographics around it. This presents a lot of scope for improvement. The existing infrastructure can be expanded and improved to increase accessibility and a sense of ownership.

Strengths

The park's boundary is territorially reinforced by the curbed edges on three sides and the sidewalk on the fourth side facing Wheaton Street. This is the only form of boundary the park currently has, as the trees inside the park are also randomly lined in the corners. This is a benefit from the natural surveillance point of view as the sightlines are not obstructed. The existing infrastructure only needs certain upgrades to enhance the overall attractiveness of the park, which is a positive attribute as it will allow immediate and short implementation timelines. Some foreseeable improvements are already underway, with more to be ushered in by ongoing improvements across the entire park network and the anticipated Tide-To-Town project. The current activity areas in the park mostly appeal to younger populations and children, with recent provisions for adults and veterans that live close by.

Concerns

The walking path is not wide enough to accommodate walking, running and cycling all together, and is only present along one edge. It also doesn't have a defined buffer from the road which would be a concern for certain park users, such as unsupervised children. There is potential to add features reflecting the presence of the veteran community in the area to build the park's character and identity.

Image Maintenance and Management

This refers to properly maintaining and managing a space that indicates active involvement of and guardianship and ownership among legitimate users. The overall maintenance and management of Blackshear Park is fairly good, with scope for some improvement.

Strengths

The sidewalks are continuous, though only on one side, and have curb cuts near the corners of the park. The park is fairly clean and has dustbins provided in two locations inside the park. The grass and vegetation were kempt and the gazebo area was clean during the site visits. The toilet complex, which had accessible toilets, was well maintained and the water fountains were functional. There is seating available in the park. Although, it can be increased to cater to the older veteran population living nearby. There were no signs of visible graffiti or vandalism in and around the park. The public facilities are already present on site that can potentially be opened to the public to increase park use.



Images: The maintained vegetation of the park (left) and cleanliness of the toilet complex (right). Photo taken by EC, 2022.

There aren't any major concerns regarding maintenance and management. There was some litter on site, but this is likely because there were no trash bins/cans located outside of the closed basketball complex. The grounds were recently mowed and thus well-kept, but the entrance of the basketball complex was overgrown, hard to notice, and poorly maintained. There is also no public art or a unique identity of the park. Finally, it is nowhere explicitly mentioned who is responsible for the maintenance of the park.



Images: The presence of litter, although minimal, in and around the park and its facilities. Photo taken by EC, 2022.

Supporting Legitimate Activities

The gazebo provides an excellent opportunity for parents, guardians, friends and family to watch their loved ones as they enjoy the park and children's playground. There is a residential area just east and south of the park for natural surveillance. There were no sign of unwanted drug or gang behavior happening in the park; during site visits. However, the park is largely located inside an industrial area and is within walking distance from an active railroad. An abandoned building is adjacent to the northern end of the park, close to the tiny home community that can enable illegitimate activity and raise safety concerns, especially at night.

Geographical Juxtaposition

According to data from the Community Crime Map from Jan 2020 to Dec 2022, some 60 incidents were registered by law enforcement in the Blackshear neighborhood and near the park. Burglaries and Vehicle theft were the most frequently reported criminal incidents in the area as seen below.

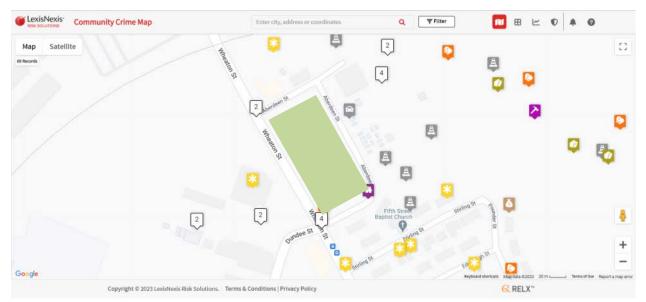


Figure 12. A map showing reported crime in the Blackshear Park area from 2020-2022. Map created by LexisNexis, 2022.

Social and Cultural

Strengths

During the site visit, several individuals were observed walking along Wheaton Street by Blackshear Park or within the park itself, including teenagers, residents of the adjacent tiny home village, and one elderly person. Our team also learned additional information about the park from the owners of the adjacent auto shop and a resident of one of the houses right across from the park. Blackshear Park had great activity and after-hour lighting prior to the COVID-19 pandemic. This was in large part to a community leader who spearheaded the efforts to establish the basketball center at the park, Coach Skollo. Since their passing during the pandemic, activity at Blackshear Park has been reduced with only the occasional church service and food drive for the residents of the tiny home community.

Concerns

We heard from the owner of the auto shop and nearby residents that they want a safe and visible place. One resident was a father who stressed how he couldn't see anything on the playground after dark. He would love his kids to go out and play in the park but is cautious of some of the after-hour activities without the lighting.

II. Complete Street

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Wheaton Street

Figure 13. Street cross-section of Wheaton Street looking north from its intersection with Dundee Street. The street has two drive lanes and bike lanes on both sides of the street. Blackshear neighborhood residences are on the right and auto repair shops and the fire service establishments on the left. Diagram created in Streetmix by EC, 2022.

Safety

Residents can currently access Blackshear Park via Wheaton Street, which has sidewalks on both sides. The sidewalk is five (5) feet wide and is separated from the street by a three (3) foot painted bike lane on either side of the street. While the existing sidewalk is well-maintained and looks newly built, it is not continuous. It ends at the corners of the park turning onto Aberdeen and Dundee Streets.



Images: The existing bike lane along Wheaton St (left) and the bust stop near the park (right). Photo taken by EC, 2022.

There are some shade trees along the park-side sidewalk, but only near the park corners. There is a bus stop at roughly 200ft from the Dundee Street corner of the park. There are bus stops on both sides of the street, but one stop is missing a sidewalk which means that people with limited mobility cannot safely get between the bus and the park or surrounding neighborhood.

Wheaton Street lacks safe crosswalks for pedestrians crossing at the intersections Dundee Street and Aberdeen Street. The sidewalk and buffered bicycle lane along Wheaton Street provide space for pedestrians and cyclists. More crosswalks and pedestrian crossings are on Wheaton Street the closer you get to the nearby school south of the park. However, accessibility can be improved for those using mobility aids.

The existing crosswalks are faded along Wheaton Street, headed both southeast towards the school and northwest towards the railroad crossing, and there are no warning signs indicating to drivers that there might be pedestrians crossing. There are no tactile features present on the ground to alert pedestrians with vision impairment that a path is ending. There are cracks and raised sections, developing a tripping hazard.

There is no walk signal for pedestrians to know when it is safe to cross near the park. There are some working pedestrian crossing signals towards Dundee Street where a school is present that lasts only 15 seconds, but none are present close to the park itself. The crossing signal timer is too short for someone to safely travel, especially if they are using a wheelchair.

The road has a speed limit of 30mph with vehicles normally going at greater speeds, which increases the risk of injuring pedestrians trying to cross. In fact, the intersection is 60 feet wide on which pedestrians must walk unprotected; this creates many potential points of conflict between drivers, bikers, and pedestrians.

Connectivity

In terms of connectivity, Wheaton Street currently is a 3-lane minor arterial road that connects the Blackshear neighborhood to the city's historic district and the commercial streets that have restaurants, retail, etc. for the neighborhood residents to access, since there aren't many close to the park. There are also multiple churches and two elementary schools connected through Wheaton Street that is served by bus routes 10 and 27. There were several people walking or biking along the park during site visits. Visitors to the park included mainly the tiny house community residents.

The proposed Tide to Town trail will pass through Wheaton Street and provide a safer pedestrian and bike pathway to the park. It will also make the park more accessible for residents of other nearby neighborhoods, which provides an opportunity to make Blackshear Park a more popular recreational space for anyone in the area looking to go for a jog or to walk their dog.

Equity

Considering the veteran's tiny-homes community to the east of the park as immediate users, the park's programming seems to be less effective to serve their needs as they may be older and might have mobility limitations. The pathways inside the park would need to be augmented and expanded to allow for groups of two or three to walk alongside each other, and accommodate the needs of people with disabilities.

Climate

The City of Savannah is expected to see a rise in temperatures over the coming years due to climate change. However, the lack of shaded relief stations (washroom and drinking fountain), coverings, or tree shaded walkways within and around the park are not a problem at Blackshear Park as it is well shaded through summer months and has a dense tree canopy all around. This poses a serious risk for the elder and health disadvantaged veteran population near the park and may impact their use of the park.



Image: View of the park from Wheaton Street looking east. The park is well shaded through summer months and has a dense tree canopy all around. Photo taken from Google Streetview, 2022.

Dundee Street



Image: View of the street looking west from the intersection with Wheaton Street. Photo from Google Streetview, 2022.

Safety

Dundee Street is a two-lane street with no sidewalks on either side. It has no painted crosswalks or pedestrian signal infrastructure on three sides which makes it very unsafe to use, especially where it intersects with Wheaton Street. Somebody trying to cross along this street to go to the park or the bus stop nearby would have to cross a 60 feet unmarked road with a speed limit of 30mph with vehicles going faster than that.

Connectivity

Dundee Street provides connectivity between the veterans' tiny-homes community on the far side of the park and the Eastside neighborhood that also has the Chatham Area County bus terminal just 1000 feet from the intersection at Wheaton Street, next to the park. With the proposed Tide to Town trail passing through Wheaton Street, which would bring in higher pedestrian and cyclist volumes, Dundee Street would need improvements to accommodate this potential growth in a safe manner.

Equity

Stiles Avenue provides little to no equity for persons with accessibility impairments. Crossing the street may be difficult for residents or visitors looking to visit this park, because of the lack of proper infrastructure to do so. The lack of curb bumps and sidewalk access decreases its accessibility to get the park or the bus stop on Wheaton Street.

Climate

The street is adjacent to the small-scale manufacturing industry services on either side, near the intersection, with almost no tree cover providing shade or shelter from the sun or rains. This would make waiting near the intersection or walking along the street very uncomfortable on hot summer days, especially as there are no sidewalks either. There can also the issue of water flooding the street, deeming the street unusable in the absence of sidewalks for both abled and disabled patrons.



Figure 13. Street cross-section of Aberdeen Street looking north. The street has two drive lanes and a parking lot to the left of the street. Blackshear neighborhood residences and veteran are on the right. Diagram created in Streetmix by EC, 2022.

Safety

Residents of the tiny-homes veterans' community can access Blackshear Park via Aberdeen Street, which currently has no sidewalks on any side. This is a neighborhood street which usually has cars parked in the street on either side, with a small parking lot along the middle edge of the park that has 15 parking spaces. Some of these spaces are reserved for people with disabilities. Sidewalks are only present on one side of the street to the extent of this parking lot and nowhere else. The lack of sidewalks along the small side street directly surrounding the park requires pedestrians to walk in the street or on grass. Although this street has less concern regarding pedestrian safety as it does not have a lot of traffic going through, the lack of lighting during the night makes this street less safe, especially for women and children.

Connectivity

This street provides direct access to the park for the residents of the veteran community. It connects them to Wheaton Street in the front of the park which has two bus routes serving the area and providing connectivity to the historic district in the city.

Equity

Aberdeen Street currently has no sidewalks or pedestrian friendly infrastructure to support part users which limits equitable access to the park by people who are not abled. Only the small patch along the parking lot has a sidewalk which requires a person with a disability to first arrive at the park in their car and then enter through that access way.

Aberdeen Street

Climate

Blackshear Park is fairly well shaded and has a dense tree canopy covering the entire park during summer and spring. It maximizes heat relief and uplifts the park's appeal during hot days. A line of tall and dense trees is also present close to the parking lot which would offset any heat reflected by its paved surface and keep the parked cars cool as well.

Feiler Park



Figure 14. Feiler Park aerial with annotations to identify the surrounding uses and street names. Image created by Equitable Cities, 2022.

I. CPTED Analysis

General Park Impressions

This is a small neighborhood park of roughly 2 acres nestled between apartment buildings in a predominately residential area of Feiler Park/ Hussars Terrace/ Dittmerville in Savannah. It is located on the opposite side of Meding Street from the fenced-in property of Pepsi Bottling. The park is well-maintained and has an attractive children's play area which adds to the "family-feel" of the park. The signs within the park identify it to be a popular park for dog-walking as well. However, the park has a lot of trees cover that would make this park less inviting after dark, even though a sign in the park says it is open till 9pm every day. The park's name sign installed in the southwest corner of the intersection of Meding and Montgomery Streets was unveiled in 2016 and serves as a

wayfinding feature for passersby along Meding Street, including drivers in vehicles traveling to and from Montgomery Street, a nearby four-lane minor arterial road, and riders on the CAT bus route 4.



Images: View of Feiler Park and its walking paths near the entrance from Meding St. Photo taken by EC, 2022.

Natural Surveillance

Strengths

The park has direct sightlines from two sides because there are no elevated fencing or boundaries around the park. However, the east side of the park offers more regular surveillance opportunities as it has two single-family homes' driveways right next to the park (Image X). The trees in the park are moderately high and do not obstruct sightlines. The visibility of the playground is fairly good on the Alamo Street side. Neighboring residents can view the park, there are some units behind the back-side fence that top floor residents can view at the rear of the park.



Images. View of Feiler Park (left) from the intersection of Meding St and Alamo St. Photo from Google Streetview, 2022.



Images. Unobstructed sightlines from nearby residences into the park from two sides. Photos taken by EC, 2022.

The current overall location, layout, and placement of physical features and activities within Feiler Park do not maximize opportunities for natural surveillance during the day, and even less so during the night. The west side of the park has limited direct visibility as the houses are facing away from the park. The property directly opposite to the park is the Pepsi Bottling Group which is fenced-in with vegetation covering parts of the fence; obstructing direct sightlines to the park. There are some blind spots in some bushes and a trail that leads to the rear of the park. This area can go unnoticed due to the distance away from the playground area and the presence of heavily overgrown vegetation at the rear of the park.



Images. Limited direct visibility, overgrown vegetation, and blind spots near the back-end fence of the park where the house units are located. Photos taken by EC, 2022.

Natural Access Control

Strengths

The park has a clear destination sign and an additional sign with hours for when one can enter. It has existing paved walking paths going through it, encircling the children's play area, and sidewalks along the road facing Meding Street, with curb-cuts and ramps at appropriate locations to facilitate

entry. Abled users can enter the park from anywhere when walking along Meding Street or Alamo Street. There is clear visibility from the parking lot because the park is located on the street and greater visibility through lighting along the meandering paths going through the park.



Images. Existing paved walking paths (left) going through the park and encircling the children's play area (right), with clear name sign and an additional sign with hours for when one can enter (left). Photos taken by EC, 2022.

Concerns

The short wooden barricade posts located on the east-west side of the park allow pedestrians to pass through and gain entry to the park. Users can enter from anywhere which also makes it easier for non-legitimate user to access the park relatively easily. There is a cut-through path along the rear fence on the north side of the park which runs between apartments and Alamo Street. Residents living nearby most likely use this path to cut through the park to get to their homes. Given the current state of concealment and poor surveillance at the rear of the park, this can especially increase the risk of illegitimate users gaining access to the park and adjacent properties.



Images. Non-ADA friendly access on two sides due to presence of semi-enclosing wooden stumps (left) and increased risk of illegitimate user access through the cut-through path on the north side of the park (right). Photos taken by EC, 2022.

Territorial Reinforcement

This refers to people's sense of ownership and the use of physical attributes that express that ownership. The park's boundary is reinforced by the sidewalks and semi-fenced boundary on the southern side which controls for access into the park to some extent. There is potential to host events for neighboring communities, but not much parking for the park, with only about 5 spaces, and two handicapped spots total.



Images. The park's name sign installed at the intersection of Meding St and Montgomery St (left) and the park's reinforced boundary by the sidewalks and semi-fenced boundary on the other side. Photos taken by EC, 2022.

Image Maintenance and Management

Strengths

The sign near the entrance of the park identifies Feiler Park Neighborhood Association as the responsible entity of the park under the Adopt-a-park program of the city. The park's name sign installed in the southwest corner of the intersection of Meding and Montgomery Streets was unveiled in 2016 and expresses community ownership. There is seating available near the children's play area and dustbins located at multiple places inside the park along with signs to promote cleanliness. The street furniture around the playground looked new and the lawn well kept, which indicates community involvement and ownership. The only area of concern regarding image maintenance along the rear perimeter of the park.



Images. The park is well maintained with new infrastructure and seating available near the children's play area and dustbins located at multiple places inside the park along with signs to promote cleanliness. Photos taken by EC, 2022.

In addition to overgrown landscaping, this concealed area is also susceptible to becoming a dumping ground for trash and other debris without additional trash receptacles. Litter was ubiquitous on both the playground and along the cut-through path at the rear of the park. Waste/dumping was evident at the rear of the park where there is dense, overgrown vegetation. The water fountains inside the park were not functional at the time of site visits.



Images. The rear of the park, located along the north property boundary, is overgrown with vegetation (left) which conceals the unformal entryway and dumping ground along the rear fence. Photos taken by EC, 2022.

Supporting Legitimate Activities

The park's current set of activities and spaces are programmed to encourage legitimate users and activities as they are centered towards children and families, given its location in a residential area and overall appeal as a family-friendly park with many spaces to conduct community events. However, there are corners of the park that have overgrown vegetation and porous boundaries that can become spots for illegitimate activities, especially after dark. The adjacent land uses are

residential or vacant. The property across the street is industrial, but it does not have access directly to Meding Street, which limits natural surveillance opportunities.

Geographical Juxtaposition

According to data from the Community Crime Map from Jan 2020 to Dec 2022, some 271 incidents were registered by law enforcement in the Feiler Park/ Hussars Terrace/ Dittmerville neighborhood and near the park. Burglaries, Vehicle theft, and assaults were the most frequently reported criminal incidents in the area.

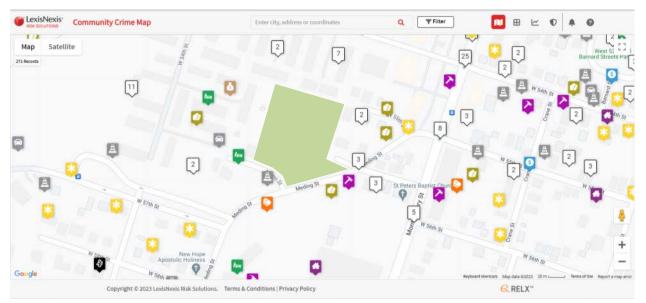


Figure 15. A map showing reported crime in the Feiler Park area from 2020-2022. Map created by LexisNexis, 2022.

Social and Cultural

Strengths

During the site visit, one person was observed walking along Meding Street towards the commercial area at the intersection with Montgomery Street to pick up food. This was verified when we observed the same person returning with a take-out bag within the next hour. The few numbers of pedestrians were attributed to the heavy rain during the site visit. One focus group participant, a resident of Feiler Park, stated that they see children using the playground and that the park regularly hosts organized gatherings.

Concerns

A well-worn foot path was observed along the fence at the northern boundary of Feiler Park. This path serves as a pedestrian cut-through between several apartment buildings and Montgomery Street. However, one focus group participant raised concerns with visibility and natural surveillance

due to the trees, bushes, and underbrush in the rear of the park. They had also noticed people hiding in darker areas of the park.

II. Complete Street

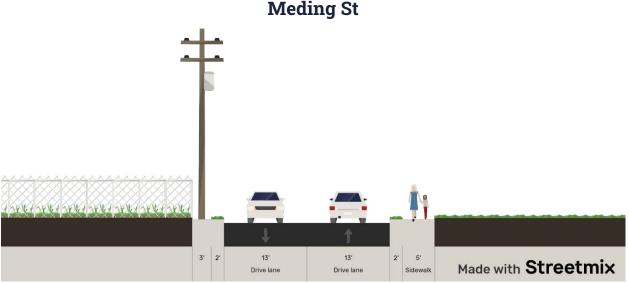


Figure 16. Street cross-section of Meding Street looking south. The park is to the left of the street which has two drive lanes, a speed bump near the park entrance, and the neighborhood residences to the left as well. The fenced-in property of the Pepsi bottling group is on the right. Diagram created in Streetmix by EC, 2022.

Safety

Residents can currently access Feiler Park via Meding Street, which is a two-lane street that has sidewalks on the park-side that end at the corners. The sidewalk is five (5) feet wide and connects to the paved pathways leading into the park and encircling the children's play area. The existing sidewalk is well-maintained, looks newly built, and extends south along Meding Street to the New Hope Apostolic Church. The sidewalk does not extend past the church heading southbound on Meding Street, and it ends without a curb cut and several vertical metal bollards installed in the middle of the sidewalk beside the church. There is not a sidewalk along the east side of Meding Street.

Close to the designated entrance of the park, traffic calming has been imposed in the street through a raised street bump which ensures safe crossing, although, the other end of the crossing lands in front of the fenced-in Pepsi bottling company property's back side without a sidewalk. No other speed control devices were observed. This street feels comfortable to bike in as well, despite there being no bike lane or sharrow markings.



Images. A speed bump is located close to the designated entrance of the park (left). Metal bollards are located in the middle of the sidewalk which extends from Feiler Park to the metal bollards beside the New Hope Apostolic Holiness. Photos taken by EC, 2022.

Connectivity

Meding Street provides direct access to the park. It connects to Montgomery Street on one end which has CAT bus route 4 serving the area and providing connectivity between the city's historic district and Walmart on Montgomery Cross Road. It also connects to Alamo Street on the other side of the park.

Equity

The intersection of Alamo Street and Meding Street adjacent to Feiler Park has ADA curb ramps with tactile indicators and a sidewalk along the west side of Meding Street. This would accommodate the needs of people with disabilities, as much as they would for other park users. The other side runs along the fence of the Pepsi bottling company's property with no such pedestrian features as it is functionally its back side.

Climate

Meding Street is a well-shaded street with tall trees on the park side and dense patches of short trees and bushes on the other side, which would easily offset any heat produced by the adjacent property's huge parking lot and impervious surfaces. However, rainwater pools near the cross walks as was observed during the site visit. When this occurs, it can limit access to the park, especially for ADA users.



Image. The existing sidewalk is well-maintained and looks newly built (right) with a speed bump close to the designated entrance of the park (left). The street feels comfortable to bike in and is well shaded (right). Photo by EC and Google, 2022.

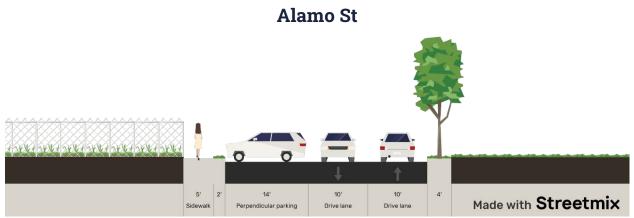


Figure 17. Street cross-section of Alamo Street looking east. The park is to the right of the street which has two drive lanes, a small parking area, and the neighborhood residences on either side of the street. Diagram created in Streetmix by EC, 2022.

Safety

There is a sidewalk on one side of the street, opposite to the park, and curb cuts ending on both sides near the front corner of the park. There is a painted crosswalk across the street that is faded in some spots. The street is a local street that provides access to the houses and apartments, therefore has less safety concerns given the low speeds of vehicles moving in and out of their driveways.

Connectivity

The street is a local street that provides access between the housing developments close to the park and feeds onto Meding Street. There is a small parking lot with six (6) spaces close to the street entrance and directly across from the park.

Equity

In terms of equity, this street currently has less ADA-friendly infrastructure, except close to the park entrance. Hence, if a person in a wheelchair wanted to access the park from the houses or apartments, they would have to roll directly in the street because there are no sidewalks.

Climate

As far as extreme heat conditions are concerned, Feiler park is well-shaded and has a lot of tree cover that can make the use of the park comfortable during hot and extreme summer days. However, heavy rain can cause flooding along the edges of the park that can obstruct and discourage entry to the park, especially for people with disabilities.



Images. The existing tree cover for a well-shaded park (left) however, monsoons can cause flooding along the edges of the park near the intersection that can obstruct and discourage entry to the park (right). Photos taken by EC, 2022.

W.W. Law Park



Figure 18. *W.W. Law Park aerial with annotations to identify the surrounding uses and street names. Image created by Equitable Cities, 2022.*

I. CPTED Analysis

General Park Impressions

The park is located next to the W.W. Law Community Center and Library within the same 1.2-acre property. W.W. Law Park and Community Center is located in a primarily residential area. The streets encircling W.W. Law Park, including Harmon St, East Bolton Street, East Waldburg Street, and Ott Street, are local neighborhood streets with primarily residential traffic. There are sidewalks along both sides of these streets, but the ADA curb ramps and sidewalk conditions require improvements in some areas. While the streets directly adjacent to W.W. Law Park did not include bicycle lanes, the streets are narrow with low traffic volume to encourage slower vehicular speeds and to promote a more comfortable bicycling environment around the park.

The W.W. Law community center is open from 11 am to 8 pm (with expanded summer hours) and has numerous programs for seniors, youth and adults that include after school programs, youth and adult basketball, weightlifting programs, etc. The center also has child daycare services for children between the ages of 5 and 17 years, which are not subsidized. The park activity areas include a swimming pool, a paved sports court, and a children's play area that can only be accessed from within the community center or from the entryway near the parking lot. During the site visit, there were no wayfinding signs or destination signs locating the park area. However, it was clear that the

primary destination is the community center and library. The entrance to the community center and library would be less clear for someone arriving on the south side of the park property.



Images. The community center building (top left), the signage of the park (top right), the fenced-in children's play area (bottom left), and the community swimming pool in the park's complex (bottom right). Photos taken by EC, 2022.

Natural Surveillance

Strengths

The park is within the community center's premises which maximizes the opportunity for natural surveillance of all the activity areas. The presence of single-family homes on all sides of the complex offers additional opportunities for natural surveillance. Houses located to the east across from the paved sports court would have direct sightlines and an unobstructed view of the park, both during the day and at night. The complex is well lit in the dark with direct sightlines from all sides. Additionally, security cameras were observed on the community center building.



Images. The views of the very well-lit W.W. Law Community Center complex at night. Photos taken by EC, 2022.

There is poor visibility from the southeast and southwest corners of the park due to the location and orientation of the community center on the property. Visibility to the front door of the community center, except from the parking lot, is also poor. It would be difficult to see the playground attached to the center from the eastern side of the property. The pool area and children's playground are fenced, while the paved sports area appears to be a decommissioned basketball court.



Images. Some pockets and corners within the complex are not very well surveillances as seen. Photos taken by EC, 2022.

Natural Access Control

Strengths

The park property occupies a full block, surrounded on all sides by neighborhood streets. A vegetated buffer separates the existing sidewalks from the curb, allowing distance between cars and pedestrians. The sidewalk is also wide enough to accommodate two people walking at a time. The sidewalks surrounding the W.W. Law Park and community center are connected to accessible curb ramps on all four corners of the property.



Images. There are sidewalks present around (left) and within (right) the park complex. Photos taken by EC, 2022.

There was a lack of wayfinding or posted information in the park to guide users on the available amenities, community center hours and programs, or library hours. Someone arriving on foot or bike from south of the park is not guided to any of the other park amenities, including the primary entrance to the park/community center. Park Signage at the southeast corner of the property is obstructed by the light pole. The playground and pool were entirely fenced with chained entrances. While the pool area provides some guidance about operational hours, it is not clear whether the playground is open to the public, or if it is only available to the daycare center which occupies some of the community center.



Images.. The access to the children's area is not ADA friendly (left) just like the pool access (right). Photos taken by EC, 2022.

Territorial Reinforcement

Strengths

The park is located on the same premises as the W.W. Law Community Center and Library and in a primarily residential area in East Savannah. The surrounding streets territorially reinforces the community ownership of the park and maintenance. The park property (including the community center) is currently defined by an encircling sidewalk. It is not clear if the park is only where the former basketball court and pool are located.

Image Maintenance and Management

Strengths

Given the park's location within the community center premises, there is good quality infrastructure already available for use by park users between the hours of 11 am to 8 pm (with expanded summer hours). Landscaping is maintained except in the area near the community garden between the pool and community center. Otherwise, the landscaping looks maintained around the park. The park has a few benches and one bicycle rack which can be added to for promoting cycling to the park. There is also a maintained, fenced playground for the daycare on the west side of W.W. Law Park. A large concrete pad of the decommissioned basketball court is located on the east side of the park. This provides an opportunity to install a large covered pavilion at W.W. Law Park.



Images. The park is well maintained with good quality infrastructure already available on-site. Photos taken by EC, 2022.

Concerns

Overgrown vegetation near and within the community garden can present visibility issues. The main destination park sign at the corner of Waldburg Street and Ott Street requires upkeep, and it is visibly obstructed by a light pole. The backside of the community center and fences surrounding the pool require upkeep and maintenance, and there is an opportunity to add public art to the park property. There was vegetation growing on the building and inside of the HVAC area. There are a few abandoned properties on Ott Street on the east side of the park property. The former basketball court has lighting fixtures focused on the area, but the bulbs were obstructed by trees. Some wiring was removed or exposed in light poles surrounding the park. There is also a lack of lighting focused on the park at back side of the community center building.



Images. The backside of the community center and community garden area by the pool are poorly maintained. The sidewalks have cracks and broken slabs in multiple places (middle). The park signage is obstructed (right). Photos taken by EC, 2022.

Supporting Legitimate Activity

W.W. Law Park is mostly surrounded by residential use except for a few commercial lots which promotes legitimate activity and users. The opposite parcel on the northeast corner of the park is used by an auto repair shop. The community center hosts after-school programs and summer

programs. However, there was no evidence of activity when we visited as the entrance to the center was locked on a weekday morning.

Geographical Juxtaposition

According to data from the Community Crime Map from Jan 2020 to Dec 2022, some 340 incidents were reported by law enforcement in the Eastside neighborhood near W.W. Law Park. Burglaries and thefts were the most frequently reported criminal incidents in the area.



Figure 18. A map showing reported crime in the W.W. Law Park area from 2020-2022. Map created by LexisNexis, 2022.

Social and Cultural

Strengths

During the site visit, we observed a person biking past the community center on E Bolton Street. The neighborhood streets allow for moderately comfortable travel on bike or on foot. In addition, according to Healthy Savannah staff, the W.W. Law Center regularly hosts after-school programming during the week. The community center pool is a popular amenity, especially for summer programming activities. The presence of a community garden, as mentioned by Healthy Savannah staff, is also indicative of an engaged community. The W.W. Law Park and community center are also one block south of the Chatham Area Transit staff parking area at the intersection of East Gwinnett Street and Ott Street. While no transit staff were observed using the park during the site visit (this may have been also due to the inclement weather), the close proximity of the Chatham Area Transit Center to W.W. Law Park is an opportunity for increased social and cultural activity through physical activity or community programming (e.g., farmer's markets).

During the site visit, a large concrete pad was observed on the park property which appeared to be a decommissioned basketball court. Renovating the court to its former use, or retrofitting the pad for a different use, such as a covered pavilion, would allow for additional activity in the park. In addition, the pool facilities were locked (this could be due to the timing of the visit), and looked to be in need of some maintenance for the fence. It should be noted that youth focus groups participants specifically indicated pool cleanliness as a deterrent for visiting or enjoying a park.



II. Complete Street

Figure 19. Street cross-section of Harmon Street. The park is to the right of the street which has two drive lanes, sidewalks on both sides, and a parking lane on the left, next to the neighborhood residences. Diagram created in Streetmix by EC, 2022.

Safety

Residents traveling to the park by car can access to the parking lot of the W.W. Law community center on Harmon Street. During the site visit, we observed more vehicular activity passing the park on Harmon Street than other adjacent streets. On both sides of Harmon Street, there are continuous sidewalks that are 5 feet wide, accompanied by a 3-foot green planting strip. The sidewalks along the park side are well-maintained, with ADA-compliant curb ramps at the parking lot access point. The existing sidewalks on both sides of the street are adorned with trees that offer shade to pedestrians. However, in certain areas, the width of the sidewalks is compromised due to the significant space occupied by these large trees. During the site visit, there was very little to no pedestrian-scale lighting observed at the park at night. In addition to the aforementioned issues, the presence of cracks on the road surfaces can influence safety risk, especially for bicyclists traveling to W.W. Law Park on Harmon Street. Improving wayfinding to the park, adding pedestrian-scale lighting will improve safety on street at night.



Images. Access points from Harmon St to Parking area, Community center and Children's play area (top); Differences in the sidewalk detailing (middle); Irregular sidewalk width along Harmon St (bottom). Photo from Google, 2022

Connectivity

Harmon Street is two-lane local road that connects the Eastside neighborhood to the city's historic district and major commercial and retail centers via Wheaton Street to the north and Victory Drive to the south. Along Harmon Street, there are also several churches and the Chatham Area Transit Center only two blocks north. The nearest bus stop, conveniently located at the intersection of E Gwinnett Street, offers bus connectivity to the historic district through route 28. Currently, the presence of well-defined sidewalks around the park enhances accessibility to the community center and park. However, there is a lack of crosswalk markings at intersections or pedestrian-scaled lighting, which can hinder pedestrian safety and convenience. Furthermore, the street lacks infrastructure that supports safe and convenient biking. The proposed Tide to Town trail, which is planned to run through Wheaton Street, will be located approximately 0.4 miles from W.W. Law Park, accessible via Harmon Street. This trail will not only enhance connectivity but also improve accessibility to the park for residents of nearby neighborhoods.

Equity

One side of the street features a sidewalk with ADA compliant curb cuts, ensuring accessibility for people with disabilities, as well as other park users. However, the presence of cracks on the road, particularly at the intersection crossings, poses challenges for wheelchair users trying to access the park. These cracks create obstacles that make it difficult for individuals using wheelchairs to navigate safely and easily, highlighting the need for repairs and maintenance to ensure equal access for all park visitors.



Image. Improperly done curb cuts and cracks on the crosswalk area of road surface. Photo from Google Streetview, 2022

Climate

Harmon Street is characterized by a significant amount of tree canopy, providing ample shade that helps mitigate heat generated by the nearby community center parking lot. However, during rainy seasons, there may be instances of minimal flooding along the access point of the park. This can obstruct and discourage entry to the park, particularly for individuals with disabilities. It is important to address this issue to ensure that the park remains accessible and inclusive for all, regardless of weather conditions.



Images. The existing tree cover offers shading within the park (left) however, monsoons can cause flooding along the edges of the park near the intersection that can obstruct and discourage entry to the park (right). Photos taken by EC, 2022.



E Waldburg St

Figure 20. Street cross-section of *E* Waldburg Street. The park is to the right of the street which has two drive lanes and wide sidewalks on either side of the street along with planting strips as separators. Diagram created in Streetmix by EC, 2022.

Safety

There is a sidewalk along both sides of E Waldburg St. in the section adjacent to W.W. Law Park with a planting strip between the sidewalk and the road. This separation provides safety and comfortability for pedestrians. However, there are a few patches of cracked sidewalk in poor condition near the utility driveway at the backside of the community center. Cracked, uneven pavement can present obstacles for those using mobility devices, such as a wheelchair or walker. In addition, there is a lack of pedestrian-scaled lighting along the segment of E Waldburg St directly behind the community center. With very few sightlines and opportunities for natural surveillance, this presents a safety concern for people using the sidewalk at night.



Image. The broken patches of sidewalk inform of utility doorway of community center. Photo from Google Streetview 2022.

Connectivity

E Waldburg Street, a two-lane residential street with parking on both sides, connects the Eastside neighborhood to the city's historic district and major commercial and retail centers via E Broad Street to the west and Wheaton Street to the north. As the area is primarily composed of single-family households, E Waldburg Street predominantly serves the needs of neighborhood residents. E Waldburg Street intersects Waters Ave, located one block east, where a transit stop is located. This nearest transit stop offers connectivity between the Savannah historic district and Oglethorpe Mall via route 27, or Walmart via route 28.

The presence of well-defined sidewalks around the park contributes to improved accessibility, although the absence of crosswalk markings at intersections impedes pedestrian safety and convenience. There is very poor connectivity for patrons arriving to W.W. Law Park and community center from E Waldburg Street. The entirety of E Waldburg Street is fronted by the back of the community center building with uninviting, locked utility doors or a locked fence surrounding the community pool. In fact, there is no walkway or other way to access the park directly from the sidewalk on E Waldburg Street. Furthermore, there is no wayfinding guidance to assist patrons on how to access the community center or park.



Images. The back side of the W.W. Law Community Center directly fronts E Waldburg Street with utility doorways, exposed HVAC units, and wire fencing along the entirety of property's southern boundary. Photo from EC 2022.

Equity

The sidewalks and planting strips along the streets are slightly wider than those on other streets, providing ample space for all users. However, it is important to note that only one side of the street features a sidewalk with ADA compliant curb cuts, ensuring accessibility for people with disabilities and other park users. Unfortunately, the presence of cracks on the road, especially at intersection crossings, along with broken curb cuts, presents challenges for wheelchair users attempting to access the park from the surrounding neighborhood.



Images. Broken curb cuts and cracked road surfaces on the street hinder smooth movement, reducing accessibility for pedestrians. Photo by EC and Google Streetview, 2022

Climate

E Waldburg Street has a comparatively large tree canopy area compared to other streets around the W.W. Law Park, which provides ample shade that helps mitigate heat generated by impervious surfaces in and around the park. However, during moderate to heavy rains, there may be instances of minimal flooding on the roadways surrounding the park. This can obstruct and discourage entry to the park, particularly for individuals with disabilities. It is important to address this issue to ensure that the park remains accessible and inclusive for all, regardless of weather conditions.



Image. Broken curb cuts and cracked road surfaces on the street hinder smooth movement, reducing accessibility for pedestrians. Photo by EC and Google Streetview, 2022



Figure 21. Street cross-section of E Bolton Street. The parking lot and the park are to the left of the street. E Bolton Street has two lanes, on-street parking on both sides of the street and sidewalks on either side. Diagram created in Streetmix by EC, 2022.

Safety

The sidewalks along E Bolton Street are located on both sides of the roadway with adequate space for pedestrians. However, the curb ramps on E Bolton Street at the intersections of Ott Street and Harmon Street are missing tactile warning surfaces. The sidewalks and curb cuts along the park side are in good condition, but the opposite curb cuts do not meet ADA standards, posing safety concerns for elderly and disabled users. Additionally, safety precautions have been implemented on E Bolton Street to ensure visibility and enhance safety at the community center parking lot access point. Specifically, a bell-shaped curb extension at the beginning of the driveway cut, effectively restricts parking that obstructs the driveway.



Image. The bell-shaped curb cut at the beginning of the curve to restrict parking on the driveway curve. Photo from Google, 2022.

Connectivity

E Bolton Street serves as the primary entry point to the community center and park area. This street features two lanes with parking available on both sides, connecting the Eastside neighborhood to the city's historic district and major commercial and retail centers via Waters Avenue to the east, and Wheaton Street to the north. The nearest bus stop can be found at the Chatham Area Transit Center on E Gwinnett Street located two blocks directly north of W.W. Law Park and community center. E Bolton Street intersects directly with Price Street approximately 0.6 miles westward. Price Street, a north-south local road, has an existing bike lane that provides a connection between downtown Savannah, the historic district, and E 41st Street to the south. It is also a part of the Tide to Town trail network.

Equity

The sidewalks along the park offer ample space for walking with a vegetated buffer from the roadway, providing a comfortable experience. However, the sidewalks on the opposite side are narrower, giving a congested feel due to overgrown plants from adjacent gardens, the placement of garbage bins, and closely constructed grilled fencing of some residential properties. These factors contribute to a less inviting and crowded atmosphere along those sidewalks. Additionally, broken curb cuts and non-ADA compliant intersection crossing may be an additional burden to the aged population and those who use wheelchairs to access parks.



Image. The broken curb cuts and non-ADA compliant intersection crossing. Photo from Google Streetview, 2022.

Climate

The sidewalks along the residential buildings of the streets provide ample shaded areas, creating a comfortable environment for pedestrians. However, the park side has limited tree cover, which may increase the potential for heat-related discomfort, particularly due to the presence of a significant portion of the community center parking along E Bolton Street. The lack of shade in this area could result in elevated temperatures and less favorable conditions for pedestrians during hot weather.



Image. The well-shaded entrance of the W.W. Law Community Center complex. Photo from Google Streetview, 2022.



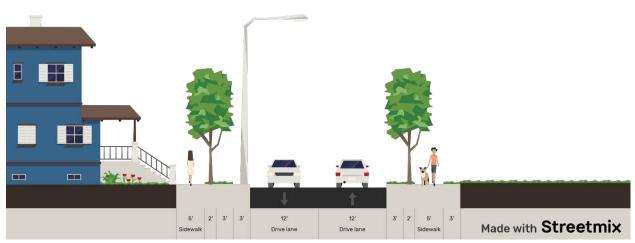


Figure 22. Street cross-section of Ott Street. The park is to the right of the street which has two drive lanes, and sidewalks on either side separated by planting strips. Diagram created in Streetmix by EC, 2022.

Safety

The sidewalk along Ott Street is well-maintained with a vegetated buffer between the sidewalk and the roadway, providing adequate space for pedestrians. However, there are some broken and non-ADA compliant sections, particularly near vacant plots adjacent to the E Bolton intersection. While the sidewalks and curb cuts along the park side are in good condition with ADA compliant curb ramps, the opposite side of Ott Street does not meet ADA standards. The sidewalk on the east side of Ott Street is missing tactile warning surfaces on the curb ramps at the intersection with E Bolton Street, and there is overgrown vegetation along the sidewalk and no curb ramps on the alley drive across from W.W. Law Park—these pose safety concerns for elderly and disabled users. This may also raise safety concerns for those walking along the sidewalk night. The sidewalk at the intersection of Ott Street and E Bolton Street was observed to be blocked by vehicles from the adjacent auto garage, impeding sidewalk access along Ott Street. This obstruction poses challenges for pedestrians, as they must navigate around the vehicles, potentially in the street, to reach the park.





Image. The overgrown vegetation that obstructs the path and limits visibility ahead (top), and vehicles occupying the sidewalk at the Ott Street and E Bolton intersection (bottom). Photos from Google Streetview, 2022.

Connectivity

Ott Street is a two-lane roadway that connects the Eastside neighborhood to the Chatham Area Transit Center to the north and East Victoria drive to the south. The nearest bus stop is located on E Gwinnett Street across from the Chatham Area Transit center. The bus stop is served by route 28, providing connectivity between the historic district, Oglethorpe Mall, and Walmart in the Sandfly neighborhood. Currently, the presence of well-defined sidewalks around the park enhances accessibility to the community center. However, there is a lack of crosswalk markings at intersections, which can hinder pedestrian safety and convenience.

Equity

The sidewalks along the park provide generous space for pedestrians, creating a comfortable walking experience. However, there are areas with broken sidewalks and without curb cuts, posing safety and accessibility challenges, particularly for individuals with disabilities. It is worth noting that, like other streets near the parks, only the sidewalks on the park side are properly maintained and ADA compliant.



Image.. The broken and non-ADA compliant curb cuts on Ott Street. Photo from Google Streetview, 2022.

Climate

The sidewalk along Ott Street on the opposite side of the park is lined with trees, providing a comfortable, shaded environment for pedestrians. However, the sidewalks and park area on the south side of Ott Street has limited tree cover, which can contribute to heat-related discomfort. This is exacerbated by the presence of the large, decommissioned basketball court at the park.



Image. The large un-shaded, decommissioned basketball court at W.W. Law Park. Photo from Google Streetview, 2022.

Bowles C. Ford Park

I. CPTED Analysis



Image. Drone shot of Bowles C. Ford Park from the main entrance next to the parking lot. Photo taken by EC, 2022.

General Park Impressions

The setting of Bowles C. Ford Park is different from the other parks in Savannah because of its unique water feature spread across approximately 16 acres. The center of the park is surrounded by tall trees and greenery on all sides, which compliments the serene atmosphere of the park. There is a parking lot near the entrance, which evokes the feeling that anyone who wants to use the park would need to drive to the park to access it unless they live within reasonable walking distance. The park is served by Chatham Area Transit's bus network, specifically Line 17, with direct service into downtown Savannah. Bowles C. Ford Park has several activity areas, including a swimming pool, a children's play area, and a gazebo where the community can host events that support community cohesion, such as barbecues and picnics. The park has a variety of users, although park users engaged in fishing and walking their dogs around the park are the most common users. The overall maintenance of the park is visibly inadequate in terms of public amenities, quality of the walking

paths, vegetation maintenance, availability of seating and shade, and lighting. With some key improvements, the park's existing potential can be transformed into a very popular park for the city and a well-maintained asset for the surrounding community.



Image. A panoramic view from the south side of the Bowles C. Ford Park, Savannah, GA. Photo taken by EC, 2022.

The overall maintenance of Bowles C. Ford Park, including trash receptacle pickup, landscaping, facilities repair, and litter removal around the park's perimeter is inadequate. The paved walking path has cracks along the way and undefined edges that do not provide a safety buffer from the water should anybody get too close. The path is not universally accessible for users with different abilities. The lack of seating and shading along the walking path is a major deterrent to use, especially during long, hot summer days. There's no provision for permanent public toilets; only an under-maintained porta-potty is available. There's visible litter in the reservoir in the surrounding parts of the park near the exterior fence, which makes the park less enjoyable. The pool is closed for much of the year, which may mean people are less likely to visit. Regulation to prevent littering and illegal dumping needs to be better patrolled. Finally, the existing parking lot has no dedicated infrastructure to support other modes of transportation in and around the park, discouraging non-motorized modes that generally complement park usage and enjoyment. The parking lot lacks shade, so cars heat up quickly in the summer, and driving to the park is less comfortable.



Images. Undefined edges of the walking path (left); cracks in the pavement (right) Photos taken by EC, 2022.



Images. View of the parking lot near the entrance (left); pooling of water near the parked cars (middle); Littering after a party (right) Photos taken by EC, 2022.

Natural Surveillance

Natural surveillance places physical features, activities, and people in a way that maximizes visibility. The current overall location, layout, and placement of physical features and activities within the 22-acre Bowles C. Ford Park do not provide sufficient natural surveillance, both during the day and especially at night. There are over 300 feet of vegetated space between the main park area and the nearest residence on the opposite side of Stiles Avenue, which makes the park feel very secluded and separated from any residential area. The entranceway into the park is curved so that people cannot observe the inside from the intersection of Stiles and Cloverdale. The park seems comfortable to use only during the day, for the lack of lighting and many unlit spots produce safety concerns for women and children. Aggregating all activities near the entrance around the park can reduce the ability to respond for help and induce illegitimate activity in the furthermost (wooded) ends of the park. The mix of users and their volumes is low during the day, which adds to the overall feeling of isolation. This aesthetic of isolation is perceived to be unsafe by the women, children, and minorities who were surveyed in the park. There is no explicit mention through signage about how

or where to seek emergency assistance; the infrastructure to seek help is also absent. We did not observe any security cameras installed anywhere in the park or public pool.



Images. No natural surveillance due to dense vegetation cover on Cloverdale Neighborhood side (left) and all around the park (right) Photos taken by EC, 2022.



Images. Obstructed and limited view of the park from the intersection (left) and the view of the park at night from the parking lot (right). Photos taken by EC, 2022.

Strengths

The water reservoir is an attraction that supports recreational and leisure activities like fishing, walking, and cycling. The presence of the pool, which is open during the summer along with changing rooms and toilets, is the infrastructure which is already present on site and can be opened to the public during months when the rest of the pool area is still closed. The pool, along with the play area and gazebo, brings a diverse group of all ages to the park. The shaded gazebo has seating and barbeques, along with two water filters and trash cans located near it that can cater to the adult users of the park. The fenced play area next to the gazebo can serve children, offering direct supervision for parents. The park's serene atmosphere, perfect for leisure reading and spending time

close to nature, attracts current patrons and students of Savannah. The proposed Tide-to-Town project is another big opportunity, as one trail will pass directly through the park.



Images. The picnic area shelter with temporary party tents (left) and children's play area next to it (right) in Bowles C. Ford Park. Photos taken by EC, 2022.



Images. The community swimming pool (left) and a community barbeque setup in the parking lot (right) at Bowles C. Ford Park. Photos taken by EC, 2022.

Several areas within the park do not maximize opportunities for natural surveillance and should be addressed to reduce the threat of apprehension and violence against residents and park patrons. These areas include the portable toilets near the park entrance, adjacent to the parking lot and the gazebo between the children's play area and the swimming pool, informal south-side access, and wetlands.

Concerns

Several areas within the park do not maximize opportunities for natural surveillance and should be addressed to reduce the threat of apprehension and violence against residents and park patrons. These areas include the portable toilets near the park entrance, adjacent to the parking lot and the gazebo between the children's play area and the swimming pool, informal south-side access, and wetlands.

Portable Toilet/ Porta Potty

The porta potty near the park entrance doesn't offer maximum natural surveillance since it is far away from the main activity areas. This is of particular concern for young children, teens, and women who are disproportionately more likely to be harmed. Coupled with the fact that they are adjacent to the parking lot, this increases the likelihood of apprehension. At night, this risk increases manifold.



Images. The area around the portable toilet near the entrance of the park during the day (left) and at night (right). Photos taken by EC, 2022.

Children's Play Area

The picnic shelter positioned between the children's play area and the swimming pool offers no direct visibility into the play area from the pool as it is also buffered by the parking lot and overgrown vegetation. The play area is fenced and can potentially be an entrapment area, especially given the dense overgrown vegetation on its two sides. This can lead to severe safety concerns and increase the crime risk. There have been recent incidents where an alligator has wandered outside the reservoir into the children's play and picnic area. The unkempt vegetation makes it hard to spot the creature and places park users in danger. There were trash receptacles including several empty alcohol bottles in the picnic area, indicating that the current layout of the play area does not induce an environment that is safe for children to play in.



Image. Dense vegetation around the play area can serve as a hiding spot for someone; it can also camouflage wandering alligators. Photos taken by EC, 2022.

Lighting

Inside the main area and lakeside path, the views are unobstructed and offer good visibility from one end to the other end of the park during the day. The lighting inside the park is not pedestrian scaled; it is infrequent and irregularly placed, which restricts the use of the park after sunset. This significantly impacts park usage during winter since the days are much shorter. The lack of sufficient lighting in combination with the large size of the park does not facilitate visibility across its length at night. Even in a close area, the lighting is not evenly distributed, producing glare. The dense vegetation obstructs any possible visibility offered by any lighting outside the park, adding to the darkness and lack of safety. In some places, trees also obscure lighting within the park. The current lighting is also bland and monotonous, and there are opportunities to install more varied light colors to contribute to a unique park identity.



Image. View of the infrequent park lighting (left) and poorly lit gazebo area with a completely hidden play area at night (right). Photos taken by EC, 2022.

Wetlands

The wetland area surrounding the park is a point of contention and concerns the park patrons and residents. It currently has homeless individuals, which exacerbates safety perception, especially for women and children. Due to its large size and overall lack of maintenance, the wetland area —an important feature and asset to the community— reduces natural surveillance at multiple locations. These include the entrance and path connecting the residential development along Cloverdale Drive and Stiles Avenue, the children's play area where women and children can feel isolated and unsafe and the farthest ends of the park with an informal access path leading out of the park. However, the proposed Tide-to-Town project will encompass the construction of a protected walking and bicycling trail through this wetland area, increasing lighting and patrons throughout the park. If provided with police and park maintenance contact information, these additional eyes throughout the park will help discourage illegitimate activities.



Image. The wetland areas surrounding the park are on the north side, near the pool area (left) and south side access paths (right). Photos taken by EC, 2022.

Natural Access Control

This refers to employing methods for controlling pedestrian, bicyclist, and vehicle access to the park. The park's entryways are not celebrated, marked, or branded in a way that ensures and defines entryways into the park. There is also informal access towards the southern end of the park, which is not controlled for access. This entrance point is used by patrons and cyclists to enter or cross the park. There can be wayfinding signage installed near the entrance to direct users into the park and control measures for unregulated access from the back-side path to improve safety and natural surveillance.

Strengths

The main accessway that leads into the park has a signpost denoting Bowles C. Ford Park at the Cloverdale Drive and Stiles Avenue intersection. This accessway bifurcates into a Y some 250ft from the intersection, with one leg leading into the parking lot and the other leg connecting directly to the walking path around the lake. This bifurcation controls vehicles from going on the walking path by directing them towards the parking lot and provides a separate designated space for walkers or cyclists to enter the park without entering the parking area. There is another dedicated entry point for pedestrians onto the walking path from the picnic area. However, many pedestrians still cross through the parking lot because it is the most direct path from the park entrance to the picnic area, which can be dangerous if cars are speeding or impaired.



Image. The main accessway bifurcates into a Y to control vehicles (left); another pedestrian access to go onto the walking path (right). Photos taken by EC, 2022.

Concerns

The main post with the park's name near the intersection is covered by an overgrown planting, making it hard to recognize the park's entrance. The informal access towards the southern end of the park, which is not controlled or formally marked, is a concern because it can allow illegitimate user access and is further outside the line of sight of users near the entrance area. Because there is only one legitimate entrance to the park, residents of surrounding neighborhoods are less likely to visit the park, especially given the missing connections of pedestrian and cycling infrastructure into the park. There is only one pathway around the lake, which gives someone with malicious intent an easy way to target someone as they go around. Such spaces can be abused because the space allows for noxious activities. More visible access points to and within the park will encourage more users to come to the park and minimize the risk of crime.



Image. Overgrown vegetation in front of the name post (left); the informal access path at the southern end of the park (right). Photos taken by EC, 2022.

Informal South Side Access

An informal path towards the southern end of the park is not access-controlled with a fence or gate. It is used by patrons and cyclists to enter the park from the Ogeecheeton and Cann Park neighborhoods. This access is not formally marked, although it will be used as part of the Tide to Town program. The current form of this pathway's access to the park can be a concern because it is not regulated or patrolled and is further away from the line of sight of users present near the Cloverdale entrance area and parking lot. Since it is on the further end and poorly lit, it can facilitate illegitimate activity and is a potential escape route for perpetrators as what's on the other end of the path cannot be viewed by passing vehicles and pedestrians. The dense vegetation would add to the feeling of danger and can quickly become a hiding spot. This pathway should be paved and lit up and signs should be installed to designate this as an additional entry point into the park.



Image. Informal south-side access path with unregulated access and poor natural surveillance opportunity in Bowles C Ford Park. Photos taken by EC, 2022.

Territorial Reinforcement

Territorial Reinforcement refers to people's sense of ownership and the use of physical attributes that express that ownership. The current design, layout, and placement of physical features and activities in the park are insufficient, offering a lot of scope for improvement. The existing infrastructure can be expanded and improved to increase accessibility and the public sense of ownership.

Strengths

The park's exterior is heavily wooded and primarily consists of wetlands, which reinforces the boundary and access to the park. The interior pathway around the lake is fenced as an additional boundary. These boundaries dramatically reduce the risk of crime and illegitimate activity by streamlining access from only dedicated entrances and maximizing surveillance by patrons. Additionally, the existing infrastructure only needs certain upgrades and specific improvements to enhance the overall attractiveness of the park, which is good as improvements can be more quickly

addressed. Some foreseeable improvements will also be ushered in by the highly anticipated Tide-To-Town project. There are vast patches of land along the walking path and near the picnic area and parking that are underutilized and can be developed to accommodate more activities and infrastructure, which will reinforce public ownership of the park.



Images. The wide patches of land that are underutilized can be used to expand existing infrastructure and add new activities. Photos taken by EC, 2022.

Concerns

The walking path in the park is not wide enough to accommodate two or three people walking together, which families and adults may wish to do to socialize with each other. It also doesn't have a defined edge or buffers along the lake, forcing people to walk cautiously along the path. The dense vegetation around the park, though aesthetically pleasing, contributes to limited natural surveillance opportunities from outside the park. The placement of the porta-potty near the park entrance is unpleasant, given that it is the first thing visitors see when arriving.

Additionally, the picnic area is not very attractive and can be enhanced through landscaping and space definition. It is also not large enough to accommodate more than one group at a time, which could lead to inconvenient interactions. While a phone number is listed inside the shelter for

reserving the area, shelter patrons who were celebrating a birthday in the space informed us that they did not make a reservation. The children's play area is currently fenced-in and is not used by children. The play area can be converted into a multipurpose space (for example a volleyball court), while the children's playground should be placed in a more visible space in the park. There is an evident lack of proper signage, wayfinding, seating, and landscaping in and around the park.



Image. An insufficiently narrow path to accommodate both pedestrians and cyclists (left); the fencing around the park (right). Photos taken by EC, 2022.



Image. Depressive fencing around the children's play area (left); unattractive gazebo area with trash can right at its entrance (right). Photos taken by EC, 2022.

Image Maintenance and Management

Image Maintenance refers to properly maintaining and managing a space that has the active involvement of guardianship and ownership among legitimate users. An overall lack of image maintenance and management in Bowles C. Ford Park may increase illegitimate activities. Even during the day, the low volume of park users adds to the overall feeling of isolation and solitude. There is an absence of any way-finding signage for help navigating within the park or connections to amenities and landmarks nearby.

Strengths

The park is already popular among patrons for picnics & barbecues, fishing, and its peaceful environment for walking alone or with dogs. It is a serene area that can benefit from additional amenities such as a gazebo, piers, unique lighting, or public artwork. Some public facilities are already present on site, such as a seasonally operated swimming pool and restrooms that should be opened to the public year-round. There are no indications of vandalism or graffiti in the park's central area, however, there are homeless encampments in the less-visible wooded areas. Although it doesn't have appropriate signage, there is a bus stop near the intersection where the Chatham Area Transit's (CAT) bus route 29 operates, providing connectivity to downtown.

Concerns

Some of the concerns that were observed involved the overgrown vegetation and unkempt landscaping throughout the site. Specific examples of this include trash and litter in the lake, parking areas, gazebo, and wetlands; flooding near the wetland area and parking lot; unaesthetic placement of portable restrooms at the entrance of the park; a closed pool during the off-season that indicates abandonment; and an evident lack of lighting in and around the park at night. During our weekend observations, most park users were males of different age groups. Although, it is possible that more women use the park during the week. The park is more utilized during summer when the public pool is operational, but many people don't think to go there during other times of the year because of the lack of programming and activities besides swimming.

We didn't see any park rangers or police patrol to communicate with, express concerns, or learn about the park. There also wasn't any contact information about who was responsible for the maintenance and patrol of the park. While community members might be able to help the City better understand maintenance issues affecting the park, the lack of collaboration between the City Parks Department and the community makes it more challenging to create maintenance and capital investment plans. Large amounts of garbage and litter in the picnic area and around the lakeside path make the park appear undesirable for potential park users. This raises equity issues compared to similarly sized parks in other neighborhoods like Lake Mayer and Daffin Parks.



Image. Poor quality of pavement with cracks and in-growth in multiple locations (left); trash and litter around the park (right). Photos taken by EC, 2022.

Supporting Legitimate Activities

Strengths

The Bowles C. Ford Park has designated activity areas like the children's park, the gazebo to rest and hold events, and the swimming pool area which is used in the summers. These places are well intended and hold potential for expansion of activities at the park. There are amenities like a water fountain, porta-potty and trash receptacle to support the users of these activities and the park. Such provision of legitimate activities and their supporting functions provide the park with a character and enhance the activation of the park. As previously stated, the park is also actively used for picnics & barbecues, fishing, and walking. There is however not enough infrastructure to support these activities, especially finishing and dog walking. The park can do with more benches and sitting areas around the water reservoir. Additionally, certain areas of the basic amenities and activity infrastructure already present on site can be improved to fully realize the park's potential.



Image. Children playing in the play area (left); a celebration set up in the gazebo (middle); a patron fishing in the water (right). Photos taken by EC, 2022.

Concerns

Trash receptacles including empty alcohol bottles in the children's play area indicate that the area is not being used as intended for children. Broken glass can injure children, and left alcohol and drugs potentially found in the playground can be consumed by them. Additionally conversing with drunk or drugged individuals without supervision can lead to possible unsafe interactions. The entire playground needs to be re-imagined preventing this, such as using better surfaces like low impact AstroTurf or grass rather than sand (which is hard to find fragments or shards in); increasing the overall footprint to accommodate more users; moving it to a more visible area; placing benches around the outside; and replacing the fence with either natural low-level vegetation or wood fencing.

There are also unhoused individuals in the park's wooded sections. When surveying the park, some interviewees stated that this encampment made the park feel unsafe and less inviting. Even though

this general perception is a point of concern for vulnerable park users like children, there is a need for examining the issue of unhoused individuals' park use carefully without stigmatizing the individuals affected by homelessness. This use of the park areas calls for an inquiry as homelessness is emblematic of larger structural issues that the city needs to address. This audit can be done by the city with the local social service agencies that work directly with people experiencing homelessness. They can send outreach workers to help with getting connected to services, to access food, and shelter, or help with more long-term needs like employment and housing.

To further improve the perception of park safety, as previously discussed, public territorial ownership can further be enabled with better lighting, trails, and access points in these park areas which currently appear to be secluded.



Image. Alcohol bottles lying around the park indicate illegitimate use of the park (left); an alligator is present in the water (right). Photos taken by EC, 2022.

Geographical Juxtaposition

According to data from the Community Crime Map from Jan 2020 to Nov 2022, some 300 incidents were registered by law enforcement in the Cloverdale neighborhood and Bowles C. Ford Park. Vehicle theft and aggravated assaults were the most frequently reported criminal incidents in the Cloverdale Neighborhood.

Strengths

There have been no reports of criminal activity within the park in the past two years, although this can be because 1) the park isn't often patrolled, 2) park patrons don't know who to report crimes within the park, and 3) park users know that crime occurs at certain times and places within the park and avoid going there altogether, or 4) there isn't a clear definition of rules within the park so people may not be sure whether they should report incidents that do occur.

Concerns

As discussed in the previous section, there are also homeless encampments in the park that occupy public space and discourage people from entering these areas. These homeless encampments remain in this park as opposed to parks in wealthier and more predominantly white areas of Savannah indicating an inequity of maintenance, policing, and supportive housing availability in the area.

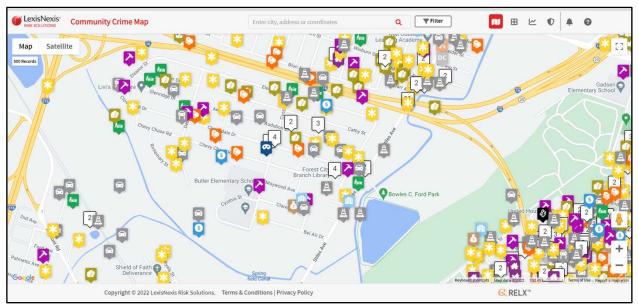


Figure 23. A map showing reported crime in the area from 2020-2022. Map created by LexisNexis, 2022

Social and Cultural Dynamics

The community in the Cloverdale neighborhood is predominantly Black or African American, with 70% of family households (married or single parent householders). Preceding generations used the park for engaging in fishing, picnicking, and swimming in the park. Fishing is indicative of community culture and has been passed on for generations. We observed all types of male users practicing catch-and-release fishing methods. It is also a tradition, especially in Black households.

Strengths

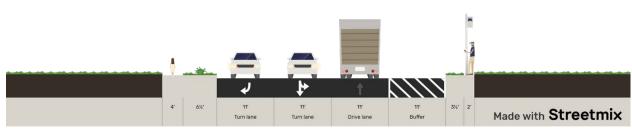
The picnic shelter is already famous for picnics and celebrations, providing opportunities to build community strength and ownership through planned events. The pool, along with the play area and shelter, brings in a diverse group of all ages to the park in the summer, all of whom have some activity catering to their specific needs.

Social cohesion and community connectivity can be improved through various measures and events centered in the park. The nearby Butler Elementary School could support the social and cultural dynamics of the park through organized field days for children, hosting festivities and events in the park, and even plantation and maintenance drives as many schools do. The Forest City Branch

Library and the Cloverdale Community Center can also host and promote events at the park to attract more users from all ages and cultures, while some of these events should be specific to the Black/African American experience given that other City parks already heavily cater to White resident's activity interests. Increased Park usage would make it financially profitable for food trucks and other vendors to put up stalls around the park during planned events. The Cloverdale Community Center currently serves various functions depending on the time of day. Elderly residents of the area use the space during the day for activities, and the building is used for childcare in the afternoon. The building is also available in the evening and weekends for community functions - some of which can be hosted at or split between the Community Center and Bowles C. Ford Park.

Concern

The lack of universal access for people with disabilities or who don't have access to vehicles renders the park exclusive. Even though the park features a picnic shelter and pool area, the use of these facilities is limited because of the concerns stated prior. There needs to be active redressal of the concerns communities around Bowles C. Ford Park have and provision of new activities which support community events.



Stiles Avenue

II. Complete Streets

Figure 24. Street cross-section of Stiles Avenue looking north from its intersection with Cloverdale Drive. The street has two drive lanes and a right-turn lane. Bowles C. Ford Park is on the right and the residential Cloverdale neighborhood is on the left. A bus stop abuts Bowles C. Ford Park on the right. Diagram created in Streetmix by EC, 2022.

Safety

Residents can currently access Bowles C. Ford Park via Stiles Avenue, which only has one sidewalk on the side of the street opposite the park, closer to the Cloverdale residential neighborhood. The sidewalk is five (5) feet wide and separated from the street by a four (4) foot planting strip. While the existing sidewalk is well-maintained and looks newly built, it is not continuous. It ends approximately 1,100 feet away from the park after intersecting with Bel Air Drive to the south and isn't as well maintained after the Interstate 16 underpass to the north. There are trees that provide shade along the existing sidewalk on one side of the street, but there is no sidewalk on the other side between the street and Bowles C. Ford Park. There are bus stops on both sides of the street, but one stop is missing a sidewalk which means that people with limited mobility cannot safely get between the bus and the park or surrounding neighborhood.



Image: Bus stop in front of Bowles C. Ford Park. There is no sidewalk to access it and little shade protection. Buses connect between the downtown intermodal terminal, through the Cloverdale neighborhood, and to the Amtrak station. Photo taken by EC, 2022.

Stiles Avenue lacks safe crosswalks for pedestrians crossing at the intersection with Cloverdale Drive. First, there are no painted lines or warning signs indicating to drivers that there might be pedestrians crossing. Second, there is no walk signal for pedestrians to know when it is safe to cross. Third, there is a large turning radius so that cars turning right onto Stiles Avenue from Cloverdale will be going at greater speeds, which increases the risk of injuring pedestrians trying to cross. In fact, the intersection is so wide that currently, pedestrians must walk on the unprotected street for 90 feet, which creates many potential points of conflict between drivers and pedestrians. Finally, there are no wayfinding signs that are designed for pedestrians to inform them that they are approaching Bowles C. Ford Park or other neighborhood points of interest. All of these factors contribute to a significantly empty sidewalk, especially at night, which means that there are fewer eyes on the street to notice and prevent dangerous or illegal activities near the park.



Image. Stiles Avenue as it intersects with Cloverdale Drive. Pedestrians have no protection when crossing the overly wide intersection, with no warning signs, walk signs, or painted walkways. The sidewalks aren't continuous either. Photo taken by EC, 2022.

Connectivity

Stiles Avenue acts as a connection between the Cloverdale neighborhood and the neighborhoods to its north and south (Carver Heights and Tremont Park, respectively). While cars can easily navigate the street, it is not as easy for pedestrians and bikes. There is no bike lane on the street, although we observed several people cycling either on the sidewalk or along with car traffic.

The proposed Tide to Town trail will provide a safer pedestrian and bike pathway to the park along the Springfield Canal, which runs parallel to Stiles Avenue. It will also make the park more accessible for residents of other nearby neighborhoods, which provides an opportunity for Bowles C. Ford Park to stand out as a quiet, relaxing place for anyone in the area looking to go for a jog or walk their dog. However, the path inside the park should be repaved and slightly widened to allow for groups of two or three to walk alongside each other.



Image: Pathways within the park require maintenance and repaving. They will likely be busier after connecting with Tide to Town. Photo taken by EC, 2022.

The Cloverdale neighborhood is a food desert and lacks any restaurants or grocery stores, which is why better connections to neighborhoods that do have these amenities are vital. Stiles Avenue also connects to the newly constructed Enmarket Arena, a large sports and theater venue located less than a mile north of the park. Given Stiles Avenue's potential to connect Bowles C. Ford Park with several important community amenities, the street should have sidewalks added on both sides of the street, and a bike lane to better serve the health and social needs of nearby residents.

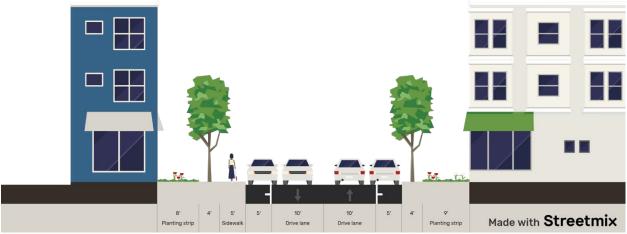
Equity

Stiles Avenue provides little to no equity for people with accessibility impairments. Crossing the street may be difficult for residents or visitors looking to visit this park because of the lack of proper infrastructure. The lack of curb bumps and sidewalk access decreases accessibility to the park.

When we talked to Cloverdale residents who live near Bowles C. Ford Park, they noted that stormwater drainage issues inhibit their access to the park. This makes sense given the park is in a low-lying area and the pond is intended to act as a stormwater drainage system for the region. However, the park offers value to the surrounding community as a place to play and improve their health, which is not possible if it is not accessible because of drainage concerns. There are poor connections to the park and within the park which contribute to the image of this park as lesser and therefore not as valuable to use and upkeep as other parks.

Climate

As previously discussed, The City of Savannah is expected to see a rise in temperatures over the coming years due to climate change. Therefore, the lack of shaded relief stations (bathrooms and drinking fountains), coverings, or tree-shaded walkways within and around the park will become more problematic as the park gets warmer and experiences more unexpected weather events. This poses a serious risk for people with accessibility issues, the elderly, and health-disadvantaged populations who are interested in using Cann Park.



Cloverdale Drive

Figure 25. Cloverdale Drive inside Cloverdale's residential area between Cynthia Street and Eleanor Street. Sidewalks are not continuous and therefore don't enable pedestrian connections between Bowles C. Ford Park, the library, and schools. Diagram created in Streetmix by EC, 2022.

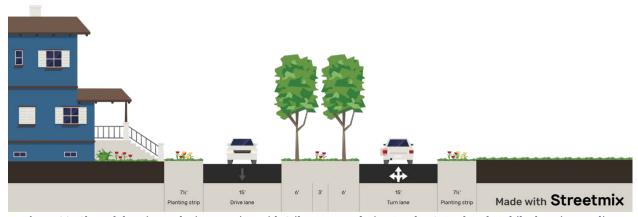


Figure 26. Cloverdale Drive at the intersection with Stiles Avenue, facing Bowles C. Ford Park. While there is a median, there are no sidewalks on either side of the street, nor is there safe crossing infrastructure. Diagram created in Streetmix by *EC*, 2022.

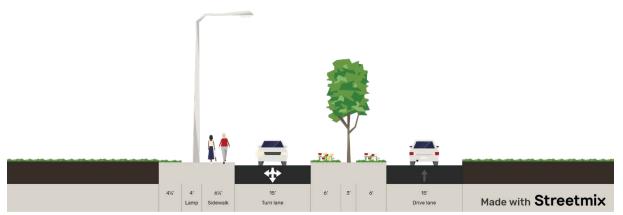


Figure 27. Cloverdale Drive at the intersection with Stiles Avenue (facing Cloverdale neighborhood when exiting Bowles C. Ford Park). The sidewalk is on one side of the street, but crosswalks into the Cloverdale neighborhood are missing. Diagram created in Streetmix by EC, 2022.

Safety

Cloverdale Drive intersects with Stiles Avenue at the entrance to Bowles C. Ford Park and runs throughout the Cloverdale neighborhood. Between the parking lot at Bowles C. Ford Park and the Stiles Avenue intersection, there is a sidewalk on one side of the street. However, there are no sidewalks on either side of the street between the intersections with Stiles Avenue and Eleanor Street. After that, there is only a partial sidewalk on one side of the street throughout the residential neighborhood. The lack of adequate sidewalks makes the park harder to access and therefore feel more isolated from the neighborhood.



Image. Missing sidewalks along Cloverdale Drive and a lack of crosswalks make the park less safe to access and appear less integrated with the Cloverdale community. The entrance to Bowles C. Ford Park is clearly designed primarily for drivers. Photo taken by EC, 2022.

Although there are no sidewalks to use after crossing, there is one pedestrian crosswalk along Cloverdale Drive that intersects Stiles Avenue. For this crosswalk, there are curb cuts with ramps on both sides of the street which makes the crossing accessible for all users (like those in wheelchairs or pushing strollers). There is also a "push-to-walk" button indicating when users may cross, but it does not offer audible prompts for hearing-impaired pedestrians. When pedestrians are given the walk signal, they have approximately 25 seconds to cross the street before it changes to "don't cross". The distance across Stiles Avenue is approximately 60 feet, and there are bright yellow pedestrian crossing signs warning drivers to slow down as they approach the intersection. Even though this crosswalk isn't too difficult to cross, the intersection overall is unsafe because there is no crosswalk and pedestrian-protection infrastructure for the other three sides of the intersection.

Connectivity

Cloverdale Drive acts as a collector street for most of the Cloverdale neighborhood and then empties onto Stiles Avenue. Pedestrians only need to walk one block to get between Bowles C. Ford Park and the Forest City Branch Library, but the aforementioned lack of sidewalks and signage along Cloverdale Drive makes these two neighborhood destinations feel much less connected. As one of 16 branch libraries in Savannah, Forest City is a place not only for reading, but also has programming for children and adults and has space for community meetings. There is also a neighborhood park outside with athletic fields, basketball courts, and a playground. Because of their proximity, these parks should ideally complement each other to offer the most facilities for users. However, this is only possible if there is a safe way to cross Stiles Avenue with adequate wayfinding between them, and facilities like bathrooms, drinking facilities, human-scale lighting, and shade protection available at both places.



Image: A basketball court next to the Forest City Branch Library sits empty at midday. Beyond the line of trees in the background is Bowles C. Ford Park. Safe connections across Stiles Avenue could help traffic get back and forth between different amenities at the park and the library. Photo taken by EC, 2022.

It is notable that currently the park is only officially connected to the rest of the city and nearby community via the Cloverdale Drive entrance to the west. However, the Tide-to-Town trail will make the park much more accessible to residents of the Cann Park and Cuyler/Brownsville neighborhoods. This will make areas of interest such as schools or community centers (such as Tompkins Regional Center) easier to walk or bike to. In fact, pedestrians already use the currently unimproved Tide-to-Town pathway to enter the park from the south. The trail will intersect with Cloverdale Drive within Bowles C. Ford Park, prompting opportunities for art installations and signage within the park.

Cann Park

I. CPTED Analysis



Image. Drone shot of Cann Park from Collat Avenue. Photo taken by EC, 2022.

General Park Impressions

Cann Park has lots to offer while also having room to improve. It is an interesting park compared to the others, given it is the only park surrounded by residential neighborhoods on all sides. With its proximity to the nearby high school, there is a great opportunity for community connection. The park is home to a basketball court and playground with a peripheral walking path. The users in Cann Park skew toward children and young adults. The park's perimeter has adequate pedestrian scale lighting so that the park is well-lit at night for people who like to use the park after sunset. Abandoned housing can be seen within the surrounding area, which contributes to the feeling that the park isn't well connected with the community. Lastly, the general presence of litter was seen throughout the park, with more heavily used areas containing a higher accumulation of dirt and debris.

Natural Surveillance

Strengths

Cann Park is a relatively small 2.8-acre neighborhood park where people can easily see what's going on throughout most of the park when they are there. It is surrounded by dense single-family residential homes and has trimmed landscaping that allows direct sightlines and provides an unobstructed view of the park from the surrounding road and houses. At night, its pedestrian-scale lighting gives visibility to the park without adding much glare. However, a few places in the park warrant some intervention. Some lights were observed to be broken, which might impede visibility to parts of the park after sunset.

Concerns

Several areas within the park do not maximize opportunities for natural surveillance and should be addressed to reduce the threat of apprehension in the neighborhood and among park patrons. These areas include the gazebo in the children's play area and areas under heavy unkept foliage in the park.

Vacant Homes and Empty Corner Lots

Several homes and corner lots surrounding the park were observed to be vacant. This translates to fewer eyes on the park and provides room for an uptick in criminal activity. During our visit to Cann park, we also observed a Crime Watch Zone Sign adjacent to the park which suggested a higher volume of crime or the perception of high crime in this neighborhood. The houses, especially closer to the children's park and the basketball court, seemed vacant or unused. Given that these spaces in the park and the park as a whole are more frequented by young children and teens, it does not help that this demographic is disproportionately targeted by perpetrators.



Image. Vacant homes around the park lessen the number of eyes on the park and diminish the natural surveillance (left); the Crime Watch Zone sign is placed across the park (right). Photos taken by EC, 2022.

Broken Lights

Some of the lights around the park were broken, which can impede visibility during night hours and encourage illegitimate activities. Figure 16 is a snapshot of the Google Street View from February showing one such light. It was in the same condition when our team visited the park in October and still not fixed. This continued inaction on services that are essential to safety like streetlights at night suggests a lack of maintenance of the park.



Image. Broken lights can create pockets of darkness inside the park, encouraging illegitimate uses within the park premises. Photo taken by EC, 2022.

Natural Access Control

Natural Access Control involves the physical guidance of people coming and going from a space. Cann Park can be accessed from many different areas, but because it is surrounded by residential areas on all sides, children benefit from their parents being able to watch over them more easily. The park has a main entrance, but it is not defined or emphasized well enough.

Strengths

The park can be accessed from practically any direction, and Cann Park is a well-suited neighborhood park surrounded by residential neighborhoods on all sides. There is little in the way to block the view of the park from houses across the street, which means parents who live nearby can keep an eye on their kids without necessarily having to go to the park with them.

Concerns

The main entrance of Cann Park is not emphasized or utilized well enough. It could be celebrated with additions that make it more visually appealing and recognizable as a primary park entrance. This will help users feel more secure because they know where to expect newcomers and can direct

their sense of caution toward the entrance rather than needing to focus their attention entirely on themselves.



Images. The park can be accessed from any side (left); there is a sign that guides users where they should enter, but this area is not used as the main entrance (right). Photos taken by EC, 2022.

Territorial Reinforcement

Territorial reinforcement refers to a person's sense of ownership and using physical attributes in a design that expresses that ownership. We understand that the community has a strong sense of public ownership over the park. People know who to report illegal activity or maintenance concerns to because the park's entrance sign states that the park is operated by the "Leisure Services Bureau" although there should still be an additional sign with a contact person, email, and phone number to reach them at. The community uses the park as a playfield for children and for walking their dogs. However, residents in the surrounding houses often feel that the park is restricted to children, which might preclude adults or elderly residents from visiting the park often.

Strengths

Cann Park has a well-defined natural boundary without much fencing. It has its name placed in two of its corners, along with the name of the authority responsible for maintaining it. A visit to the park on a weekend evening showed various activities taking place. A small group of teenagers was using the softball field to play football, women were walking their dogs, and mothers were bringing their kids to play. A group of teenagers was also seen playing basketball on the court.

Concerns

Most people observed in the park were either kids or teenagers. Few adults from the neighborhood seemed to come to the park outside of those who came to walk their dogs or come with their kids. We spoke with an old man who did not go to the park for some ailment he had. We spoke to another 18-year-old woman, who said she didn't visit the park because "she was not a kid". This suggests that the general perception of this park within the neighborhood is that it is a play area for children.

Regardless of its merits, this perception might limit participation from a sizable portion of the neighborhood's residents.



Images. Running tracks and sidewalks define the park's boundary (left); clear signage on two corners mentions the park's name and provides a sense of ownership (right). Photos taken by EC, 2022

Image Maintenance and Management

The park had some general signage; however, it lacks some specific signage or display boards that give information about the park and its surroundings. There aren't any noticeable signs of vandalism on the park facilities, and the benches around the park are in good condition. However, the general upkeep of the park is lacking. The physical infrastructure of the park could use revamping, as litter was everywhere, making the park less inviting to come to.

Strengths

Cann Park offers a decent place to sit as benches were seen to be in good condition. General signage can be found throughout the park. The basketball court and playground on the premises show that the park is more than just a green space for recreational activities. There is also no graffiti around, which makes the space more inviting for families and children.

Concerns

Cann Park has signage present, but it was observed that the signage placement leaves room for improvement. None of the signage indicates the park's location in Savannah, its history, or surrounding attractions. A general lack of upkeep throughout the park was seen, with the most significant issue being litter. The landscaping in some areas of the park, especially near Stevens and West 45th Street, can be redesigned to make it much more inviting.



Images. A general lack of upkeep at the park can be seen regarding landscaping (left); this lack of upkeep extends to numerous litters on park grounds (middle); the physical infrastructure of the park also suffers due to lack of general upkeep (right). Photos taken by EC, 2022.

Supporting Legitimate Activities

Legitimate activity support refers to activities and uses that encourage legitimate users of a space. Cann Park has well-programmed spaces that encourage legitimate activities inside the park premises. But most of them are targeted toward kids, and there is a need to program and host more spaces encouraging adult participation.

Strengths

The park's programmed spaces- the swings, basketball court, softball field, and running tracks, all promote acceptable use of the space. The Gazebo and benches provide a place for people to sit and watch their children play. Additionally, the park hosts some community events like movie nights during the summer that are engaging activities for neighborhood residents and provides avenues to create and maintain community harmony.

Concerns

However, most of these activities focus on children and teenagers and exclude participation from the neighborhood's older residents. Focus also needs to be directed toward programming for spaces that encourage the use of the space by adults at different times during the day, which can increase the natural surveillance periods of the space. Our team talked to a few residents, and they mentioned the necessity for including a water fountain and a bathroom. Water and restrooms are essential necessities, and their availability might encourage older neighborhood residents to come and stay in the park for extended periods.



Images. Activity Programming like kids' play areas and a gazebo give people a reason to come to the park. Photos taken by *EC*, 2022.

Geographical Juxtaposition

In terms of geographical juxtaposition, the concerns in Cann Park far outweigh the strengths. There are no bathrooms or water fountains on the park premises. The abandoned housing in the immediate area possibly contributes to the way people treat the park while they are there. The general dilapidation of the surrounding area potentially contributes to the lack of upkeep of the park. The park's benches are placed far too close to the garbage cans, or vice versa.

Strengths

Located at the center of the Cann/Jackson neighborhood close to the Alfred E. Beach High School, Cann Park generates much footfall from the neighborhood residents, particularly the kids and teenagers. The Alfred E. Beach High School is a particular opportunity for Cann Park and strengthening the connection between the school and the park can generate new activities in the community. This can be done through better pedestrian and bike connections to the park. Cann park also has the opportunity to have a convenient Tide to Town connection that can help connect the surrounding area and brings more foot and pedal traffic to the area.

Concerns

Cann Park contains no water fountains or bathrooms. This is a deterrent to users of the park as well as passersby who might want to use those facilities. Residents who don't regularly use the park might be more inclined to visit after a positive experience using park facilities. Abandoned housing and dilapidation in the area potentially affect user behavior and actions in the park. There is also unfavorable bench and garbage can placement, which need to be placed further apart.



Images. Garbage cans are placed too close to the benches (left); Alfred E. Beach High School in the neighborhood (right). Photos taken by EC, 2022.

Social and Cultural Dynamics

Social cohesion refers to enhancing mutual respect and understanding in a community and appreciating diversity and differences. Cann Park is a nice quiet neighborhood park that provides a comfortable space. It has the potential to host community events that can boast community engagement.

Strengths

The park attracts kids and teenagers to play. Adults come to the park to accompany their kids or walk their dogs. Our meetings with a few residents revealed some events are hosted occasionally. This gives a feel of the presence of general social cohesion in the neighborhood.

Concerns

No neighborhood adult group was observed hanging out inside the park premises. Another significant demographic missing from the park users was the older adult population. Our brief meeting with one elderly resident revealed that his ailment stopped him from visiting the park, even though he lived barely 400 ft. from it.

II. Complete Streets

All Streets

Climate

Cann Park is not located within the FEMA floodplain and therefore is less likely to be affected by flooding. However, Cann Park will still be affected by the changing climate and rising temperatures. Higher summer temperatures may discourage people from walking or cycling to the park and may

keep them from any form of participation. The park does have several trees along its edge which provide shade and an area to rest. However, several sections of the road surrounding the park would benefit from shady areas with benches or places to sit. Additional sources of shade would also help provide protection from the rain, which is a common occurrence during the summer months. The pathways to and from the park are not consistently maintained in terms of debris removal and gutter cleaning. This can affect the drainage of the park during rainstorms and leave puddles near the curb cuts, which is another barrier to access for individuals using walking assistance or strollers.



Image. A shelter at the northwest section of Cann Park with four picnic tables. Photo taken by EC, 2022.



Images. Trees at Cann Park (left); an example of possible standing water as a result of inconsistent maintenance (right). Photos taken by EC, 2022.

10' 5' 10' 10' 5' 10'

West 45th Street

Figure 25. A cross-section of West 45th Street looking east. Diagram created in Streetmix by EC, 2022.

West 45th street runs North of Cann Park and connects with the Alfred E. Beach High School to the West of the park. The speed limit for the road is 25 mph and while it is possible that some cars exceed this speed limit, onsite observations reflected a relatively slow flow of traffic and general obedience to the recorded speed. The roadway runs in both directions but does not have striping delineating the lanes. Without adequate driveway space, cars park along the street in front of houses and sometimes on lawns. In-person observations identified four abandoned houses along 45th street, one directly across from the park, two along the pathway to the high school, and one a block east of Cann Park.



Images. 45th Street facing east with Cann Park sidewalk on the right (left) and 45th Street facing west from Alfred E. Beach High School; notice the lack of sidewalk and no clear right of way (right). Photos taken by EC, 2022.

Safety

The street has a sidewalk on the south side, but it is limited to the perimeter of Cann Park (Figure 1). As a result, pedestrians from the neighborhood must walk to the park alongside road traffic. The sidewalk along the park is five feet wide, surfaced with a relatively smooth material, and free of obstacles, but does not sufficiently connect the surrounding neighborhood. The front yards of private

properties are landscaped up and to the street which may make it difficult for pedestrians to avoid oncoming traffic if necessary (Image 1.1). Stop signs are used at intersections around the park, which helps slow traffic, although they lack painted crosswalks for pedestrians to safely cross. This makes pedestrians vulnerable to vehicle collisions and possible injury or death.



Image. Connectivity concerns: corner of 45th Street and Bulloch Street where shrubs and growth block out the connecting sidewalk. Photo taken by EC, 2022.

Connectivity

West 45th Street provides a direct path to the Alfred E. Beach High School to the west but does not provide sufficient walking space for students or teachers who may want to walk to school. The street also lacks a designated bike lane which may prevent transportation to the school via cycling. While this street has relatively low traffic and slower speed levels, a commute to the high school requires crossing the more dangerous Hopkins Street. This roadway has a higher traffic volume and while speed limits remain at 25mph, observations suggest that few drivers adhere to it. Without a crosswalk from 45th Street to the high school, students and other pedestrians risk traffic collisions and injury by crossing Hopkins Street (**Figure 20**). The existing bus stop at the corner of 45th and Hopkins Street could also support connectivity to the parks. However, this bus stop lacks a bench, shelter, and a noticeable bus route sign (**Figure 21**). While this may affect connectivity, it is important to note that Cann Park is predominantly a neighborhood park and improving the bus stop may have little effect on park participation.

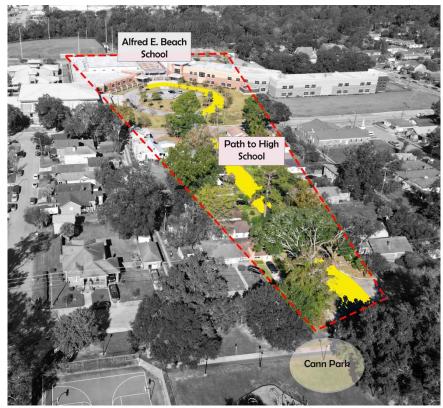


Image. Alfred E. Beach High School, viewed from 46th Street, facing west. Photo taken by EC, 2022



Image. Limited signage for bus stops and lack of benches and shelters within the park. Photo taken by EC, 2022.



Image. Poorly maintained curb cut at the western corner of Cann Park on 45th Street (left) and uneven curb cut (right). Photo taken by EC, 2022.

Equity

American Disability Act (ADA) considerations are the primary concern at Cann Park. On 45th Street, curb cuts on both sides of the park allow for greater accessibility of the park for individuals using wheelchairs, strollers, or walking aids, but these cuts are not on the opposite sides of the park to the east and west. The curb cut on the western side is badly maintained and overflows with standing water and leaves (**Image 33**). This means the park and sidewalks are not as accessible for individuals using walking assistance as well as strollers. The existence of a bench on the southern side of the street does provide some resting locations for older individuals, although it is neither shaded nor covered. In general, the shade on this side of the park is somewhat limited, especially towards the eastern side where the baseball field is located. Lack of shading and lower amounts of seating may present a challenge for older populations and individuals particularly vulnerable to heat exhaustion. As climate change places Savannah at high risk for an increase in hot days, this consideration is especially important for the community.

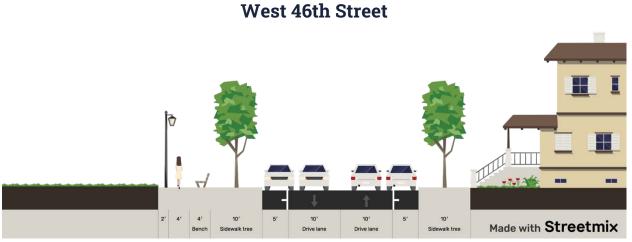


Figure 27. 46th Street is a two-way street that runs south of Cann Park and connects the park with the Alfred E. Beach High School to the west to the Salvation Army food distribution center to the east. The speed limit for the road is 25 mph. There is on-street parking on this street. Due to low residential density and a speed limit of 25 mph, the street has low traffic. Inperson observations identified four abandoned houses along 46th Street. Diagram created in Streetmix by EC, 2022.



Image. The intersection of West 46th Street and Stevens Street, without crosswalks or proper safety infrastructure. Photo taken by EC, 2022.

Safety

The sidewalk is continuous, in good condition without cracks or raised sections, and free of obstacles (e.g., overgrown landscaping or trash). The posted speed limit is 25 mph and during in-person observation, it appeared that drivers obey the limit. The street does not have stop signs on the intersections, nor any signage, pedestrian crossing signals (beacons), or "push to walk" mechanisms alerting drivers to the presence of pedestrians. Installing stop signs and pedestrian signs at these intersections can reduce the number of severe crashes and assist pedestrians and bicyclists to cross safely. Also, installing pedestrian beacons can reduce delays for pedestrians by up to 50 percent when compared to traditional signalized crossing. It'll also be safe and helpful for people with vision impairment. The posted speed limit is 25 mph, which can be reduced to 15-20 mph as it's a low-density residential area with a school nearby.

Connectivity

46th Street, like 45th Street, connects to Alfred E. Beach High School and can provide high schoolers with safe paths to the school. The Tide-to-Town pathway will follow the Springfield Canal right behind the high school. The street's only sidewalk, on the north side, is limited to inside the perimeter of the park, leaving pedestrians without the safe walking infrastructure in the park's environs. Due to a lack of consistent sidewalks or a dedicated bike lane, it may be challenging for locals or visitors seeking access to this park to visit via walking or cycling. Visitors can also be challenged by the lack of marked crosswalks at the intersections. Because Cann Park is at the center of its neighborhood, it will be useful to have sidewalks adjacent to houses for pedestrians regardless of their intent to use the park. As discovered with the preliminary survey, people accessing this park do use cars but prefer to walk, if the necessary infrastructure is provided.

Equity

Sidewalks, like roadways, should be designed to serve all users. This includes children, older people, parents with strollers, pedestrians who have vision impairments, and people using wheelchairs and other assistive devices. The sidewalk along this street is surfaced with a smooth material, which makes it easy to use for everyone. However, the sidewalk isn't wide enough for two people to walk side by side. ADA considerations have been made, as the sidewalk has tactical ground surface indicators (**Figure 25**) so pedestrians with vision impairment will be more aware of the situation and have curb-out ramps on both ends, which makes it accessible for people with wheelchairs or people using baby strollers. The sidewalk also has sufficient benches where people can sit. The street does not have streetscape features like art that could bring character to the space and represent the community. This is an opportunity for the community to make this space unique to their neighborhood.

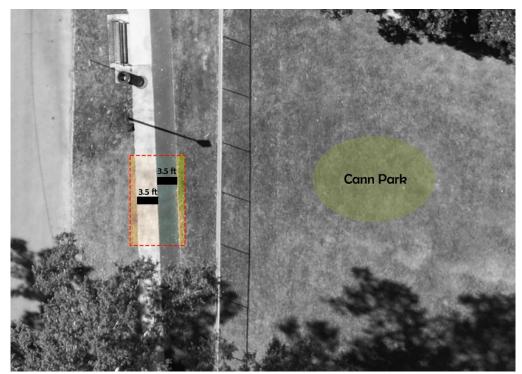


Image. A sidewalk along the perimeter of Cann Park, with a sidewalk on the left and soft asphalt material on the right. Photo taken by EC, 2022.



Image. Tactical ground surface indicator. Photo taken by EC, 2022.

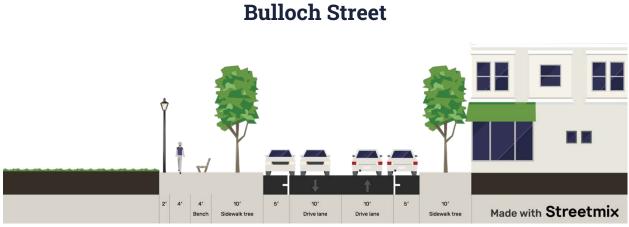
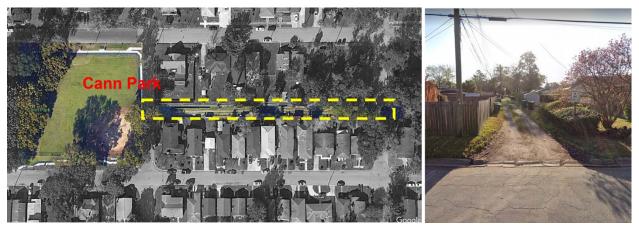


Figure 27. Bulloch street connects West Victory Drive in the north and Clinch Street in the south of Cann Park. The speed limit for the street is 25 mph. During the site visit, it was observed that drivers were obeying the speed limit. It is a two-way street with on-street parking. In-person observations identified one abandoned house on the street. Diagram created in Streetmix by EC, 2022.

Safety

The sidewalk along the park is in good condition, however, it could be improved. There is no speed limit posted on the street, although context from surrounding streets suggests to drivers that this is a 25-mph zone. There is a hidden road that passes between the two parcels (**Figure 27**) and connects Bulloch Street to Hopkins Street directly. This roadway seems unfinished and undesigned and therefore increases risk and danger for car users and pedestrians. The street does not have stop signs at the intersections. It does not have any signage, pedestrian crossing signals (beacons), or "push to walk" mechanisms alerting drivers to the presence of pedestrians.



Images. The hidden driveway passes between two parcels and connects Bulloch Street to Hopkins Street directly. Photos taken by EC, 2022.

117



Image. Bulloch Street intersection with 45th Street, without crosswalks and sidewalks. Photo taken by EC, 2022.

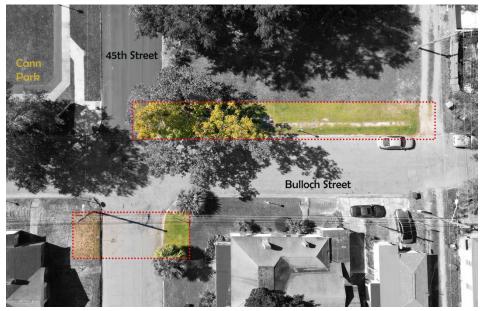


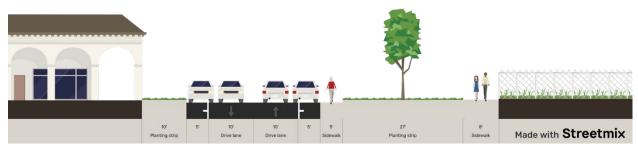
Image. Bulloch Street to the east of Cann Park, deteriorating sidewalk. Photo taken by EC, 2022

Connectivity

Bulloch Street connects Mills B Lane Blvd in the South and West Victory Drive in the North. Bulloch Street has a sidewalk on one side of the street which is along the perimeter of the park. The residential side of the street does not have any sidewalks. There are no marked crosswalks on the intersection of Bulloch and West 46th Street; and Bulloch and West 45th Street. The street does not have dedicated bicycle lanes. However, we discovered through the survey that some park users rode on sidewalks. It is a two-way lane but due to the on-street parking, it becomes difficult for two cars to cross at the same time.

Equity

The sidewalk's smooth surface can appeal to most park users, but it is too narrow to accommodate two walkers' side-by-side. Because the walkway has curb out ramps on both ends, wheelchair users and parents carrying strollers may use it. There are no community-representative streetscape elements (such as artwork) on the street.



Stevens Street

Figure 28. A cross-section of Stevens Street looking North, by a basketball court. Diagram created in Streetmix by EC, 2022.

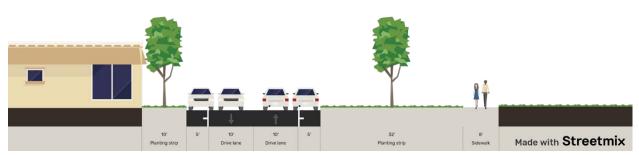


Figure 29. A cross-section of Stevens Street looking north, near the playground. *Stevens Street is located on the western side of the park. The speed limit is also 25 mph and according to observations, drivers seem to obey this established speed. The street runs along the park, close to the basketball courts and playground. The park is surrounded on the opposite side of the street by single-family homes. Two seemingly abandoned homes were identified during in-person observation, each a block away from the park and on the north and south side respectively. Diagram created in Streetmix by EC, 2022.*



Image. An abandoned house across from Cann Park. Photo taken by EC, 2022.



Image. Panoramic view: Stevens Street to the right with 46th Street to the left, entrance to Cann Park in the middle. Photo taken by EC, 2022.

Safety

Stevens Street is bisected by 45th and 46th Streets and drivers must stop before each of these intersections. Although there are stop signs, the intersections do not have crosswalks and lack sidewalks beyond the perimeter of the park. Attempts to increase safety should be noted as a 'Watch for Children' sign is prominent on the western side of the street, opposite of the playground. However,

this signage will not keep pedestrians and cyclists safe from passing cars and as seen with other surrounding roads, spaces on lawns are limited and not available for pedestrians to get out of the street if necessary.

Connectivity

Stevens Street runs from Cann Park south to the Sarah Mills Hodge Elementary School, which is a 13-minute walking commute for local residents. However, without proper sidewalks and crosswalks for the length of the trip, this walk could be dangerous, especially for children, the elderly, and people with a disability. The lack of sufficient sidewalks may also be discouraging local residents to travel around the neighborhood and into the park.

Equity

Stevens Street and the existing infrastructure do allow for greater accessibility for populations using wheelchairs, walking aids, or strollers. Both the north and south sides of the park have curb cuts that are not obstructed by signs or patchy pavement. Beyond the park, no proper infrastructure has been added to allow for continued travel on wheels which suggests that traveling to the park from a house could be nearly impossible for some individuals relying on walking aids. Along the park there is a great amount of shade provided by several trees, which could be helpful for individuals most at risk of suffering from extreme heat. However, no seating is present underneath these sources of shade.



Tide to Town - Connectivity and Equity

Image. Cann Park in the context of Tide to Town and Alfred E. Beach High School, facing west. Photo taken by EC, 2022

Located in close proximity to Cann Park is a section of the proposed Tide to Town trail which will connect various low-wealth neighborhoods throughout Savannah to waterways and nature. While Cann Park presents as a predominantly neighborhood park, it is valuable to consider improving the connection to Tide to Town, as it may encourage additional visitations to the park. Improved connectivity through safety measures and policy implementations can also encourage residents of Cann Park neighborhood to visit the Tide to Town trail to explore nature, feel more connected to their surroundings, and learn about local flora and fauna. The trail runs behind Beach High School, which may also provide an opportunity for high school students to become more engaged with nature as well.

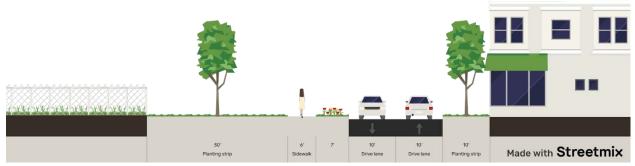


Figure 30. A cross-section of Hopkins Street facing north by the Alfred E. Beach High School, the main roadway leading to the Tide to Town Trail on West 48th Street. Diagram created in Streetmix by EC, 2022.

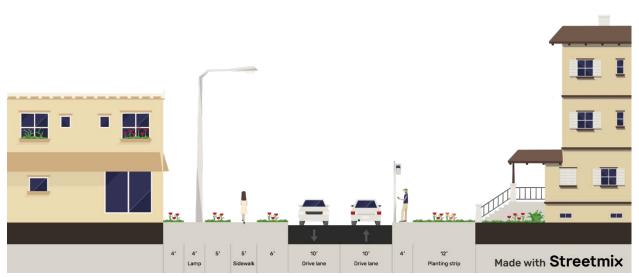


Figure 31. A cross-section of Hopkins Street facing north, the main roadway leading to the Tide to Town Trail on West 48th Street. Diagram created in Streetmix by EC, 2022.

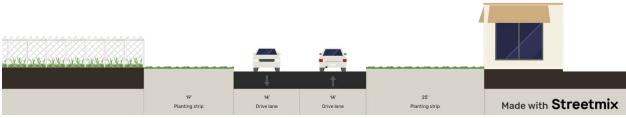


Figure 32. A cross-section of West 48th Street facing East, a residential street that leads to the Tide to Town entrance.

If an individual wanted to travel from Cann Park to Tide to Town, they would need to travel down 45th or 46th Street and cross Hopkins Street. As mentioned previously, Hopkins Street is prone to speeding and lacks adequate crossing signage and safe crosswalks. Once on Hopkins Street, individuals could utilize the sidewalk running along the western side of the street. Individuals would then turn on 48th Street and be without a sidewalk or any safety measures. Though 48th Street has limited traffic, its wide roadway has the potential to encourage speeding and therefore increase the risk of traffic incidents. Protection for cyclists and walkers should be considered on this road, especially if it is utilized by high school students on their way to and from the high school.



Image. 48th Street facing west: the road connecting Tide to Town with Hopkins Street, Alfred E. Beach High School, and Cann Park, without striping, sidewalks, or bike lanes. Photo taken by EC, 2022.

Kennedy Park

I. CPTED Analysis



Image. Drone shot of Kennedy Park from the main entrance adjacent to the industrial area. Photo taken by EC, 2022

General Park Impressions

Kennedy Park is a significant community resource for the Historic Carver Heights village, which is the first African American neighborhood in the nation that was created especially for World War II veterans. The community center and Kennedy Park are two community aspects that improve the neighborhood's quality of life. With a bus shelter located within the park, the park is easily accessible by all forms of transportation. The park is big and open, offering a variety of active and passive recreational and social activities. The park also has numerous underutilized spaces with a lot of potentials. The Community center adjacent to Kennedy Park offers different activities for youth, young adults, and senior citizens. The central warehouse, Savannah marine terminal train expansion line, and industrial facility near the north side of the park bring a disconnected feeling from the lack of connectivity. However, there are activities placed close to the residential areas on the northeast, east and south sides of the park that give the surrounding community a feeling of active involvement. EC team members did not experience significant personal safety concerns during the field visits. When park visitors were queried, they stated that the park is safe and that children primarily use it. Users cited excessive speeding on Collat Avenue as their top concern, with parents noting that they always accompany kids to ensure their safety. The following observations and suggestions reflect the research using the concepts of CPTED, highlighting, and balancing both the positive and negative aspects of the park.



Images. The park seen from the south side (left). North end of the park and surrounding areas (right). Photos taken by EC, 2022.



Image. Carroll Street bus shelter. Photo taken by EC, 2022.



Images. Kennedy Park basketball court (left) and the Carver Heights Community Center (right). Photos taken by EC, 2022.

Natural Surveillance

Visibility and activation are the two key components of natural surveillance in parks. Natural surveillance helps reduce feelings of isolation by making the park feel connected with other users and clearly seen by the surrounding community. Kennedy Park is located on the northwest corner of Carver village and is surrounded by predominantly residential land on the east, south, and southwest side, providing a good amount of natural surveillance to the park. Commercial and industrial use on the northwest side of the park brings a feeling of disconnectedness as it breaks the interactions that residential uses provide to the park. **Figure 36** exhibits land uses activities around the parks. Kennedy Park has an excellent line of sight from almost all directions because of the well-maintained tree canopy lines inside the park and along the street's landscaping. Residents of Carroll and Winburn streets enjoy unobstructed views of the park and can monitor criminal activity within and around the park. Overall, activities inside parks are visible from the adjacent residential areas and minimize the threats of apprehensions naturally. These activities areas are well-lit during nighttime. However, areas directly outside the lighting catchment are equally dark. The absence of pedestrian-scaled lighting around the park and streets increases low-light conditions and creates an unsafe feel at night.

However, several areas within the park do not maximize opportunities for natural surveillance and should be addressed to reduce the threat of apprehension and violence against residents and park patrons. These areas include the overgrown vegetation and low-lit areas along Collat Avenue near the community center, the lift distribution center that minimizes the visibility of the children's play area, and the poorly maintained landscaping around the unused tennis court that blocks the visibility & disconnects the north and south side activities of the park.



Image. Land use activities around the park. Photo taken by EC, 2022.



Image. South (left) & north (right) sides of the park are seen from above with existing activities. Photo taken by EC, 2022.

Strengths

The setting of the houses that surround Cann Park have features such as open fences, low shrub height, grill fences, and large glass windows that provide see-through barriers that encourage people

to spend time outdoors. This provides a good amount of visibility and natural surveillance both during the day and at night. The tree canopy along the streets is in good condition and provides maximum visibility to monitor activity inside the parks, which decreases the potential for crime in parks and streets. As we can see from **Figure 38**, adjacent houses are visible till their roof shades allowing residents to watch all the activities in the park.



Image. The residential area along Carroll Street seen from the picnic area shows clear sightlines into the park. Photo taken by EC, 2022.



Image. Visibility of the children's play area. Photo taken by EC, 2022.

Concerns

Overgrown Vegetation and Low-lit Areas

The dense and overgrown vegetation around the community center and along the side of Collat Avenue creates areas, of concealment that contribute to a lack of personal safety and increase the amount of potential hiding places. The overgrown tree canopy along Collat Avenue also conflicts with the overhead street lighting and creates shadow and blind spots at night. **Figure 40** shows the low visible areas, and the night condition along Collat Avenue near the Community center entrance.



Images. Low visible areas around the park (left) and nighttime conditions along Collat Avenue (right). Photo taken by EC, 2022.

Blocked Visibility

The lift distribution area near the children's play area on the south side of the park significantly reduces the visibility of the play area from the south side.



Images. Lift distribution center. Photo taken by EC, 2022.

Residents during the audit mentioned that nobody in the neighborhood uses the park's tennis court, and the overgrown vegetation around the court blocks the visibility & disconnects north and south side activities of the park. Residents from the south side also mentioned that they discourage their children from going to the north side basketball court & open play area due to the low visibility towards the north side of the park. **Figure 41** shows the overgrown vegetation obstructing the view of the north side from the picnic area. And **Figure 42** of the temporary basketball court set up on Winburn Street is currently being used by local kids and adults.



Images. Overgrown vegetation along Collat Avenue. Photo taken by EC, 2022.



Images. The overgrown vegetation around the tennis court (left) and the temporary basketball court on Winburn Street. Photo taken by EC, 2022.

Natural Access Control

Natural access control manages access into and through parks to minimize navigation confusion and increase park users' sense of security. Kennedy Park appears to have no measures to regulate access for bikes and pedestrians. Kennedy Park has no dedicated park entrance from outside that celebrates, marks, or is branded in a way that ensures and defines entryways into the park. Rather than the park's own name, which is obscured by overgrown plants, the entrance to the park bears the name of the village of Carver Heights (**Image 42**), but this is only visible from one direction, and it is hard to find the name board for people traveling from Bloomingdale to Downtown direction.



Images. Park entrance blocked signage (left) and park entrance from Savannah Marine Rail extension line - no identification (right). Photo taken by EC, 2022.

In the park, there are sidewalks on Carroll Street and Collat Street close to the community center that led to the gazebo, which is used almost exclusively by pedestrians. The only way for bikes and gokarts to enter the park is through the sidewalks, despite the lack of any restrictions on entrance for these vehicles. The park's other sides are all bordered by curbs, making it difficult for cycles, gokarts, and wheelchair users to enter or exit. The park has a very straightforward layout with a basketball court, baseball field, tennis court, and children's play area. The design of the park does not direct visitors to each recreation area. Signs along Carroll and Collat streets forbid trucks from traveling through those streets (**Image 43**).



Images. No entry sign at the Collat Avenue and West Gwinnett Street intersection (left), Truck using the 'no entry route' around the park (right). Photos taken by EC, 2022.

Strengths

One of the park's strengths is its open design, which offers opportunities for improvement and partial control of how bikes and go-karts can enter the area. People using bikes and go-karts can only access and exit the park through Carroll Street, even though there are not clearly marked entrances or exits.

There are signs with clear markings controlling how vehicles may move around the park. Enough lighting along the sidewalk makes it easy to use the sidewalks at night.

Concerns

The park's lack of a marked entry and the fact that go-karts, cyclists, and pedestrians all enter along Carroll Street's sidewalk pose a safety risk to pedestrians. It is challenging to guide movement to the tennis court because its surrounding landscape limits nighttime lighting. Additionally, the tennis court entry is walled and unmarked, making it challenging for people to find the entrance. There are no signs pointing people in the direction of the activity locations inside the park, nor is there a path that leads people there.

Territorial Reinforcement

Territorial reinforcement establishes boundaries for properties as well as guidelines and standards for proper behavior. Territorial reinforcement includes techniques from both natural access control and surveillance. The park's boundaries are well defined by an imaginary line because Carroll Street borders it on the east, Winburn Street borders it on the south, Collat Street borders it on the west, and West Gwinnett Street borders it on the north. The Carroll Street sidewalk serves as the entrance point, despite the access points not being well-marked. Near the baseball field and tennis court, a railed barrier shields people and cars from flying balls as people play in these locations (**Image 44**). Carroll Street's row of trees also serves as a line of demarcation between the street and the park. Many parents expressed concern about speeding cars on Collat Street and the lack of a physical barrier between the park and the street to protect children running through the street. On the entrance to the tennis courts, the park has put some guidelines for the COVID-19 protocols, but aside from that, no additional park rules are mentioned (**Image 45**). There is no list of park regulations or emergency contact information available at the park.



Images. Railed fence near the baseball field along Collate Street (left) and trees and sidewalks act as a barrier between the park and the street (right). Photos taken by EC, 2022.



Image. *COVID-19 regulations and park rules about social distancing are mentioned near the tennis court. Photo taken by EC, 2022.*

Strengths

In Kennedy Park, an imaginary line signifies ownership and divides the park from its surroundings. The park and the street are separated by the walkway on Carroll Street, acting as a barrier between them. Only the areas on the other two park sides need to be defined. By addressing natural access control, many territorial concerns can be resolved.

Concerns

The absence of physical barriers separating Kennedy Park from the streets is the only issue with the territorial reinforcement of the park. People don't speed as frequently on Carroll Street since there are sidewalks on both sides of the street and a residential area on one side. Collat Street, on the other hand, has a side that is highly vegetated, and the absence of sidewalks makes it challenging to enforce speed limits.

Image Maintenance and Management

An essential component of CPTED in parks is image maintenance and management. Proper maintenance of landscape and lighting reduces concealing places and improves visibility. Good condition of amenities and removal of litter indicates ownership of the park, which promotes good conduct and lessens the possibility of undesirable activity. Kennedy Park's general lack of image management and maintenance is one of its key concerns. The park's amenities are generally in poor shape. The park's water fountain is either broken or not functioning (**Image 46**). Only a couple of trash cans can be found in the park, one which is near the gazebo, and the other which is near the bus shelter. It was evident from the gazebo's physical state that there was no routine maintenance plan. There was a lot of trash both inside and outside the gazebo. The densely wooded region near the community center is another location where trash is dumped (**Image 47**). This wooded area is a

low-visibility location that can be used for concealment. The landscape north of the park, near West Gwinnett Street, is overgrown and not maintained. Besides the trees, the park's landscape is predominantly grown over two feet above the ground. Except for the area surrounding the tennis court, most of the tree canopies are kept in good condition. Although there is light on the streets around the park, the light is blocked by the tree canopies on Collat Street, close to the tennis court, and on Carroll Street and Winburn Street. Most of the park is dark at night, with lighting only in the gazebo and the basketball court areas.



Images. Condition of the water fountain (left) and litter inside the gazebo (right). Photos taken by EC, 2022.



Images. Trash near the wooded area next to the community center (left) and canopies casting shadows (right). Photos taken by EC, 2022.

Strengths

The park shows no evidence of vandalism or graffiti. There are lights throughout the park, and they all function correctly. The installation of lights inside the park will be advantageous. Tree canopies are maintained from the ground up, however, we need to pay more attention to how shadows are being cast by the tree canopy. The park's image maintenance will improve substantially if proper

landscaping is maintained. The park was generally clean, with most of the trash concentrated around the Gazebo and community center. Close to the playground are some benches for parents and caretakers (**Image 48**). There are two bus stops along Carroll Street. The bus stop near the Winburn intersection has a proper bus shelter, seating, and dustbin placed nearby, while the other stop near the Chambers Street intersection has only a seating area.



Images. Benches near the children's playground (left) and seating near the basketball court (right). Photos taken by EC, 2022.

Concerns

The park has no specific maintenance strategy in place. The trash from the trash can appears to be emptied on a regular basis, but amenities are not regularly maintained and are not in good shape. There are two water fountains on the park's premises; one is broken and filled with leaves, and the other, the one closest to the gazebo, is out of commission. The gazebo was generally covered in trash. Seating areas are limited, and potential seating areas such as tree shades are not being used. The wooded area near the community center increases the possibility of undesired activities. The tennis court is a less-used portion of the park that is also undesirable due to its poor maintenance, visibility, and illumination.



Images. Food waste spilled on the seating area and floors of the gazebo (left) and movable fixtures were kept inside the court area (right). Photos taken by EC, 2022.

Supporting Legitimate Activities

Activity Support places any activity in a position such that people blend in with the surroundings naturally. The park contains a lot of features that spur activities. Parents and other adults can keep an eye on kids as they play on the playground thanks to the gazebo and the seating area nearby. However, parents complained that there aren't enough activities for them to do while they watch over the kids. They prefer to have some sort of activity generator other than the gazebo and seating areas, such as a pathway for walking around the entire park or an outdoor exercise equipment area. According to the survey, summertime picnics and birthday parties are frequently held in the park. Throughout the summer, the community center sponsors a variety of events at the park. The baseball field is used for softball practices during the evenings. The gazebo and the children's play area are where many of the park's activities take place.



Image. Family of kids using go-karts using the swing while watching the kid playing. Photo taken by EC, 2022.

Strengths

The park has many opportunities for activities. During summer, activities like picnics, birthday parties, community center events, and softball leagues are held in the park. The activities are mainly limited to mornings and afternoons. The park also has the opportunity to host events with the community center and support more activities and programs.

Concerns

Most events happen close to the community center and the playground. It is necessary to plan how activities will be dispersed across the park. The tennis court divides the park in two. Activities mainly take place to the south of the tennis court, as there are fewer supporting activities to the north of the tennis court. Children do play on the baseball field and the basketball court, but this does not generate a lot of supplementary activities.

Geographical Juxtaposition

Geographical juxtaposition is the concept that a location's surroundings can affect both the safety and criminal activity in that area and vice versa. Carver Heights' neighboring land use raises questions about the neighborhood's safety and criminal activity. Kennedy Park is surrounded on the east and south by residential areas, on the southwest by a community center and a warehouse, on the northwest by the Savannah Marine Terminal rail extension line, and on the north by industrial use.

Strengths

Residential neighborhoods tend to have natural surveillance throughout the day from the south and east. In these areas, the kids usually play in the park with their parents, either watching them from their houses or sitting on a bench close by. The activities, landscape design, and lighting on this side of the park, along with seating placement, seem conducive to generating enough activity in the area. There is also enough space for people to walk in these areas and kids from the neighborhood use the facilities actively.

Concerns

The park's north and west sides are only used during the day, therefore there is no natural surveillance in these areas after dusk. These areas are more likely to be the scene of criminal activity. In 2020 and 2021, there were reported assaults in the heavily wooded area close to the community center and the area close to the tennis court on Carroll Street.

In addition to having overgrown plants and trees, these regions have poor illumination and visibility. Crime rates in each location are influenced by poor illumination and visibility. A larceny was also reported in the park in 2021. Numerous crimes, including theft, car break-ins, car theft, drunk driving, and vandalism, were observed in the neighborhood close to the park.

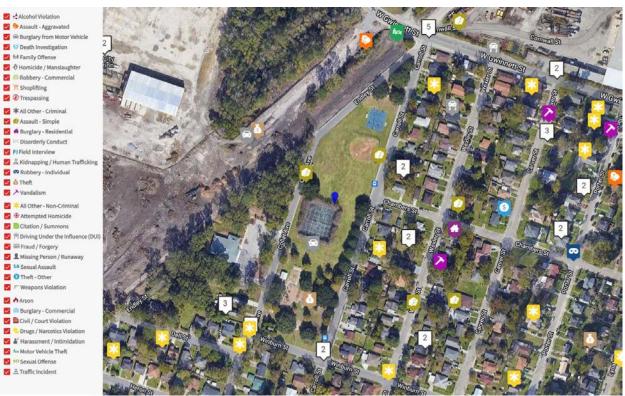


Figure 33. A map showing reported crime in the area from 2020-2022. Map created by LexisNexis, 2022

Social and Cultural Dynamics

The community in the Carver Heights neighborhood is predominantly Black or African American (88%), as of 2020 (ACS). Cann Park is situated in the middle of the Carver Heights neighborhood and has the opportunity to enhance social cohesion with the surrounding communities. In addition to the community center adjacent to the park, Cann Park has the opportunity to attract a vast majority of potential users.

Strengths

The Carver Heights community has a rich history, having been the largest privately owned housing development for people of color in the World. It also has been placed on the Registry of Historic Places, making Carver Village a nationally recognized landmark. Kennedy Park in the neighborhood has a special significance in the socio-cultural environment of the community. During summer, the community hosts events such as day picnics and movie shows with the help of the Neighborhood Association. This shows the presence of high levels of social cohesion that exist within the community. The community is also known for its baseball team, whose past achievements include winning the Savanna city athletic championships. The baseball field hosts league matches every Saturday. In addition to bringing people together, the Carver Village Neighborhood Centers' regular events contribute significantly to the improvement of the social well-being of the community. The community center is a vital positive aspect of the community that can help implement projects and

programs related to improving safety, ensuring equity, and upgrading the quality of the park and the community.

Concerns

The lack of universal access for people with disabilities or who don't have access to vehicles renders the park exclusive. The absence of sidewalks in and around the park makes it particularly difficult for people with aided mobility to access the park facilities. There is also an absence of activities for these groups which needs to be addressed.

II. Complete Streets

All Streets

Climate

The infrastructure around Kennedy Park poses several challenges from a climate perspective. The car-centric street designs reinforce automobile use while discouraging alternate modes of transportation, such as walking and cycling. This is problematic due to the environmental and climate impacts of car dependency. The abundance of hard surfaces along a number of the streets around the park, such as West Gwinnett Street, combined with inadequate tree cover, should also raise climate-related concerns. Given that Savannah is likely to experience higher average temperatures in the future as a result of climate change, a lack of shade could serve to discourage potential bike and pedestrian users from traveling along these streets, especially during the summer months. The park and its immediate surroundings do not lie within the FEMA 500-year floodplain, putting them at low risk of flooding in future extreme weather events.

West Gwinnett Street

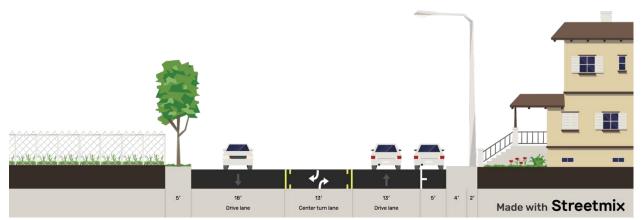


Figure 34. The street cross-section for West Gwinnett Street, looking east from the combined Collat Avenue/Carroll Street intersection. The street has two travel lanes, and a shared center turn lane. Parked cars were only observed on the south side of the street, although there are no paint markings to delineate this as a parking zone. Diagram created in Streetmix by EC. 2022.

Safety

No form of traffic or pedestrian signaling is present along the portion of West Gwinnett Street surveyed. Traffic speeds were found to be relatively high. The speed limit is set at 30 mph, and a number of drivers appeared to be exceeding it. The only form of intersection control is stop signs for Collat Avenue and Carroll Street at the combined intersection with West Gwinnett Street (vehicles moving along West Gwinnett Street do not have to stop). The combined intersection itself has an unusual design, which generates safety issues for traffic and pedestrians trying to cross. Collat Avenue and Carroll Street effectively join with each other just prior to intersecting West Gwinnett Street Street, creating an irregular cross-pattern for traffic. There are no clear paint markings or signage present to indicate how drivers are supposed to negotiate this shared intersection, and this appeared to cause confusion for some drivers.



Image. The cross-traffic pattern created by the combined West Gwinnett Street/Collat Avenue/Carroll Street intersection. The first of the two cars in this image have advanced beyond the Collat Avenue stop sign but then had to yield to the CATS bus turning onto Carroll Street. Photo taken by EC, 2022.



Images. West Gwinnett Street, looking east (left) and west (right) from the combined Collat Avenue/Carroll Street intersection. Note the narrow sidewalk width, higher speed limit, and lack of crosswalks. Photos taken by EC, 2022.

The quality of pedestrian infrastructure along West Gwinnett also raises a number of safety concerns. West Gwinnett Street only has a sidewalk along its south side, which ends at Carroll Street. The sidewalk itself is relatively narrow (roughly 4 ft. wide), has no setback from traffic, and is abutted by a relatively low curb. No crosswalks are present along this segment of the road either, including at the combined Carroll/Collat intersection. Furthermore, no tactile surfaces are present at this intersection, which creates a potential hazard for visually impaired pedestrians. The lighting at the intersection is generally quite poor at night, which is something that could prove especially challenging for pedestrians.

Connectivity

The most significant connectivity concern for this stretch of West Gwinnett Street is the general lack of adequate pedestrian infrastructure. There are no sidewalks on the north side of West Gwinnett Street, and no crosswalks are available for crossing the street. This isolates the park from the residential area north of West Gwinnett Street Another feature that impacts connectivity is the disruption in the road caused by the rail spur just west of Collat Ave, which complicates pedestrian access from the west. A further connectivity concern pertains to the eventual Tide to Town trail, which will be situated about ¾ of a mile east of the park. While Kennedy Park will not have any direct connection with this trail, it would be ideal for some sort of wayfinding or bike route signage to be installed, so that trail users could be made aware of the park. Currently, there are no bike sharrows or wayfinding indications whatsoever along West Gwinnett Street, despite the fact that it will likely provide a direct connection with the future trail.

Equity

The sidewalks in this area are generally not accessible by ADA standards. The sidewalk along West Gwinnett Street is very narrow and does not have the 5-6 ft. width needed to accommodate individuals in a wheelchair (as per NACTO guidelines). Furthermore, there were no curb cuts in place to allow disabled users to cross the combined Collat/Carroll intersection, and no tactile strips for visually impaired individuals (Figure 48). On a more general level, there are several equity-related concerns that need to be stated regarding this stretch of road. The poor quality of infrastructure provisions, such as the sidewalks, should raise equity concerns given the disadvantaged nature of the park's location. Many wealthier parts of Savannah have a higher-quality pedestrian infrastructure in place, so it is important to ensure that similar provisions are in place around Carver Village.



Image. The sidewalk along West Gwinnett Street bends to follow Carroll Street. Note the narrow width, poor maintenance, and lack of ADA-compliant design features. There are also no crosswalks provided to access the park. Photo by EC, 2022



Figure 35. Street cross-sections for the northern portion of Collat Avenue. The northern portion has a freight rail spur just west of the street (represented by the streetcar). Street lighting is minimal, and the strip on the west side of the street is generally overgrown and appears to experience issues with litter dumping. Diagram created in Streetmix by EC, 2022.



Figure 36. Street cross-sections for the southern portion (bottom). The southern portion has the community center and parking lot on its left. Diagram created in Streetmix by EC, 2022.

Safety

One of the most significant safety issues observed along Collat Avenue is that drivers disregard the current 25 mph speed limit. The highest recorded speed over two days of observation was 46 mph. Given the presence of a playground and community center along this portion of the roadway, this is a potentially serious issue for the safety of park users, since 25% of the traffic fatalities and severe injuries are the result of speeding. According to NACTO, pedestrians are five times more likely to die if they are struck by a car traveling 35 mph than if they are struck at 20 mph. There is also no fourway stop in place at the Winburn Street intersection, which will increase traffic speeds along the southern portion of Collat Avenue An additional safety concern is the fact that there are no sidewalks provided along Collat Avenue. This means that pedestrians traveling along this street will either have to walk on the road (as one pedestrian was observed doing) or along the rough grass surface of the park. Furthermore, no crosswalks are provided, including one that would allow individuals to cross between the community center and playground area. Another issue observed is the lack of a pullover/drop-off spot for individuals trying to access the playground/shelter area. Several individuals and their children were observed exiting vehicles and walking along the road to the playground path, which put them in the path of traffic. Additionally, there is a lack of signage present to warn drivers about the park and individuals using it. Only one sign is visible at the West Gwinnett Street/Collat Avenue intersection, which is relatively far from the most heavily trafficked section of the park. Another safety issue is the lack of lighting near the community center/playground crossing area. Finally, there is no pedestrian-scale lighting present, and the existing streetlights may not cast enough light to make pedestrians visible to drivers.



Images. Collat Avenue, looking south from West Gwinnett Street (left), and looking north from Winburn Street (right). Note the only children playing caution sign observed in the entire park area (left). Photos taken by EC, 2022.

Connectivity

Perhaps the most serious connectivity issue along Collat Avenue is the fact that there are no sidewalks along it and the west side of Kennedy Park (**Figure 50**). The lack of crosswalks is also a serious issue as it isolates the playground and community center from the other portions of the park, in addition to the park's surrounding areas. Even the park and community center are not connected

effectively. While there are pedestrian amenities near the playground area, including a curb cut in the path between the playground and Collat Avenue, no crosswalk is provided. Additionally, no path is provided on the community center side, apart from the park's sidewalk. Finally, bike connectivity along this stretch of road is poor. Given that Collat Avenue is arguably the focal point of the park's activities, it is the most ideal location for providing bike storage. One bike rack appeared to be visible, (near the community center), but it was rusted and overgrown (**Figure 51**). There is also no wayfinding available for bikes, which could create issues for connecting the park to the future Tide to Town trail route.

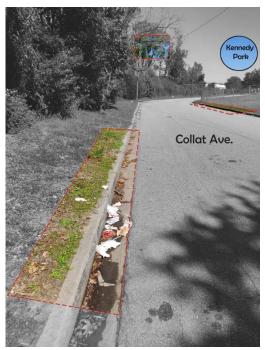


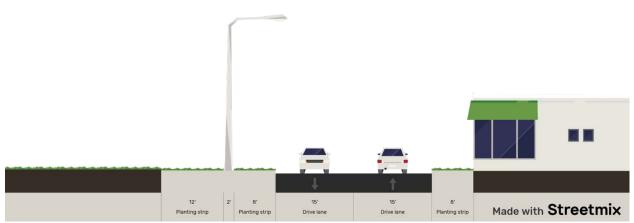
Image. Collat Avenue lacks sidewalks, as seen in this snapshot looking north (above). Litter is present along the west side of the street, and street lighting is generally inadequate. Photo taken by EC, 2022.



Images. Current bike storage rack at the Carver Village Community Center (left). It is somewhat overgrown and does not appear to be used. The view between the park shelter and the community center (right), shows the lack of a connection between the two. Photo taken by EC, 2022

Equity

ADA pedestrian compliance is limited along Collat Avenue The park area by the gazebo and playground is acceptable, as it offers accessible sidewalks. The community center also provides accessible pedestrian amenities, but there is no dedicated pedestrian connection between it and the other portions of the park. Therefore, disabled park users would either have to travel along the road or go along the grass. Overall, the substandard quality of pedestrian amenities along this stretch of roadway should raise concerns amongst planners, given the disadvantaged nature of the community where it is located.



Winburn Street

Figure 37. The cross-section of Winburn Street, facing east, with the park on the left and residences on the right. No sidewalks are present, and only one streetlight was visible along the entire block. Diagram created in Streetmix by EC, 2022.

Safety

Winburn Street runs along the south end of Kennedy Park. The intersection between Winburn Street and Collat Avenue has an irregular design because of an odd boundary of a corner property, which increases the width of the street along a small segment. This segment also lacks a stop sign for traffic moving along Collat Avenue, something that may be contributing to that street's speeding problems. With better signage in place, this shape might actually be able to help slow down cars. The street generally lacks sidewalks (aside from the discontinued portion adjacent to the park), forcing pedestrians to walk on the road or in the grass. There are stop signs along Winburn Street on the approach to Carroll Street and Collat Avenue, but neither intersection provides any crosswalks.

There was a portable basketball hoop fallen on the side of the park where the children were also playing outside of their home onto the street opposite the park. Since this is a small segment, there were no benches, street lighting, or posted speed limit. Although the two houses on this street have a good view of the park with few obstructions. The placement of Winburn Street between two main streets where cars are mostly observed traveling above the posted speed limit lacks pedestrian infrastructure which does not differentiate the walking pedestrians from high-speed streets.



Image. The oddly angled Collat Avenue/Winburn Street intersection. No crosswalks or sidewalks are present at this location, and traffic moving along Collat Avenue does not have to stop. Photo taken by EC, 2022.

Connectivity

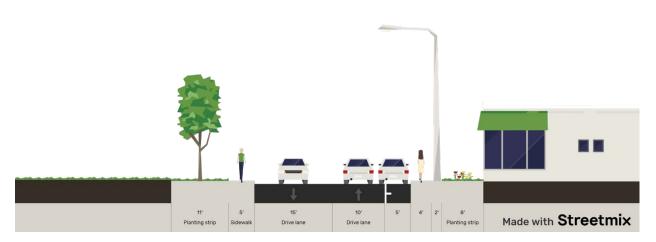
Kennedy Park is rectangular in shape, mainly running along Carroll Street and Collat Ave, with only 270 feet connected to Winburn Street In terms of connectivity, this road provides first access to the pump house on the corner, bus stop on Carroll Street and to park amenities like a gazebo, children's playground, sitting and open area. It is also easily connected to the community center through Collat Avenue This street is designed only for vehicular traffic with no bike or pedestrian infrastructure present. A future connection to Tide to Town will be provided by Carroll Street and Collat Avenue taking West Gwinnett St in the eastbound direction. As seen in **Figure 54**, Winburn Street also lacks any pedestrian infrastructure due to discontinued sidewalks, no crosswalks, and signs, which might affect people walking to the park from the south of the neighborhood.



Images. The discontinued sidewalk on Winburn Street coming from Carroll Street (left). There is no pedestrian or bike infrastructure seen from east to west (right). Photo taken by EC, 2022.

Equity

Winburn street is generally not ADA compliant in the vicinity of the park, as it lacks pretty much any form of accessible pedestrian infrastructure. There are no curb cuts along the park, and any accessibility measures to provide access to the park from this street. The sidewalk along Carroll Street only runs a few feet onto Winburn Street before being discontinued, and its corners also lacked ADA compliance. No tactile markings are in place at this intersection either.



Carroll Street

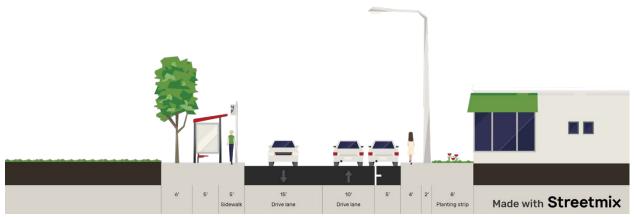


Figure 38. The cross-section of Carroll Street looking north. Note the narrow sidewalks on both sides of the street. On-street parking generally takes place on the east side of the street next to the houses. Diagram created in Streetmix by EC, 2022.

Figure 39. The cross-section of Carroll Street, looking north from Winburn Street. Note the sheltered bus stop and narrow sidewalks on each side. There are no painted parking strips, but all vehicles were observed parking on the east side of the street. Diagram created in Streetmix by EC, 2022.

Safety

Carroll Street exhibits the most complete street attributes when compared to others in the park's vicinity, but it still requires some consideration. This is a two-way street with one lane in each direction, and some on-street parking on the east side of the street. The parking is predominantly on the residential side of the street, and not on the sections closest to West Gwinnett Street There are 4 feet wide sidewalks on both sides separated from the street, and while the sidewalks along the park are in good condition and continuous, the sidewalks on the residential side are disrupted and in poor condition. Some sections of the sidewalk were broken up by portable construction barriers, water from a pipe leak, and driveways. The sidewalks and the setbacks they provide seem to be narrow considering the traffic on the street. There were stop signs for traffic coming onto Carroll Street at almost every street it intersects, but none along the street itself, and signs are present to warn of the park and its users.



Images. A sidewalk along the park on Carroll St (left); sidewalks requiring maintenance due to uneven surface (middle); water seeping onto the sidewalk from open pipe connection (right). Photo taken by EC, 2022.

Safety at night is also a weakness along this street. There are streetlights on the residential side, but pedestrian-scaled lighting is completely absent, which may lower visibility during the night for pedestrians. During observations, driving speeds were over the posted speed limit of 25 mph, with drivers instead traveling at up to 35 or 40 mph. This discrepancy may be because of on-street parking, sidewalks, and residences, which act to slow traffic. Regardless, speed is still an issue and should be lowered, especially since there are no crosswalks to the park or two bus stops on this street. The bus stop near Winburn intersection has shelter and seating, with the shelter being in bad condition with some missing panels. The other bus stop at Chambers Street only has a small bench for seating and no shelter.

Connectivity

The park is easily accessible to the residents of Carroll Street by walking but is still somewhat dangerous due to the lack of pedestrian infrastructure and high traffic speeds. People were observed dropping off children in the playground on Collat Avenue, but no such activity was seen on Carroll Street, even with the sidewalks, and in general more aware of pedestrians. There are two CAT (Chatham Area Transit) bus stops on Carroll Street, one near Winburn Street intersection and the playground area, and another after Chambers St between the baseball field and the tennis court. Both bus stops service Bus 29, traveling Cloverdale Via Dasmas or Amtrak. The bus enters Carroll Street from West Gwinnett Street and takes Winburn Street to Crosby Street to be back on West Gwinnett Street. The Tide to Town connection is 0.6 miles east of West Gwinnett Street which connects to Stiles Avenue and takes about 5 minutes on a bike.



Images. The bus stop on the north side of the park near the baseball field, which does not have any shade or shelter (left). The bus stop on the south end of the park near Winburn Street (right). The shelter is missing a roof and wall panels, and also lacks any form of wayfinding signage or schedule information. Photo taken by EC, 2022.

Equity

Carroll street has sidewalks and cutouts for getting onto the sidewalk, but the cutouts are not maintained or graded to make it easier for people with disabilities to enter the sidewalk, especially for the sidewalk outside residences which was discontinued for reasons explained above which leads to a disconnected pedestrian network. Out of the two bus stops, only one has shelter which is missing part of the roof and wall. The lack of a proper shelter with seating may prevent certain members of the population from traveling via bus.

Park Recommendations *Complete Streets and CPTED*

Blackshear Park Recommendations

Complete Streets Recommendations

Figure 40: Map of street cross-section locations around Blackshear Park. Map created by Google, 2022.

1. Aberdeen Street





Image: Existing conditions on Aberdeen St facing north-west. Photo taken by Google, 2022.

Proposed

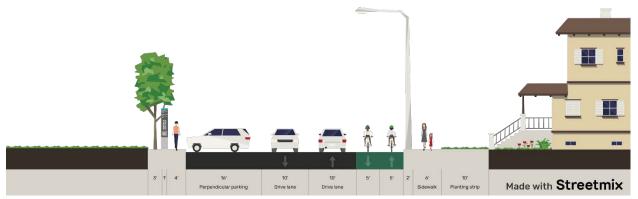


Image: This is a proposed street cross-section of Aberdeen Street, viewed from the north-west. The plan includes a 10-foot driving lane to slow down vehicular traffic, as well as a two-way bike lane to promote safety for cyclists and pedestrians. Additionally, wayfinding signage will be placed on the left side of the street to help people navigate around the park. This signage will also serve as an art display, cultural center, and information booth. Diagram created in Streetmix by EC, 2023.

2. Wheaton Street



Image: Existing conditions on Wheaton St facing north. Photo taken by Google, 2022



Figure 39: Street cross-section of Wheaton Street looking north from Spencer Elementary School, located 500m south of Blackshear Park. The proposed street has two driving lanes and bike lanes on both sides. In addition, adding the bike-share

Proposed

station near the school helps promote the biking environment and repainting the marking and a crosswalk with proper street signage. Diagram created in Streetmix by EC, 2023.

Common Recommendations

1. Improve Park Safety and Maintenance

• **Install proper lighting which creates more visibility and natural surveillance**: During our visit to the park, the team noticed insufficient lighting, which made the park unwelcoming, particularly at night. To address this, implementing a consistent schedule for park lighting (with a sign) and extending the hours to promote safety for park users and encourage evening activities. We also suggest installing additional lighting or repairs near the covered picnic area and playground.



Source: Project for Public Spaces (Academy of Music Bus Stop, Northampton, MA)

- Waste Management: In certain sections of the Blackshear Park, there is an issue with trash spillover because there are lack waste bins in and around the park. To address this issue, it would be helpful to install wastebins throughout the park, particularly near the entrances of the covered picnic area and basketball complex. This would encourage park users to dispose of their trash in the receptacles and take care of the grounds.
- Improve the landscaping: Enhanced landscaping and upkeep would invite passersby to use the park by highlighting main amenities. During the site visit, several people were observed walking on the sidewalk right next to the park. However, the park is not immediately obvious from the street. For example, the entrance to the basketball courts was concealed by overgrown vegetation. This could be improved with landscaping and

a refreshed destination sign to highlight the main amenities and make the park more vibrant and welcoming to the community.

• **Install wayfinding signages:** Currently Blackshear Park has insufficient signage within the park. There are no clear signs to help users navigate and learn about the park's operating hours. To solve this problem, installing signs that display operating hours, regular programs, and contact information would greatly improve the usability of the basketball court amenities. A well-designed park signage system serves several functions: it offers clear information and directions for visitors to navigate the park, promotes educational opportunities, maintains the park's image, and communicates its rules (*Project for Public Spaces*). Signage can be customized to fulfill specific requirements and target specific areas, while still maintaining consistency throughout the park. Furthermore, incorporating the history of a particular site into the design can enhance the sense of place. (*CPTED Principles - Territorial Reinforcement and Natural Access Control*)



Images: A sign listing park rules in the City of Atlanta (<u>left</u>), and a branded route wayfinding sign in New York City (<u>right</u>). Retrieved by EC, 2023.

2. Improve Road Safety

• **Upgrading and revamping existing sidewalk infrastructure:** To create inclusive streets and parks that cater to everyone, regardless of their abilities. To achieve this, we need to design infrastructure that meets the needs of all users. In some cases, we may need to upgrade sidewalks by improving ADA curb ramps, adding tactile markers, and ensuring better alignment. These upgrades will make it easier for users to access on and off streets

and sidewalks and are an essential tool for all pedestrians, particularly the aging population and people with ambulatory and vision disabilities. *(Complete Streets Principles - Safety, Connectivity, and Equity)*



Image: Pedestrian Ramp at 2nd Avenue, Manhattan, New York, <u>NYC DOT Street Design Manual</u>. Retrieved by EC, 2023.

• **Crosswalk visibility enhancements:** Some of the street intersections have faded crosswalks, so for better navigation and slowing down the vehicles, street crosswalks need to be repainted with high visibility crosswalk at the corners of Dundee St & Wheaton St and Aberdeen St and Wheaton St. and adding proper pedestrian signals by lengthening the crosswalk signal time and adding sound for the hearing impaired at the crosswalk signal at Wheaton St & Waters Ave. *(Complete Streets Principle - Safety; CPTED principle - Natural Access Control)*

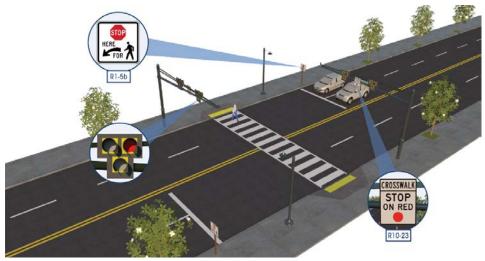


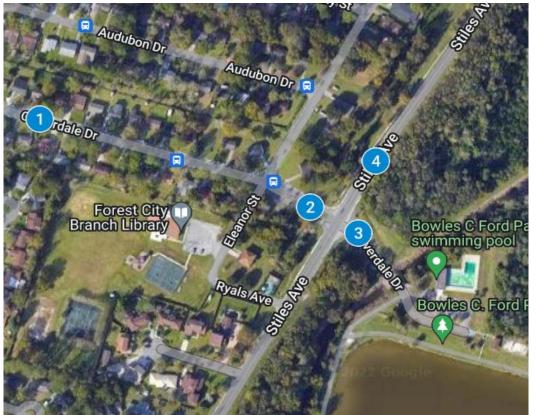
Image: Pedestrian Hybrid Beacons (PHBs) can warn and control traffic at unsignalized locations and assist pedestrians in crossing a street at a marked crosswalk. <u>USDOT Federal Highway Administration PEDSAFE Guide</u>. Retrieved by EC, 2023.

• **Improving the bike lanes (colored pavement):** There is a bike lane on Wheaton St located south of Blackshear Park. However, to improve safety measures, it is necessary to repaint the bike lane to differentiate it from a track that prohibits motorized traffic from encroaching. *(Complete Streets Principle - Safety; CPTED principle - Natural Access Control)*



Image: NACTO: Urban Bikeway Design Guide (Image from Philadelphia: Durable Liquid Pavement Markings). Retreived by EC, 2023.

Bowles C. Ford Park Recommendations



Complete Streets Recommendations

Figure 41: Map of street cross-section locations around Bowles C. Ford Park. Map created by Google, 2022.

1. Cloverdale Drive between Eleanor Street and Cynthia Street

Existing



Image. Existing conditions on Cloverdale Drive between Eleanor Street and Cynthia Street, facing west. Photo taken by Google 2022.

Proposed

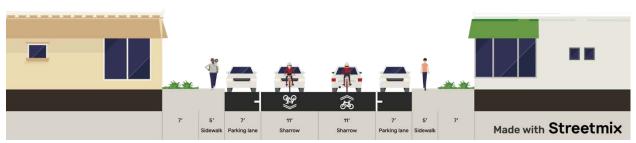


Figure 42. Traffic volumes are low on Cloverdale Drive, meaning that with proper signage and enforcement, the street can become a sharrow: a shared space for bikes and cars. Sidewalks will be continuous along both sides of the street. Diagram created in Streetmix by EC, 2022.

2. Cloverdale Drive between Eleanor Street and Stiles Avenue



Image. Existing conditions on Cloverdale Drive between Eleanor Street and Stiles Avenue, facing east. Photo taken by Google, 2022.

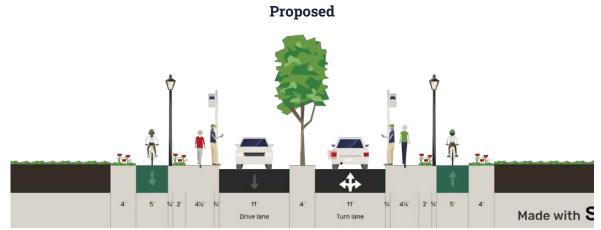


Figure 43. Sidewalks will be placed on both sides of the street. As vehicles approach the intersection with Cloverdale Drive, bikes would be separated to be more visible to drivers. Bikes and pedestrians should have the walk/bike signal a few seconds before drivers have a green light for maximum visibility. Diagram created in Streetmix by EC, 2022.

3. Cloverdale Drive within Bowles C. Ford Park

Existing



Image. Existing conditions on Cloverdale Drive looking into Bowles C. Ford Park, facing east. Photo taken by Google, 2022.

Proposed

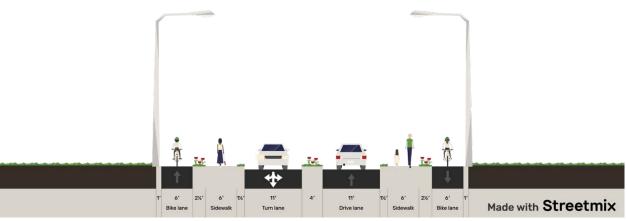


Figure 44. Sidewalks and bike lanes are on both sides of the street. A stop sign will be required within the park where Cloverdale Drive and the new bike lanes intersect with Tide-to-Town. Bike boxes can be used so that bikers can move in front of stopped cars to indicate that they will be turning, which is ideal for making bikers visible to drivers. Diagram created in Streetmix by EC, 2022.

4. Stiles Avenue Intersection with Cloverdale Drive

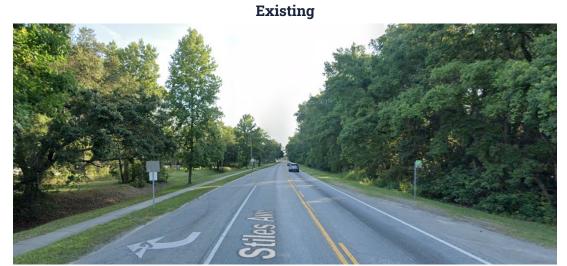


Image. Existing conditions on Stiles Avenue at the intersection with Cloverdale Drive, facing north. Photo taken by Google, 2022.

Proposed

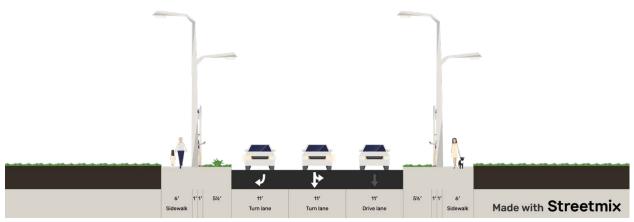


Figure 45. A sidewalk runs on both sides of the street. Improved lighting, street furniture, and art installations will make the sidewalk more inviting for pedestrians. Bikers can use the Tide-to-Town trail within Bowles C. Ford Park to easily get to other neighborhoods. Pedestrians should get a prioritized walk signal at the intersection to maximize visibility. Diagram created in Streetmix by EC, 2022.

Common Recommendations

1. Build a Unique Park Identity

Bowles should be viewed as an asset to not just the Cloverdale neighborhood but surrounding ones as well. Bowles should be considered on the same level as Daffin Park, Forsyth Park, or

Lake Meyer Park, all of which are large parks that serve all of the City's residents. *(CPTED Principles - Image Maintenance and Social & Cultural Dynamics)*

- **Build Activities for All Age Groups** To build an identity that would appeal to many people from across Savannah, Bowles C. Ford Park needs to offer more amenities and programs. *(Complete Streets Principle of Equity; CPTED Principles Supporting Legitimate Activities and Social & Cultural Dynamics)*
 - We recommend building more places for people to relax with benches. For example, a gazebo built on the opposite side of the pond could offer protection from the sun while families stop to have a picnic.
 - **Piers** extending above the lake would offer people a better view of wildlife in the park.
 - **Artwork** placed along the path would also make people stop and think and encourage users to come from farther away.
 - **Programming** could showcase art installations, host athletic competitions such as running events like 5Ks, and wildlife viewing.
 - Place **boardwalk** paths above the wetlands for runners and people looking for longer paths to walk around. Signage could be placed here to help educate the public about the wetland ecology in the park.
 - Building a **small amphitheater** facing the lake near the park entrance would offer the potential for programs like theater performances, weddings, outdoor community gatherings, evening music performances, and prayer space.
 - There also needs to be **expanded shelter space for group gatherings** close to the parking lot. Although the present shelter isn't fully utilized, we expect that as more people come to Bowles C. Ford Park it will quickly become insufficient for groups that want to celebrate birthdays, school events, and the like.
 - The swimming pool offers an excellent opportunity for residents to cool down in the summer, although it is not useful for younger children or those who aren't able to swim. Adding a **splash pad area** near the pool will help young children cool off and prepare them to excel in the swimming pool when they are ready.
- Plan activities in the park to capture the Enmarket Arena footfall The Enmarket Arena has recently been constructed within a mile of Bowles C. Ford Park, so activities could be planned within the park at the amphitheater or shelters before people migrate to the Arena. Shuttle buses could even run between the two for large events. (*Complete Streets Principles Safety and Connectivity*)
- **Build Collaboration Opportunities with Local Organizations** In order to accomplish the planning required for creating more programming at the park, we recommend that the city partner with the Cloverdale Community Center, Enmarket Arena, and other local organizations ensure that the park serves both neighborhood residents and potential users from across the city. *(Complete Streets Principle Equity; CPTED Principle Social & Cultural Dynamics)*



Image. Boardwalk pathway to access the student center at the University of Central Florida.



Image. Small amphitheater for crowds to view both performances and the lake. Hodag Park, Rhinelander, WI.



Image. Adding a splash pad area near the pool will make it safer for young children who aren't ready to swim yet. East Roswell Park, Roswell, GA.

• **Improve the Landscaping** - The **landscaping** of the park should be improved to create a more inviting environment for the community. Creating a visually appealing entrance with more vibrant flowers, cleaner mulch, and a pedestrian pathway into the park from the outside will incentivize additional park usage. The grass surrounding the roadway is also in poor condition. It should therefore be maintained on a more frequent schedule. An unmanicured park will not appeal to potential park users and will lead to continued underutilization.

2. Improve Park Safety

- Install Lighting in the Park One of the reasons Bowles C. Ford Park is under-utilized is because of the safety concerns local residents have when using the park. The park when visited at night is particularly unsafe due to the absence of lighting in the area. One of the most significant improvements that can be made to Bowles C. Ford Park is the addition of lighting around the perimeter of the park's **paved trail route**. After dusk, the park has insufficient lighting, and it is recommended that adequate lamppost lighting be present for the entirety of the park's route. (*Complete Streets Principle Safety; CPTED Principle Natural Surveillance*)
 - There are currently encampments set up within the park between Stiles Avenue and the Springfield Canal. This may prohibit some users from wanting to go into the park for fear that there may be a crime-related issue. The addition of lights here will assist with increased surveillance and/or patrolling this area and remaking it into a public space. (*CPTED Principles - Natural Surveillance, Territorial Reinforcement, and Image Maintenance*)

- Lighting posts should be spaced at approximately 100 ft intervals to increase natural surveillance on the trail around the pond to stay consistent with similar parks. The current lighting is pole-mounted, but this is unattractive at the human scale and can produce glare. Improved lighting posts at a lower height will induce more traffic within the park, especially later in the day when potential users might return home from work and bring their families to visit the park.
- **Provide Alligator Safety Measures** The Bowles Lake is home to alligators that were spotted several times during site visits. During these visits, the park users stated that one of their major concerns was the alligators in the lake. To mitigate this concern, providing a spatial buffer between the lake and the trail along with signage that warns about any dangerous wildlife and how people should act around wildlife should be considered. These buffers and signs can reduce potential incidents and induce a safer environment for parents and families. (*CPTED Principle Supporting Legitimate Activities*)



Image. Low-level lighting helps us see people and animals more easily while avoiding glare and unnecessary light pollution in wildlife areas.

3. Establish Wayfinding

- Celebrate Park Entrance The entrance of Bowles C. Ford Park should be celebrated as a welcoming spot for residents to relax, exercise, and recompose themselves from the rest of the city. Many people who drive by Bowles C. Ford Park may be underwhelmed with what they are seeing on approach to the park. In our visits to Bowles C. Ford Park, the landscaping and care of the park didn't show any unique attributes of the park or community. The current state of Bowles C. Ford Park lacks a true identity. (*CPTED Principles Territorial Reinforcement and Image Maintenance*)
- **Improve the Park Signages-** Upon entering Bowles C. Ford Park from outside the park, there is unsatisfactory signage that does not welcome potential users into the parking area, nor is it visible to pedestrians or drivers approaching the park. Without signage, Bowles C. Ford

Park fails to create an identity for potential users. Bowles C. Ford Park should invest in **pursuing signage** on the interior and exterior of the park to create an identity that many of the park users can associate the park with. On the front entrance of the park, it is recommended that Bowles C. Ford Park place a large sign closer to the intersection that is appropriate for the area it serves with contrasting colors to be both visually appealing for both pedestrians and cars driving by. With this being accomplished, it is expected that members of the community will use Bowles C. Ford Park. *(CPTED Principles - Territorial Reinforcement and Natural Access Control)*

4. Provide Educational Opportunities

- Install Historic Plaques- In its interior, Bowles C. Ford Park should have various plaques, stands, and small signage that denotes the history and wildlife of the area. Adding signage and plaques that display the history of the park or community will allow residents to explore and better connect with the community that they reside in. *(CPTED Principles Social & Cultural Dynamics and Natural Access Control)*
- Install Wildlife Information Plaques- Because the Bowles C. Ford Park is a host to a lot of wildlife in the area, the park should at different locations, like the entrance, the activity areas and around the lake should have wildlife and safety related information posted about the alligator, birds and other wildlife which can be spotted in the area. (CPTED Principles Social & Cultural Dynamics and Image Maintenance)



Images: Implementing interpretive trail signs throughout the park can make a visit to Bowles C. Ford Park more interesting for all ages. Photo taken by Pulse Design for a Texas park (left) and Sky Hill Park in Fairfield County, Ohio's Park Signage (right).

5. Strengthen Neighborhood Connections

• Introduce a Community Garden - The area surrounding the park is a food desert, so Bowles should take an active role in ensuring that community members have access to healthy and affordable food near them. To this end, we recommend that the Cloverdale Neighborhood Community Center pilot a community garden initiative near the park entrance. *(Complete*)

Streets Principle - Equity; CPTED Principles - Supporting Legitimate Activities and Social & Cultural Dynamics)

- The park can host a weekly farmers market to bring local produce closer to neighborhood residents.
- Bring in food trucks from Savannah area vendors.
- There can be separate regional food festival events to bring in food trucks and vendors from a larger area.
- **Partner with Community Institutions** Partner with community institutions for the park to act as an outdoor extension of their programming. *(Complete Streets Principle Equity; CPTED Principles Supporting Legitimate Activities and Social & Cultural Dynamics)*
 - The Forest Branch Library is only a block away from the entrance to Bowles C. Ford Park and will be an instrumental partner to encourage more programming at the park. The library can sponsor outdoor events like a hammock and read, learn to identify wildlife, or rent equipment and games for people to learn and play in the park.
 - Similar connections between the park and the Cloverdale Community Center and the two schools in the community, Butler Elementary, and Coastal Georgia Academy, means that the park could be used for physical education classes, school retreats, and learn-to-bike events.
- Install Fitness Trails with Exercise Stations Given that predominantly black communities are more likely to suffer from heart conditions, this park is a vital space for community residents to regularly exercise outdoors. Therefore, the park needs to offer equipment for people of all ages to want to come to the park and exercise. One popular offering is to implement a designated fitness trail with exercise stations spaced out across a 1–2-mile trail. For example, Lake Meyer Park currently offers a 1.5-mile rubberized track with an 18-station fitness course. *(Complete Streets Principle Equity; CPTED Principles Supporting Legitimate Activities and Social & Cultural Dynamics)*
- Improve Pedestrian Crossings An improved pedestrian crossing with better infrastructure to cross Stiles Avenue is key to ensuring that Cloverdale residents can safely get to the park. We imagine that this crossing will feature elements of tactile urbanism to improve the visibility of pedestrians. *(Complete Streets Principles Connectivity, Safety, and Equity)*
 - This might include using blacktop art, using poles and markers to decrease the turning radius so that turning cars must proceed slower when passing the crosswalk and watch more carefully, and using a mix of vibrant colors to denote that the park is a space for people and that children are likely to be present.
 - Similar colors and tactical urbanism tactics can be used throughout the neighborhood, especially along paths that connect the park, library, and schools.



Image: The farmers market at Forsyth Park is a popular Saturday event. Bowles C. Ford Park could host one on another day of the week for residents living on Savannah's west side. Photo taken by visitsavannah.org.



Image. Family Fitness Trail at Spanish Lake Park, Saint Louis County, MO. Photo taken by St. Louis Magazine.

6. Improve Multimodal Connections

• Install Bike Paths - Currently there are no designated bike paths along Cloverdale Drive or Stiles Avenue to help cyclists get to the park, even though we observed people biking both in the Cloverdale neighborhood and inside Bowles C. Ford Park. Creating bike lanes within the community leading into the park will allow many individuals to access the park without needing to drive and it will become more inviting for families who want to take advantage of the amenities and future events inside. Connecting bike lanes through the neighborhood and merging into the Tide to Town pathway will be ideal as the pathway will also provide connections to nearby neighborhoods. That intersection within the park could then serve as a convenient rest stop for bikers to pause and view the scenery, or to repair their bikes. This means that bike racks and a bike repair station should be installed near the planned Tide to

Town trail intersection. (Complete Streets Principles - Safety and Connectivity; CPTED Principles - Image Maintenance and Natural Access Control)

- Improved Bus Shelter The bus stop closest to Bowles C. Ford Park along Stiles Avenue needs to have a proper shelter and sidewalk to access it to make it equitable for all users. A shelter is of particular importance given that this side of the street bordering Bowles C. Ford Park is warmer during midday due to a lack of shade, so it has the potential to improve the safety and comfort of transit users. (Complete Streets Principles Safety, Connectivity, Equity, and Climate)
- Enhanced Parking Spaces Given that many people will still be arriving at the park by car, especially if they reside outside of the Cloverdale neighborhood, we recommend adding additional parking options. The existing parking lot should be repaved and expanded to increase capacity, which will allow the park to host more festivals and cultural activities like food trucks and a farmers' market on the lot. Sidewalks should be built along the entire lot to ensure connectivity between the parking area and park amenities. Lane widths should be narrow, and speed bumps should be placed to ensure that cars travel at speeds no greater than 5-10 miles per hour within the park. *(Complete Streets Principle Safety; CPTED Principle Supporting Legitimate Activities)*



Image. The Tide to Town connection at Bowles C. Ford Park needs to help all transit users safely intersect with each other. It is an ideal location to place park signage, a bike repair station, landscaping, and art installations. An example is a bike roundabout in Fitchburg, WI. Photo taken by Samantha Haas

Cann Park Recommendations

Complete Streets Recommendations

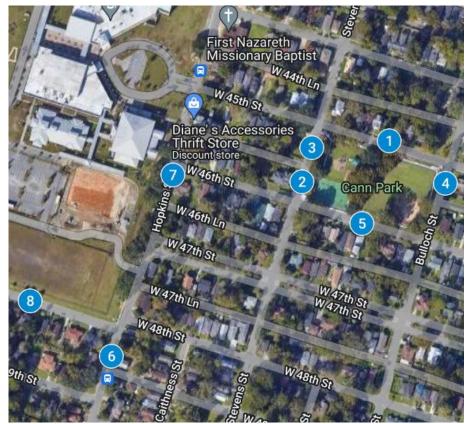


Figure 46: Map of street cross-section locations around Cann Park. Map created by Google, 2022.

1. West 45th Street

Existing



Image. Existing conditions at West 45th Street facing east toward Bulloch Street. Photo taken by Google, 2022

Proposed

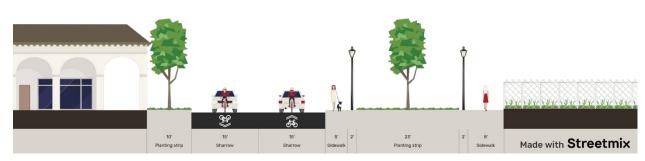


Figure 47. Proposed cross-section of West 45th Street looking east. This new design includes a shared bike lane with the driveway. Bike sharrows will be added to the road. It also suggests restricting on-street parking; the drive lanes will become wider. Diagram created in Streetmix by EC, 2022.



2. Stevens Street Near the Basketball Court

Image. Existing conditions at Stevens Street facing north towards West 45th Street. Photo taken by Google, 2022



Proposed

Figure 48. Proposed cross-section of Stevens Street looking north, by the basketball court. This new design adds a sidewalk along the driveway. It includes a shared bike lane with a driveway. Bike sharrows will be added to the road. It also suggests restricting on-street parking; the drive lanes will become wider. It proposes to add street light infrastructure along the sidewalk. Diagram created in Streetmix by EC, 2022.

3. Stevens Street Near the Playground

Existing



Image. Existing conditions at Stevens Street facing north towards West 45th Street. Photo taken by Google, 2022.



Figure 49. Proposed cross-section of Stevens Street looking North, near the playground. The new design proposes a sidewalk along the driveway. It includes a shared bike lane with a driveway. Bike sharrows will be added to the road. It also suggests restricting on-street parking; the drive lanes will become wider. It proposes to add street light infrastructure along the sidewalk. Diagram created in Streetmix by EC, 2022.



Image. Existing conditions at Bulloch Street facing north towards West 45th Street. Photo taken by Google, 2022

4. Bulloch Street



Figure 50. Proposed cross-section of Bulloch Street looking north. It includes a shared bike lane with a driveway. Bike sharrows will be added to the road. It also suggests restricting on-street parking; the drive lanes will become wider. It proposes to add street light infrastructure along the housing units. Diagram created in Streetmix by EC, 2022.

5. West 46th Street

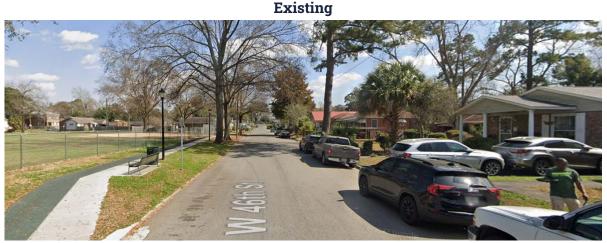


Image. Existing conditions at West 46th Street facing east towards Bulloch Street. Photo taken by Google, 2022



Figure 51. Proposed cross-section of West 46th Street looking east. This new design includes a shared bike lane. Bike sharrows will be added to the road. It also suggests restricting on-street parking; the drive lanes will become wider. The width of the furniture zone will be decreased so sidewalks can become wider. Diagram created in Streetmix by EC, 2022.

172

6. Hopkins Street



Image. Existing conditions at Hopkins Street facing north towards West 48th Street, south of the high school. Photo taken by Google, 2022



Figure 52. The proposed cross-section of Hopkins Street, facing north; the main roadway leading to the Tide to Town Trail

on 48th Street. The new design includes a furniture zone, streetlights along the housing units (to the right), and a shared bike lane next to the driveway. Diagram created in Streetmix by EC, 2022.

7. Hopkins Street by Alfred E. Beach High School

Existing



Image. Existing conditions at Hopkins Street facing north towards West 46th Street next to the high school. Photo taken by Google, 2022

Proposed

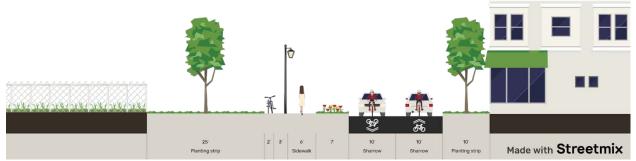


Figure 53. Proposed cross-section of Hopkins Street facing north by the high school. The main roadway leads to the Tide to Town on West 48th Street. The proposed design includes a bike lane along the high school plot. Installing streetlights along the bike lanes. Shared bike lane with driveway. Diagram created in Streetmix by EC, 2022.

8. West 48th Street

Existing



Image. Existing conditions at West 48th St facing east towards Hopkins Street. Photo taken by Google, 2022

Proposed

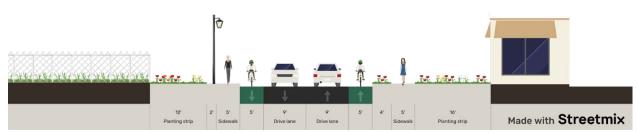


Figure 54. Proposed cross-section of West 48th Street facing east, a residential street that leads to the Tide to Town entrance. The new design proposes two bike lanes on both sides of the street. Adding sidewalks on both sides of the street. More streetlights will be installed along the housing units. Diagram created in Streetmix by EC, 2022.

Common Recommendations

1. Improve Multimodal Connections

Improving connectivity around the park and establishing green linkages has been shown to deliver significant environmental, economic, and social benefits to urban areas (Zareba et al, 2019). Cann Park is a small neighborhood park cut off from Savannah's Park connections. Hence, identifying ways to establish that connection should be prioritized. Some of the ways to improve the park's connectivity are below.

• **Provide a Dedicated Bike Facility to Connect the Park to Tide to Town Route** - The Tide to Town program aims to connect three-quarters of Savannah's neighborhoods to safe,

affordable, and cost-effective walking and biking infrastructure (City of Savannah, 2022). The proposed Tide to Town route passes along the canal behind the Alfred E. Beach High School, barely 1000 ft. away from the Cann park premises. A dedicated biking facility across West 48th Street and Hopkins Street could help connect the park with the Tide to Town route. This could be very effective in connecting Cann Park to other parks in the city through a walking and biking infrastructure.



Images. Entrance to proposed Tide to Town network at West 48th Street behind Alfred. E. Beach High School (left); Proposed dedicated bike facilities route connecting the park with the future Tide to Town network (right). Photo taken by EC, 2022

- Install Bus Shelter The bus stop served by CAT route 12 lies on the corner of Hopkins and West 45th Street. However, it is only marked by small signage and does not have any shelter or seating for transit users to wait comfortably. Installing a shelter with seating facilities will make the facility more visible which in turn will increase transit ridership. Providing a transit shelter is also important for a tropical city such as Savannah those experiences over 100 days of rainfall in a year on average (WeathersPark, 2022). *(Complete Streets Principle Connectivity)*
- **Provide a Complete Network of Sidewalks** Cann Park is surrounded by a sidewalk and a running track. However, the path is separated from the street by a significant green buffer that makes it feel more part of the park than the adjacent streets. Installing sidewalks on the roads surrounding the park and the streets that connect it to some major roads and surrounding destinations like the school, the Tide to Town connection area, and the bus stop can help improve connectivity for pedestrians in the neighborhood, especially the more vulnerable populations like children, elderly, and disabled residents. (Complete Streets Principles Connectivity, Equity)
- Make Roads Sharrow Friendly Vehicle volume and speed in the streets adjacent to the park are low and hence a dedicated bike facility in them seems unnecessary. However, sharrow markings around intersections and some strategic locations can reinforce the idea of shared streets for a driver, make a cyclist more confident in using the street, as well as help in

controlling the speed of a vehicle. *(Complete streets principles - Connectivity, Equity; CPTED principle - Territorial Reinforcement)*



Images. A bus shelter at Kennedy Park in Savannah provides transit riders a waiting space (left); sharrow markings on a neighborhood street in Portland (right). Photos taken by EC, 2022 (left) and Bike Portland (right).

2. Improve Park Safety

Creating and maintaining safe spaces around the park is paramount to enhancing community wellness. Cann Park has a feel of a small neighborhood park that is largely sheltered and comfortable for its users. However, there are some areas of concern that need to be intervened.

- **Populate Abandoned Homes** Vacant homes result in diminished natural surveillance since it translates to fewer eyes on the park. It can also lead to a negative perception of the park since vacant homes mostly tend to be not maintained. Coming up with a solution to this can begin by first trying to understand the reasons for the specific vacancies. This might call for a survey of the homeowners, as well as a mortgage analysis that can reveal any trend of home abandonment that might be present in the neighborhood. *(CPTED principle- Natural Surveillance, Geographical Juxtaposition)*
- **Replace broken lights** Pedestrian scale lights help provide visibility to the park after daylight hours and in turn improve safety in the area. They also help in reducing the glare that is caused by overhead lights and help balance the required park visibility as opposed to the privacy needs of the homes surrounding them. While Cann Park had pedestrian scale lighting, our team observed some broken lights during our visit, especially on the corner of West 46th Street and Bulloch Street. Replacing them will help negate any dark areas that can play host to illegitimate activities. (Complete Streets Principle Safety; CPTED Principle Natural Surveillance)

3. Improve Road Safety

• Install Crosswalks Around the Park and on Hopkins Street at West 45th and West 46th Street Intersections - Crosswalk stripes not only provide pedestrians a safe area to cross the street but also psychologically make drivers slow down while approaching them. While the streets around Cann park do not typically receive high-speed vehicle traffic, adding crosswalks can only be beneficial since it emphasizes **slow-down** inputs to the **approaching driver**. Crosswalks can also help accentuate the corners of the park as their main entrances help in controlling the access to the park premises.

Unlike the streets surrounding Cann Park, our team witnessed several speeding instances on Hopkins Street. Hopkins Street is a collector street (City of Savannah, n.d.) that separates the Cann Park neighborhood from the high school as well as the proposed Tide-to-Town connection through the canal behind it. It is served by route 12 of Chatham Area Transit (CAT). While the posted speed limit on the road is 25 miles per hour, our team notes multiple vehicles speeding instances there. It is thus recommended that crosswalks be painted over at intersections on the street and pedestrian beacons are installed to provide more visibility to pedestrians crossing the road. This recommendation also goes in hand with the Georgia Department of Transportation's Safe Routes to School program which encourages safer walking and biking environments near schools in the state (GA DOT, 2022). *(Complete Streets Principle - Safety; CPTED principle - Natural Access Control)*



Images. Temporary curb extensions in Jersey City help in enhancing pedestrian safety. It also provides an opportunity to create a unique park identity by means of cost-efficient tactical urbanism solutions. Photos taken by Streetplans.

4. Build the Park Identity

Creating a unique identity around Cann Park will make it more appealing to the users while influencing social cohesion among its neighborhood residents. Some methods to render an identity to the park are listed below:

- Improve the Urban Design of the Park through Tactical Urbanism Tactical urbanism is a low-cost approach to implementing temporary design solutions to urban spaces. It provides a great way to experiment with some design ideas before permanently implementing them. Cann Park can significantly benefit from implementing tactical urbanism to add curb extensions and artwork on the streets. This can help in informally creating a road diet for the streets adjacent to it while building the identity of the park. Tactical urbanism also provides scope for reflecting the values, culture, and cultural diversity of the local population as well as improves social cohesion by providing a fun event for the community residents. *(Complete Streets Principles Safety, Equity; CPTED Principles Territorial Reinforcement, Image Maintenance & Management, Social & Cultural Dynamics)*
- Install Wayfinding Signages Wayfinding signages not only help to create a sense of space and build awareness of the surroundings, but it also provides a brand identity and helps build a sense of ownership of the place. Installing wayfinding signages can guide users to the nearby destinations within the neighborhood and can also encourage people to walk by indicating the walkshed of the area. Within the park, it is an effective tool to improve park safety as it allows people to be vigilant of their surroundings in case they need to find an escape or entry in cases of emergency. (Complete Streets Principle - Connectivity; CPTED Principles - Territorial Reinforcement, Image Maintenance)



Images. The town of Queen Creek, Arizona has installed wayfinding signs to recapture lost downtown crowds (left); the Bristol Legible City project has incorporated maps in the city's wayfinding boards (right). Photos taken by National Sign Plazas

Wayfinding signage at and near Cann Park should include the following information:

- direction a person is looking at to help geographically orient them
- a map of all the activity areas inside the park
- some of the surrounding places to visit in the region
- a description of access points like the Tide to Town connection map or the bus stop on Hopkins Street

5. Strengthen Neighborhood Connections

Programming spaces provide meaningful reasons for people to visit and stay in the park. A well-programmed park caters to the needs of people of all ages. Programming the park also solidifies its place as a congressional space for the neighborhood it resides in. Cann Park has several programs like the running track, basketball court, kids swing, and gazebo which are intended to bring people to these parks. However, they are mostly focused on younger residents of the neighborhood and hence most of its users are kids and teenagers.

• Include More Adult-focused Programming - Adult-focused programming like outdoor gyms and community gardens provide reasons for the increased footfall of the older population in the neighborhood. This helps in creating community cohesion, as well as, enhancing the natural surveillance in the park. *(CPTED Principle - Legitimate Activity Support, Natural Surveillance)*



Image. Neighborhood Park gyms provide a community engagement environment while giving free access to exercise equipment. Photos taken by Playcore.

- **Revive Neighborhood Organizations** Neighborhood organizations provide meaningful channels for augmenting the voice of a community on specific community-level issues. In turn, they boost community *(Complete Streets Principle Equity; CPTED Principle Social & Cultural Dynamics, Image Maintenance & Management)*
- Install a Water Fountain and Portable Toilet The LBS should consider installing a water fountain and portable toilets within the park premises. These are essential facilities that can help visitors of all ages, especially older adults, and help them feel comfortable coming and staying in the park for longer periods of time. *(Complete Streets Principle Equity; CPTED Principle Legitimate Activity Support)*



Images. Drinking water fountains and portable toilets are essential park facilities. Photos taken by Needpix (left) and Superior Portable Toilets (right).

6. Improve Climate Resiliency

Considering the weather management and maintenance of the park, resources need to be employed to negate the impact of climate change. The presence of urban parks helps in reducing carbon pollution, heat waves, and droughts by cooling urban heat islands and by minimizing the chances of flooding. In Cann Park's case, it lacks some weather and climate change management strategies.

- Increase Sources of Shade Cann Park has uneven shade cover with some portions in its northeast missing tree cover. This increases the heat in the region and adds to the discomfort of the people walking there. It also reduces the areas where benches can be placed for people to sit, rest, and enjoy the park. Increasing tree cover or creating shaded structures like gazebos in the part of the park will help in mitigating this effect. *(Complete Streets Principle Climate, CPTED Principle Legitimate Activity Support)*
- **Manage Drainage Systems** The park is not routinely maintained. During our visit, we witnessed the corner along West 45th Street and Stevens Street had an accumulation of debris on its gutter, which can lead to water clogging and mudding during the rainy season. It also blocked the curb cut on that side which is then a barrier for people in wheelchairs or with strollers to enter the park premises from the corner. Routine clearance of litter will make the park more inviting and reduce the chances of drain blockages. *(Complete Streets Principle Climate, Equity; CPTED Principle Image Maintenance & Management)*

Feiler Park

Complete Streets Recommendations

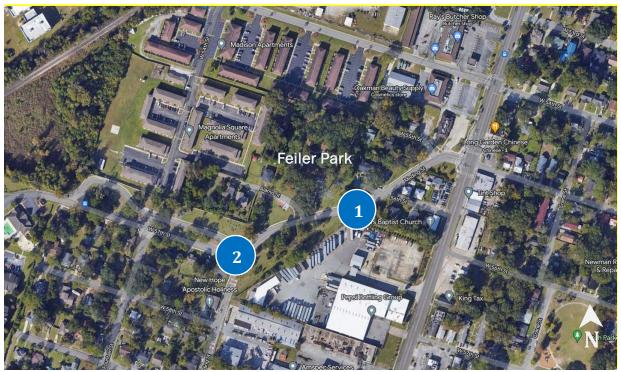


Figure 55: Map of street cross-section locations around Feiler Park. Map created by Google, 2022.

1. Meding Street

Existing



Image: Existing conditions on Meding St facing west. Photo taken by Google, 2022.

Proposed

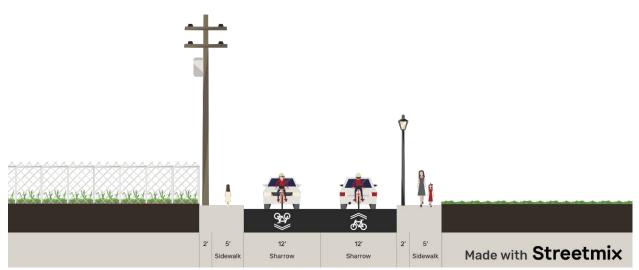


Image ##: This is a street cross-section view of Meding Street facing West. On the right side is a park, while the fenced-in property of the Pepsi bottling group is on the left. The proposed street will have two driving lanes with shared biking spaces on both sides, marked by sharrows. Additionally, a sidewalk will be added on the left side of the street by carving out space from the driving lane and utility area. Diagram created in Streetmix by EC, 2023.

2. West 57th Street



Image: Street cross-section of W 57th St facing west. Photo taken by Google, 2022

Proposed

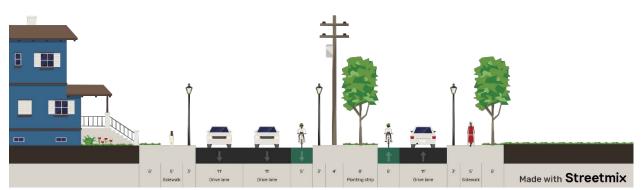


Figure 56. The street cross-section of W 57th St and the park is 100m from the street. This street has a wide median with a planting strip, one driving lane on the right, and two driving lanes on the left. To reduce the vehicular speed by slightly decreasing the drive lane width. And the reduced center median space accommodates bike spaces on both sides. Adding landscaping on the right to enhance the walking environment. Diagram created in Streetmix by EC, 2023.

3. Alamo St



Image: Street cross-section of Alamo St facing West. Photo taken by Google, 2022

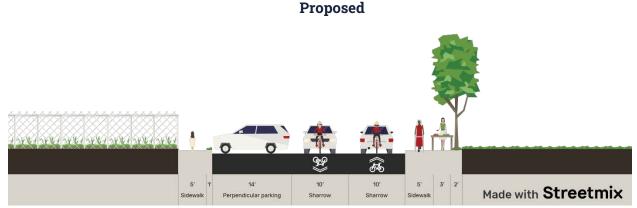


Figure 57. Street cross-section of Alamo Street looking west. On the right side of the street is a park, with two lanes for driving and a small parking area. The proposed street design includes a shared bike lane, marked with sharrows, on the driving lane.

Additionally, a proper sidewalk will be added along the park side to provide space for farmers markets and pop-up events, which will make the environment around the park more vibrant. Diagram created in Streetmix by EC, 2023.

Common Recommendations

1. Improve Road Safety

- **Upgrading existing sidewalk infrastructure**: The curb ramps at Meding St are not in compliance with ADA standards and even if they do exist, they are in poor condition. In order to make streets and parks accessible to everyone, regardless of their abilities, it's important to design infrastructure that meets the needs of all users. To achieve this goal, it may be necessary to upgrade sidewalks on Meding St by improving the ADA curb ramps, adding tactile markers, and ensuring better alignment.
- **Prioritize safe biking and pedestrian environments**: Add sharrow street markings on Meding St. to clearly allow bicyclists to share the street with vehicles and encourage drivers to slow down their vehicular speed. In addition to this, creating dedicated bike lanes on W 57th St. will enhance safety and provide more comfortable space for bicyclists traveling through the neighborhood to Feiler Park.



Image: Pedestrian Ramp at 96th St, Manhattan, New York, <u>NYC DOT Street Design Manual</u>. Retrieved by EC, 2023.

2. Enhance Park Amenities and Maintenance

• Sidewalk Stormwater Management Practice: During the site visit, the EC team observed water logging, particularly near the street corners adjacent to the park. Water logging around the curb corner can make it difficult for park users to identify or use the crosswalk and curb ramps. As a solution, the team recommends conducting an assessment of the water drainage pattern and installing storm water drainage to effectively address the issue of water

logging. For example, stormwater curb extensions at intersections can improve accessibility and pedestrian safety during rain events.



Image: <u>NACTO Urban Street Stormwater Guide</u> (Stormwater Curb Extension)

- **Repair the existing park infrastructure**: During the site visit, the team noticed that some critical infrastructure was not functioning properly. Specifically, there were issues with the lighting and a broken water fountain. Repairing these facilities can ensure that visitors of all ages, particularly older adults, feel comfortable using the park and staying there for extended periods of time. In addition, adding more lighting, especially near the rear of the park, and adding more trash bins to promote cleanliness will increase comfortability and security at the park.
- Unlock the potential of the park by expanding it: Currently, the park has an undesignated footpath at the rear fence line that is obstructed by overgrown vegetation and poorly defined spaces. To make better use of the park and attract more visitors, a pedestrian trail could be created along the back perimeter of the park, following the fence line. This would activate previously unused areas of the park and make it more accessible for walking and exploring. In addition, introducing new amenities to the park, such as outdoor gym equipment, can expand park potential for visitors of all ages.

3. Build Neighborhood Connection and Identity

• **Promote art with tactical urbanism**: Feiler Park has the potential to become a vibrant spot in the neighborhood by promoting art and culture. One way to achieve this is by using tactical urbanism to paint intersections, which can help connect and engage the community while also reducing vehicular speed around the park.



Image: A painted crosswalk promotes traffic safety and supports culture and arts. Retrieved by EC, 2023.

- Add art within the park: Feiler Park has several areas within the park that could benefit from public art installations. Feature neighborhood art and artists using the rear boundary fence. The rear area of the park near the fence does not have a designated footpath or any park amenities. Adding art will encourage park users to take advantage of the full park space and create a more vibrant and livelier park environment.
- **Build new programs**: Carve out a space on Alamo St to accommodate pop-up events such as farmers markets and summer carnivals. These initiatives can create safe environments and foster a sense of community within the area by promoting neighborhood organizations and small businesses.



Images: A farmer's market is a high-energy activity in parks to strengthen social and cultural park programs (<u>left</u>), and a interactive park feature supports culture and arts (Abernathy Greenway Park North- Explore Georgia). Retrieved by EC, 2023.

Kennedy Park Recommendations

Complete Streets Recommendations



Figure 58. Map of street cross-section locations around Kennedy Park. Map created by Google, 2022.

1. Northern Portion of Carroll Street

Existing



Image. Existing conditions on Carroll Street facing north towards West Gwinnett Street. Photo taken by Google, 2022

Proposed

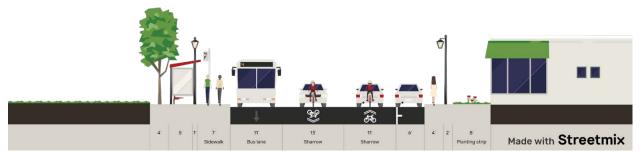


Figure 59. Proposed layout for the northern portion of Carroll Street, looking north from the baseball field. A bus shelter with wayfinding information would be installed to replace the current bench. Bike sharrows will be added to the road, and sidewalks will be upgraded to be ADA-compliant. New pedestrian-scale lighting will also be installed, and additional trees will be planted on the park side for shade. Diagram created in Streetmix by EC, 2022.

Existing

2. Carroll Street at Winburn Street

Image. Existing conditions on the southern portion of Carroll Street facing north towards West Gwinnett Street. Photo taken by Google, 2022

Proposed

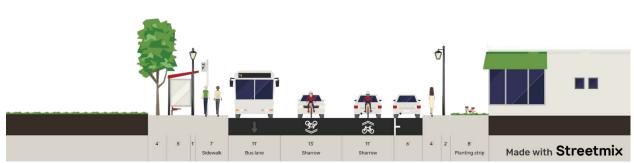


Figure 60. Proposed layout for Carroll Street, looking north from Winburn Street. This new design will include a cut-out for buses to pull into, and an improved bus shelter (with wayfinding information installed). Bike sharrows will be added to the road, and pedestrian scale lighting will be installed on both sides of the street. Additionally, the existing sidewalk on the park side will be widened and updated to ensure that it is fully ADA-compliant. Diagram created in Streetmix by EC, 2022.

189

3. Winburn Street

Existing



Image. Existing conditions on Winburn Street facing east towards Carroll Street. Photo taken by Google, 2022.



Figure 61. Proposed layout for Winburn Street, looking east toward Carroll Street. The new design includes ADA-compliant sidewalks on each side of the street, pedestrian-scale lighting on both sides, and bike sharrows on the street. A sidewalk buffer and seating options will also be provided on the park side. Diagram created in Streetmix by EC, 2022.

4. Chambers Street

Existing



Image. Existing conditions on Chambers Street facing east towards Wexler Street. Photo taken by Google, 2022.

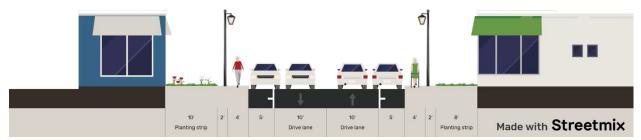


Figure 62. Proposed layout for Chambers Street, looking east from Carroll Street. The new design will include accessible sidewalks and pedestrian-scale lighting on both sides of the street. Diagram created in Streetmix by EC, 2022.

5. Collat Avenue Next to the Rail Line



Image. Existing conditions on the northern portion of Collat Avenue facing north towards West Gwinnett Street. Photo taken by Google, 2022.



Figure 63. Proposed layout for Collat Avenue looking north from the baseball field. The new design includes pedestrianscale lighting on both sides of the street, and a buffer zone for food trucks and other vehicles to park. The street will be closed off to through traffic, using removable barriers on either end. Diagram created in Streetmix by EC, 2022.

6. Collat Avenue by the Community Center



Image. Existing conditions on the southern portion of Collat Avenue facing north. Photo taken by Google, 2022.



Figure 64. Proposed layout for Collat Avenue looking north from the community center. The new design includes an ADAcompliant pathway set back from the road, pedestrian-scale lighting, and bike sharrows on the road. Diagram created in Streetmix by EC, 2022.



7. West Gwinnett Street at Carroll Street

Image. Existing conditions on West Gwinnett Street facing east from Carroll Street. Photo taken by Google, 2022.

Proposed

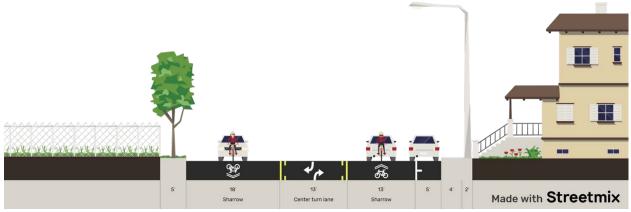


Figure 65. Proposed layout for West Gwinnett Street, looking east from the combined Carroll Street/Collat Avenue intersection. The new design will include bike sharrows that lead to and from the future Tide to Town, and an enhanced sidewalk with ADA-compliant features. Diagram created in Streetmix by EC, 2022.

Common Recommendations

1. Build a Unique Park Identity

• Install Features to Build a Community Identity - Add features such as public art (i.e., murals and sculptures), and historical plaques, to build a much greater sense of community identity into the park. Of particular importance is the Carver Village's history as a neighborhood built specifically for Black veterans after World War II. The existing memorial to Carver Village

native and civil rights activist Earl Shinhoster could also be enhanced through better landscaping, in order to make it more visible and to provide additional context regarding his significance to the community. *(CPTED Principle - Social & Cultural Dynamics)*

- Close Collat Avenue and Add New Programs to Enhance Community Activity Add new programmable spaces to the park, to allow for enhanced community activities. We recommend closing off the portion of Collat Avenue between the community center and West Gwinnett Street, in order to provide a new, multipurpose space for community events. These could include food-based events and temporary bicycle space. This solution would also eliminate the traffic problems created by the combined Carroll/Collat intersection with West Gwinnett Street, by rerouting all through traffic onto Carroll Street *(Complete Streets Principles Safety and Connectivity)*
- Convert the Tennis Court into a Child-friendly Traffic Garden The tennis court area, which is currently underutilized, could also be converted into a multi-purpose space. Potential uses could include a child-friendly traffic garden (a combined educational/recreational space).
 Additional shelters could also be added to the park, to complement the one smaller gazebo that is currently in place by the community center. (CPTED Principles Supporting Legitimate Activities and Social & Cultural Dynamics)



Images. Examples of activities that a new, programmable space could accommodate, such as a traffic garden where children have the opportunity to learn about traffic safety while riding their bicycles (left), and an on-street farmers market (right). Photos taken by ABC7 (left) and 101 Inc (right).

2. Expand Park Programming

• Install Internal and External Pathways in the Park - A circuit pathway should be constructed around Kennedy Park's perimeter, so as to better integrate the different activity areas, and provide pedestrians with a more convenient means for traversing the park. Several East-West paths should also be constructed across the park. Walkways should be designed with community exercise needs in mind and should be able to provide an opportunity for local seniors to safely exercise in the area. For this reason, new paths should be built to a width of at least 6 feet and provide adequate shade and seating options. (CPTED Principle - Supporting Legitimate Activities; Complete Streets Principles - Connectivity and Equity)

- Install Outdoor Exercise Equipment Outdoor exercise equipment should be installed at the park. We recommend adding equipment that is tailored to the needs of adult park users. Preferably, this equipment should be located near the playground so that parents can be comfortable using it while their children play nearby (as this was a request made by a number of the park users surveyed). *(CPTED Principle Supporting Legitimate Activities)*
- **Provide Food-based Activities** The park should offer opportunities for **food-based activities**. Much of West Savannah (including Carver Village) is located in a "food desert". A redesigned park presents a unique opportunity to both provide residents with healthy food options that they currently lack and bring community members together. One potential option involves dedicating some of the more underutilized space in the park to become a **community garden**, where fresh fruits and vegetables could be grown. Another option includes holding food-based events, potentially on weekends when most residents are home. Farmers' markets or food truck gatherings could be set up in order to offer goods that local residents would not normally have access to. *(CPTED Principles - Supporting Legitimate Activities and Social & Cultural Dynamics)*



Images. A wide park path with adequate shade, lighting, and seating options (left), and outdoor gym equipment installed in a park (right). Photos taken by Wikimedia (left) and Cosumnes Community Services District (right).

3. Improve Road Safety

• Install Crosswalks and Curb Cuts- Crosswalks and curb cuts should be provided at all intersections surrounding the park, to ensure that pedestrians of all ages can safely access it. The curb cuts provided should be fully ADA compliant, complete with tactile surfaces, in order to accommodate disabled park users. We recommend that sidewalks should be installed on at least one side of each residential street. New sidewalks should be installed along both sides of West Gwinnett Street These should be wider, and elevated higher above the street than they currently are (so as to improve safety conditions for pedestrians). Although there are some space constraints along West Gwinnett Street (due to the properties that line the street), the construction of sidewalk buffers along this road should still be explored, due to this street's higher traffic volumes and speeds. Additional tree cover should also be included, if possible, along the new sidewalks, so as to reduce the risks of extreme heat pedestrians may experience during the summer months. *(Complete Streets Principles - Connectivity, Safety, and Climate.)*



Images. An ADA-compliant pedestrian crossing (left) should be installed at residential intersections near Kennedy Park, and a push-button pedestrian crossing (right) could be installed at locations along West Gwinnett Street. Photos taken by Federal Highway Administration (left) and SmartCitiesWorld (right).

- Decrease Speed Limit and Add Signages Indicating Shared Roads- Additional or altered street signage should be provided, in order to improve safety for all road users. Traffic speeds should be lowered along every street in the park. The speed limit along West Gwinnett Street should be lowered from 30 mph to either 25 or 20 mph. The residential streets that surround the park (including Collat Avenue, Windburn Street, and Carroll Street) should have their speed limits dropped from 25 to 20 or 15 mph, as those are generally considered a safer threshold for pedestrians. A 15-mph limit is especially critical along Collat Avenue, given its proximity to the playground and community center. Furthermore, **new caution signs** should be added on all roads that approach and/or run alongside the park. These should be clearly visible to drivers and should warn of the presence of pedestrians and children playing. Several "Share the Road" signs should also be installed along the designated bike connection to the future Tide-to-Town trail, to remind drivers of traffic laws regarding cyclists on the road. *(Complete Streets Principle Safety)*
- Decrease Traffic Speed- Traffic calming measures should be deployed on the streets surrounding the park, so as to decrease traffic speeds and potential accident risks. At a minimum, all residential intersections in the park's vicinity should be converted to four-way stops (most are currently just two-way stops). This will slow traffic speeds and increase comfort levels for pedestrians crossing the streets. Additionally, further traffic calming devices, such as speed humps, could potentially be deployed to the areas in and around the community center, in order to slow traffic. This would likely prove effective at reducing some of the unsafely high speeds observed along streets near the park. (Complete Streets Principle Safety)



Images. An example of enhanced pedestrian-scale lighting in a park (left), and a speed hump (Right), a design feature that could be used to calm traffic along the streets that parallel Kennedy Park. Photos taken by Architectural Products (left) and Federal Highway Administration (right).

4. Improve Park Safety

- Minimize Visual Obstruction through Vegetation-Rectify Park deficiencies that generate security concerns. The tennis court area and associated landscaping should be redesigned, so as to minimize the visual obstruction that it currently creates. A majority of the trees should be removed and replaced with vegetation that is not so obstructive. Vegetation should also be cut around the lifting station, so as to minimize the visual blockage that it creates. Additionally, park maintenance and garbage removal should be conducted more rigorously, so as to give the park a more welcoming appearance. *(CPTED Principles Natural Surveillance and Image Maintenance)*
- Increase Legitimate Park Activities- An increase in legitimate park uses has the potential to increase natural surveillance and decrease potential security concerns. If more attractions are added, park usage will increase, meaning so will the number of "eyes on the street". This, in turn, can serve to deter criminal activity and alleviate concerns about crime amongst potential park users. *(CPTED Principles Natural Surveillance and Territorial Reinforcement)*
- Improve Lighting- Enhanced lighting should be provided throughout the park, and along the streets that parallel it. Within the park, new **pedestrian-scale lighting** options should be installed along all pathways, and around key activity areas, such as the playground. This will make the park much more attractive for users in the evening. Enhanced street lighting should be provided at intersections near the park, in order to better illuminate pedestrians crossing the street. (CPTED Principles of Natural Surveillance and Territorial Reinforcement. Complete Streets Principle of Safety)

5. Improve Wayfinding in and Around the Park

• **Provide Clearly defined Entry Points-** Ensure that the park has much **more clearly defined entry points**. These will improve user comfort, and better tie the park in with its surrounding neighborhood. Ideally, a defined entry point should be provided at all four of the intersections that surround the park, in addition to the community center crossing. *(CPTED Principles - Natural Access Control)*

- Install Park Identity Signages- Each defined park entrance should include a sign displaying the park's name, a basic map of the park, and information related to the community center. The park map should clearly convey information about all of the amenities on offer. Contact numbers should be provided on all signage as well. These should include municipal numbers to report maintenance concerns and all local emergency numbers. (CPTED Principles Natural Access Control and Territorial Reinforcement)
- **Provide Bike Connection Signages- Signage** should be added to direct park users and neighborhood residents to the location of the future Tide to Town trail (which will travel east of the park). An **official bike route** connecting Kennedy Park and the Carver Village area to the trail should also be established, with a map included in the park. This map should clearly display the on-street bike route and show the entirety of the Tide to Town trail. *(Complete Streets Principle Connectivity)*



Image. An example of a park wayfinding sign (center) that provides an overall map and list of activities for the park. Similar signage could improve the experience of Kennedy Park visitors. Photo taken by External Works.

6. Expand Multimodal Connections

• Improve Transit Amenities - Kennedy Park should be better integrated with the CATS route 29 bus that runs along Carroll Street, making stops at Chambers Street and Winburn Street The new circuit pathway within the park should provide an **accessible connection** to both stops, in order to give transit users, ease of access to the park's main activities and community center. The bus shelter at Winburn and Carroll Street should have all damages repaired, and a new shelter should be installed at Carroll and Chambers Street A park redesign should also ensure that adequate night lighting is provided at each of these stops. *Complete Streets Principles - Connectivity and Safety*

- Improve Bike Amenities Bike-friendly design elements should be incorporated into the park redesign. A new bike rack should be installed, preferably in a better view of the community center and/or playground (for security purposes). It should also be placed on a paved area that is easily accessible, instead of its current location in a non-landscaped portion of the community center lot. To complement the bike rack, a small repair stand could be installed next to it, in order to allow cyclists to make minor bicycle repairs on the go. Additionally, signage should be put in, to alert park users to the presence of these amenities. *Complete Streets Principle Connectivity*
- **Connect Carver Village to Tide-to-Town Trail** An **official bike route** connecting Carver Village to the Tide-to-Town trail should be established. This would ideally include bike sharrows along the roadway, and wayfinding signage to direct cyclists along the designated route. Given the planned alignment of Tide to Town, a bike route should probably be designated along one of the East-West streets that intersect the park, such as West Gwinnett Street or Winburn Street *Complete Streets Principles Connectivity and Safety*



Images. An enhanced outdoor bike rack in a park (left) and bike signage and sharrows (right) could be installed to connect the future Tide-to-Town trail with Carver Village and the park. Photos taken by Try This WV (left) and the Batavian (right).

W.W. Law Park Recommendations

Complete Streets Recommendations

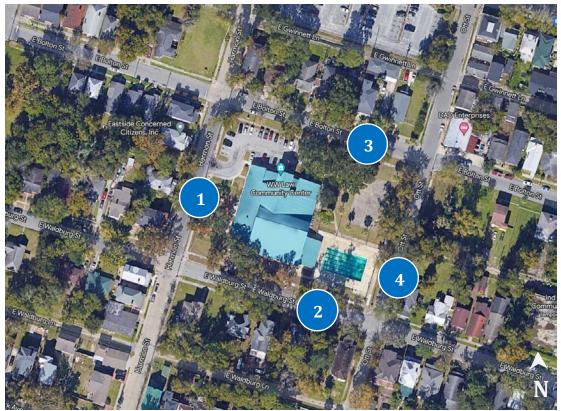


Figure 66: Map of street cross-section locations around W.W. Law Park. Map created by Google, 2022.

1. Harmon St

Existing



Image: Street cross-section of Harmon St facing north. Photo taken by Google, 2022

Proposed

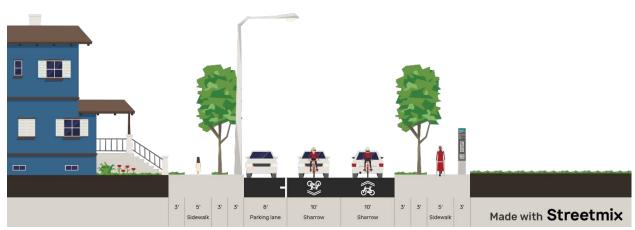


Figure 67: Street cross-section of Harmon Street facing north. The proposed street section includes a shared biking space with sharrow markings on the street. Additionally, there will be information signage on the right side to help navigate around the park area and the neighborhood. Diagram created in Streetmix by EC, 2023.

2. East Waldburg Street

Existing



Image: Street cross-section of E Waldburg St facing west. Photo taken by Google, 2022



Figure 68. Street cross-section of *E* Waldburg Street. This proposed street section includes shared bike space on the driving lane with the proper Sharrow street marking. To provide better pedestrian space, this proposed street section carved out the space from planting strips to add more space on the sidewalk and accommodate the sitting on the right. Also, revamping the streetlights with the banner adds more identity to the street and neighborhood. Diagram created in Streetmix by EC, 2023

3. E Bolton St

<image>

Image: Street cross-section of E Bolton St facing west. Photo taken by Google, 2022

Proposed



Figure 69: This proposed street section includes shared bike space on the driving lane with the proper Sharrow street marking. To provide better pedestrian space, this proposed street section carved out the space from planting strips to add more space on the sidewalk. Diagram created in Streetmix by EC, 2023

4. Ott Street



Image: Street cross-section of Ott St facing south. Photo taken by Google, 2022

Proposed

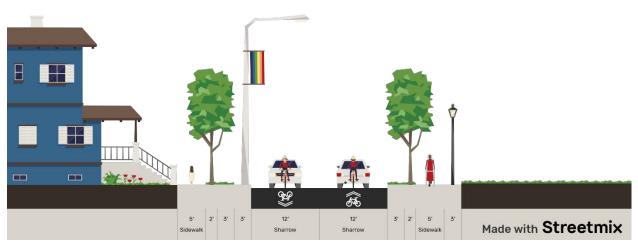


Figure 70: This is a proposed street section of Ott St that faces south. The proposed street design includes a shared bike lane for bicyclists on the driving lane with Sharrow marking. To improve safety and visibility at night, streetlights will be added on both sides of the street, creating a safer environment and enhancing the park atmosphere.

Common Recommendations

1. Increase Road Safety

• Slow traffic through tactical urbanism: Tactical urbanism is a fast, low-cost, action-oriented approach to test and evaluate changes in the built environment. The WW Law area is encircled by four neighborhood streets. Specifically, Harmon St provides a direct north-south connection between E Victory Dr, a state route, and Wheaton St which leads into downtown Savannah. To reduce vehicular speed and bring attention to the street crossings at the park, the EC team recommends improving the existing crosswalks around the community center with artistic designs and paint.



Source: The Mercer Cluster- Nov. 18, 2022, Macon, GA

- Improve sidewalks for all users: During the site visit, a sidewalk gap was observed on Ott St between E Gwinnett St and E Gwinnett Ln. This section of sidewalk leads directly from the CAT Center staff parking lot to W.W. Law Park. To improve the pedestrian walking experience in the area, it is recommended to fill the sidewalk gap and install proper ADA ramps and tactile warning surfaces.
- Add Shared Lane Markings: The streets surrounding the WW Law Community Center are too narrow to have a dedicated bike lane. To address this, the image below provides guidance on how to improve bicycle infrastructure specifically on Harmon St between E Gwinnett St and E Waldburg St. Shared Lane Markings (SLMs), or "sharrows," are road markings used to indicate a shared lane environment for bicycles and automobiles.



Source: <u>NACTO Urban Street Design Guide</u> (Image of Shared Lane Marking - Austin, Texas)

2. Increase Park Safety

- **Manage and maintain landscaping**: To create a welcoming and appealing outdoor environment, regularly maintain the landscaping, particularly around the community garden and around the back of the community center. Maintaining these areas is also crucial for increasing natural surveillance within the park.
- **Repair the existing light utility infrastructure:** While on a field visit, the team observed multiple light poles with cut and exposed wires. This poses a safety hazard for park visitors. The team suggests repairing the existing infrastructure to enhance the park's image and create a safer environment for its users.



Image: A missing cover and strewn wires on a light pole at W.W. Law Park. Photo taken by EC, 2023

3. Enhance Park Amenities

- **Create an outdoor gathering space**: Use the existing, large concrete pad adjacent to the W.W. Law community center and pool to build a covered pavilion or picnic area. This will encourage park use by nearby residents and support community center activities and library programs. A covered gathering space also provides reprieve from heat during the summer season.
- Establish signage throughout the park: Only one destination sign was observed on the south side, or rear, of the park—it was also blocked by an existing light pole. To assist visitors in finding their way to the W.W. Law community center and W.W. Law library, install directional and informational signs at key points throughout the park. Informational signs with the center operating hours and contact information could be placed both at the center and its backside. Directional signs located at the park edges and nearby the parking lot will inform visitors of the park's amenities and assist users with navigation within the park.



Source: Atlanta Area Parks, Retrieved by EC, 2023.

• Improve stormwater management: Savannah's tropical climate often brings heavy rains and storms, which can make it difficult for people to walk or bike around the affected areas due to inadequate stormwater infrastructure. To address this issue, the team suggests investing in green infrastructure to improve public spaces. This could result in economic, social, and environmental benefits for all users.



Image: Standing water puddle at W.W. Law Park (left, photo taken by EC), and a combined park art feature and green infrastructure at <u>Historic Fourth Ward Park</u> (right).

Recommendations

Summary

The Equitable Cities Team synthesized site visit observations, survey responses, and focus group outcomes to develop recommendations for six City of Savannah parks. Recommendations were outlined based on consistent, recurring themes that were observed on site visits, or provided in direct feedback from residents about the six parks. We asked ourselves whether these parks were on par with those closest to the city center or comparable to parks in other parts of Savannah. The following section is an overview of these common issues and should be thought of as a general guide for considering how Blackshear, Bowles C. Ford, Cann, Feiler, Kennedy, and W.W. Law Parks relate to other parks in Savannah in terms of quality, safety, and access.

One of the most notable deficiencies is a lack of community identity in and around the parks - there is very little signage, art, or activities to connect each park with its surrounding neighborhood. All parks also appear to be lacking amenities that appeal to adult users - rectifying this will be critical to attracting more park-goers. Furthermore, all of the parks surveyed have substandard pedestrian connections to their surrounding neighborhoods. Even though these parks have sufficient amenities and activities, there must be safe ways to get there for pedestrians.

Many Savannah residents were alive during the enforced Jim Crow laws and racial segregation. Historically, parks in black communities weren't considered as important to develop and maintain as those in white communities. Even after desegregation, concerns about safety and maintenance in these parks have not been addressed. This causes user volumes in these parks to remain low. Low users perpetuate safety fears and likely lead the city to focus its attention on busier parks. Therefore, although it is not explicit, history continues to present itself through inadequate care for these parks. Because parks serve real needs in communities as gathering spaces and places for individuals to focus on their health and well-being, this generational inequity has direct negative consequences for park-adjacent communities. Until significant improvements are made, the parks and nearby community residents will continue to suffer from historic policy failures. Through our analysis, we have suggested recommendations of facilities and amenities that are present in most white parks of Savannah but missing in the black neighborhoods.

The parks are also missing design elements that could deter crime and are essential to improve the parks' public perception for users. Finally, all of the parks have substandard wayfinding signage and multimodal connections. This will need to be addressed in order to integrate them with the future Tide-to-Town trail network, and the users it could bring from across the city.

Key Recommendations

1. Build a Sense of Community Identity and Ownership in the Parks

A common issue observed with all three parks is that they fail to create a sense of community and/or neighborhood identity. We recommend taking several steps to rectify this deficiency. First, public art displays, such as murals or sculptures, should be installed at several of the more prominent locations within each park. These could even be integrated into the park entrance signs, which are currently either underwhelming or absent entirely. Additionally, each of the parks should include plaques that display the unique history of their surrounding neighborhoods, and the stories of prominent local figures. This should hopefully build a further sense of community ownership and pride in each of the parks. Finally, public outreach to local community centers, libraries, and schools could also be employed as a strategy for increasing local pride and ownership of the parks.

2. Provide Additional Park Activities and Amenities

Additional amenities and activity options are needed to draw in more users to each of the parks. All three parks need to offer more exercise opportunities for adults and seniors. For this reason, we recommend adding outdoor gym equipment and enhanced walking paths. All of the parks should also have programmable, multi-purpose spaces set aside for community activities. These could include art events, food-based events, festivals, and family-friendly activities. Enhanced Park amenities will also be key to attracting more park users. All three parks should have yearround restrooms, additional shelters, seating, and water fountains installed. Park-specific amenities will also play an important role in increasing usage, such as nature walks at Bowles C. Ford Park, a sheltered pavilion at W.W. Law, or a community garden at Kennedy Park.

3. Ensure that all Parks Have Safe Pedestrian Connections

The quality of pedestrian infrastructure within each park varies, but all three parks lack proper pedestrian connections to their surrounding neighborhoods. We recommend that all walking paths within each park be upgraded to ensure that they are fully ADA-compliant and attractive for pedestrians of all ages. Enhanced pedestrian connections also need to be built through the areas outside of each park, to ensure that residents can conveniently and safely reach parks on foot. New or upgraded sidewalks should be made available on all of the streets that lead to the parks and should offer adequate tree shading. Crosswalks should be installed at all intersections, with appropriate and context-dependent safety protections in place. Speed limits on roads near the parks should be lowered, to ensure that non-motorized users are adequately protected. Traffic calming features and warning signage should also be installed where necessary, to further protect park users from road hazards.

4. Increase Park Security and User Comfort

Security concerns are clearly an issue at all three of the parks surveyed. Perhaps the most fundamental improvement that can be made would be expanding the number of "eyes on the street". This can only be accomplished if park usage is increased over a broader spectrum of the day. While improved amenities will therefore be important, there are also a number of design changes that also need to be made at each of these parks, in order to decrease perceived crime risks. Landscaping should be altered to ensure those park users have a clear view of their surroundings. Each park should have defined entry points constructed, to increase the comfort of users. Adequate, pedestrian-scale lighting should be installed throughout all three parks, in order to improve the comfort of park-goers after dark. It is also critical to increase park maintenance (including garbage disposal) and have public works employees show a greater presence.

5. Provide Proper Wayfinding and Multimodal Connections

All parks should have new wayfinding signage installed, to clearly communicate the amenities they offer to users. Park signs should be located along the future Tide-to-Town trail, to inform cyclists and visitors about the parks and the amenities they offer. Because the Tide-to-Town trail will not directly connect with Feiler, Cann, Kennedy, and W.W. Law Park, wayfinding signage will be needed to direct cyclists between the two parks and trail. Ideally, official bike routes should be established to facilitate these connections, relying on bike signage or even on-road bike infrastructure. All three parks should also offer adequate bike storage options. Finally, it is also important to ensure that the transit stops near each park are properly integrated with pedestrian infrastructure, and park wayfinding signage.

6. Installing Signages to the Surrounding Streets

The streets adjacent to the park lack signages. Signs enable quick communication with other road users, overcome language barriers, and are increasingly used in traffic management systems worldwide. All the necessary traffic signs in order to preserve the security and functionality of transportation infrastructure. They serve as reminders of the regulations in place to keep the user safe and assist in conveying to drivers and pedestrians' information that can help to lower accident rates. So, it is necessary to install the stop and pedestrian signs (pedestrian crossing signs, push-to-walk mechanism, and pedestrian beacon).

Prioritized Implementation Table

	Short Term Priority	Long Term Priority
Bowles C. Ford Park	 Include wayfinding and informational signage about park safety and connection. the park and nearby neighborhood connections. Improve lighting in and around the park to be pedestrian-scale. 	 Add sidewalks and crosswalks to all neighborhood streets. Add new park amenities and activity options, including outdoor exercise equipment. Build bike infrastructure, including bike racks, bike repair stations, and bike lanes near the park.
Cann Park	 Improve lighting in the park. Wayfinding signage, enhance the main entrance of the park. Improve Park amenities and install a water fountain and portable toilets. 	 Add new sidewalks to the neighborhood streets near the park (Tide to Town connection), shared bike lanes, and lighting in the park. Installing bus shelters and providing signages for a better network.
Kennedy Park	 Better integrate the north and south park sections through improved Landscaping. Close the north portion of Collat Avenue and convert it into a programmable space. 	 Construct in-park pathways, with adequate lighting and shade. Add new park amenities and activity options, including outdoor exercise equipment. Add sidewalks and crosswalks to all neighborhood streets.
Blackshear Park	 Lengthen the crosswalk signal time and add sound for the hearing impaired at the crosswalk signal at Wheaton St & Waters Ave. Add signs with operating hours, regular programs, and current contact information. Add wastebins throughout the park, specifically near the covered picnic area and basketball complex entrances. 	 Add high visibility pedestrian crosswalks at the corners of Dundee St & Wheaton St and Aberdeen St & Wheaton St. Add lighting near the covered picnic area and playground.

	4. Set lighting within the park on a consistent schedule (with a sign) and after hours.	
Feiler Park	 Install additional lighting at the rear of the park, and install additional trash bins throughout the park. Manage and maintain the overgrown vegetation on the back perimeter of the park. Expand the pedestrian path or trail along the back perimeter of the park along fence line. 	 Add public art installations and outdoor gym equipment throughout the park to encourage a livelier space for the community. Add or update pedestrian crosswalks along Meding St between Montgomery St and W 58th St.
W.W. Law Park	 Relocate the park sign currently by the pool so that it is not obstructed by the existing light pole. Address overgrown landscaping at the backside of the community center and at the community garden. 	 Fill in the sidewalk gap on Ott St between E Gwinnett St and E Gwinnett Ln. To encourage drivers to slow down, use tactical urbanism to add crosswalks and art at intersections surrounding the park property. Repair damaged ADA curb ramps and add tactile markings at intersections around WW Law Park.

References

- Busy Tourist. (2022, September 20). 30 Best & Fun Things to do in Savannah (Georgia). Busy Tourist. Retrieved October 25, 2022, from <u>https://www.busytourist.com/things-to-do-in-savannah-georgia/</u>
- 2. Chatham Area Transit. (n.d.). About CAT. Chatham Area Transit CAT About CAT Comments. Retrieved October 25, 2022, from <u>https://www.catchacat.org/about-cat/</u>
- 3. Chatham Area Transit. (2016, July). A Bus Routes for Free Downtown Map catchacat.org. Chatham Area Transit. Retrieved October 26, 2022, from https://catchacat.org/_meta/files/SystemMap_CAT_Savannah.pdf
- City of Savannah Development Services GIS Department. (n.d.). Street Classification Map -Savannah, GA. Retrieved December 20, 2022, from https://www.savannahga.gov/DocumentCenter/View/3030/Street-Classification-Map-for-Land-Uses?bidId=
- City of Savannah. (n.d.). Hazard identification & analysis Savannah, Georgia. City of Savannah. Retrieved October 19, 2022, from <u>https://www.savannahga.gov/DocumentCenter/View/6678/Section_03_Hazard_Identification_and_Analysis_FINAL?bidId=</u>
- City of Savannah. (n.d.). Recommendations: Health. Recommendations | Savannah, GA Official Website. Retrieved October 23, 2022, from <u>https://www.savannahga.gov/3331/Recommendations#health</u>
- City of Savannah, GA. (2022). Tide to Town. Tide to Town | Savannah, GA Official Website. Retrieved December 20, 2022, from https://www.savannahga.gov/2952/Tide-to-Town
- 8. County Health Rankings. (n.d.). Chatham County, GA Health Outcomes. County Health Rankings; Roadmaps. Retrieved October 23, 2022, from <u>https://www.countyhealthrankings.org/app/georgia/2022/rankings/chatham/county/outcome</u> <u>s/overall/snapshot</u>
- 9. FEMA. (n.d.). FEMA Flood Map Service Center. Retrieved October 18, 2022, from <u>https://msc.fema.gov/portal/search?AddressQuery=cann+park%2C+savannah+georgia#searchr</u> <u>esultsanchor</u>
- Fraser, E. (2021, April 14). Food deserts in Chatham County, Georgia. ArcGIS StoryMaps. Retrieved October 23, 2022, from <u>https://storymaps.arcgis.com/stories/c83952703ddf40848db72c2a5e8440c7</u>
- 11. Georgia Department of Transportation. (2022). Georgia SRTS Basics. Georgia SRTS Basics | Georgia Safe Routes to School. Retrieved December 20, 2022, from http://saferoutesga.org/content/georgia-srts-basics.html
- 12. Georgia Historical Society. (2019, February 8). Marker Monday: The Georgia Civil Rights Trail: The Savannah Protest Movement. Georgia Historical Society. Retrieved November 1, 2022, from

https://georgiahistory.com/marker-monday-the-georgia-civil-rights-trail-the-savannahprotest-movement/

- 13. Georgia Ports. (2021, October 15). Port of Savannah. Georgia Ports Authority. Retrieved November 1, 2022, from <u>https://gaports.com/facilities/port-of-savannah/</u>
- 14. GISGeography. (2022, June 3). Savannah Georgia Reference Map. GIS Geography. Retrieved December 19, 2022, from <u>https://gisgeography.com/savannah-map-georgia/</u>
- 15. Healthy Savannah. (2017, October 25). The State of Obesity in Georgia. Healthy Savannah -Making Savannah a healthier place to live, work, and play. Retrieved October 23, 2022, from <u>https://healthysavannah.org/the-state-of-obesity/</u>
- 16. Healthy Savannah. (2022, October 1). Southside Activity Friendly Routes to everyday destinations initiative. Healthy Savannah - Making Savannah a healthier place to live, work, and play. Retrieved October 23, 2022, from <u>https://healthysavannah.org/southside-activity-friendly-routes-to-everyday-destinations-initiative/</u>
- 17. Historic Tours of America. (2022, September 14). A Brief History about the City of Savannah GA. Old Town Trolley Tours. Retrieved November 1, 2022, from <u>https://www.trolleytours.com/savannah/history</u>
- 18. Interstate Guide. (2022, July 29). Interstate 16. Interstate. Retrieved November 1, 2022, from https://www.interstate-guide.com/i-016/
- 19. LexisNexis®. (2022). Community Crime Map Savannah-Chatham, GA. LexisNexis® Community Crime Map. Retrieved December 20, 2022, from https://communitycrimemap.com/?address=Savannah-Chatham%2CGA
- 20. Medical News Today. (2020, June 22). Food deserts: Definition, effects, and solutions. Medical News Today. Retrieved November 10, 2022, from <u>https://www.medicalnewstoday.com/articles/what-are-food-deserts#definition</u>
- 21. Official Savannah Guide. (n.d.). The Savannah Historic District a national historic landmark. The Savannah Historic District - A National Historic Landmark. Retrieved October 25, 2022, from <u>https://www.officialsavannahguide.com/savannahs-historic-district</u>
- 22. PolicyMap. (2020). PolicyMap. PolicyMap | Rutgers University Libraries. Retrieved October 29, 2022, from https://www.libraries.rutgers.edu/databases/policymap
- 23. PolicyMap. Income and Race data: (U.S. Census 2020). Retrieved October 28, 2022, from <u>PolicyMap - Dig Deeper</u>
- 24. Savannah Area Chamber. (2022, June 16). Manufacturers. Savannah Chamber. Retrieved October 18, 2022, from <u>https://www.savannahchamber.com/economic-</u> <u>development/manufacturers/</u>
- 25. Savannah Area Chamber. (2022, June 16). The Ports. Savannah Chamber. Retrieved October 18, 2022, from <u>https://www.savannahchamber.com/economic-development/the-ports/</u>
- 26. Smith, M. (2022, May 16). New data shows increase in visitor spending and overnight visitation in 2021 as Savannah's tourism continues its rebound. Savannah Chamber. Retrieved November 1, 2022, from <u>https://www.savannahchamber.com/news-and-events/news/visit-savannahnews/new-data-shows-increases-in-visitor-spending-and-overnight-visitation-in-2021-assavannahs-tourism-continues-its-</u>

<u>rebound/#:~:text=Savannah's%20volume%20of%20day%20trip,percent%20increase%20over%202</u> 019's%20numbers

- 27. Sullivan, B. (2003, December 1). Savannah New Georgia Encyclopedia. New Georgia Encyclopedia. Retrieved October 19, 2022, from https://www.georgiaencyclopedia.org/articles/counties-cities-neighborhoods/savannah/
- 28. Susquehanna County Historical and Society and free Library Association. Retrieved October 28, 2022, from <u>https://www.susqcolibrary.org/forest-city</u>
- 29. U.S. Census Bureau. (2019). All Blocks Within Census Tract 33.02, Chatham County, GA. Explore census data. Retrieved November 1, 2022, from <u>https://data.census.gov/cedsci/table?g=1400000US13051003302%241000000&tid=DECENNIALSF</u> <u>12010.P1</u>
- 30. U.S. Census Bureau. (2019). Income in the Past 12 Months, Census Tract 33.01. Explore census data. Retrieved November 1, 2022, from <u>https://data.census.gov/cedsci/table?q=S1901%3A+INCOME+IN+THE+PAST+12+MONTHS+%28I</u><u>N+2021+INFLATION-ADJUSTED+DOLLARS%29&g=1400000US13051003301</u>
- 31. U.S. Census Bureau. (2019). Income in the Past 12 Months, Census Tract 28. Explore census data. Retrieved November 1, 2022, from <u>https://data.census.gov/cedsci/table?q=S1901%3A+INCOME+IN+THE+PAST+12+MONTHS+%28I</u> <u>N+2021+INFLATION-</u> <u>ADJUSTED+DOLLARS%29&g=0100000US_1400000US13051002800&tid=ACSST5Y2020.S1901</u>
- 32. U.S. Census Bureau. (2021). U.S. Census Bureau quickfacts: Chatham County, Georgia. Retrieved October 19, 2022, from <u>https://www.census.gov/quickfacts/fact/table/chathamcountygeorgia/PST045221</u>
- 33. U.S. Census Bureau (2021). American Community Survey 1-year estimates. Retrieved from Census Reporter Profile page for Savannah, GA Metro Area Retrieved October 18, 2022, from <u>http://censusreporter.org/profiles/31000US42340-savannah-ga-metro-area/</u>
- 34. U.S. Climate Data. (2022). Weather averages Savannah, Georgia. U.S. Climate Data. Retrieved October 18, 2022, from <u>https://www.usclimatedata.com/climate/savannah/georgia/unitedstates/usga1191</u>
- 35. Visit Savannah. (2018, March 22). Savannah's Squares and Parks. Visit Savannah. Retrieved October 25, 2022, from <u>https://www.visitsavannah.com/article/savannahs-squares-and-parks</u>
- 36. Visit Savannah. (2019, December 10). History of Savannah. Visit Savannah. Retrieved October 18, 2022, from <u>https://www.visitsavannah.com/article/history-savannah</u>
- 37. Visit Savannah. (2021, April 22). Who We Are. Visit Savannah. Retrieved October 18, 2022, from https://www.visitsavannah.com/who-we-are#:~:text=As%20a%20result%20of%20our,%243.1%20billion%20in%20visitor%20spending
- 38. WalkScore. (n.d.). Savannah neighborhoods on Walk Score. Walk Score, Living in Savannah. Retrieved October 29, 2022, from <u>https://www.walkscore.com/GA/Savannah</u>
- 39. Weather and Climate. (n.d.). Average monthly humidity in Savannah (Georgia), United States of America. World Weather & Climate Information. Retrieved October 18, 2022, from

https://weather-and-climate.com/average-monthly-Humidity-perc,savannah-georgia-us-2,United-States-of-America

- 40. Weatherspark. (2022). Weatherspark.com. Savannah Climate, Weather by Month, Average Temperature (Georgia, United States). Retrieved December 20, 2022, from https://weatherspark.com/y/17828/Average-Weather-in-Savannah-Georgia-United-States-Year-Round
- 41. WSAV Staff. (2020, February 13). Hidden history: Carver Village in Savannah, Georgia. SiouxlandProud. Retrieved October 31, 2022, from <u>https://www.siouxlandproud.com/hidden-history/hidden-history-carver-village-in-savannah-georgia/</u>
- 42. Zareba, A. D., Krzeminska, A. E., & Dzikowska, A. (2019, September 9). Urban Green Network -Synthesis of Environmental, Social and Economic Linkages in Urban Landscape. IOP Conference Series: Earth and Environmental Science. Retrieved December 20, 2022, from <u>https://iopscience.iop.org/article/10.1088/1755-1315/362/1/012003</u>