I. Project Information*

Project Director	Taryn Sabia
Project Title	Heat Vulnerability Playbook: Preparing Tampa's At-Risk Communities for Extreme Heat
Project Location	Tampa
Project Summary	The City of Tampa is fortunate to have a highly productive urban tree canopy which helps mitigate direct sun exposure and reduces cooling costs. Urban tree cover provides significant benefits to human health and can reduce the impacts of climate hazards. However, studies suggest that tree cover is often inequitably distributed (McDonald, 2021). The Tampa Tree Canopy and Urban Forest Analysis is an invaluable data set, utilized to inform policy decisions in the Urban Forest Management Plan. This project will evaluate the forthcoming Tree Canopy study update as it applies to the City of Tampa Parks & Recreation Master Plan as well as the Urban Forest Management Plan. Evaluation of tree canopy data and social vulnerability indicators will inform decision-making, engagement, and recommendations through an equity lens. The project will seek more equitable outcomes associated with mitigating climate hazards in the context of extreme heat by analyzing the accessibility and quality of parks and outdoor spaces, potential cooling centers, and other resources to generate equity-informed strategies within the City's Parks and Recreation Master Plan and the Urban Forest Management Plan. The product, a Heat Resiliency Playbook, will be a working document, designed to reflect real-time data collection, feedback, and the evolving needs of the community. While focusing on East Tampa, the Playbook will be designed for flexibility, to produce unique outcomes that reflect the complexity of each community's needs.

II. Progress Report Questions

1. Please revisit your proposal and review your goals and the outcomes you were seeking to achieve through this grant. How successful were you in meeting your goals? Please assess your success against the criteria you set in your proposal and use any combination of anecdotes, stories, graphs, charts, visuals as well as data to explain your success. Upload supporting files if you choose.*

The project team was successful in meeting established and outlined goals. In addition to deliverables that were co-designed with the City and community groups, existing data continues to inform ongoing efforts to mitigate heat and to increase the resiliency of the East Tampa community. This project is a start toward reconciling the equitable outcomes identified in the proposal goals, but will take a concerted and long-term commitment from the City and residents alike. The data was linked to analysis that helps the team to better understand issues associated with outcomes. The Heat Resilience Playbook provides the City with a compass and a checklist for beginning to reconcile community inequities. The outward facing Playbook helps the community understand what the City's capacity is to address actionable items for extreme heat. The mapping analysis and data in the background of the Playbook provides direct information to City departments, including Parks & Recreation, the Office of Sustainability, Mobility, Affordable Housing Services & Rehabilitation, that inform their program including the Parks & Recreation Master Plan and the in-progress Urban Forestry Master Plan to address what existing data has shown us about extreme heat in Tampa.

The next step in success of utilizing these data sets toward action would require a follow-up study to review implementation efforts between 1 year and 3 years from now. This would be done in tandem with reviewing heat levels and energy burden within the study area neighborhoods.

The complete GIS package can be accessed via this link:
https://usf.box.com/s/ira3sk25xptx03p09s94mpcjhsjrsebc

Optional File Upload

Tampa-heat-playbook-08.pdf

Filename: Tampa-heat-playbook-08.pdf **Size:** 20.4 MB

2. How has your work benefited your organization, professional field, community, or other stakeholders?*

The project, this work, has resulted in better interdepartmental communication and collaboration in the City as well as at USF. Professor Shawn Landry continues to work with the City of Tampa toward ground truthing planting locations for the City's tree planting goals. Collaboration and bilateral meetings between City organizations has helped them better align their goals and resources; mobility's new plan since project goals were defined is well suited to help both Parks & Recreation and the Hillsborough County School District to work with the City on critical right of way improvements and re-forestation needs within East Tampa and other neighborhoods in the urban core.

This project has helped us propel the conversation of climate hazard considerations within our own role of research and in using the research toward implementable actions.

3. Are there any other successes related more broadly to this project that you would like to share with us?*

The City of Tampa has proven to be a valuable partner, fully committed to building off of and furthering existing commitments. Their community-facing departments expressed enthusiasm and proved to be valuable resources for both idea generation and implementation. Starting with the first delivery/meeting of maps and walk radii, Affordable Housing Services and Parks & Recreation shared valuable data and insights about their ongoing initiatives. Project timing with Tampa's hottest summer to date and the release of the updated Tree Canopy Assessment showing a net loss in trees underscored the importance of casting a wide net to improve heat mitigation and urban forestry citywide.

4. What did you learn (positive or negative) as a result of this grant? What lessons would you share with other organizations or the field at large?*

Build lasting relationships with community members as well as local agencies. Neighborhood stabilization is critical for authentic community engagement and empowerment; neighborhoods with long-lasting community ties and residents who feel a sense of ownership (whether renting or owning) will be positioned and empowered by a co-design process. Residents who have been over surveyed and have seen little to no benefit from investments will be less likely to engage.

5. How do you characterize your relationship with the GRP and what suggestions do you have for improvement?*

The project team is grateful for the support and opportunity to focus on this topic. The check-in was helpful and it was interesting to also see what other awardees were doing during early presentation sessions. It would be advantageous to have 1 or 2 roundtable discussions with combined cohorts to discuss challenges and solutions. These discussions could be facilitated by GRP staff and yield replicable solutions.

6. Please provide any other feedback or comments you have for the GRP.*

The Gulf Research Program could further help communities through increased funding for pilot implementation, based on research and data.

7. If applicable, please identify and describe the ways you or your organization leveraged GRP's grant (e.g., other funders, volunteers who worked on the program, in-kind donations etc.) Please specify the value and/or number/hours of volunteers if possible.

The City of Tampa has invested significant hours from their Green Corps. We have not tracked the data of hours contributed, but they are committed to ground truthing planting areas that were identified through the combined community engagement process of this project and the GIS data analysis.

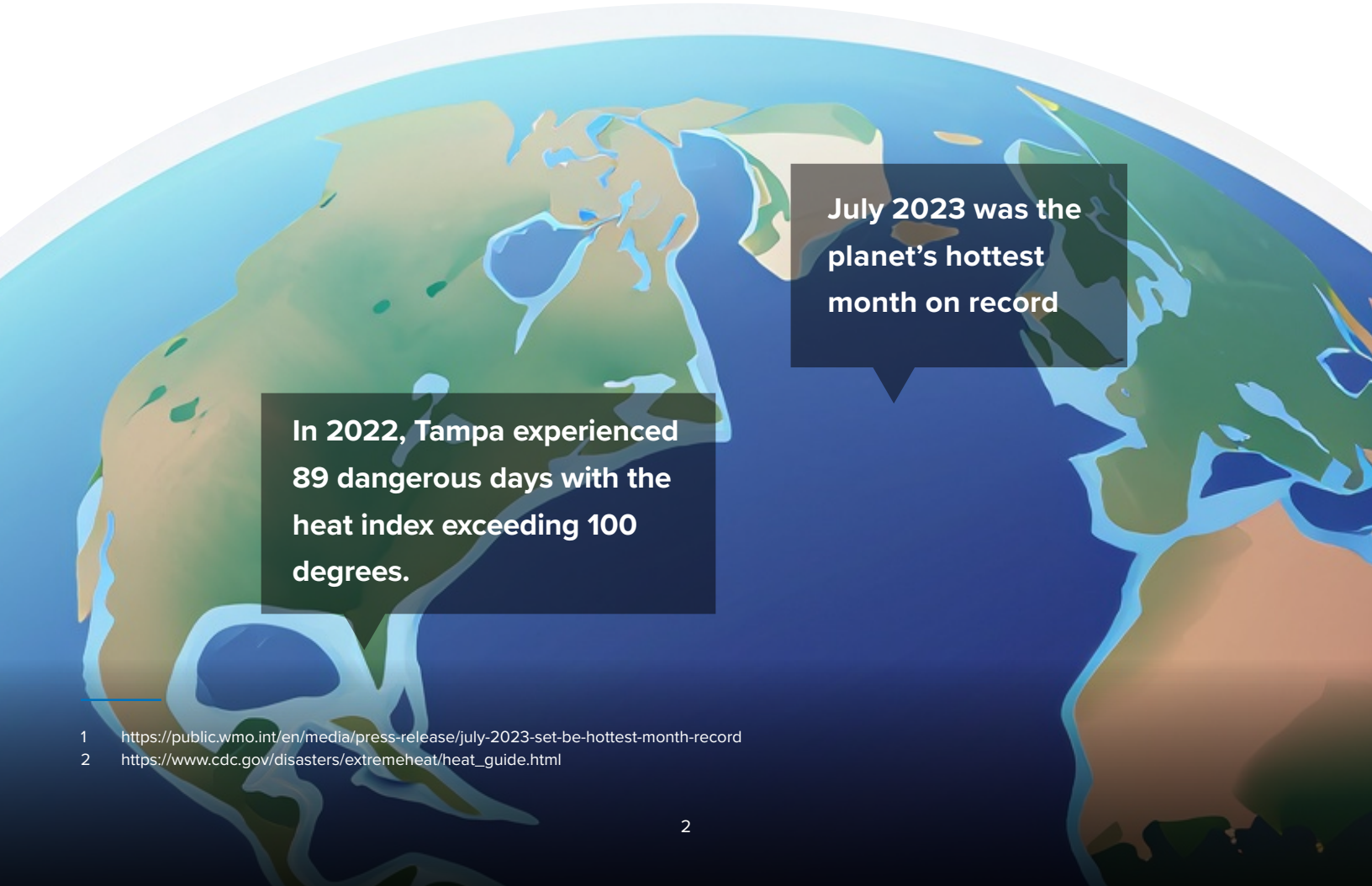
TAMPA HEAT RESILIENCE PLAYBOOK

City of Tampa Florida

INTRODUCTION TO EXTREME HEAT

Communities across the United States are facing increasingly hotter temperatures. Today, people in the U.S. experience nearly 2.5 times more extreme heat days than during the 1980s. And the summer of 2023 has underscored the urgency of this trend — with July becoming the world's hottest month on record.[1]

In Tampa, this global phenomenon has translated into more days and longer periods of extreme heat: when summertime temperatures are much hotter and/or humid than average.[2] Under these conditions daily life in Tampa has been disrupted. For instance, the extreme heat has prompted an even greater reliance on access to cooling for longer periods throughout the day, caused water temperatures in the Tampa Bay to exceed 90 degrees, and negatively impacted residents with asthma and other underlying health conditions. In the worst cases, these periods of extreme heat can seriously endanger Tampanians, with extreme heat as the leading cause of weather-related deaths nationwide.



1 https://public.wmo.int/en/media/press-release/july-2023-set-be-hottest-month-record
2 https://www.cdc.gov/disasters/extremeheat/heat_guide.html

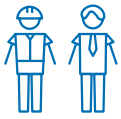
But Isn't Tampa Always Hot?

Although known for its warm climate, Tampa isn't immune from the dangers of extreme heat. Since 2016, Tampa's heat index has consistently exceeded 100 degrees for over 45 days per year. This number spiked in 2022, with Tampa experiencing 89 dangerous days with the heat index exceeding 100 degrees. And this year the trend has become more dangerous. July 2023 was Tampa's hottest July on record reaching 2.7 degrees above normal with an average high temperature of 93.3 degrees Fahrenheit and an average low of 79.7 degrees Fahrenheit, minimizing the City's ability to cool off overnight.

As extreme heat events become more frequent and intense, an increasing number of Tampa residents will suffer severe health impacts — and in extreme cases — deadly consequences from rising temperatures. In 2021, the Tampa Bay Regional Planning Council conducted a study projecting 242 heat-related deaths annually in the Tampa Bay area by 2030. This number is expected to surge significantly by 2060, reaching a total of 1,059 heat-related deaths each year.[3] These risks are particularly dangerous for those with underlying health conditions and those facing socioeconomic vulnerabilities.

Extreme heat is the leading cause of weather-related deaths nationwide

Tampa's intensifying heat will impact not only the health of our City's communities, but also our region's economy. Energy demand and costs for households are expected to surge across Tampa. By 2060 the Tampa Bay region is expected to lose nearly 9,000 jobs annually due to extreme heat, and industries critical to the region's productivity including tourism and manufacturing are at high risk of productivity loss.[4]



By 2060 the Tampa Bay region is expected to lose nearly 9,000 jobs annually due to extreme heat

The need to further build our City's resilience to the impacts of extreme heat is clear. The following Playbook provides the City, its partners, and Tampanians across the city with a series of actionable recommendations to take to support Tampa as we adapt to and mitigate the impacts of extreme heat. The policies, projects, and programs outlined below will protect Tampanians, increase access to spaces of refuge, enhance and protect our tree canopy, and ensure that heat resilience is built into plans for growth.

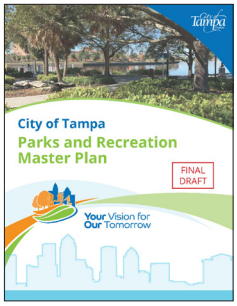
3 https://tbrpc.org/taking-stock-climate-driven-heat-impacts-on-the-tampa-bay-regional-economy-through-2060/
4 https://tbrpc.org/taking-stock-climate-driven-heat-impacts-on-the-tampa-bay-regional-economy-through-2060/

MATRIX OF PLANS

Tampa's Heat Resilience Playbook outlines a series of initiatives the City will implement to address the impacts of extreme heat. Given the intersecting nature of heat resilience, the Playbook seeks to align with and build upon existing planning efforts across the City. These plans include the following outlined below.

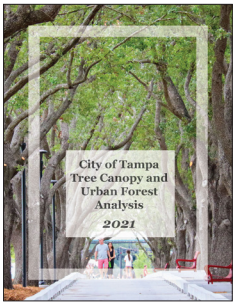
EAST TAMPA CRA STRATEGIC ACTION PLAN

The East Tampa Community Redevelopment Area's plan to unify leaders across East Tampa around 10 community-based strategic themes and initial actions that support quality of life and economic opportunity.



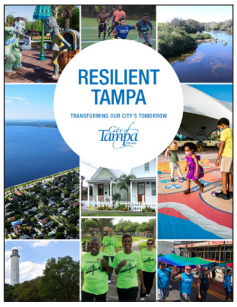
CITY OF TAMPA PARKS AND RECREATION MASTER PLAN

Long-range planning document to shape the direction, development, and delivery of the City's parks and recreation facilities, programs, and services over the course of the next 10-15 years.



TAMPA TREE CANOPY AND URBAN FOREST ANALYSIS

The Tree Canopy Analysis identifies the extent and location of the existing tree canopy and the potential for new tree plantings. By updating the assessment every five years, it measures tree canopy coverage over time.

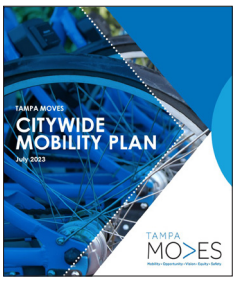


RESILIENT TAMPA

Lays out a tactical roadmap that sets forth concrete actions that address our city's most pressing challenges at all scales: from individual Tampanians and households, to our diverse and vibrant neighborhoods, to our critical infrastructure, to City government as a whole.

CLIMATE ACTION AND EQUITY PLAN

Built on three goals: Reduce Emissions, Adapt Infrastructure, and Support All People Along the Way — the Plan outlines how the City of Tampa will address the challenges posed by growth and climate change while making a stronger, healthier, more sustainable, and resilient city.



CITYWIDE MOBILITY PLAN

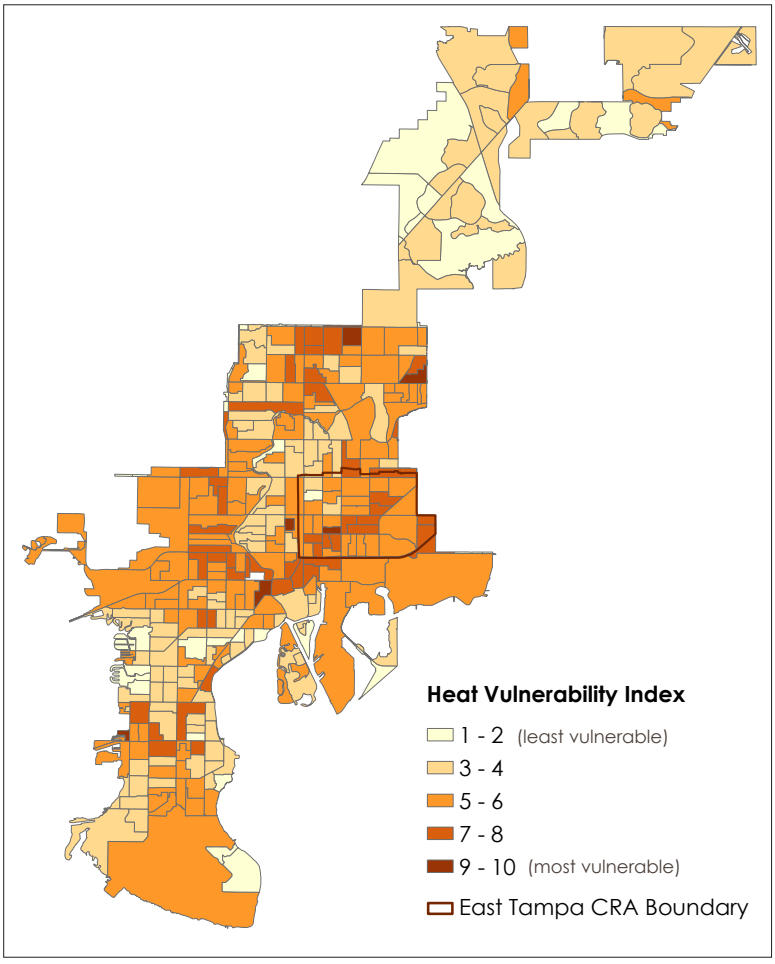
Tampa M.O.V.E.S Plan that serves as the City's roadmap to improve and expand mobility and transportation around the City.

HEAT VULNERABILITY INDEX

Recognizing that each neighborhood has a specific set of challenges and opportunities, a Heat Vulnerability Index (HVI) provides the City with a tool for decision making to balance investments and assistance — for the highest impact in areas of high risk and to those neighbors with the greatest need.

The Heat Vulnerability Index, as an assessment tool, can respond to unique project or funding constraints. It is a snapshot of heat related challenges in specific areas and communities that, in combination with community feedback and financing opportunities, can help the city target heat mitigation activity. Strategies described in this document work to balance sociocultural needs with the physical and ecological realities of the city.

Extreme heat impacts people in different ways. While each of the following layers tells us about a different population and their capacity to cope with heat, the HVI combines known vulnerability indicators (exposure and sensitivity) with proximity and access to cooling infrastructure (adaptive capacity). The HVI is grounded in demographic data from the American Communities Survey, City of Tampa tree canopy data, land surface data, and various infrastructure data from the City of Tampa and Hillsborough County. The HVI is designed to be applicable to a wide array of public-facing city programs and planning departments, ranging from public health and social services to home weatherization assistance programs, and tree planting initiatives like Treemendous.



Criteria includes a standardized layering of exposure, sensitivity, and adaptive capacity indicators.

- Median Household Income (CENSUS, 2021)
- % Population 17 and under (CENSUS, 2021)
- % Population 65 and over (CENSUS, 2021)
- % Population 20 to 64 years with a disability (CENSUS, 2021)
- % of households without a vehicle (CENSUS, 2021)
- Median land surface temperature in Fahrenheit (WATER INSTITUTE, 2021)
- % Tree canopy coverage (WATER INSTITUTE, 2021)
- Distance (ft) to existing cooling centers – libraries, community centers, splash pads, public pools (CITY OF TAMPA, 2023)

FOCUSING ON HEAT VULNERABLE NEIGHBORHOODS: EAST TAMPA CASE STUDY

Heat is impacting residents citywide; however, some neighborhoods and communities are disproportionately impacted. While the concentration of at-risk groups — seniors, children, outdoor workers, and those with asthma — plays a role in which communities are most impacted, the layout and physical composition of our city's neighborhoods act as additional determinants of risk. This is particularly true of East Tampa.

East Tampa encompasses 4,820 acres in the geographic center of the City, with the southernmost neighborhoods located just two miles from downtown Tampa. The neighborhoods that compose East Tampa are largely walkable, residential areas with several commercial corridors — historically used to support Tampa's thriving African American business districts — primarily located on the outer boundaries of the community. Community members point to strong community ties established through neighborhood associations, community-based organizations, and faith-based institutions as the neighborhood's greatest strength. However, East Tampa faces a series of challenges due to its location and history.

The majority of East Tampa's neighborhoods were formerly redlined.[5] More than 80 years after the 1936 redlining maps were produced, East Tampa residents are still facing significant inequities with the City as a whole: homes are older than average with poor insulation and inadequate cooling, nearly 50% of children live in a home where the household income doesn't cover the essentials,[6] residents live further from accessible green space and other areas of heat refuge, and health indicator statistics are far below-average. Additionally, East Tampa is physically bounded by two elevated interstates — interstate 4 and 275 — that act as physical boundaries to divide East Tampa from much of the urban core and contribute to higher temperatures and less overnight cooling than in other parts of the City.

Given the heightened risk, the Playbook outlines a series of strategies that should be piloted and implemented in East Tampa and ultimately scaled to other heat-vulnerable neighborhoods across the City.

What Residents Had to Say

To assess community members' experience with and priority interventions to address extreme heat, the project team worked with neighborhood associations and organizations to deploy a community input survey and hosted a 2-hour in-person workshop. Over 200 community members shared their experiences and priorities.

5 https://dsl.richmond.edu/panorama/redlining/#loc=12/27.942/-82.571&city=tampa-fl
6 https://www.tampabay.com/news/2020/07/01/even-before-the-pandemic-poverty-was-a-way-of-life-for-many-black-children-in-tampa-bay/

Homes and other air-conditioned locations — including churches and small businesses — were identified as residents' primary places of refuge from extreme heat

Trees, access to splash pads and pools, and built shade were among residents' most desired cooling solutions

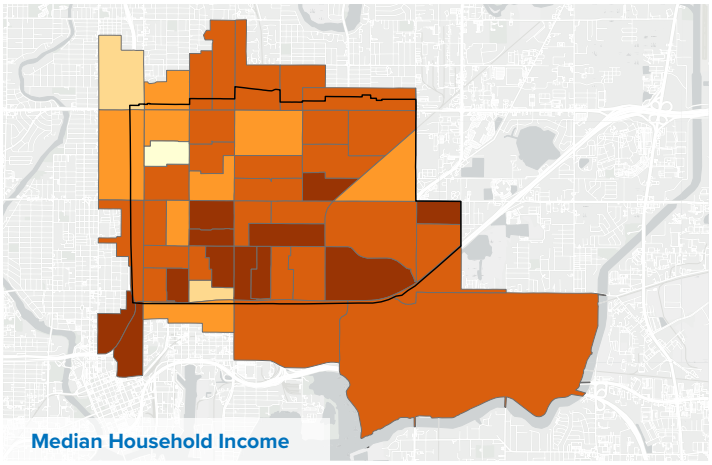
Finding additional ways to improve heat resilience in and around existing community assets — including parks and schools — was identified as a key priority by East Tampa community members

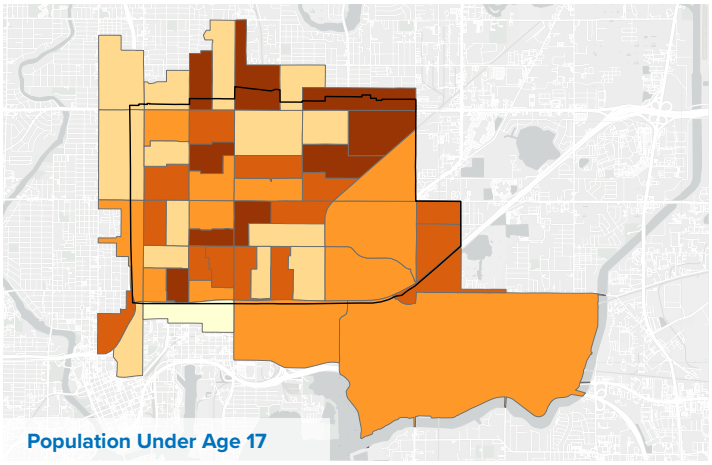
Neighbors and neighborhood institutions — including recreational centers, churches, neighborhood associations, and other community-based organizations — were identified as East Tampa's greatest strengths

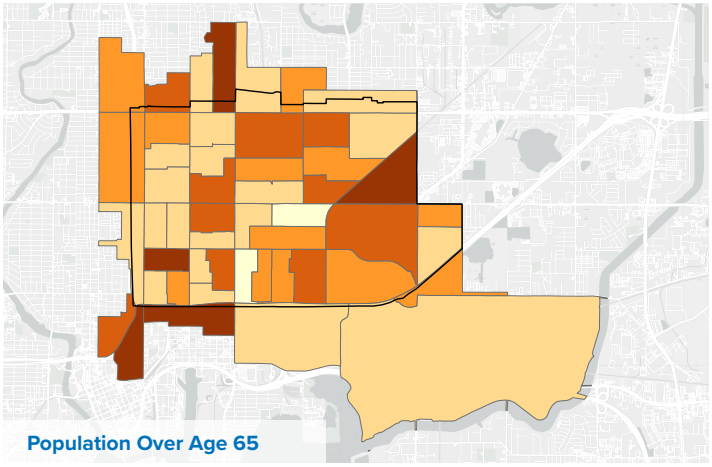
Major corridors that are known for safety concerns — including East Hillsborough Avenue, MLK Jr. Boulevard, and Nebraska Avenue — were identified as being particularly hot places

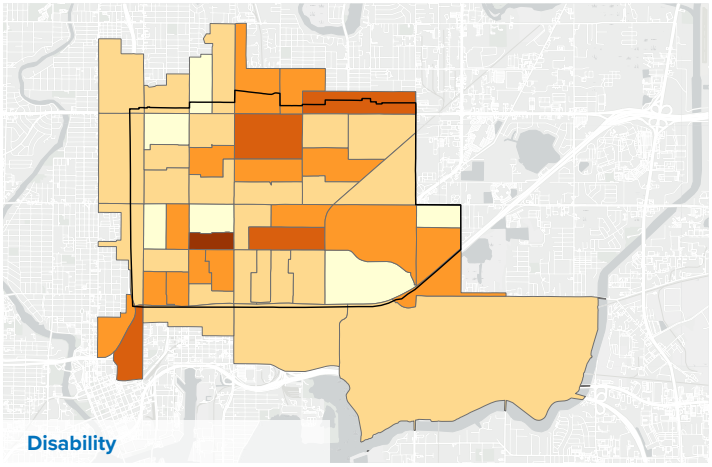
HEAT VULNERABILITY INDEX: Factors in East Tampa

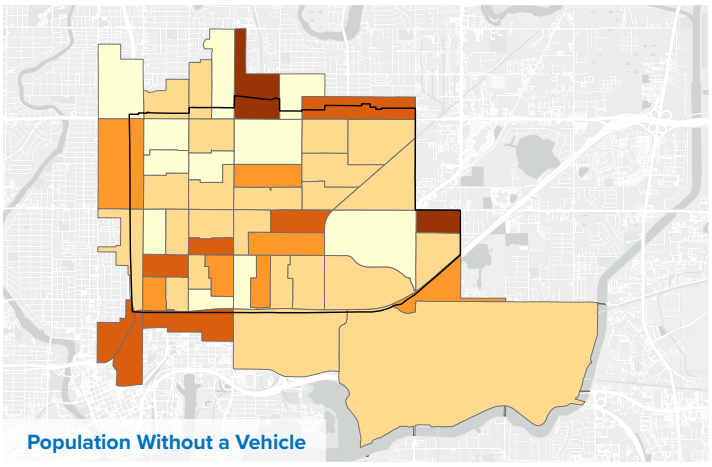
SENSITIVITY

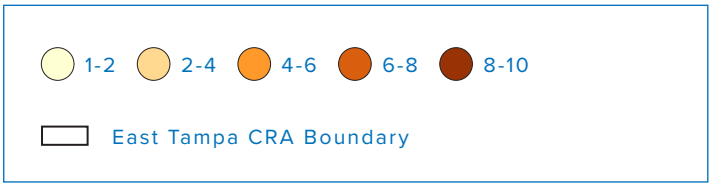

Median Household Income


Population Under Age 17

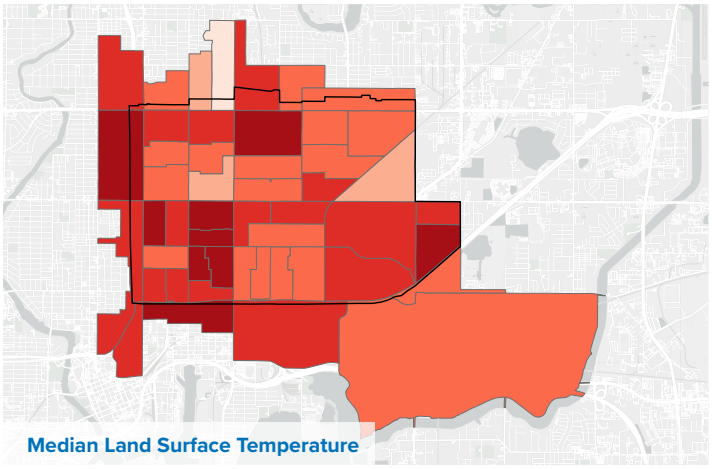

Population Over Age 65


Disability


Population Without a Vehicle



EXPOSURE

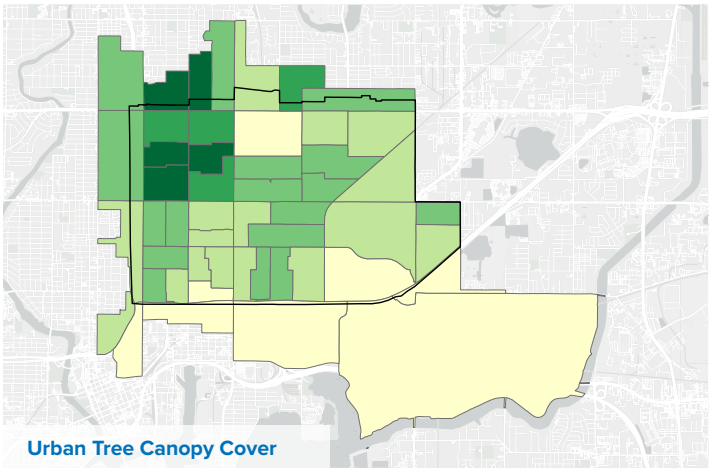


Median Land Surface Temperature

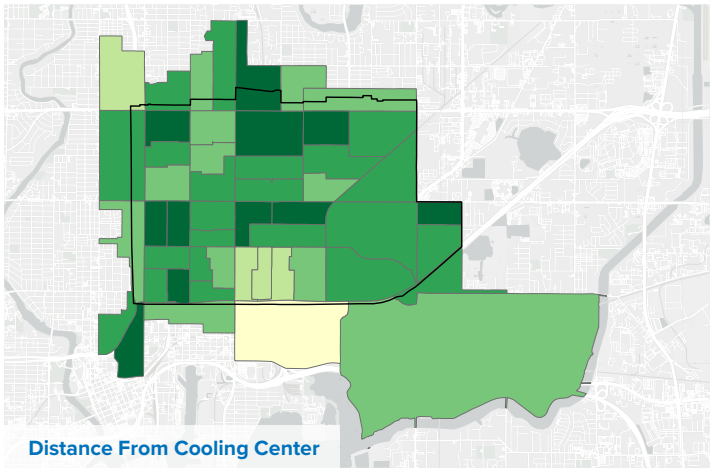
1-2 2-4 4-6 6-8 8-10

East Tampa CRA Boundary

ADAPTIVE CAPACITY



Urban Tree Canopy Cover

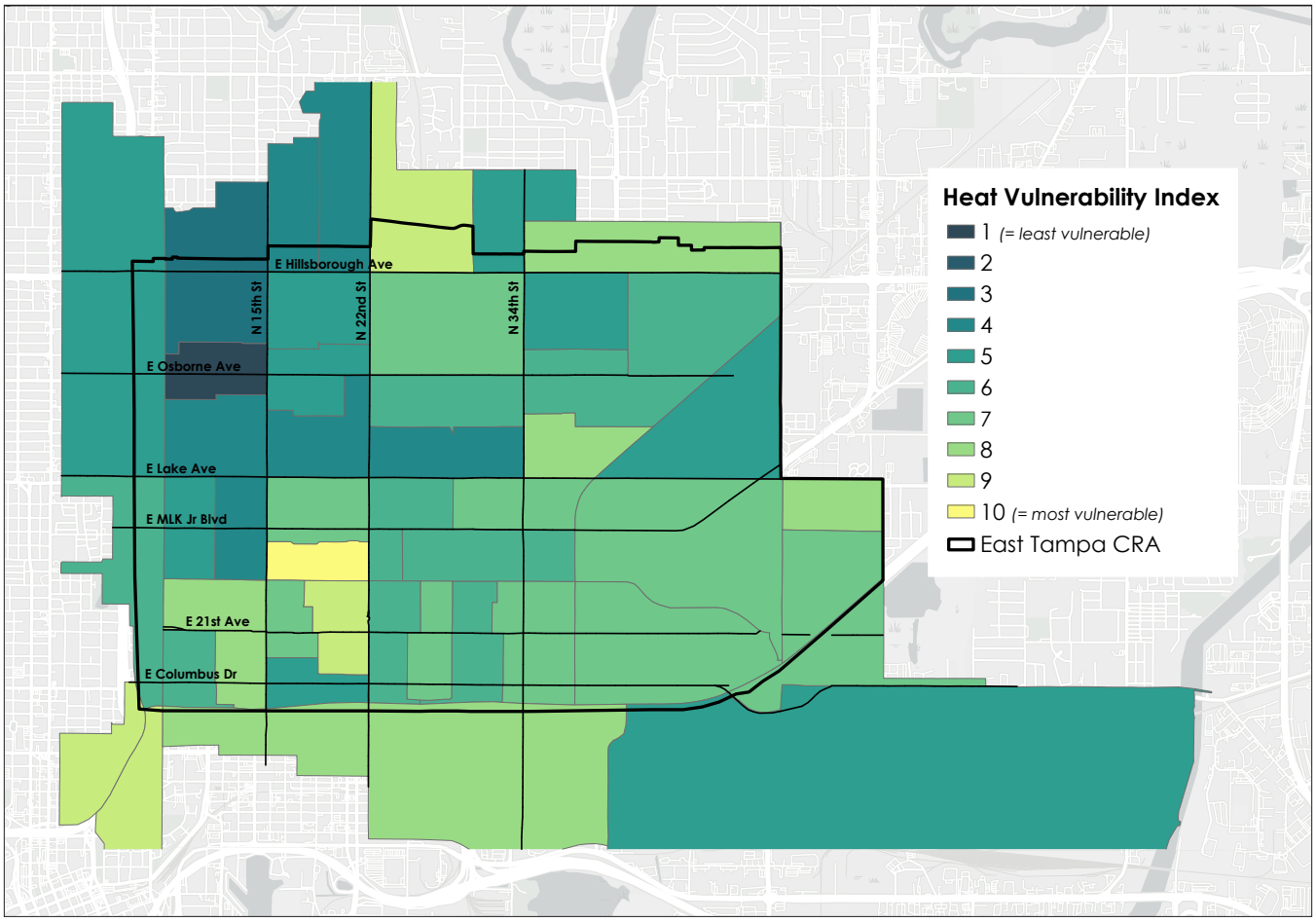


Distance From Cooling Center

1-2 2-4 4-6 6-8 8-10

East Tampa CRA Boundary

A snapshot of the East Tampa CRA neighborhoods



The map above represents the highest concentrations (10 being the highest) of people and places that demonstrate high levels of one or more of the vulnerability indicators. Each indicator, on its own, will highlight a specific population or infrastructure need.

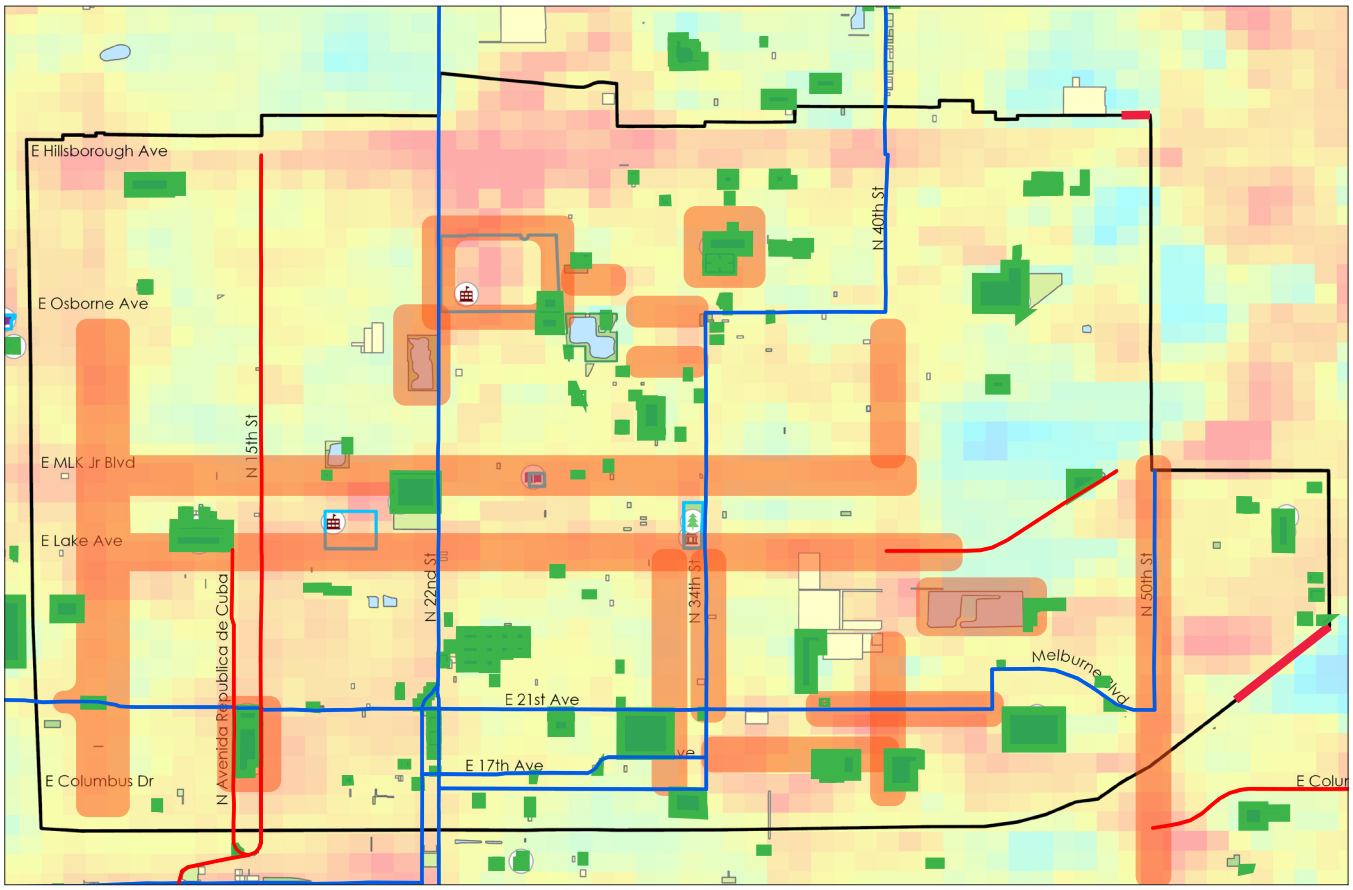
The HVI, when aligned with agency data and community feedback, will act a tool for the city and other agencies to target programs and interventions. Every neighborhood in Tampa will have its own unique set of challenges and opportunities. The HVI, is designed to be able to respond to that.

East Tampa is a robust and diverse combination of neighborhoods and community pockets. While some areas within the boundary experience high tree canopy cover (shade and cooling) and walkable access to potential cooling centers (parks, community centers, libraries, pools, splash pads), pockets of vulnerable or isolated populations and high urban heat demonstrate the need for targeting interventions that are as unique as the community it represents.

Putting the HVI to Work

Due, in part, to local temperatures and the findings of the recent Tree Canopy Assessment (~3% loss citywide since 2016), the City of Tampa announced an ambitious citywide goal to plant 30,000 trees by the year 2030.

To meet the Citywide goal and address extreme heat equitably, the City is launching a pilot tree-planting program focused on enhancing neighborhood corridors. Location selection is determined by a layering of community needs through the HVI, the potential to build upon City Capital Improvement Projects, community input, and tree planting opportunity areas. Coordinating City departments, like Mobility, are working to align 'low-stress' corridors (safer for pedestrian and bicycle activity) with cooling measures that will connect more people to Parks and Recreation improvements and other cooling centers. By combining various inputs, City leaders can better leverage existing investments and equitably respond to community needs. The map below demonstrates a layering of various inputs and will be used in the site selection process.



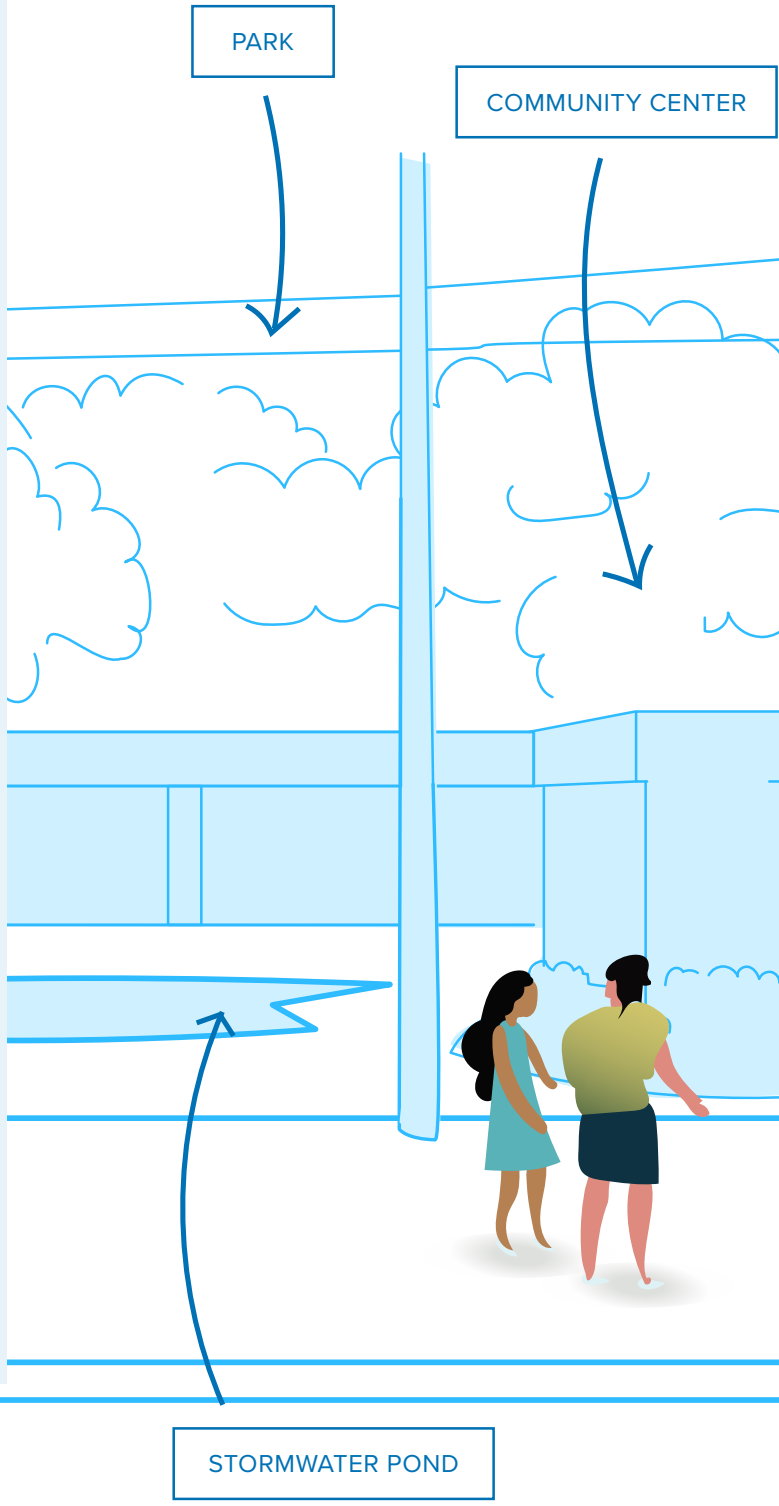
East Tampa Cool Corridor Pilot

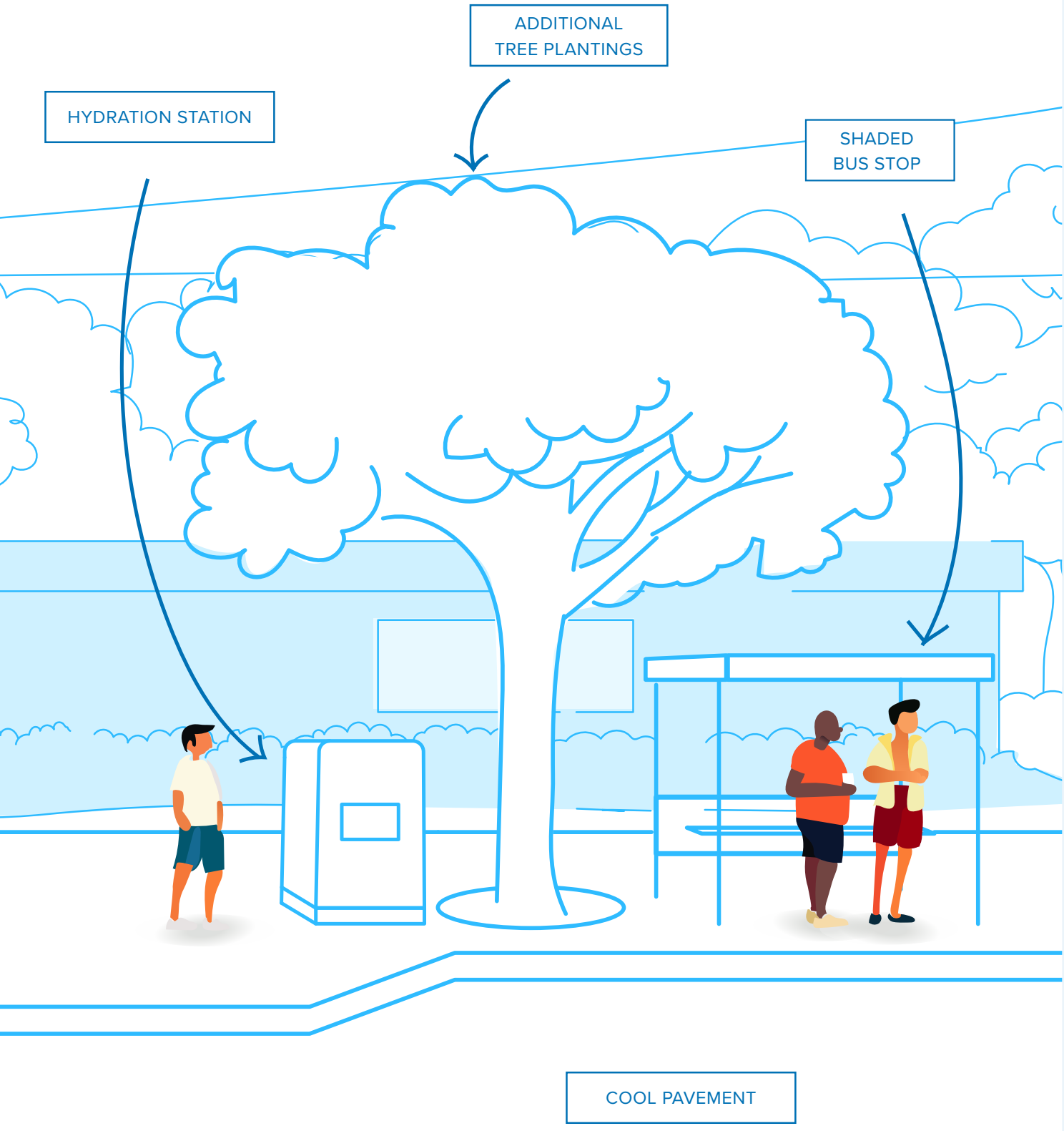
Leveraging the Heat Vulnerability Index, input from East Tampa community members, and City inter-departmental workshops, the City of Tampa is launching a cool corridor pilot program. The pilot, centered in East Tampa, seeks to enhance existing cooling assets and neighborhood hot spots, develop safe street networks, and foster cross-sectoral coordination to maximize tree planting opportunities. Tampa is one among many cities across the Country piloting the cool corridor model to support residents in the face of extreme heat.

Planting more trees will ensure all communities can leverage the health and resilience benefits that trees offer as they mitigate against increased heat but can also offset greenhouse gas (GHG) emissions and intercept rainfall, reducing stress on stormwater systems. Beyond trees, the City will also use this pilot to explore other cooling interventions along the selected corridor. Interventions being explored include built shade structures, cool pavement, and hydration stations.

Successful interventions and learnings from the pilot will then be scaled to other neighborhoods across Tampa.

PARTNER DEPARTMENTS: PARKS AND RECREATION DEPARTMENT, URBAN FORESTRY DIVISION, OFFICE OF SUSTAINABILITY AND RESILIENCE, MOBILITY DEPARTMENT, CITY PLANNING DEPARTMENT, COMMUNITY ENGAGEMENT AND PARTNERSHIPS DEPARTMENT




ADDITIONAL
TREE PLANTINGS
HYDRATION STATION
SHADED
BUS STOP
COOL PAVEMENT

TAMPA PLAYBOOK

The Tampa Heat Resilience Playbook includes 18 tactical actions the City of Tampa will advance to address the impacts of extreme heat. These actions are organized under 4 key priority areas:

1 Reduce Heat Risk for All Tampanians

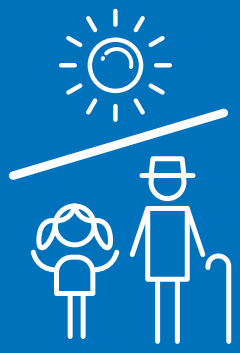
2 Increase Access to Cool Spaces

3 Maximize the Benefit of Our Tree Canopy

4 Adapt our Built Environment to the Impacts of Extreme Heat

The City will continue to prioritize investments and projects in higher heat vulnerable neighborhoods, while also ensuring that critical citywide policies and projects are deployed. Multiple agencies and actors contributed to these actions and will continue to collaborate on implementing the playbook.

1 Reduce Heat Risk for Tampanians



This priority area outlines actions to protect the health and safety of Tampanians in the face of increasing temperatures — especially those most vulnerable to the impacts of extreme heat.

1.1 LAUNCH A COMMUNITY PREPAREDNESS CAMPAIGN AROUND EXTREME HEAT

Create accessible materials that inform Tampanians about the risks of extreme heat, tactics for managing heat stress and available resources. Using the City's existing communication channels, partnerships with community groups, and a variety of outreach methods, the City will ensure that extreme heat messaging reaches residents in the lead-up to and during extreme heat days.

PARTNER DEPARTMENTS: OFFICE OF EMERGENCY MANAGEMENT, OFFICE OF SUSTAINABILITY AND RESILIENCE, COMMUNITY ENGAGEMENT AND PARTNERSHIPS DEPARTMENT, MARKETING AND COMMUNICATIONS DIVISION

1.2 PILOT A HEAT RESILIENCE PROGRAM FOR RENTERS

Connect Tampa's low- and moderate-income renters with the resources needed to stay cool in their homes. The City will expand outreach and education on low- or no-cost cooling techniques and utility assistance programs such as the Low Income Home Energy Assistance Program (LIHEAP) and the Emergency Home Energy Assistance for the Elderly Program (EHEAP). The City will also explore programs in similar municipalities that support the provision of new or upgraded air-conditioning units for renters.

PARTNER DEPARTMENTS: DEVELOPMENT & GROWTH MANAGEMENT DEPARTMENT, HOUSING AND COMMUNITY DEVELOPMENT DIVISION

1.3 EXPAND ACCESS TO WEATHERIZATION AND ENERGY EFFICIENCY UPGRADES FOR HOMEOWNERS

Expand the set of retrofits provided to Tampa's low- and moderate-income homeowners through the City's Owner-Occupied Rehab (OOR) Program to include upgrades such as attic insulation and tankless water heaters that further decrease residents' energy cost burden and mitigate the impacts of extreme heat. Conducting pre- and post-blower tests on OOR homes will ensure retrofits are reducing energy use and help make the case for additional funding that expands access to OOR to more vulnerable homeowners.

PARTNER DEPARTMENTS: DEVELOPMENT & GROWTH MANAGEMENT DEPARTMENT, HOUSING AND COMMUNITY DEVELOPMENT DIVISION

1.4 PILOT A TARGETED HEAT OUTREACH PROGRAM FOR TAMPANIANS MOST VULNERABLE TO HEAT

Launch a heat ambassador initiative in 1-2 East Tampa neighborhoods to ensure the most heat-vulnerable residents — especially seniors and those with underlying health conditions — are safe during times of extreme weather. The City will partner with the East Tampa CRA and local neighborhood associations to identify residents most at risk, train ambassadors, and pilot one-to-one outreach campaigns to reach those neighbors. The City will also engage with the local healthcare community — especially home health aide organizations — to equip front-line workers with heat risk training to support the vulnerable residents under their care.

PARTNER DEPARTMENTS: OFFICE OF EMERGENCY MANAGEMENT, OFFICE OF SUSTAINABILITY AND RESILIENCE, COMMUNITY ENGAGEMENT AND PARTNERSHIPS DEPARTMENT, MARKETING AND COMMUNICATIONS DIVISION

1.5 UPLIFT OUTDOOR WORKER HEAT SAFETY STANDARDS FOR CITY EMPLOYEES AND CONTRACTORS

Advance recommended safety measures (e.g., provision of water, shading, breaks) to protect City workers during extreme heat events. Beyond its own workforce, the City will educate City contractors about the risks of extreme heat and incorporate outdoor worker safety standards into City procurement requirements moving forward.

PARTNER DEPARTMENTS: OFFICE OF SUSTAINABILITY AND RESILIENCE, HUMAN RESOURCES & TALENT DEVELOPMENT

1.6 EXPLORE MAXIMUM INDOOR TEMPERATURE STANDARDS

Assess the feasibility of setting maximum indoor temperature standards to keep Tampa's renters — who make up half of the city's residents — safe and cool. The City will research municipalities facing similar climate challenges, such as Dallas and Phoenix, that have adopted maximum indoor temperature regulations as part of their minimum housing standards.

PARTNER DEPARTMENTS: OFFICE OF SUSTAINABILITY AND RESILIENCE

2 Increase Access to Cool Spaces

This priority area outlines ways to improve access to shade, water, cooling centers, and cool spaces by increasing the amount of these cooling features and creating connections between these spaces.

2.1 CREATE NETWORKS OF COOLING CORRIDORS

Connect existing green spaces and community assets through "cooling corridors". Cooling corridors are segments of streets and sidewalks that will have increased shading and other cooling benefits. Cooling corridors will support pedestrians, cyclists, and commuters in remaining cool while also supporting overall cooling of neighborhoods. Key initial corridors of focus include Vision Zero streets, safe routes to schools and connecting neighborhood parks and green spaces.

PARTNER DEPARTMENTS: PARKS AND RECREATION DEPARTMENT, URBAN FORESTRY DIVISION, OFFICE OF SUSTAINABILITY AND RESILIENCE, MOBILITY DEPARTMENT, CITY PLANNING DEPARTMENT, COMMUNITY ENGAGEMENT AND PARTNERSHIPS DEPARTMENT

2.2 INCREASE COOLING FEATURES IN PARKS AND STORMWATER PONDS

Increase shading in existing parks while augmenting existing public stormwater ponds with cooling and recreational benefits. As the Parks and Recreation Department continues to upgrade and design new Parks, heat resilient design elements will be incorporated. Additionally, the City of Tampa will leverage the development of the East Tampa Recreation Center to catalyze a model resilience center with a resilience hub, green infrastructure, and cool corridors leading to the space.

PARTNER DEPARTMENTS: PARKS AND RECREATION DEPARTMENT

2.3 INCREASE ACCESS TO WATER FEATURES FOR COOLING

The Department of Parks and Recreation will continue to evaluate the feasibility of splash pads, fountains, and water misters. Finally, the City will look for opportunities for increased access to drinking water through the installation of hydration stations.

PARTNER DEPARTMENTS: PARKS AND RECREATION DEPARTMENT

2.4 INCREASE COOLING IN AND AROUND SCHOOLS

Partner with local schools to expand shading on the school campus. Additionally, create cooling corridors along safe routes to schools. Finally, work with schools in high heat neighborhoods to explore other greening benefits within its campus.

PARTNER DEPARTMENTS: PARKS AND RECREATION DEPARTMENT, MOBILITY DEPARTMENT, HILLSBOROUGH COUNTY PUBLIC SCHOOLS

2.5 LAUNCH COOLING CENTERS DESIGNED TO MEET COMMUNITY NEEDS

Identify, design, and support improved community cooling centers in City-owned buildings in high-heat vulnerable neighborhoods. This can include ensuring that cooling centers are trusted community facilities and are welcoming and enjoyable spaces. The City will also explore incentivizing private and non-profit partners to serve as cooling centers.

PARTNER DEPARTMENTS: PARKS AND RECREATION DEPARTMENT, OFFICE OF EMERGENCY MANAGEMENT, COMMUNITY ENGAGEMENT AND PARTNERSHIPS DEPARTMENT

2.6 IMPLEMENT A RECREATIONAL COMPLEX IN EAST TAMPA

Design and implement the East Tampa Recreational Complex to include gold-standard heat resilience elements. The City of Tampa will incorporate shading elements — including shaded walkways and tree plantings — across the 10-acre campus and along corridors leading to the Complex in the surrounding neighborhood. In addition, a new splash pad will be installed to provide cooling benefits and recreation for children and families. The Complex will be primed to become a resilience hub in Tampa: connecting residents to needed information and resources that increase resilience to extreme heat and other climate events.

PARTNER DEPARTMENTS: PARKS AND RECREATION DEPARTMENT

3 Maximize the Benefit of our Tree Canopy

This priority area outlines actions the City of Tampa will take to preserve and increase its tree canopy, a critical infrastructure system that provides multiple benefits — cooling, stormwater management, air quality improvement, and more — to all Tampanians.

3.1 EXPAND TREE PLANTING PARTNERSHIPS

Identify new resources and partnerships including with schools, businesses, homeowners, and potentially County and State Agencies — that increase the impact of the tree planting programs. This should include organizations and people to plant and maintain trees, as well as funding for new trees. This expanded network will also explore innovation around tree maintenance to encourage greater program participation and develop a campaign to educate homeowners and landscapers on trees, their multiple benefits, and tree maintenance approaches.

PARTNER DEPARTMENTS: PARKS AND RECREATION DEPARTMENT, URBAN FORESTRY DIVISION, OFFICE OF SUSTAINABILITY AND RESILIENCE

3.2 HARNESS AND PROTECT OUR EXISTING TREE CANOPY

Building on the diverse existing knowledge of tree planting and maintenance across departments, develop a centralized inter-departmental advisory team made up of experts on tree maintenance to support departments and outside entities (e.g., TECO) across the city as they work in and around tree canopies. The City will also leverage existing permit data and review processes to better adaptively manage Tampa's tree canopy — including maintenance of new trees and protection of existing ones.

PARTNER DEPARTMENTS: PARKS AND RECREATION DEPARTMENT, URBAN FORESTRY DIVISION, OFFICE OF SUSTAINABILITY AND RESILIENCE, DEVELOPMENT & GROWTH MANAGEMENT DEPARTMENT

3.3 ACCELERATE NEW TREE PLANTING STRATEGIES TO SUPPORT THE MAYOR'S GOAL OF 30,000 NEW TREES BY 2030

Increase the annual rate of tree planting through a coordinated effort that brings together multiple City departments and other partners. The City will conduct an analysis of right-of-way and median tree planting location viability in coordination with utilities and Hillsborough County and Florida Department of Transportation partners — with a focus on identifying priority opportunity corridors. Prioritized corridors will also account for proximity to existing community assets and institutions including schools, businesses, and stormwater ponds. Using these findings, the City will pilot an accelerated tree planting program on a subset of these streets that incorporates both maintenance innovation and workforce training. Learnings from this pilot will inform a City-wide program that will put 30,000 new trees in the ground by 2030.

PARTNER DEPARTMENTS: PARKS AND RECREATION DEPARTMENT, URBAN FORESTRY DIVISION, OFFICE OF SUSTAINABILITY AND RESILIENCE, MOBILITY DEPARTMENT, CITY PLANNING DEPARTMENT, COMMUNITY ENGAGEMENT AND PARTNERSHIPS DEPARTMENT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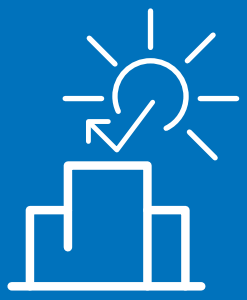
LIMIT
25

4 Adapt our Built Environment to the Impacts of Extreme Heat



This priority area outlines the policies, codes, and investments needed to make our buildings, streets, and sidewalks resilient to extreme heat.

4.1 ENSURE COOL BUILDINGS

Embed heat resilience design elements in new and existing buildings through incentives, codes, and retrofit assistance. Following Tampa's recent incentivization of LEED building standards, the City will also explore additional heat resilience design best practices that could be incorporated into the building and land development code. The City will also incentivize heat-resilient design in new construction through the use of density bonuses and other incentives. Additionally, greening City-owned parking lots while also exploring a commercial parking lot greening policy will provide cooling benefits. Finally, the City will lead by example and deploy heat resilience elements to City-owned buildings, City-sponsored redevelopment projects, and Tampa Housing Authority buildings.

PARTNER DEPARTMENTS: CITY PLANNING DEPARTMENT, DEVELOPMENT AND GROWTH MANAGEMENT DEPARTMENT

4.2 COOL STREETS AND SIDEWALKS

Explore cooling sidewalks, streets, and other paved spaces with cool pavement and green infrastructure. The City will continue to analyze if the benefits of cool pavement are benefical in Tampa and pilot the use on non-pedestrian heavy corridors. The City will also green streets and sidewalks by increasing the urban tree canopy and working closely with County and State partners on increasing street trees along partner-owned corridors. Lastly, the City will update and expand "public realm" standards to increase trees, awnings, and other cooling elements through incremental redevelopment.

PARTNER DEPARTMENTS: CITY PLANNING DEPARTMENT, MOBILITY DEPARTMENT, PARKS AND RECREATION DEPARTMENT

4.3 INVEST IN HEAT RESILIENCE IN CITY CAPITAL PROJECTS

Establish a dedicated percentage of the capital budget to climate-resilient design features. The City will develop specific guidance for all City capital projects that include heat resilience as well as other climate resilience standards. Pursuant to the Mayor's Executive Order 2023-03, the City of Tampa must review capital projects to ensure there are opportunities for resilient infrastructure. To operationalize these goals, the City will develop guidance and a dedicated allocation of the City capital budget to invest in climate-resilient elements in capital projects. By investing in climate resilience including heat resilience, the City will ensure all capital projects such as streetscape upgrades are incorporating cooling pavements, built shade, trees, and other cooling techniques where applicable.

PARTNER DEPARTMENTS: OFFICE OF SUSTAINABILITY AND RESILIENCE, CITY PLANNING DEPARTMENT, DEVELOPMENT AND GROWTH MANAGEMENT DEPARTMENT, MOBILITY DEPARTMENT

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Parks and Recreation Department

City Planning Department

Development and Growth Management Department

Community Engagement and Partnerships

Mobility Department

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