

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. The summer of 2023 only underscored the urgency of this trend – with July becoming the world’s hottest month on record.¹ And 2024 is projected to be even hotter.²

In Tampa, this global phenomenon has translated into more days and longer periods of extreme heat: when temperatures are much hotter and/or humid than average.³ 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 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 residents, with extreme heat being the leading cause of weather-related deaths nationwide.



July 2023 was the planet’s hottest month on record

In 2022, Tampa experienced 89 dangerous days with the heat index exceeding 100 degrees.

1 <https://public.wmo.int/en/media/press-release/july-2023-set-be-hottest-month-record>
2 <https://www.climatecentral.org/climate-matters/2024-summer-package>
3 https://www.cdc.gov/disasters/extremeheat/heat_guide.html

But Isn't Tampa Always Hot?

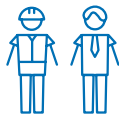
Although known for its warm climate, Tampa isn't immune from the dangers of extreme heat. Since 2016, Tampa's heat index has consistently exceeded 100 degrees for over 45 days per year. This number spiked in 2022, with Tampa experiencing 89 dangerous days with the heat index exceeding 100 degrees. And in 2023 the trend became 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.⁴ 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 nationwide⁵

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.⁶



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 residents 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 residents, increase access to spaces of refuge, enhance and protect our tree canopy, and ensure that heat resilience is built into plans for growth.

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

⁵ <https://www.who.int/news-room/fact-sheets/detail/climate-change-heat-and-health>

⁶ <https://tbrpc.org/taking-stock-climate-driven-heat-impacts-on-the-tampa-bay-regional-economy-through-2060/>

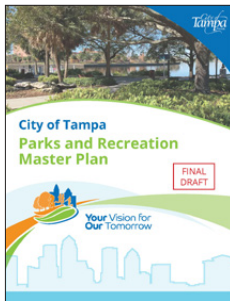
MATRIX OF PLANS

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.



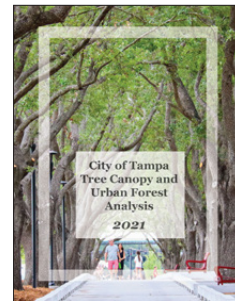
EAST TAMPA CRA STRATEGIC ACTION PLAN

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.



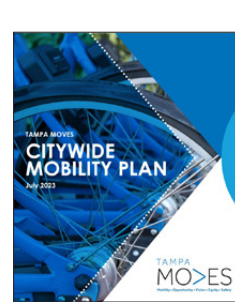
RESILIENT TAMPA

Lays out a tactical roadmap that sets forth concrete actions that address our city’s most pressing challenges at all scales: from individual residents 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

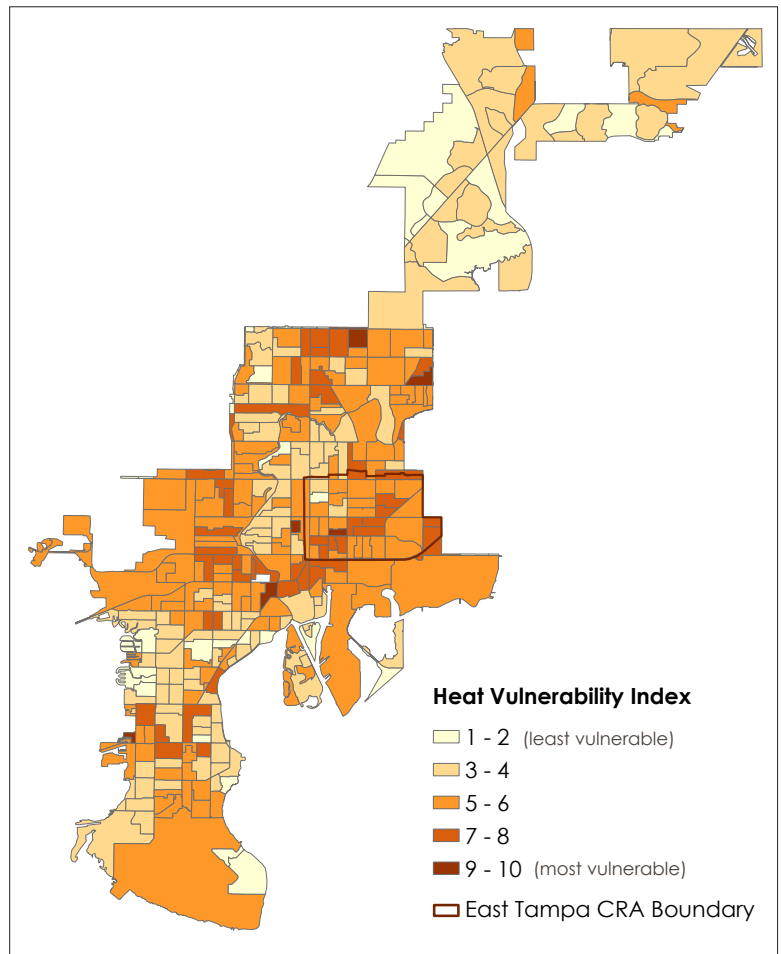
Tampa M.O.V.E.S. Plan that serves as the City’s roadmap to improve and expand mobility and transportation around the City.

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

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.⁷ 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,⁸ 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.

7 <https://dsl.richmond.edu/panorama/redlining/#loc=12/27.942/-82.571&city=tampa-fl>

8 <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



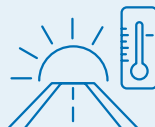
Trees, access to splash pads and pools, and built shade were among residents' most desired cooling solutions



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



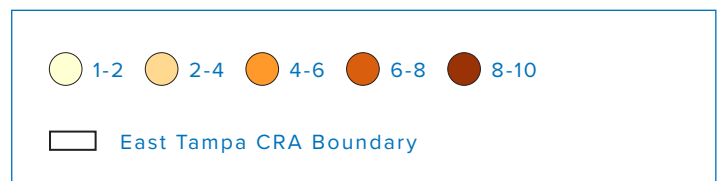
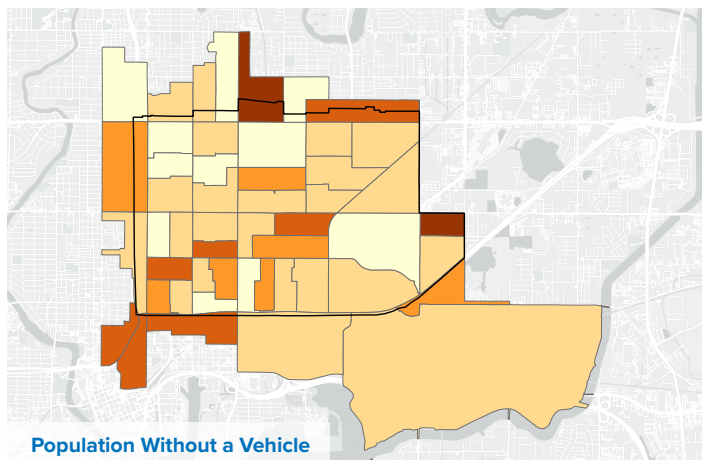
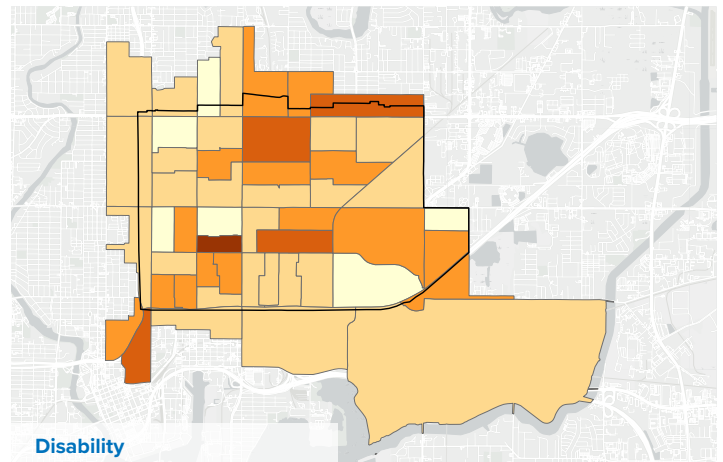
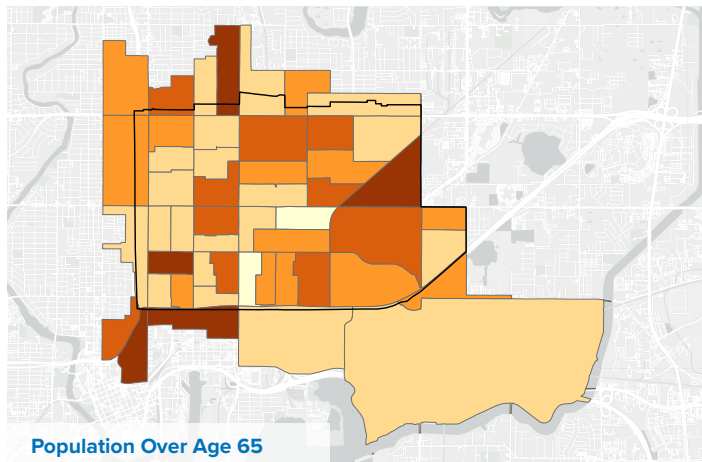
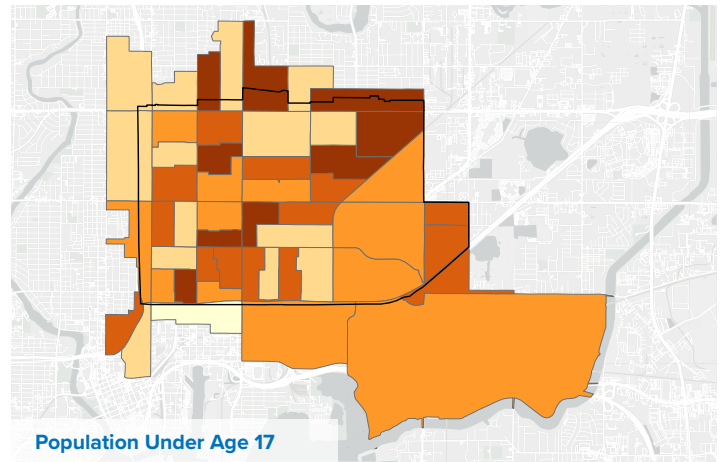
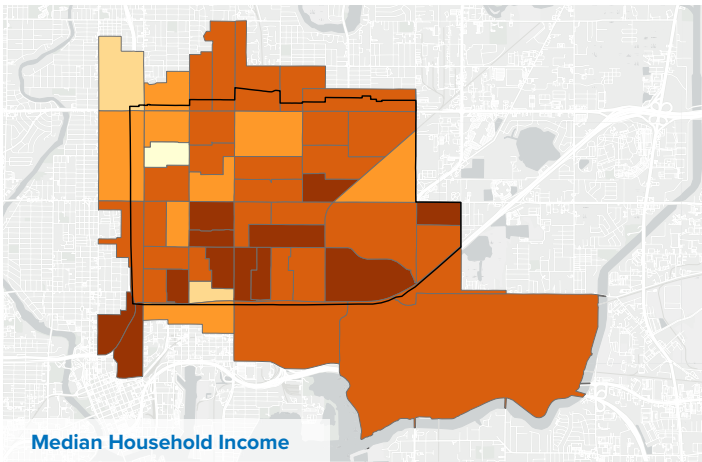
Finding additional ways to improve heat resilience in and around existing community assets — including parks and schools — was identified as a key priority by East Tampa community members



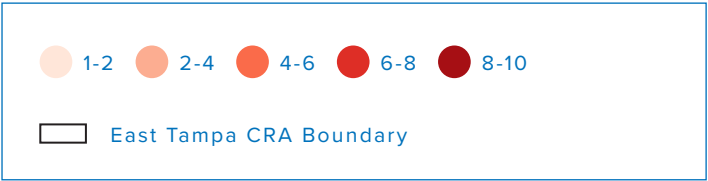
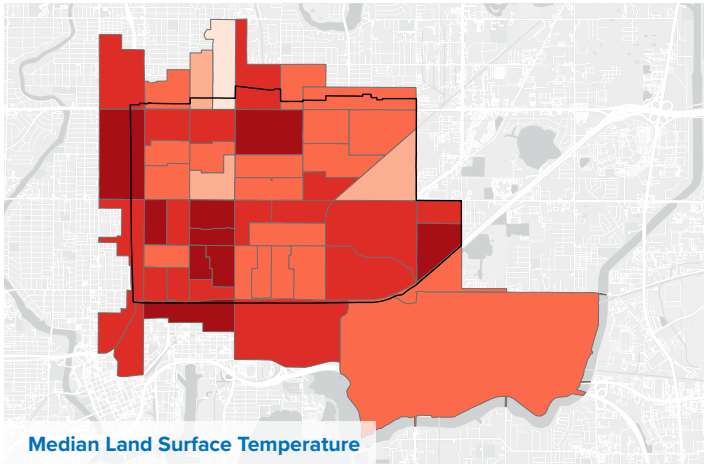
Major corridors that are known for safety concerns — including East Hillsborough Avenue, MLK Jr. Boulevard, and Nebraska Avenue — were identified as being particularly hot places

HEAT VULNERABILITY INDEX: Factors in East Tampa

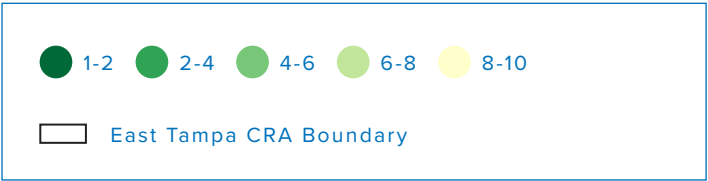
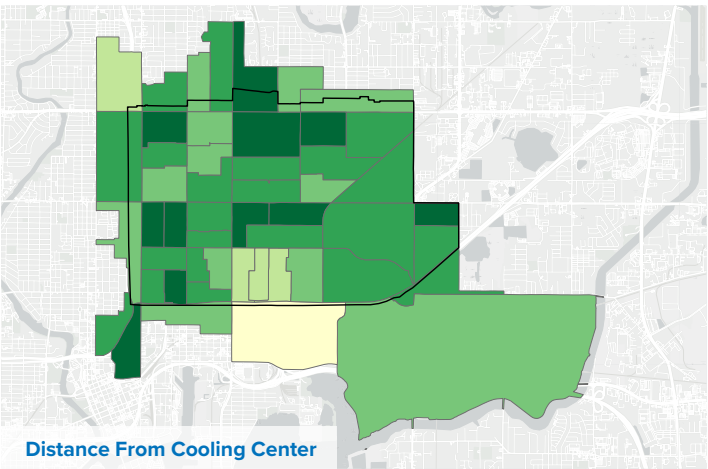
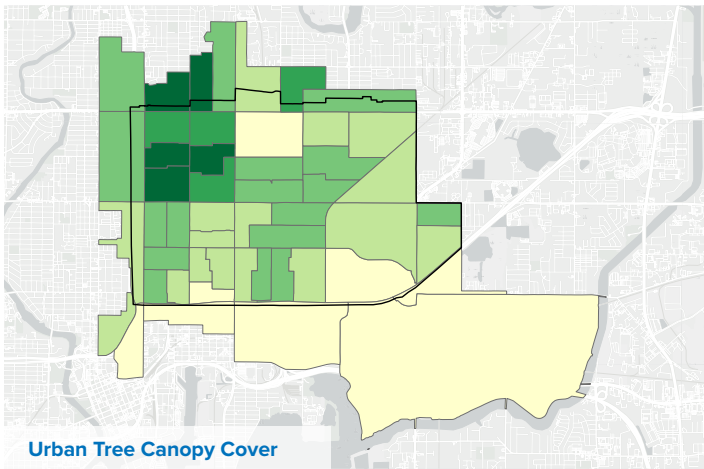
SENSITIVITY



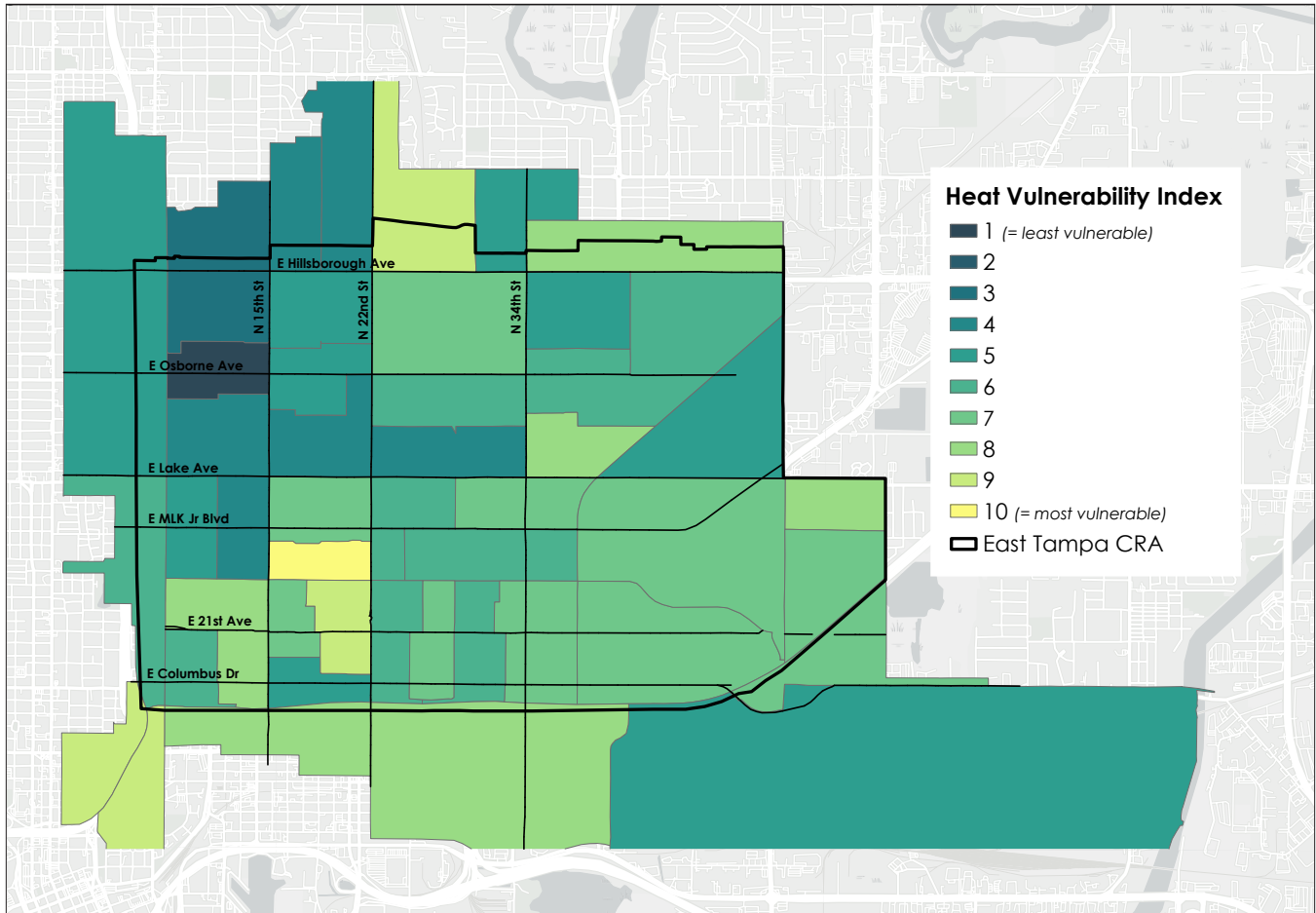
EXPOSURE



ADAPTIVE CAPACITY



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 as 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.

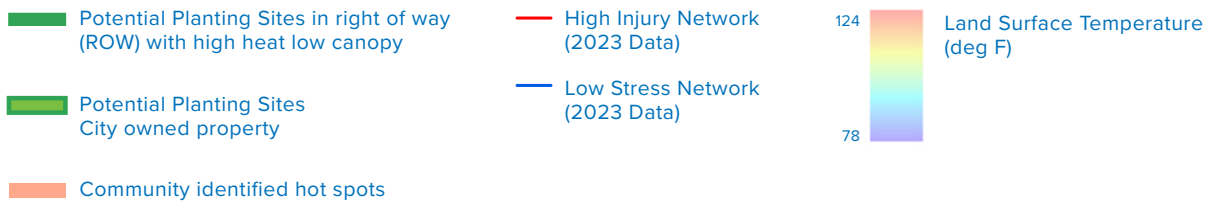
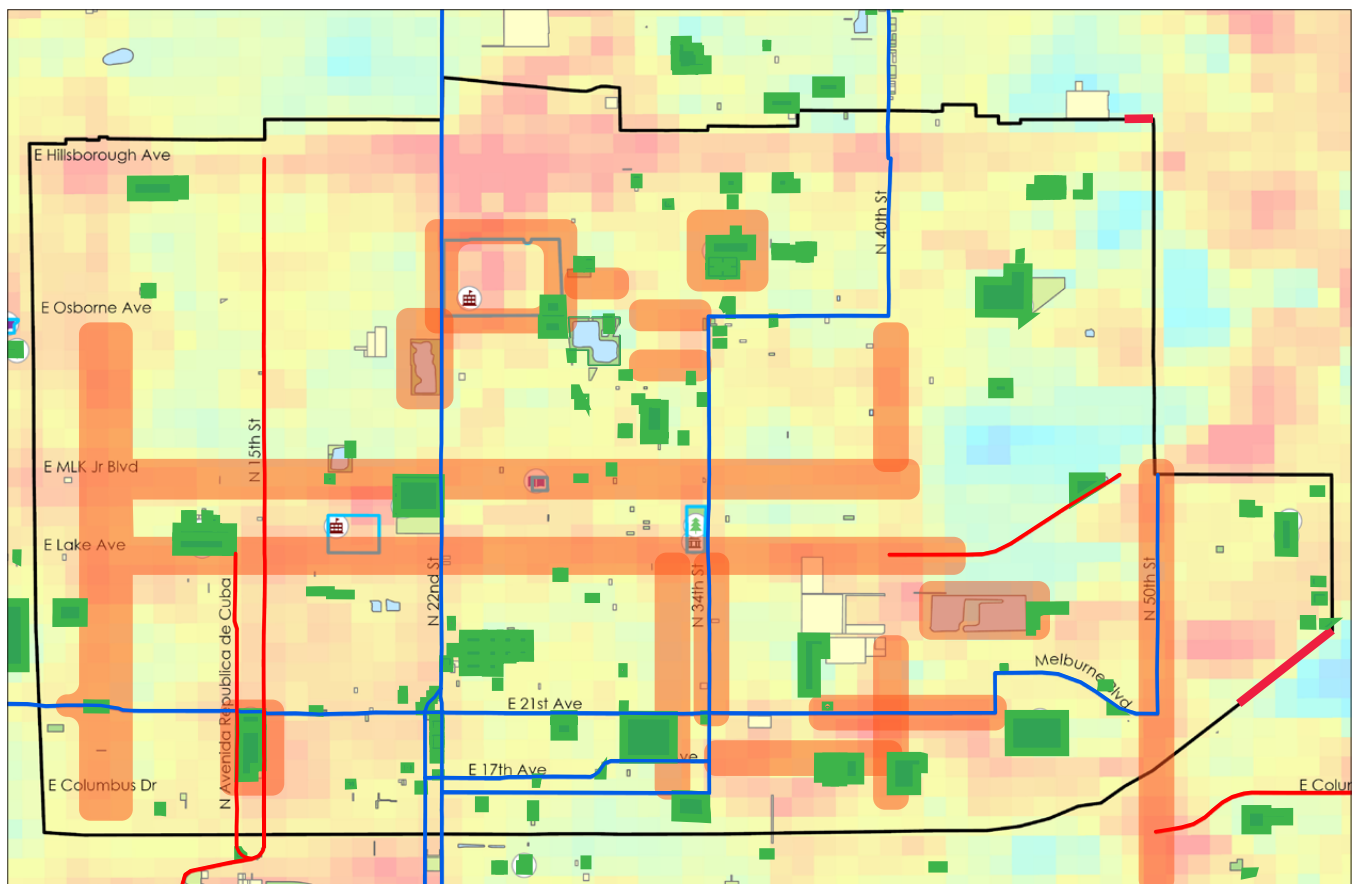
East Tampa is a robust and diverse combination of neighborhoods and community pockets. While some areas within the boundary experience high tree canopy cover (shade and cooling) and walkable access to potential cooling centers (parks, community centers, libraries, pools, splash pads), pockets of vulnerable 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 city-wide since 2016), the City of Tampa announced an ambitious citywide goal to plant 30,000 trees by the year 2030.

To help meet the Citywide goal through the Trees for Tampa program and address extreme heat equitably, the City is launching a cool corridor pilot program focused on mitigating heat and enhancing cooling along neighborhood corridors through tree planting and other interventions. 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.



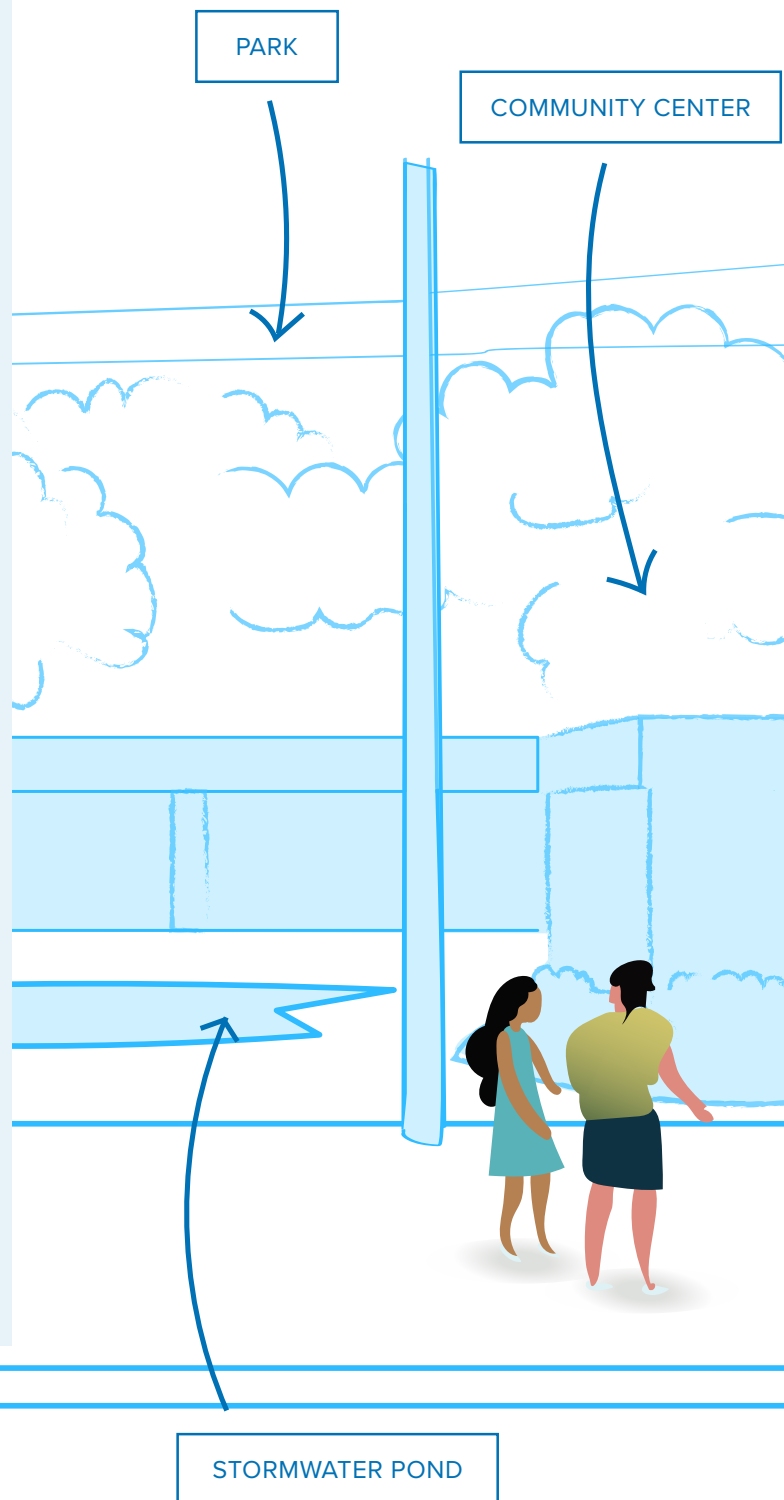
East Tampa Cool Corridor Pilot

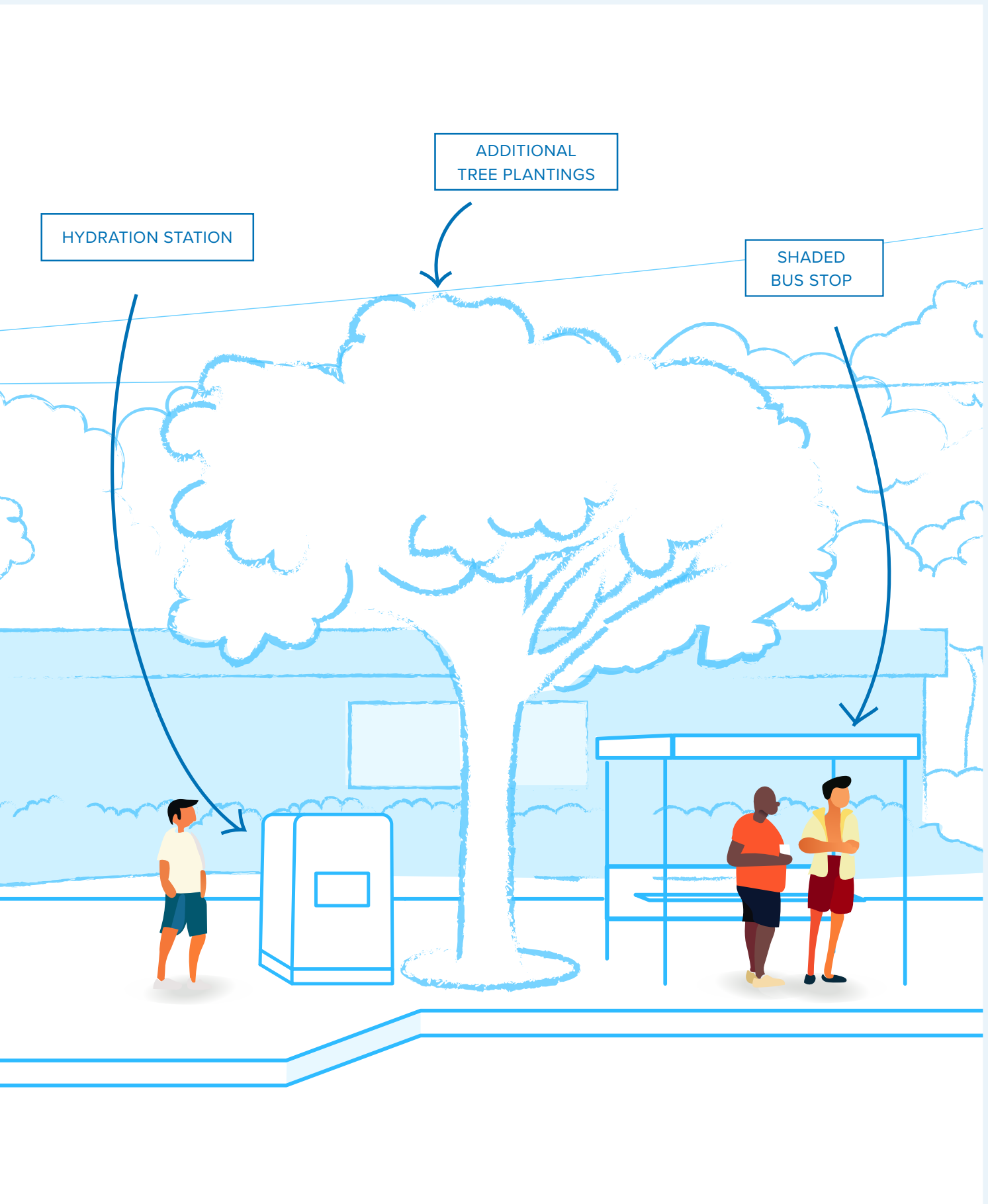
Leveraging the Heat Vulnerability Index, input from East Tampa community members, and City inter-departmental workshops, the City of Tampa is launching a cool corridor pilot program. The pilot, centered in East Tampa, along North 22nd Street, seeks to support heat adaptation, neighborhood cooling, and public health outcomes through community-prioritized physical and programmatic measures while maximizing 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





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

2 Increase Access to Cool Spaces

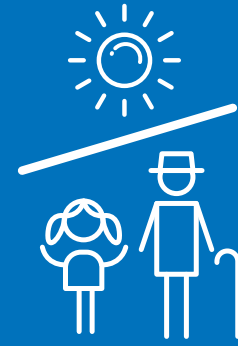
3 Maximize the Benefit of Our Tree Canopy

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 All



This priority area outlines actions to protect the health and safety of residents 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 residents 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

Explore expanding 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 among other climate risks. 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 RESIDENTS 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 MEASURES 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 lead by example and share outdoor worker heat safety measures on its website.

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

Alert Tampa | HEATSAFE Alerts

Extreme heat is the leading cause of weather-related deaths nationwide and poses a serious risk to residents' health. However, with notice, residents can better prepare themselves to avoid the worst impacts of extreme heat.

Facing the hottest summer on record, the City upgraded the Alert Tampa system to include optional heat alerts. Alert Tampa enables the City to provide residents with critical information from severe weather to other emergencies via phone call, text, and email.

Through this system, residents that opt into HEATSAFE, are now alerted when the City experiences heat advisories and extreme heat warnings; both of which can cause heat-related illnesses including heat exhaustion and heat stroke. Beyond these warnings, the HEATSAFE system provides residents with tips to stay cool, cooling locations, and other heat-related information.

To sign up to receive these alerts text HEATSAFE to 888-777.



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. The City will look for opportunities for increased access to drinking water through the installation of hydration stations.

PARTNER DEPARTMENTS: PARKS AND RECREATION DEPARTMENT, WATER 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 residents.

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





WHAT IS THE RIGHT OF WAY (ROW)?

All publicly owned land for the transportation network including sidewalks, bike lanes, street parking, public transit, and traffic lanes. The right-of-way (ROW) begins where the private property line ends. It includes the physical infrastructure needed for transportation but can also include amenity elements such as landscaping, benches, medians, streetlights, and newspaper boxes.

40-100 ft.



Width

The width of the ROW is generally about 40-100 feet, influenced by many factors including the speed limit, number of traffic lanes, and the type of land use. Some older neighborhoods may have less than 30-foot ROWs for their streets, while state-owned roads, such as Dale Mabry Highway, can be up to 200 feet wide in some parts of the city. Generally, the width exists on a spectrum where more urban and walkable areas are narrower while rural and higher traffic areas are wider.



Ownership

Streets in Tampa consist of a mosaic of ownership between different jurisdictions, including the City of Tampa, Hillsborough County, and the Florida Department of Transportation. For example, MacDill Avenue is owned by the City of Tampa, Armenia Avenue is owned by Hillsborough County, and Kennedy Boulevard is owned by the State of Florida.

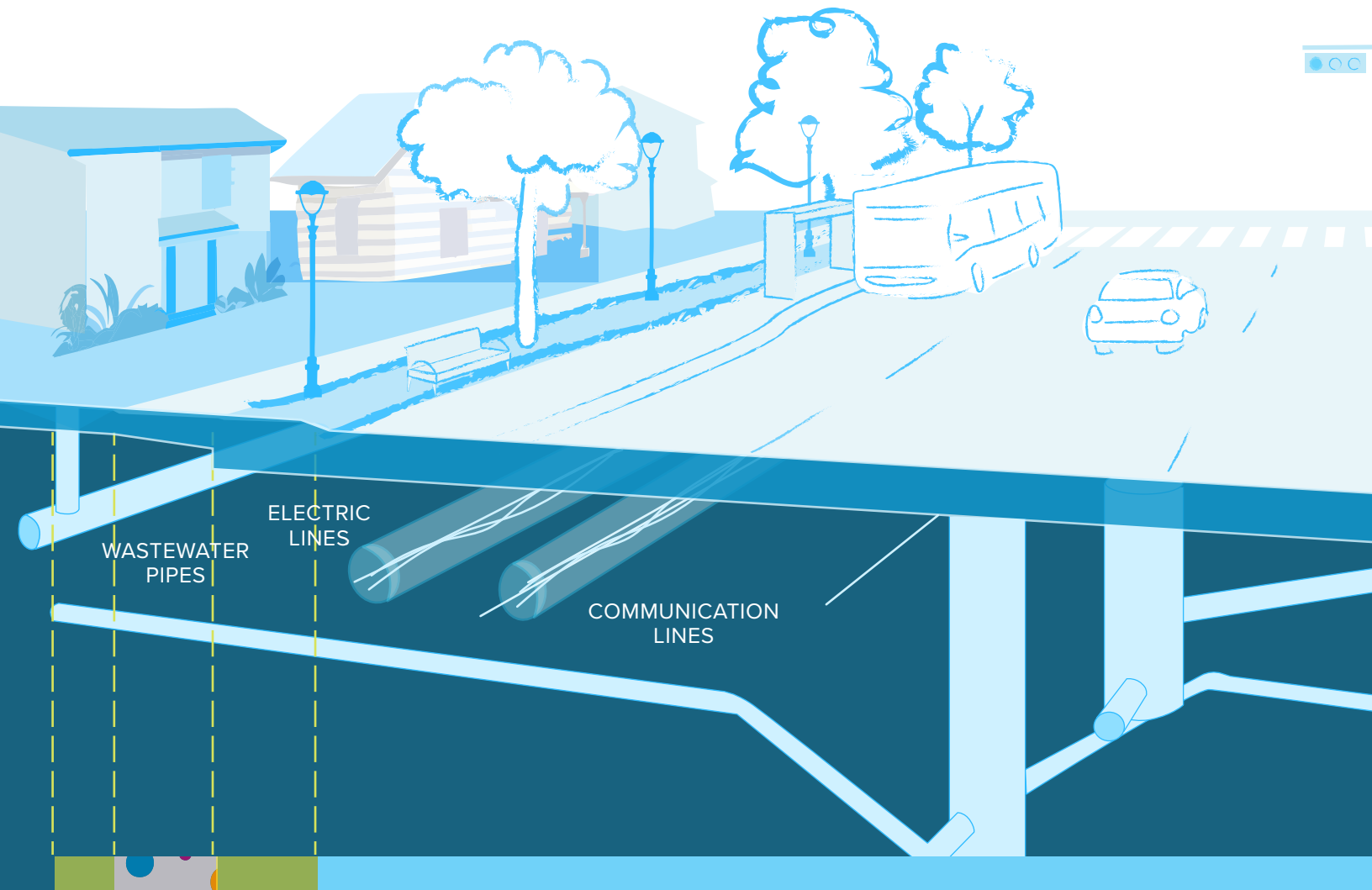


Maintenance

Maintenance of the ROW, such as filling a pothole or planting a tree, typically falls on the various entities who have ownership of the street, but there are exceptions. For example, Bayshore Boulevard is owned by the county but is maintained by the City of Tampa. Almost all traffic signals within the city limits are maintained by the City of Tampa regardless of ownership.

PLANTING CHALLENGES AND OPPORTUNITIES IN THE RIGHT OF WAY

The ROW is home to critical city infrastructure that is often competing for a small amount of space. However, increasing the pervious surface or green infrastructure in the ROW, such as trees or bioswales, will help reduce excess heat and create other benefits, such as decreased stormwater runoff.



TRIMMING & REMOVAL:

TECO works with the ROW team at the City of Tampa as it relates to pruning and removal of trees in the ROW.

BY ORDINANCE:

To avoid conflict with overhead power line(s), vegetation that exceeds twenty-five (25) feet in height at maturity shall not be planted closer than thirty (30) feet from the vertical plane of an existing power line, excluding service wires.



Street Trees

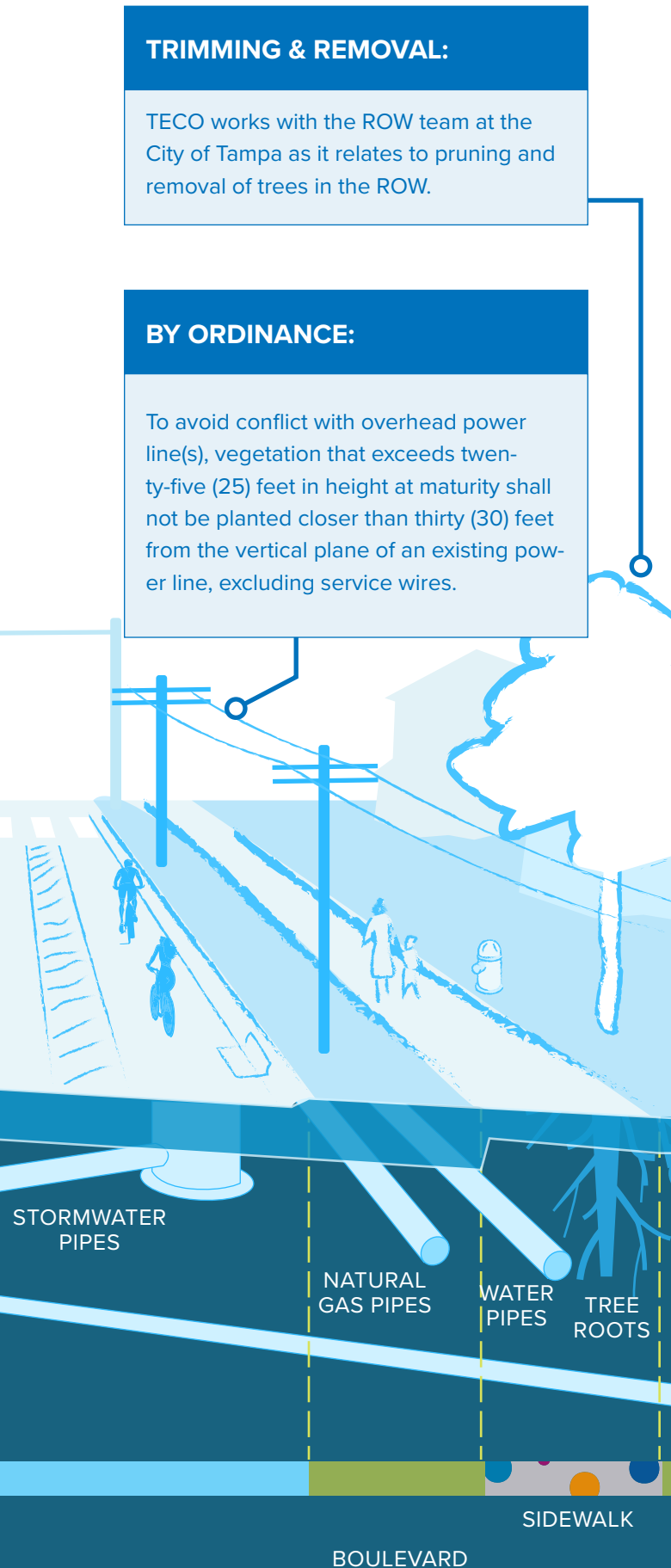
In 2023, Mayor Castor announced the City's goal to plant 30,000 trees by 2030 through the Trees for Tampa program. Street trees, trees in the ROW, are a key piece of that goal. Below are some considerations the City accounts for when planting street trees.

Tree Benefits: The shade that trees provide can cool land surface temperatures by up to 6 degrees F and air temperatures by up to 25 degrees F. Street trees also help to reduce noise pollution, improve air quality, and reduce stormwater runoff.

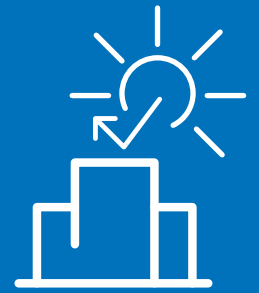
Tree Maintenance: Street trees in the city-owned or maintained ROW are maintained by the City of Tampa's Urban Forestry Team in the Department of Parks & Recreation. The 17-person team is responsible for the pruning, management, and removal of trees in 1,400 miles of streets and over 194 parks, green spaces, and cemeteries.

Barriers to Planting: Finding space in the ROW to plant trees where there are limited conflicts with other infrastructure, such as sidewalks and water pipes, is challenging. At left is an example of the types of infrastructure competing for space.

Right Tree Right Place: Not all trees are well suited for all environments. Through planning and an analysis of existing infrastructure the City carefully decides which trees can be planted where.



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. As the City updates its bonus density program, one of the potential public benefit options for that program should be focused on heat resilience. Additionally, the City is poised to complete a major update to the Land Development Code for private development. As part of this update, the tree and landscape section will be reviewed to explore opportunities to achieve better cooling outcomes. Finally, the City will lead by example and deploy heat resilience elements to City-owned buildings and City-sponsored redevelopment projects.

PARTNER DEPARTMENTS: CITY PLANNING DEPARTMENT, DEVELOPMENT AND GROWTH MANAGEMENT DEPARTMENT, LOGISTICS & ASSET 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 beneficial 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. The City will explore the current costs and resources of the in lieu fee for trees and for landscape to ensure they are achieving the maximum value for resilience and that costs are adjusted to the CPI. Lastly, the City should update and expand “public realm” standards to incentivize and increase shade 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

Explore developing specific guidance for all City capital projects that includes 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 explore developing guidance and a dedicated allocation of the City capital budget to invest in climate-resilient elements in capital projects. By investing in climate 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



WHAT TAMPA RESIDENTS CAN DO TO STAY COOL

Tips and Programs to Keep You and Your Community Safe and Cool



Understand the Heat Index. The heat index is what the temperature feels like to the human body when humidity is considered. In other words, it is the “feels-like” temperature. This is especially important to consider in a humid environment like Tampa. Sweat evaporating off the skin is the body’s natural way of cooling off. During high humidity, sweat cannot evaporate as easily which causes the body to feel warmer. The table below shows the dangers posed when exacerbated with prolonged heat exposure and physical activity.

CLASSIFICATION	HEAT INDEX	EFFECT ON THE BODY
CAUTION	80 - 89 degrees F	Fatigue possible with prolonged exposure and/or physical activity
EXTREME CAUTION	90 - 102 degrees F	Heat stroke, heat cramps, or heat exhaustion possible with prolonged exposure and/or physical activity
DANGER	103 - 124 degrees F	Heat cramps or heat exhaustion likely, and heat stroke possible with prolonged exposure and/or physical activity
EXTREME DANGER	125 degrees F or higher	Heat stroke highly likely

Source: National Weather Service



Cooling Down, Remaining Hydrated, and Staying Safe

- Limit time outdoors and, when possible, schedule outdoor activities during cooler parts of the day
- Drink fluids regularly to avoid dehydration
- Dress in loose-fitting, lightweight, and light-colored clothes
- Check in on family, friends, and neighbors
- Do not leave pets or children in hot vehicles, even with windows rolled down



Heat-Resilient Homes

- Join the city-sponsored [Solar United Neighbors Hillsborough Solar Co-op](#) to learn if solar energy is the right fit for you
- Get a free energy audit through TECO's [Weatherization Program](#)
- See if you qualify for the [Energy Efficient Home Improvement tax credit](#)
- Apply for [Energy Bill Assistance](#)
- Apply for [Tampa's Owner-Occupied Rehab Program](#)
- Plant a tree in your yard through [Tree-Mendous](#) to provide additional shade and reduce heat



Heat-Resilient Communities

- Opt in to [Alert Tampa](#): HEATSAFE and follow Alert Tampa on Facebook, Instagram, and X
- Visit one of the 11 pools and 9 splash pads that are located throughout the city. Locations, hours, and open swim schedules can be found on the [Pool Facilities and Schedules](#) webpage
- Visit cool spaces in your community such as libraries, places of worship, community centers, shopping malls, and cooling centers

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Community Engagement and
Partnerships
Development and Growth Management
Department
Human Resources and Talent Division
Logistics & Asset Management
Department
Mobility Department
Office of Emergency Management
Office of Sustainability and Resilience
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Water Department

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