



RESILIENT JACKSONVILLE

ANNUAL UPDATE

OCTOBER 2024

Resilient Jacksonville, released in October 2023, looks to the future of our city for the next 50 years and establishes an ambitious framework for tackling complex challenges over the coming decades. The strategy leans on sound science and data as the foundation for planning and decision-making to ensure actions today meet the needs of tomorrow. As the City continues to embrace change from increasing and uncertain risks, Jacksonville is well on its way to achieving its vision as a more resilient city that proactively adapts, fosters healthy communities and environments, expands opportunities, and builds for the future.

Over the past year, the City has been working diligently to implement this vision, using a science-based approach to prioritizing actions and investments. The newly established Office of Resilience has added capacity and expertise to lead the implementation of *Resilient Jacksonville* with the same rigor as used in the development of the strategy. In the first year alone, the City has fostered a culture of resilience and moved swiftly to implement actions, with 38 of the 45 actions currently underway.

Jacksonville's innovative approach to resilience has established it as a national leader in the field. In this capacity, the City has prioritized sharing best practices and lessons learned in addressing flooding and urban heat issues with communities across Florida and the country. The City is dedicated to maintaining partnerships, advancing actions, and remaining on the cutting edge of resilience. We look forward to continuing the momentum towards building a resilient Jacksonville with you.



RESILIENT JACKSONVILLE BY THE NUMBERS



Systems

Adaptation Approaches and Actions that work across multiple sites at a neighborhood, corridor, landscape, or regional scale.

18

Actions In Progress

20

Total Actions



Sites

Adaptation Approaches and Actions that can be implemented at the scale of a single asset or site.

7

Actions In Progress

9

Total Actions



People

Resilience Approaches and Actions that focus on residents, communities, businesses, organizations, and partnerships.

13

Actions In Progress

16

Total Actions



Resilience Funding To-Date

Includes but not limited to

**Regional
Catastrophic
Preparedness
Grant Program**

Federal Emergency
Management Agency

\$1M

**Community Wildfire
Defense Grant**

U.S. Forest Service

\$250K

**Resilient Florida
Grant Program**

Florida Department of
Environmental Protection

\$38.7M

Smart Surfaces Coalition

National League of Cities

\$10M

(technical assistance)

**Safe Streets and
Roads for All**

U.S. Department
of Transportation

\$1.3M

**Climate Pollution
Reduction Grant**

Environmental Protection Agency

\$1M

Heat Watch Study

National Oceanic and
Atmospheric Administration

\$12K

KEY PROJECTS

Compound Flood Model & Real-Time Forecasting

The Office of Resilience is working with a team of experts to develop a compound flood model to measure the combined impacts of coastal surge, tidal fluctuations, riverine flooding, and inland stormwater flooding. The model will provide Jacksonville with the most advanced flood data in the country, identify the most flood-prone areas of the city, and guide project development.

- The compound flood model will run 10,000 probabilistic flood scenarios, which incorporate current conditions and future projections based on the best available science.
- The model will inform a real-time forecasting system that can anticipate where flooding is likely to occur in advance of a storm and guide emergency response and evacuations.

Urban Forestry Management Plan

The Office of Resilience is leading the development of Jacksonville's first Urban Forestry Management Plan to guide the protection and expansion of Jacksonville's tree canopy. The plan is being developed in coordination with the Jacksonville Tree Commission, parks and public works staff, community stakeholders, and guided by a team of experts.

- The plan will identify new planting zones and detail the proper management, regulation, and preservation decisions needed to ensure the long-term success of tree planting projects.
- The plan will help address the public health implications of extreme heat and target tree plantings in the areas of the city most in need of heat mitigation.

Land Development Regulation Update

The Office of Resilience is working with the Planning Department to update the City's land development regulations to incorporate resilience. The update is aimed at encouraging development in areas of the city that are most prepared to accommodate our growing population safely. Resilient development is a crucial step towards reducing future vulnerability to flooding and other hazards.

- The updated regulations will incentivize smart and climate-adaptive development in areas of the city with lower risk of flooding and where multi-modal transportation options are available.
- The project is supported by a team of consultants and an advisory group made up of developers, development attorneys, engineers, affordable housing, community and environmental advocates.

Extreme Temperature EOC Standards

The Office of Resilience is partnering with the Emergency Preparedness Division of the Jacksonville Fire and Rescue Department to develop standards and procedures for responding to extreme heat and freeze events. This project will ensure a swift and coordinated response to extreme temperature events, in much the same manner that we respond to other threats like hurricanes.

- The project is supported by a \$1M Regional Catastrophic Preparedness Grant from FEMA.
- The procedures developed will guide the activation of the Emergency Operation Center for a coordinated city-wide response to extreme temperature events.



RESILIENT JACKSONVILLE ONGOING ACTIONS

1	Guide future growth in areas that are at low risk and well-connected to infrastructure.	1.1 Update the City's land development regulations. 1.2 Facilitate strategic infill development in areas of low flood risk. 1.3 Incorporate resilience considerations into future land use.
2	Ensure infrastructure investments are aligned with land use priorities for growth and conservation.	2.1 Ensure infrastructure investments are aligned with land use priorities for growth and conservation.
5	Update public works design standards to account for climate change impacts and support resilient infrastructure development.	5.1 Align above-ground and below-ground infrastructure specifications and review process. 5.2 Update the standard details and specifications for City of Jacksonville street designs. 5.3 Incorporate green infrastructure features into drainage specifications.
6	Create connected and multimodal transportation options.	6.1 Increase public transit service and ridership. 6.2 Strengthen first and last mile connections to transit. 6.3 Increase bicycle ridership through bike share and e-bike incentives.
7	Build ecological and recreational connections across Jacksonville's parks and open spaces.	7.1 Support the continued buildout of and safe connections to the Emerald Trail System. 7.2 Support the expansion of Jacksonville's regional trail system. 7.3 Connect open spaces and ecosystems to establish habitat corridors and improve water management.
8	Make room for the river and tributaries.	
9	Develop a green infrastructure program across Jacksonville based on the best available stormwater science and data.	
10	Expand Jacksonville's tree canopy.	10.1 Plant more climate-adaptive trees to increase shade and ecosystem value. 10.2 Develop an Urban Forest Management Plan. 10.3 Improve the City's engagement with neighborhoods on the management and expansion of Jacksonville's tree canopy.
11	Ensure water and energy utilities can meet the growing demands of the future.	11.1 Support the implementation and regular updating of JEA's Integrated Resource Plans.
12	Preserve ecologically important areas with the capacity to manage water and mitigate extreme heat.	12.2 Support strategic land acquisition for conservation.
13	Improve land management and stewardship to enhance ecosystem value, improve public safety, and reduce wildfire risk.	13.2 Manage invasive species and nuisance animals 13.3 Manage forests to reduce wildfire risk.
14	Discourage new development in current and future high-risk areas and mitigate downstream impacts in the watershed.	
15	Enhance ecosystem and community health by improving water, soil, and air quality.	15.1 Improve watershed health and water quality.
16	Invest strategically in hardened shorelines.	16.1 Manage publicly owned bulkhead heights in accordance with best available flood data.
17	Identify shorelines where natural and nature-based solutions can provide long-lasting ecosystem service benefits.	17.1 Conduct research and analyses to identify waterfront edges most suitable for natural and nature-based solutions. 17.2 Address shoreline erosion in coastal parks.
18	Improve digital security of critical assets and infrastructure from cyberattacks.	
19	Strengthen emergency response and evacuation plans.	19.1 Routinely refine the city's hurricane evacuation zones based on the best available data. 19.3 Create plans for extreme heat and freeze events
20	Strengthen Jacksonville's lifelines and supply chains to withstand extended disruptions to regular operations and commerce.	20.2 Maintain commerce into and out of the city through partnerships with the Port and other agencies.
21	Expand retrofit programs for residential and commercial buildings to improve building energy performance, storm fortification, cooling, and stormwater detention.	21.2 Leverage federal funding to improve community awareness of lower-cost floodproofing, heat, and energy performance upgrades. 21.4 Explore retrofits for stormwater ponds.
22	Implement resilient standards and codes for existing and new construction.	22.3 Develop design standards and guidelines for riverfront properties to accommodate flooding.
23	Maximize the resilience of City-owned buildings and assets.	23.1 Conduct energy benchmarking on City buildings.
24	Invest strategically in existing parks to increase stormwater management capacity and reduce urban heat.	24.1 Align resilience actions with the forthcoming Master Recreation Improvement Plan. 24.2 Create multi-beneficial park amenities with intentional stormwater retention.
25	Repurpose vacant land for uses that best support resilience goals.	
26	Retrofit parking lots and impervious surfaces to reduce urban heat and increase stormwater infiltration and storage.	
27	Harden vulnerable critical assets to mitigate damage from hazards and ensure continuity of operations.	27.1 Fortify City-owned assets, such as evacuation roads and bridges. 27.2 Work with utilities and independent agencies to identify and fortify their vulnerable critical assets.
30	Strengthen the citywide response to extreme heat and other public health emergencies.	30.1 Expand JaxReady alert system for high heat days 30.2 Extend open hours and access to cooling infrastructure and air-conditioned public facilities during high heat days.
31	Increase mental and physical health and well-being across Jacksonville through tailored resource delivery.	31.1 Support the Blue Zones Project to improve community health and wellbeing.
33	Develop, implement, and monitor plans in support of eliminating all bicycle and pedestrian deaths in Jacksonville.	33.1 Complete a Vision Zero Action Plan with a goal of zero traffic fatalities and serious injuries among all roadway users by 2035. 33.2 Complete and update additional plans in support of the VZAP, including the Pedestrian and Bicycle Master Plan, Pedestrian Safety Action Plan, and Mobility Plan.
34	Strengthen community cohesion in all of Jacksonville's neighborhoods through quality public spaces, events, and activities.	
35	Engage Jacksonville's youth to guide future resilience and climate action.	35.2 Incorporate resilience education and materials into Jacksonville youth programs.
38	Market Jacksonville's resilient business climate to attract new companies and investment.	
39	Address rising flood and homeowners' insurance costs by investing in risk reduction.	39.1 Maintain participation in FEMA's CRS program to lower flood insurance premiums based on risk reduction activities.
40	Establish an Office of Resilience to facilitate the ongoing implementation of <i>Resilient Jacksonville</i> .	40.1 Facilitate interdepartmental and interagency collaboration throughout City government and with external partners. 40.2 Use the best available science and data to inform decisions.
41	Expand community knowledge and participation in resilience actions.	41.1 Coordinate with local organizations, including nonprofits and philanthropy. 41.2 Coordinate public education and engagement activities.
42	Coordinate resilience actions and policies across agencies and relevant independent authorities.	
43	Develop a Climate Action Plan that aligns Jacksonville's resilience goals with actions to promote sustainability.	43.1 Lead the development of a Climate Action Plan for the North Florida region through the EPA Climate Pollution Reduction Grant.
44	Support regional resilience efforts.	
45	Coordinate and leverage resilience investments with federal partners and resources, including military partners.	45.1 Leverage federal data, tools, and other resources. 45.2 Build relationships with military and other federal partners to maximize resilience investments.