



RESILIENT JACKSONVILLE

DRAFT Outline of Actions & Sub-Actions For Review and Feedback Purposes July 21 to August 4, 2023

OVERVIEW & BACKGROUND

Jacksonville is in the process of finalizing a comprehensive city resilience strategy to guide policies, projects, and programs that will help Jacksonville prepare for, adapt to, and quickly rebound from acute shocks and chronic stresses the city may face.

For the past fifteen months, the City's Chief Resilience Officer and the planning team supporting her have been leading a science-based planning process to prioritize actions and investments that will make Jacksonville more resilient. Building on important resilience work in Jacksonville that preceded this effort, this process engaged public, private, nonprofit, and philanthropic stakeholders as well as the public in identifying and developing resilience actions.

The final *Resilient Jacksonville* strategy document is scheduled to be completed in late September. This outline provides an overview of the most substantial section in the document: the actions (policies, projects, and programs) that Jacksonville will take to become a more resilient city. This document is intended for review and feedback purposes and is not an outline of the strategy in its entirety. The final document will also include: background context to understand Jacksonville today, a future vision and associated objectives for a resilient Jacksonville, a summary of the shocks and stresses Jacksonville faces and the associated vulnerabilities and risks, and place-based strategies that connect the actions to where and how to implement them across the diversity of neighborhood conditions within Jacksonville. Additionally, there will be a companion vulnerability assessment document that goes into greater detail on the data analyzed as part of this planning process.

For more information, visit: resilientjacksonville.com

Please submit any feedback on the action outline via this online form by Friday, August 4, 2023:
<https://forms.gle/ztudaopPLCjdkcrG6>

VISION FOR A RESILIENT JACKSONVILLE

City resilience is the ability of city systems to adapt and thrive in the face of **acute shocks** (sudden, extreme events that threaten a community) and **chronic stresses** (long-term pressures that weaken the fabric of a community over time). Often, the impact of an acute shock, like a hurricane, is made worse by chronic stresses, like aging infrastructure or poverty. A resilience approach plans holistically for a safe and thriving future for the city's people, economy, and physical environment.

Jacksonville's vision for resilience is closely tied to its identity as a city shaped by water, a spacious city, a welcoming city, and a growing city. Jacksonville's vision for resilience looks toward the future and embraces change. Even as the city faces new, increasing, and uncertain risks, we believe Jacksonville's best days are ahead. The following four themes are central to Jacksonville's vision for resilience and have set the direction for this planning process.

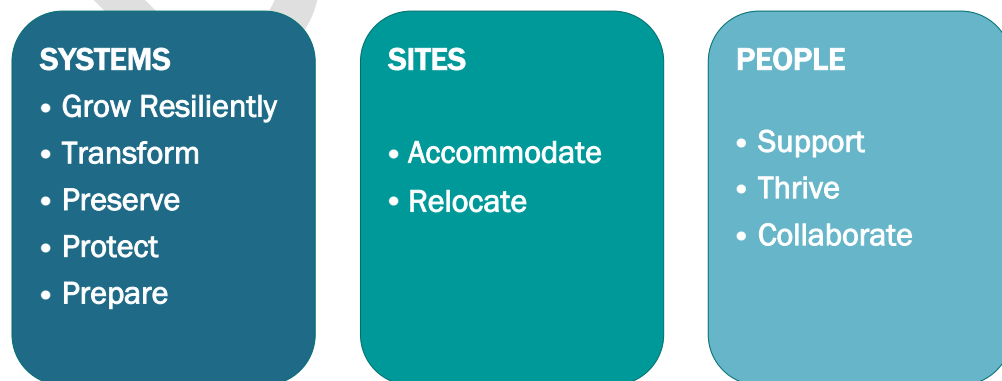
A resilient Jacksonville will be a city that:

1. Proactively Adapts
2. Fosters Healthy Communities and Environments
3. Expands Opportunity
4. Builds for the Future

UNDERSTANDING ACTION ORGANIZATION

There are three overarching categories of draft actions defined by the scales at which the actions are intended to be implemented: systems, sites, and people. Under each of these categories, there are several adaptation approaches described in detail within this outline. Under each adaptation approach, there are numbers and titles for draft actions. Some actions also include distinct numbered sub-actions.

The final strategy document will include a written description of all actions and sub-actions and how they increase Jacksonville's resilience, as well as implementation details such as timeline, lead and partners, and funding sources.



DRAFT Outline of Actions & Sub-Actions

SYSTEMS

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

GROW RESILIENTLY: GUIDE SAFE AND CONNECTED DEVELOPMENT TO AREAS OF LOW FLOOD RISK AND HIGH RESILIENCE POTENTIAL.

Jacksonville is a growing city, but that growth should be informed by the risks and hazards facing the city today and in the future. The business-as-usual patterns of development in Jacksonville are not sufficient for coping with the stresses that exist today and the increasing risks of the future. This approach focuses on actions Jacksonville can take to guide future development that is not only safer from flooding and other hazards, but also well-connected to infrastructure and services—facilitating a more resilient growth model for Jacksonville’s future.

1. **Target 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 planning.
2. **Ensure infrastructure investments are aligned with land use priorities for growth and conservation.**
 - 2.1. Embed resilience in the prioritization process for Capital Improvement Plan investments.
 - 2.2. Prioritize utility expansion in high, dry, and connected areas.
3. **Develop design guidelines for climate adaptive and low-impact new subdivisions, neighborhoods, and planned developments.**
 - o Design guidelines that cover elements such as tree cover, shade, impervious cover, materials, and floor area ratios will be informed by global best practices so that housing is climate adaptive, and prepared to withstand future hazards for decades to come.
4. **Increase and safeguard the supply of affordable housing in low-risk and well-connected neighborhoods.**
 - 4.1. Expand affordable housing in low-risk areas by supporting Community Land Trust acquisitions.
 - 4.2. Safeguard affordable housing by securing heirs’ property rights.

TRANSFORM: REDESIGN INFRASTRUCTURE AND THE BUILT ENVIRONMENT TO MAKE SPACE FOR WATER, REDUCE URBAN HEAT, AND IMPROVE CONNECTIONS BETWEEN PLACES.

Laying the groundwork for the next generation of resilient development in Jacksonville will require rethinking how we plan and build infrastructure to support a high quality of life for all residents. This approach focuses on actions that fundamentally alter where and how infrastructure such as roads, trails, utilities, waterways, open spaces, and tree canopies are designed, constructed, and maintained to meet the challenges and demands of the future.

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 processes.
 - 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.
 - 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.**
 - Restore natural/historic floodplains by creating floodable landscapes, building on existing efforts such as the McCoy's Creek restoration.
9. **Develop a green stormwater infrastructure program across Jacksonville based on the best available science and data.**
 - Prioritize projects, like bioswales and rain gardens, in areas where chronic flooding is a concern.
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 Plan for energy and Annual Water Resource Master Plan for water and wastewater.
 - 11.2. Improve utility resilience in Jacksonville's neighborhoods to minimize disruptions to service delivery.

PRESERVE: CONSERVE AND ENHANCE VALUABLE OPEN SPACE AND ECOSYSTEMS AND LIMIT DEVELOPMENT IN AREAS OF HIGH FLOOD RISK.

Jacksonville is a water city. The critical functions of the river, tributaries, coast, ecosystems, and open spaces can be maximized to manage water, mitigate heat, and maintain natural beauty for the benefit of all residents. Actions under this approach are focused around living safely with water and discouraging development where the risk of flooding is high right now and in the future.

12. Preserve ecologically important areas with the capacity to manage water and mitigate extreme heat.

- 12.1. Protect existing park and preserve lands in perpetuity.
- 12.2. Support strategic land acquisition for conservation.

13. Improve land management and stewardship to enhance ecosystem value.

- 13.1. Establish guidelines, resources, and trainings for resilient land management.
- 13.2. Manage invasive species and nuisance animals.
- 13.3. Conduct prescribed burns and manage vegetation in preserve parks.

14. Discourage development in current and future undeveloped high-risk areas and mitigate downstream impacts in the watershed.

- While directing future growth to lower-risk areas, the City will also discourage development in extreme cases where future risk is high.

15. Enhance ecosystem and community health by improving water, soil, and air quality.

- 15.1. Improve watershed health and water quality.
- 15.2. Address saltwater intrusion and rising groundwater threats.
- 15.3. Expand cleanups of toxic soils and brownfield sites.
- 15.4. Maintain healthy air quality.

PROTECT: FORTIFY CRITICAL CITY SYSTEMS AGAINST FUTURE THREATS.

Planning resiliently for Jacksonville's future includes investing in the protection of major city systems. This approach involves actions that strategically safeguard vulnerable, critical systems in built, natural, and cyber environments, and prioritize investments using data and scientific analyses to avoid single points of failure. Most actions included in this approach are costly and will not be able to be deployed everywhere. This approach is not only about what types of protective actions are used, but also about deciding how and where this type of protection will best serve Jacksonville's residents.

16. Invest strategically in hardened shorelines.

- 16.1. Manage publicly owned bulkhead heights in accordance with best available flood data.
- 16.2. Set height standards for privately-owned bulkheads.
- 16.3. Evaluate where additional publicly-funded structural shoreline protection may be technically and financially feasible.

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.**

- The City's consolidated, interconnected cybersecurity defense platform will continue to undergo routine improvements in order to prevent and remediate cyber threats.

PREPARE: PLAN IN ADVANCE OF A THREAT TO IMPROVE THE RESPONSE OF CITY SYSTEMS DURING AN EMERGENCY.

Preparedness is a core adaptation approach, as not all threats can be avoided or mitigated. In an uncertain future, preparing for severe events, outages, and disruptions is a sound practice to ensure that daily life in Jacksonville can resume as soon as possible, and that residents' needs can be met under difficult circumstances that are often compounded by financial pressures and emotional hardship.

19. Strengthen **emergency response and evacuation plans.**

- 19.1. Routinely refine the city's hurricane evacuation zones based on the best available data.
- 19.2. Identify high frequency flooding intersections for automated flood alert signage.
- 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.**

- 20.1. Work with critical service providers, like area hospital systems, to ensure adequate stockpile of resources.
- 20.2. Maintain commerce into and out of the city through partnerships with the Port and other agencies.

SITES

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

ACCOMMODATE: ALTER OR RETROFIT VULNERABLE BUILDINGS AND THE BUILT ENVIRONMENT AT THE PARCEL LEVEL TO ADAPT TO HEAT AND MANAGE WATER.

While setting standards for new development is important, existing vulnerable buildings and structures will also need to be adapted to withstand future risks. Accommodation at the site scale includes retrofitting buildings, but also looks at the land itself. Maximizing the potential of different kinds of parks and open spaces designed to handle flooding can help ensure that stormwater is managed on site. With more accommodations at the site scale, Jacksonville will be more resilient and well-equipped to handle increasing climate risks like heat and flooding.

21. Expand retrofit programs for residential and commercial buildings to improve building energy performance, storm fortification, cooling, and stormwater detention.

- 21.1. Expand existing retrofit programs.
- 21.2. Leverage federal funding to improve community awareness of lower-cost floodproofing, heat, and energy performance upgrades.
- 21.3. Partner with downtown building owners to adopt larger-scale retrofits like green roofs and shading.
- 21.4. Explore retrofits for stormwater ponds.

22. Implement resilient standards and codes for existing and new construction.

- 22.1. Identify and promote standards that improve building and roof resilience to high winds.
- 22.2. Increase compliance of Florida Building Code standards, particularly on retrofits.
- 22.3. Develop design standards and guidelines for riverfront properties to accommodate flooding.
 - Example: Downtown riverfront parks and associated amenities

23. Maximize the resilience of City-owned buildings and assets.

- 23.1. Conduct energy benchmarking on City buildings.
- 23.2. Add green space, solar, and energy efficiency upgrades to school facilities and public buildings.
- 23.3. Establish Resilience Hubs in strategically located public facilities.
- 23.4. Complete an ADA Transition Plan to improve the safety and accessibility of public facilities.

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. Reinvest in multi-beneficial park amenities.
- 24.3. Create intentional stormwater retention features in parks.

25. Repurpose vacant land for uses that best support resilience goals.

- There are many options for resiliently repurposing vacant land based on community needs, including the addition of green space, green infrastructure, solar generation, or affordable housing.

26. Retrofit parking lots and impervious surfaces to reduce urban heat and increase stormwater infiltration and storage.

- Retrofits for large impervious surfaces such as de-paving and planting, green infrastructure, solar production, and public space can reduce the number of urban heat islands across the city and provide stormwater detention and other benefits.

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.

RELOCATE: OFFER VOLUNTARY, INCENTIVIZED, OR GRADUAL RETREAT WHERE FORTIFICATION AND ACCOMMODATION ARE NOT EFFICIENT OR EFFECTIVE.

While relocation is uncomfortable to consider and costly to execute, planning for relocation before a crisis occurs can ease this difficult process. Developing plans for assets that can and must be moved is a proactive step that can make emergency operations smoother in the future. Voluntary buyout programs are necessary for moving residents out of areas with repetitive and destructive flooding, but these programs can be streamlined and made more efficient to ensure that Jacksonville's residents in need of this kind of assistance can move to safety. These actions may have limited appeal today, but will likely be needed more often in the future.

28. Develop relocation plans for vulnerable critical assets that can be moved outside the floodplain.

- 28.1. Develop plans for moving City-owned critical assets where alternative adaptation options are infeasible.
- 28.2. Work with utilities and independent agencies to develop and implement relocation plans for their critical assets.

29. Streamline voluntary residential buyout and relocation programs for high-risk areas.

- The City currently uses funding from FEMA and HUD for buyouts of properties that repeatedly flood, and will work to make the process easier and faster for homeowners to navigate.

PEOPLE

Resilience approaches and actions that focus on residents, communities, businesses, organizations, and partnerships.

SUPPORT: INVEST IN THE HEALTH AND QUALITY OF LIFE OF JACKSONVILLE RESIDENTS.

The well-being of Jacksonville residents is essential to achieving Jacksonville’s vision for the future, and will rely on significant investments in public health and safety. For example, while Floridians are no strangers to heat, the risks of extreme heat are growing, and the strain on public health is increasingly evident. This approach calls for a shared commitment to ensuring that the built environment serves all Jacksonville residents, and includes actions that support Jacksonville’s people in navigating challenges today and into the future.

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 air-conditioned public facilities during high heat days.
- 30.3. Provide heat trainings for schools and youth sports organizations.
- 30.4. Provide guidance on outdoor work standards for employers.
- 30.5. Ensure robust and dynamic public health planning for vector-borne diseases and pandemics.

31. Increase mental and physical health and wellbeing across Jacksonville through tailored resource delivery.

- 31.1. Support the Blue Zones Project to improve community health and wellbeing.
- 31.2. Ensure residents can easily connect to available public and nonprofit resources and services.
- 31.3. Improve food security and healthy food access in all neighborhoods.
- 31.4. Prioritize veteran and servicemember health services.
- 31.5. Identify and connect with housebound seniors and people with disabilities.
- 31.6. Continue the existing collaboration between organizations serving homeless individuals.

32. Improve housing condition and quality.

- 32.1. Develop a rental registry and enforce minimum habitability requirements.
- 32.2. Establish right to counsel for evictions.

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 2030.
- 33.2. Complete and update additional plans in support of the Vision Zero Action Plan, 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.

- Foster a sense of solidarity and support among neighbors through arts and culture.

THRIVE: ENSURE SHARED PROSPERITY FOR JACKSONVILLE’S PEOPLE AND BUSINESSES FOR THE LONG-TERM.

Sustaining Jacksonville’s strong local economy and securing future opportunities for all residents will require deliberate investment in Jacksonville’s youth, and a commitment to job creation and business development that is aligned to resilience goals and accounts for future conditions. For Jacksonville to be a global business center, it must be proactive about addressing risk, and recognize that resilience is an economic opportunity that can increase jobs, investments, and revenues.

35. Engage Jacksonville’s youth to guide future resilience and climate action.

- 35.1. Foster youth leadership through the Mayor’s Youth Council and Kids Hope Alliance.
- 35.2. Incorporate resilience education and materials into Jacksonville youth programs.

36. Create new jobs, training, and business development opportunities by leveraging funding spent on resilience projects and programs.

- 36.1. Coordinate with local educational institutions to offer specialized training for jobs that are needed to meet resilience goals.
- 36.2. Encourage small business formation, specialization, and expansion into resilience work.

37. Expand digital and financial infrastructure necessary for full economic participation.

- 37.1. Maximize resources available for expansion of broadband citywide.
- 37.2. Support new models of community banking.

38. Market Jacksonville’s resilient business climate to attract new companies and investment.

- Ensure that marketing and business development organizations are telling the full story of Jacksonville's efforts to manage risk and increase resilience.

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.
- 39.2. Explore new and emerging models of hazard insurance for homeowners.

COLLABORATE: STRENGTHEN PARTNERSHIPS AND COORDINATION AMONG CITY DEPARTMENTS, BETWEEN GOVERNMENT AGENCIES, WITH CIVIC ORGANIZATIONS, AND IN SUPPORT OF REGIONAL COALITIONS.

Jacksonville's resilience strategy provides a foundation for the city's resilience actions and investments over the next 30 to 50 years, but long-term success and institutionalization of resilience requires tactical, organized coordination between decisionmakers. This approach contains actions focused on interagency planning, and an expansion of Jacksonville's resilience work to strengthen regional partnerships and benefit from additional resources to support local resilience.

40. Establish an Office of Resilience and Innovation to facilitate the ongoing implementation of the resilience strategy.

- 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.

- Stand up an interagency body for coordination and advising on relevant activities like maintenance, pursuit of federal funds, scenario planning, and retrofitting of critical assets.

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.
- 43.2. Secure federal funding to implement climate actions.

44. Support regional resilience efforts.

- The City will participate in regional efforts to promote strategy alignment and knowledge sharing, such as the Resilient First Coast collaborative.

45. Coordinate and leverage resilience investments with federal partners and resources, including military partners.

- 45.1. Leverage federal grants, data, tools, and other resources.
- 45.2. Build relationships with military partners to maximize resilience investments.