The RAFT: Maintaining Progress in Coastal Virginia

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HOPEWELL RAFT IMPLEMENTATION 2024

HEAT ACTION TOOLKIT COMPARISON

This is a comparison of the diverse approaches of the three different heat action toolkits across different categories. The toolkits are the North Carolina Heat Action Toolkit 2024, the Richmond Virginia "RVA Green" Climate Equity Action Plan 2024, and the Miami-Dade County Heat Action Toolkit 2022. Each city/State has implemented forward-thinking approaches to dealing with urban heat resilience, and the initiatives are described as benchmarks for other cities, such as Hopewell, VA, to enhance their heat resilience strategies.

What is unique about each city/State approach?

a) NC Heat Action toolkit (2024)

Creation of localized heat response teams: These comprise dedicated emergency responders, healthcare professionals, and community volunteers. The objective is to prioritize direct outreach during heat waves, providing immediate assistance, education, and interventions tailored to specific local needs. This ensures timely response and efficient community-specific adaptations.

b) RVA Green Climate Equity Action Plan (2024)

Incorporating equity-focused climate resilience audits: A unique approach which evaluates how well city policies and initiatives cater to the needs of vulnerable populations in climate action planning. Equity-based audits ensure equitably distributed climate resilience efforts, of which heat action plans form a part.

Integration of heat action with affordable housing initiatives: Examples of unique strategies that embed heat resilience features into affordable housing projects include green roofs, enhanced insulation, energy efficient cooling systems, to cater to low-income populations that experience poor living standards and higher energy costs.

c) Miami Heat Action Plan (2022)

Creation of Chief Heat Officer (CHO) role: The chief heat officer's job description is to coordinate heat resilience efforts across various sectors and agencies, to strategize urban cooling measures, to enhance public awareness, and to mobilize resources and policies aimed at mitigating heat-related risks.

Heat Resilient Infrastructure in Public Transit: Examples of heat-resilient designs include bus shelters and transit shops that protect commuters from heat exposure. Examples of heat-resilient materials include those that reflect light and maximize airflow.

Summary Table Comparison

Category	North Carolina Communities	Richmond VA	Miami-Dade County Florida
Toolkit Source Document	NC Heat Action Toolkit 2024	RVA Source Document (2024)	Miami-Dade Document 2022
Toolkit Objectives	To build resilience against extreme heat through community engagement, infrastructure planning, and health services.	To reduce urban heat island effect and increase community resilience to heat-related health risks.	To enhance community resilience through equity-focused environmental improvements.
Toolkit Elements	Community surveys, cooling centers, healthcare partnerships, public education.	Urban tree canopy expansion, public awareness campaigns, updated building codes for better air circulation.	Social equity, environmental justice, community education, and sustainable urban development.
Toolkit Strategies	Heat relief task forces, local heat action plans, training for health professionals.	Strategic tree plantings, public cooling areas, energy-efficient building initiatives.	Embedding heat resilience within broader climate action goals, such as, urban greening and infrastructure retrofits.
Toolkit Community Participation	Collaboration with local governments, health departments, and community organizations.	Community surveys, partnership with local universities, and public sectors.	Stakeholder workshops, community leader involvement, and public forums.
Measuring Success	Evaluation based on metric like declining heat related illnesses, survey feedback, and usage rates of cooling centers.	Evaluation based on tree canopy coverage, public use of cooling areas, and community feedback.	Evaluation based on climate action benchmarks, community feedback, and equity audits.
Public Awareness and Communication	Webinars, printed materials, social media campaigns on heat risk and prevention.	Public service announcements, educational campaigns in schools, and community centers.	Educational programs, and public awareness campaigns integrating climate knowledge with public health.
Toolkit Innovative Features	Comprehensive templates, checklists, and focus on health risk management.	Consideration of urban forestry initiatives, and modern urban planning, and heat resilience strategies.	Emphasis on equity and prioritizing vulnerable populations in climate resilience efforts.
Overall Emphasis	Health and community preparedness.	Integrating heat action with broader equity and environmental initiatives.	Urban planning and greening.

TOOLKIT STRATEGIES

North Carolina Communities

Heat relief task forces.

What this is: Diverse community members to help review and improve the usefulness of the heat action plan.

Examples: Members may include regional councils of government staff, at-risk community members, local emergency staff, local health department staff, local colleges and universities, school district staff, faith-based organization members, city and regional planners, among others.

Document Reference: NC Heat Action Toolkit 2024 pages XVII – XVIII, 28.

Local heat action plans.

What this is: A heat action plan that responds to the affected community's needs. Local jurisdictions tailor their plans.

Examples: Contextualized action for the jurisdiction, designating a responsible position, department or unit, establishing the expected timeline, specifying the criteria to be used to implement each action, detailing community partners and their role in the action, collecting data to measure the success of each action

Document Reference: NC Heat Action Toolkit 2024 pages XVIII - XIX.

Training for health professionals.

What this is: Synchronous/asynchronous professional development around heat-health for health professionals.

Examples: Courses and events related to heat offered throughout the State, NC Area Health Education Center (NC AHEC), Climate and Health Responder Course for Health Professionals, Online learning courses on heat and extreme weather, Seminar series on climate change and the threat against health, Climate Resilience for Frontline Clinics Toolkit.

Document Reference: NC Heat Action Toolkit 2024 page 19.

Richmond, VA

Strategic tree plantings.

What this is: This involves planting trees and increasing vegetation cover, especially in areas with low tree cover.

Examples: Replace trees and vegetation with more heat and drought tolerant native species.

Document Reference: RVA Source Document (2024) page 83-84

Public cooling areas

What this is: These are cooling shelters equitably distributed in the neighborhood. Identify multiple locations across the city to serve as permanent community cooling centers, particularly in areas with low-income, elderly, young, and homeless populations.

Examples: Provision of immediate cooling relief in the way of equipment, churches giving fans, utility bill assistance to low-income residents and/or residents of formerly redlined neighborhoods and heat islands.

Document Reference: RVA Source Document (2024) page 535, 546 Appendix J, page 2, 549

Energy-efficient building initiatives

What this is: Improvements or modifications that may improve energy efficiency or decrease energy demand.

Examples: Combined heat and power (CHP), Energy Star standards, Energy Cap (energy management and utility bill software).

Document Reference: RVA Source Document (2024) page 185

Miami-Dade County, Florida

Embedding heat resilience within broader climate action goals.

What this is: Ensuring that the heat resilience plan aligns with the County's resilience-building goals: Inform, prepare, and protect people. Cool our homes and emergency facilities. Cool our neighborhoods.

Examples: Urban greening and infrastructure retrofits. Action 7: Seek increased support for efficiency and cooling upgrades. Action 13: Create a bold tree plan.

Document Reference: Miami-Dade Document 2022 page 7-8, 17, 24

MEASURING SUCCESS

North Carolina Communities

Evaluation based on declining heat related illnesses.

What this is: Documented understanding of heat related illnesses and precautions community members are taking.

Examples: Heat health infographics in both English and Spanish with are customizable. Toolkit's supplemental materials such as factsheets about extreme heat and heat-related illness. Using health data during and after the season.

Document Reference: NC Heat Action Toolkit 2024 page 20, 46.

Evaluation based on survey feedback.

What this is: Collect community input on how heat impacts the lives of residents.

Examples: Observing how residents are currently coping with heat, tracking use of existing shade structures or requests for air conditioning units.

Document Reference: NC Heat Action Toolkit 2024 page VXIII

Evaluation based on usage rates of cooling centers.

What this is: Establishing which neighborhoods are most in need of cooling centers, launch a cooling center program, offer transportation to cooling centers, and tracking the number of visits to cooling center locations

Examples: Establish a cooling center locations and webpage and track the number of physical/virtual

visits. **Document Reference:** NC Heat Action Toolkit 2024 page VXIX, 4, 23, 25

Richmond, VA

Evaluation based on tree canopy coverage.

What this is: Assessing progress in canopy coverage. Examine the extent of shade sails and cooling stations to support communities while tree canopies develop.

Examples: Increase city-wide tree canopy from 42 percent to at least 60 percent. To achieve at least 30 percent tree canopy in all neighborhoods.

Document Reference: RVA Source Document (2024) page 5

Evaluation based on public use of cooling areas.

What this is: Service-based measurement of usefulness of cooling areas.

Examples: # of people taking advantage of cooling centers, # of churches giving fans, # of people displaced by climate impacts

Document Reference: RVA Source Document (2024) page 6-4 (61),

Evaluation based on community feedback.

What this is: These are strategies that stakeholders would like to see as a result of the implementation of the plan.

Examples: Input from the Roundtable and Working Groups, the Office of Sustainability developed Indicators and an Equitable Implementation and Accountability Framework.

Document Reference: RVA Source Document (2024) page 7-7 (85), 445 (5), 492 (52), 511

Miami-Dade Country, Florida

Evaluation based on climate action benchmarks.

What this is: Assessing progress based on established climate action plans.

Examples: Action 7: Expansion of County offerings for energy efficiency upgrades (2-year timeline). Action 8: Requirement for cool or green roofs for all new construction of County-owned or County-funded buildings (2-year timeline).

Document Reference: Miami-Dade Document 2022 page 17-18

Evaluation based on community feedback.

What this is: Gather feedback through County's community-based partners and residents.

Examples: Using collected input to adapt the Heat Season Campaign with the goal of continued, increased awareness and protective behaviors by residents and visitors.

Document Reference: Miami-Dade Document 2022 pages 2-3

Evaluation based on equity audits.

What this is: Respectful treatment and fair involvement of all people in a society.

Examples: The first guiding principle of the Miami-Dade Extreme Heat action plan is equitability. This establishes recognition of historic discriminatory policies that have led some residents to have fewer resources to adapt to climate change. Demands inclusive engagement, fair policies, and direct investments to mitigate disparities.

Document Reference: Miami-Dade Document 2022 pages 4

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