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City of Gainesville Policy Program
Preliminary Research & Analysis

TOPIC: **Resilient Community Plans**

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EXECUTIVE SUMMARY

Communities around the world face a series of underlying challenges, such as job, food, and housing insecurity, poor infrastructure, and acute weather shocks and storms that come with the changing climate. In response, municipalities have begun taking steps to promote a more sustainable and resilient future through the creation of resiliency plans, which are designed to ensure that residents are able to thrive despite these new challenges.

Every resiliency plan is unique, as in order for it to be successful it must be tailored to the needs and challenges of the specific community where it is being implemented. Most plans, however, emphasize goals including public safety and preparedness, climate adaptation, and social equity and cohesion. After outlining the resiliency goals of the city, resiliency plans additionally detail specific strategies that the city will adopt to create a more resilient community. These strategies can include the creation of green jobs and educational opportunities to support vulnerable populations, the strengthening and building of infrastructure, and the promotion of sustainable energy forms and usage within the city.

Through the creation of a resiliency plan, cities are prompted to explicitly discuss their goals for the future of the municipality, and plan specific strategies to achieve those goals. As cities begin to adopt these plans, they are able to respond more efficiently and effectively to challenges that arise, in addition to adopting preventative measures which reduce the likelihood of certain shocks and stressors materializing.

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HISTORY/BACKGROUND INFORMATION

Resiliency Plan

Community resilience is the ability of a community to prepare for anticipated hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions. Community resilience focuses on improving the infrastructure within a community to handle challenges ranging from natural disasters to a lack of affordable housing. Resilience plans outline the specific goals and strategies that a city can take in order to respond to these challenges. They further help to create a plan of action which allows the city to respond to emergencies and challenges more effectively, and additionally can help to reduce future disaster related response and recovery costs and improve recovery times.

The creation of a community resiliency plan is not a quick process, as any plan must be customized towards each city's needs and capabilities in order for it to be successful. One step that many cities have taken to facilitate their resilience building is the hiring of a Chief Resilience Officer (CRO), who ideally reports directly to the city's chief executive and who coordinates the city's resilience efforts. The CRO works across government departments to promote collaboration within government, brings together stakeholders including individuals from the private and non-profit sectors, and acts as a resilience point person to ensure that resources are leveraged correctly and projects are planned with resilience in mind.[1]

The second step to creating a community resilience plan is engaging in discussions with community stakeholders, including local residents, businesses, and non-profits, to determine what the major vulnerabilities are within the city. Once those vulnerabilities are determined, the city can determine their goals regarding various challenges, such as in relation to the development of infrastructure or clean energy usage. The final step in the creation of a resilience plan is the outlining of the specific steps and strategies the city and community must take in order to achieve the goals. The total process of creating a resiliency plan would likely take a minimum of six months to complete, and may take upwards of a year.

National and Statewide Partners

A successful resilience strategy necessitates strong partnerships on the local, national, and state-wide level. These partnerships are needed not only to secure funding and resources for any strategy, but also to learn what other cities have tried and successfully implemented in regards to resilience planning. Several national and state-wide nonprofits have started work in the city resilience planning field, providing funding and resources to cities looking to create these strategies.

The Rockefeller Foundation is a leader in developing the field of resilience to help cities prepare for and thrive amid uncertainties. Since 2013, The Rockefeller Foundation's 100 Resilient Cities (100RC) program

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[1] http://100resilientcities.org/wp-content/uploads/2018/01/100RC-Press-Kit-What-a-Chief-Resilience-Officer-Does.pdf

has launched more than 80 resilience strategies, more than 4,000 actions and initiatives, and leveraged over $25 billion in external funding to implement those efforts. 100 Resilient Cities is an organization dedicated to helping cities around the world become more resilient to the challenges they face. Cities in the organization's network are provided with financial and logistical guidance for establishing the position of Chief Resilience Officer and in developing their resilience strategy. Additionally, 100RC offered an online forum which allowed cities to exchange ideas and best practices regarding resiliency, a feature which many participants in the program celebrated as integral the developing a resilience strategy.[2]

In April of this year, The Rockefeller Foundation halted funding to the 100RC program, stating that the program had become fiscally inefficient.[3] The organization has stated, however, that it will continue funding resilience projects through other means, notably with a grant to the Adrienne Arsht Center for Resilience at the Atlantic Council.[4] The Adrienne Arsht Center similarly seeks to help individuals, communities, and governments with resilience solutions to climate change, migration, and security challenges. The Center emphasizes collaboration with policymakers, NGOs, and private businesses to create partnerships which can help build successful resilience strategies.[5]

In June of 2017, the World Bank Group established the City Resilience Program (CRP) to empower cities to pursue investments which build greater resilience to climate and disaster risks, and to access the financing necessary to ensure those investments are successful. The CRP provides technical, planning, and financial support to cities to help integrate resilience strategies into cities' upstream planning. The CRP has additionally developed two tracks that cities can follow to help achieve these goals. The Resilience Enhancement Track helps cities to design and implement resilience strategies, while the Capital Mobilization Track helps cities to mobilize source of financing from commercial sources, Public Private Partnerships, or Land Value Capture.[6]

For resiliency efforts specifically related to environmental and climate change related challenges, Resiliency Florida is a non-profit dedicated to promoting the development of regional strategies and action plans to adapt to extreme weather and sea level rise. Resiliency Florida acts as a conduit for local government and private sector partnerships to secure funding and regulatory support for resiliency strategies. Members of Resiliency Florida include cities, counties, and the private sector, and the organization promotes the exchange of ideas and resources to help communities become more prepared and resilient to face challenges stemming from climate change.[7]

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[2] https://www.rockefellerfoundation.org/our-work/initiatives/100-resilient-cities-network/
[3] https://www.citylab.com/environment/2019/04/rockefeller-100-resilient-cities-climate-philanthropy-end/586522/
[4] https://www.citylab.com/environment/2019/04/rockefeller-100-resilient-cities-climate-philanthropy-end/586522/
[5] https://www.atlanticcouncil.org/programs/adrienne-arsht-rockefeller-foundation-resilience-center/
[6] https://www.worldbank.org/en/topic/disasterriskmanagement/brief/city-resilience-program
[7] http://resiliencyflorida.org/about-us/

Resilient Community Leaders
Below are several cities and communities across the State of Florida and the United States at large which have taken steps to become a resilient community, either through the establishment of a Chief Resilience Officer position or through the creation of a community resilience plan.

- Tallahassee, Florida[8]
- Miami, Florida – City of Miami, Miami Beach, and Miami-Dade County[9]
- Palm Beach County, Florida[10]
- Boulder, Colorado[11]
- Louisville, Kentucky[12]
- Atlanta, Georgia[13]
- Tulsa, Oklahoma[14]
- New Orleans, Louisiana[15]
- New York City, New York[16]
- Pittsburgh, Pennsylvania[17]
- Boston, Massachusetts[18]
- Chicago, Illinois[19]
- Seattle, Washington[20]
- El Paso, Texas[21]
- San Francisco, California[22]

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[8] https://www.talgov.com/publicsafety/resplan.aspx

[9] https://www.100resilientcities.org/cities/greater-miami-and-the-beaches/

[10] http://discover.pbcgov.org/resilience/Pages/default.aspx

[11] https://bouldercolorado.gov/resilience

[12] https://louisvilleky.gov/government/resilience-and-community-services/louisville-resilience-strategy-release

[13] https://www.atlantaga.gov/government/mayor-s-office/executive-offices/office-of-resilience

[14] https://www.cityoftulsa.org/government/resilient-tulsa/

[15] http://resilientnola.org/

[16] https://www1.nyc.gov/site/orr/index.page

[17] https://www.100resilientcities.org/wp-content/uploads/2017/07/Pittsburgh_-_Resilience_Strategy.pdf

[18] https://www.boston.gov/departments/resilience-and-racial-equity

[19] https://resilient.chicago.gov/

[20] https://www.seattle.gov/Documents/Departments/SeattlePlanningCommission/MinutesAndAgendas/SeattleResilienceStrategyPresentation12_14(0).pdf

[21] https://www.elpasotexas.gov/~/media/files/coep/sustainability/el%20paso%20tx%20%20livable%20city%20sustainability%20plan.ashx?la=en

[22] https://sfgsa.org/sites/default/files/Document/Resilient%20San%20Francisco.pdf

City of Gainesville

The City of Gainesville currently has created the City of Gainesville Comprehensive Plan, which outlines the goals, objectives, and policies for the protection and conservation of natural and environmental resources within the incorporated limits of the City. The plan additionally serves as a blueprint for future commercial and residential land uses, housing, and cultural and recreational amenities. The plan specifically identifies the new infrastructure and growth demands needed to support the future development of the community.

Similarly, in 2018 the Gainesville City Commission committed the city to be powered by 100 percent renewable electricity and net zero greenhouse gas emissions community-wide by 2045.[23]

The first steps of creating a resiliency plan could be implemented under a variety of City of Gainesville departments, including the Department of Doing or Strategic Initiatives.

PRELIMINARY RESEARCH AND FINDINGS

Tallahassee, Florida

The City of Tallahassee began creating and implementing their own resiliency plan in the aftermath of Hurricane Hermine. Residents expressed concerns that the city was inadequately prepared for hurricanes and other hazards, which led to the development of the Community Resilience Plan. The plan consisted of a comprehensive assessment of threats to social, economic, and environmental characteristics which influence the community's ability to be resilient and recover from acute shocks and chronic stresses.

In 2017, Tallahassee commissioned the Community Resilience Plan and hired the first Chief Resilience Officer. In 2018 the planning project officially began convening stakeholders and experts, and followed the process identified in the US Climate Resilience Toolkit.[24] Through this process, the municipality identified and prioritized threats to the quality of life in Tallahassee, notably extreme weather events, crime, and affordability. Following significant stakeholder engagement, the Community Resilience Plan has identified immediate and long-term strategies to secure a safer and more resilient future.[25]

The plan outlines the four specific goals of the City of Tallahassee, and strategies to achieve those goals. The first goal is Public Safety and Preparedness, which consists of empowering households and organizations to be safe, secure, and self-sufficient. The second goal is Hazard Mitigation and Climate Adaption, which includes protecting people and the environment while adapting to the future. The third goal is Planning and Integration, or making resilience ideals part of everyday business and long-term

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[23] https://www.sierraclub.org/press-releases/2019/03/gainesville-becomes-fifth-city-florida-commit-100-percent-clean-renewable

[24] https://toolkit.climate.gov/#explore

[25] https://www.talgov.com/publicsafety/resplan.aspx

strategy. Finally, the fourth goal is Equity and Social Cohesion, or connecting people with each other and with opportunities to thrive.

The goals and strategies outlined in a resiliency plan will differ based on the municipality, but some of Tallahassee's strategies explicitly include securing cyber networks from attacks, investing in training and resources for first responders and disaster volunteers, reducing energy use and achieving net zero local greenhouse gas emissions, and strengthening the utility network with smart technology.[26]

An additional element of Tallahassee's Community Resilience Plan is the TEMPO program, or "Tallahassee Engaged in Meaningful Productivity for Opportunity". The TEMPO program seeks to educate and employ individuals aged 16-24 through partnerships with businesses, non-profits, and individuals within the Tallahassee community. TEMPO is integrated into the Community Resilience Plan by putting an emphasis on the creation of jobs to increase climate-adapted infrastructure. The program advocates for the inclusion of vulnerable populations in climate adaption plans, notably by training and hiring individuals in the industries that will build and maintain the infrastructure in a warming world. The program has been supported for promoting economic vitality among low-income youth, but also for generating a new population to help with sustainability-related infrastructure. Once individuals graduate from the program, they are placed with companies creating "green jobs" such as working on the city's drainage system, underground utilities, or building new roads and bridges. [27]

The job skills training provided by the City of Tallahassee is estimated to cost around $500,000 annually, and the cost of employing 10 disconnected youth to paid apprenticeships in the City of Tallahassee costs approximately $312,000 annually. The other participants in TEMPO are hired by private organizations, where the costs are not taken on by the City of Tallahassee. In the two years since its founding, the program has had 640 participants, and the city estimates that around 7,000 teens and young adults in the city are eligible. By 2020, the city plans to have around 1,000 participants in the program.[28]

Boulder, Colorado

The City of Boulder, Colorado has identified their key resilience challenges as natural events (such as flooding and wildfires), ecological and social stresses, rising housing and commercial real estate costs, and the need for a united and cohesive community. The City of Boulder was part of the 100 Resilient Cities network, which helped the municipality to create their own resilience plan.

The city initiated its first resilience assessment in 2014, which included an analysis of current resilience efforts and an identification of gaps in those efforts. The goal of Boulder's resiliency plan is to help the city prepare for uncertainty and disruption by fostering community preparedness, creating a culture of risk awareness, and personalizing resilience.[29]

[26] https://www.talgov.com/uploads/public/documents/publicsafety/resplanexec.pdf
[27] https://www.citylab.com/equity/2019/10/tallahassee-climate-resilience-tempo-jobs-infrastructure/599479/
[28] https://www.talgov.com/neighborhoodservices/tempo-opportunity.aspx
[29] http://www.100resilientcities.org/strategies/boulder/#/-_/

Boulder's city resilience plan has four key dimensions, Leadership & Strategy, Health & Wellbeing, Economy & Society, and Infrastructure & Environment. Boulder has developed a multitude of strategies in order to promote the key elements of the plan, including developing post-disaster impact capacities, developing a volunteer community preparedness program, designing and conducting a local food system assessment, creating community resilience centers, building climate preparedness capacity across the city, and developing an integrated approach to managing ecosystems and green infrastructure.[30]

PRELIMINARY COST/BENEFIT ANALYSIS

Cost
- Creation of a resiliency plan would require City infrastructure
  - Employees, time, financial resources
- Timeframe
  - Would take a significant amount of time to complete
- The strategies put in place through the resiliency plan would require significant time and resources to implement

Benefit
- Increased transparency regarding City of Gainesville goals/strategies
- Increased accountability regarding City of Gainesville goals/strategies
- Increased responsiveness towards emergencies/disasters
- Increased preparedness for climate change/storms
- Mitigation of threats from poor infrastructure, etc.

PRELIMINARY AND ILLUSTRATIVE LIST OF POTENTIAL STAKEHOLDERS

- Department of Doing
- Planning Department
- Florida Institute for Built Environmental Resilience
- Sustainability Office
- City Resilience Program – The World Bank[31]
- Adrienne Arsht Center for Resilience[32]
- Resiliency Florida[33]
  - Environment Specific

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[30] http://www.100resilientcities.org/wp-content/uploads/2017/07/Boulder_Resilience_Strategy.pdf
[31] https://www.worldbank.org/en/topic/disasterriskmanagement/brief/city-resilience-program
[32] https://www.atlanticcouncil.org/unused/webcasts/adrienne-arsht-center-for-resilience-and-the-rockefeller-foundation-a-more-resilient-future/
[33] http://resiliencyflorida.org/about-us/