The Resilience Authority of
Annapolis and Anne Arundel County
Strategic Plan
2023 - 2026

RESILIENCE AUTHORITY
Annapolis and Anne Arundel County

Arundel Center

PREPARE.MITIGATE.ADAPT

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Introduction

The purpose of this plan is twofold. First, our aim was to provide the Authority with an ongoing organizational process, relying on available information and knowledge, to chart and guide its intended direction. The process and tools that we have created are designed to prioritize efforts, effectively allocate resources, align shareholders on the Authority's goals, and ensure those goals are supported by data and sound reasoning. Second, our goal was to provide the Authority leadership with a clear set of actions and next steps for launching and scaling the organization within the next 3-5 years.

Purpose of the Strategic Plan

1. Provide the Authority with a vision and organizational mission for achieving sustainable community resilience.
2. Codify the organization's role and function within the broader climate mitigation and adaptation investment and planning processes in Annapolis and Anne Arundel County.
3. Identify and define the actions necessary to launch, scale, and maintain long-term institutional success, including establishing key performance indicators.

Benefits of the Strategic Plan

1. *Create One, Forward-Focused Vision.* This plan will be an important part of the process to establish a single, forward-focused vision that can align the vision and associated actions of the Authority and its stakeholders, primarily the County and the City. By making the community aware of the Authority's goals, how and why those goals were chosen, and what the organization will do to reach them, the plan will create a sense of responsibility and purpose moving forward.
2. *Create a Structured and Reasoned Community Resilience Investment Decision-Making Process.* The Resilience Authority is likely to become the focal point of the region's climate mitigation and resilience financing system moving forward. Assuming this important leadership role will require establishing transparent and defensible investment decision-making processes that can provide both immediate community-wide impacts while at the same time establishing the systems required for scaling and sustaining long-term resilience. The strategic planning process itself should be dynamic and ever-evolving, thereby providing the Authority and its leadership with an opportunity to continuously address inherent biases by examining and explaining why each decision is being made and supporting those decisions with data, projections, or case studies.
3. *Track Progress Based on Strategic Goals:* Having a strategic plan in place will enable the Authority to track progress toward goals using thoughtfully designed performance indicators. By establishing an implementation strategy and defining goals, progress indicators will ensure that every level of the organization is aligned and can positively impact its performance.

Structure of the Strategic Plan. The plan is structured around two sections. Section 1 defines the core program components that are likely to frame and guide the Authority's activities moving forward, including: (1) the resilience authority mission and shared community vision; (2) project portfolio and action plan; (3) long-term revenue strategy; and (4) project financing and cash flow processes. Within each of these four primary components, we assess the importance of that component to the community resilience investment and financing process as well as the specific programmatic elements and activities, and the role of the Authority in implementing those activities. Section 2 of the report provides an action strategy that is focused on effectively launching and scaling the Authority's core programs, projects, and initiatives over the next 12-24 months of operations.

Section 1: The Resilience Authority's Core Activities and Project Areas

A strategic plan by design is an inward facing document that is meant to guide an organization towards meeting its mission and associated goals. Therefore, given that the Authority's mission centers on meeting the community's climate and resilience needs, those needs must be clearly codified and articulated in a comprehensive climate action and resilience plan.

Shared Community Vision and Action Plan. The impacts of climate change are pervasive, acute, and well documented. Effectively responding to the inherent risks of these impacts will require coastal communities like Annapolis and Anne Arundel County to make some very difficult and nuanced policy and investment decisions. The establishment of the Resilience Authority was an important step in enabling the Annapolis and Anne Arundel County communities to better navigate this complex policy environment. The *Authority's mission* will be to fund and finance the design, implementation, and long-term maintenance of projects and programs that ensure a resilient and vibrant future for both communities. Achieving this mission will require the Authority to facilitate and realize three fundamental outcomes:

1. Development of a shared community vision for a resilient future and a corresponding climate action plan that will facilitate the achievement of that vision.
2. Implementation of projects and interventions that are directly tied to achieving that shared vision and action plan.
3. An enabling environment and conditions that will ensure the necessary flow of capital, investment, and project implementation over time.

The Importance of Community Visioning and Climate Action Planning to the Financing Process. A comprehensive climate mitigation and resilience action plan is a resource in which communities such as Annapolis and Anne Arundel County can construct a roadmap for reducing greenhouse gas (GHG) emissions and strengthening climate resilience across the community. In short, the action plan provides a clear articulation of the community's climate vision and mission; in turn, the Authority's strategic plan will define the organization's approach to advancing that plan.

This type of plan/document is key to communicating how local-level climate ambitions will be realized and will help build engagement when moving forward with implementation actions and activities, including guiding the Authority's long-term climate mitigation and resilience investments. The main technical elements of a climate plan will include an assessment of existing conditions, a summary of climate risks, a GHG emissions inventory and a detailed overview of the strategies and actions the two communities will pursue for achieving reductions in GHG emissions and improvements in climate resilience over time.[1]

Beyond the technical details, an effective climate action plan should explore four key components including emissions neutrality, governance and collaboration, resilience to climate hazards, and inclusivity and benefits.[2] To be effective the plan must be transparent, equitable and developed with stakeholder input and support. To that end, an important component of the plan will be the establishment of a shared community vision. Community visioning is a process that includes discovering and codifying the kind of future the Annapolis and Anne Arundel communities want by giving leaders, within the Authority and the community, the opportunity to express goals, objectives, and values. Through this discovery, a platform is provided to define what the community could and should look and feel like within the next five to 10 years and beyond.

The Role of the Authority in the Visioning and Action Planning Process. Because the Authority is not a planning entity, it will have an indirect leadership role in the community visioning and planning process. In short, the Authority's role in advancing the community's resilience and climate vision is based on establishing the enabling conditions that are necessary for answering and addressing the key community visioning and planning question above. The Authority must ensure that the visioning and planning process sets the stage for developing and implementing a comprehensive investment and financing strategy. More specifically, the Authority must serve as a primary mechanism for coordinating disparate systems and processes within the context of a very complicated financing system. This includes:

- Creating a portfolio of projects that advance and accelerate climate action, mitigation, and resilience.
- Scaling the level of investment in climate mitigation and adaptation across the region.
- Incentivizing project implementation efficiency using innovative financing processes and mechanisms.

The Authority's goal with this effort is to move beyond "big picture" statements towards a clear and actionable climate mitigation and resilience plan. This in turn will be essential for the organization's long-term success in achieving its mission. Establishing a blueprint regarding the community's resilient future, the Authority will have the framework necessary to guide key infrastructure investment decisions. In some respects, the visioning process is as important as the vision statement itself. Undertaking a collaborative community visioning process will ensure that the Authority and the County and the City are working towards achieving goals that the community wants. Broadly, climate action planning and community visioning involves answering key questions, including:

- *What is the current state of the community regarding resilience?* An inventory of current assets, opportunities, and challenges.
- *What does the future likely hold?* Future scenarios based on current assets, including threats, risks, opportunities, and challenges.
- *Where do both communities want to be?* Preferred resilience outcomes, based on shared values and aspirations.

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[1] https://resourcentre.c40.org/_app/breezy-summer-3041/preview/resources/writing-an-engaging-climate-action-plan

[2] ibid

- *What is the path for getting there?* Decisions and actions required to make the resilience vision possible, with clear indicators and measurements.
- *How will the Authority measure progress?* A codified process for evaluating performance (through monitoring and reporting) and creating opportunities to recalibrate actions as necessary.
- *Finally, how will the Authority succeed?* The actions, adaptations, and economic/financing models that are required to measure success.

Climate Mitigation and Resilience Project Implementation Plan. The financing process is designed to ensure the flow of money and capital throughout the infrastructure development process, which entails ensuring the most efficient risk adjusted investment possible. This will require that the Authority establish a diverse portfolio of projects with unique investment profiles that in aggregate result in the most efficient and effective allocation of resources. In short, the project portfolio will be the foundation of the Authority's investment processes, and by extension its mission and vision.

Importance to the Financing and Investment Process. The project portfolio provides the most direct connection between the services and processes of the Authority and the resilience goals and vision of the two jurisdictions. It is through the on-the-ground projects that sustained resilience will be achieved and the foundation of the Authority's investment process will be established.

The resilience financing process is designed to ensure the flow of money and capital throughout the infrastructure development process, which entails ensuring the most efficient risk adjusted investment possible. This will require a diverse portfolio of projects with unique investment profiles that in aggregate result in an effective allocation of resources. The portfolio should be structure around three core components:

- <u>Project typology.</u> Local resilience projects can and will take a myriad of forms. However, from a management perspective, they can be categorized based on three basic typologies: baseline projects and programs; enterprise or outcome-based projects and programs that focus on many of the essential services that local governments provide to its residents and businesses; and, capital and infrastructure projects, which are the primary focus of the resilience financing process.
- <u>Project timing.</u> Climate resilience projects are categorized based on the anticipated timing of impacts and the corresponding need for investment. The project portfolio should address short-, mid- and long-term implementation needs and time horizons. Categorizing projects in this way will be critical for creating a sustainable revenue plan.
- <u>Project costs.</u> The third and perhaps most important organizing element for the project portfolio is anticipated project costs. Project cost estimation is the process of forecasting the financial and other resources needed to complete a project within a defined scope. Cost estimation accounts for each element in the budget. While definitive project cost estimates will be required during the design and implementation process, the Authority's initial approach will be to use the project inventory and the anticipated project timing to establish an order of magnitude cost evaluation to determine the scale of climate investment that will be required over time.

The Role of the Authority. The Authority will have a *direct role* in establishing a climate resilience project portfolio. While many resilience projects may be implemented outside the Authority's structures (i.e., the County and City may finance projects on their own), the Authority will play an important role in prioritizing projects for implementation and investment. In short, the Authority will have autonomy over its project activities, though it must implement those activities and projects in direct partnership and collaboration with the County and the City.

Actions taken to date: the interim director and Throwe Environmental set the foundation for establishing the project portfolio conducting a comprehensive project and planning literature review as well as implementing an initial Request for Qualifications and Information (RFQI).

Conducted Comprehensive Planning Review. Authority staff conducted a thorough planning-based literature review to identify primary hazards, assets, and project categories. Appendix 1 provides a summary of the approximately 12 local planning documents and project reports that were the focus of this review. Our intent was to identify the priority project categories, activities, and actions within each of the jurisdictions. Because neither community has produced what would be considered a comprehensive climate action plan, the Authority will use existing resources to craft that plan in the short-term.

An important part of this review process included doing a cursory evaluation of the climate hazards facing the community. Specifically, the County's Hazard Mitigation Plan provides a climate risk and vulnerability assessment, which includes an evaluation of community level exposure, sensitivity, and adaptive capacity to the impacts of climate change.

Established a list of qualified and potential vendors. In the Fall of 2022, the Authority issued a Request for Qualifications and Information (RFQ-I). The purpose of the RFQ-I was twofold. First, it was designed to obtain information from qualified companies and organizations regarding local climate resilience and mitigation action strategies that will support flood control, ecosystem resilience, shoreline protection, structural resilience, energy resilience, and other community-based projects and programs. Our intent was to identify institutions with the capacity to assist the Authority in its efforts to create a resilience project portfolio and implementation decision-making process across four the four project categories: civic and community infrastructure; shoreline protection on public and private lands; public and private structural resilience; and energy resilience.

Second, the Authority was seeking information regarding specific solutions-oriented project implementation processes including establishing a process for continually assessing the risk and vulnerability of local and regional assets to the impacts of climate hazards. Though the Authority is not a planning agency, the intent is to work in direct partnership with City and County planning, public works, and emergency management agencies to identify the most vulnerable infrastructure assets and develop action strategies to mitigate those impacts. A sustainable and dynamic vulnerability assessment process will be essential for guiding long-term investments. Respondents should describe options for how the Authority, in partnership with the City and the County, can economically, efficiently, and sustainably evaluate community risks and vulnerabilities regarding key climate hazards. Appendix 2 provides a summary of responses to the RFQ.

Revenue Portfolio and Strategy. Of all the Authority's activities and functions within the four components of the investment and financing system, it will be the organization's capacity to secure new, sustainable, and scalable revenue streams that will be scrutinized most closely. While the scale of the Authority's revenue pool and access to capital will be foundational to its success, equally important will be the composition of the Authority's revenue resources.

The importance to the financing and investment processes. The revenue portfolio is the most significant and important part of the strategic plan. It is the basis, obviously, of all the Authority's investments and activities. Characteristics of an effective on-going revenue system and plan include:

Adequacy and Scale. The revenue system should provide the Authority with enough revenue to finance necessary resilience projects and programs across both jurisdictions. Successfully financing community resilience in the long-term will likely require a suite of funding resources to support a variety of infrastructure and programmatic needs. As the project portfolio is developed, each project within each asset class must be connected to a revenue source(s) that is sufficient to achieve desired outcomes.

Diversity. The comprehensive nature of climate mitigation and resilience will require a diverse suite of projects and actions. This in turn will require establishing an equally diverse suite of revenue streams. In short, it is unlikely that any single source of revenue will be sufficient to meet all the Authority's investment needs. The assumption when developing a revenue plan to support resilience project priorities should be that existing local revenues are limited, and as a result any new projects will require new or expanded funding resources. If new revenues are not identified and leveraged, then resilience projects will be in competition with existing community programs and capital infrastructure projects. The Authority's focus should be to estimate the expected increases in public funding necessary to implement the project portfolio and to facilitate an ongoing conversation among the three jurisdictions and Authority partners regarding revenue options moving forward.

Redundancy. While diversity is essential for expanding the scale of the project implementation process, redundancy ensures that shifts in specific sources of revenues do not derail implementation priorities. More new revenue sources will be needed to address climate impacts rather than just reallocating those sources that already exist. Most of this new money must ultimately come from the public sector. In short, redundancy is essential for ensuring the resilience of the financing system.

Fairness. The Authority's revenue system should reflect the bedrock value of the democratic system of government: fair and equal treatment. Not only should the pipeline of projects facilitate equity and fairness in the resilience system, but also the revenues supporting these projects should reflect the same values. Specifically, revenues must represent equity and treat tax and ratepayers differently based on circumstances. In addition, the system should be proportional in that lower income residents are not disproportionately burdened.

Accountability. Public expectation of government services impacts the confidence that tax and ratepayers have in public programs. Accountability has two facets. First is the ease with which fee or taxpayers can grasp how a fee or tax is charged. The second is how easily the public can understand how revenues are being used. New taxes garner more support when the proposed tax is associated with specific services.

The sources and types of revenues that will support the Authority's investments. As stated earlier, redundancy, i.e. establishing multiple mechanisms to accomplish priority tasks and actions, is a central tenet of community resilience planning and implementation. In the context of financing, the goal is to establish redundant systems without creating inefficiencies. Therefore, an important step in the process is to establish a revenue pool consisting of multiple sources, including grants, taxes and tax-based fees, service-based fees, project revenues, and asset-based revenues. We describe each in more detail below.

Grants. Grant revenues are likely the most popular source of local revenue for many communities. This makes sense given that grants do not adversely impact local budgets. The attractiveness of grant funding has increased significantly with the passage of the Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act (IRA). The combination of these two pieces of legislation has created an unprecedented level of federal funding in support of infrastructure projects in general and climate adaptation and mitigation projects specifically. An important role for the

Authority will be to ensure that the two jurisdictions are as competitive as possible to receive associated federal grant funds.

Taxes. Tax revenues are the foundation of local infrastructure investments and financing. While this will be the case for the foreseeable future, the establishment of the Authority is an indication that the role of tax revenues will evolve as local response to climate impacts evolves. Specifically, SB 457 disallows resilience authorities in Maryland to assess and collect taxes. Therefore, any taxes supporting Authority investments or administrative functions will be the result of tax transfers from the two jurisdictions. As a result, tax revenues offer the Authority the least amount of control in the funding process. This in turn will require the Authority to work in direct partnership with both jurisdictions to identify and secure tax-based revenues in support of resilience and climate action projects.

Project and non-tax-based fees. While tax-based fees are disallowed, non-tax-based fees are a potential opportunity for the Authority. Non-tax-based fees, usually in the form of a user fee, are charges imposed by the government for the primary purpose of covering the cost of providing a service, directly raising funds from the people who benefit from the public good or service being provided.

Asset-based revenues. Perhaps the most unconventional option available to the Authority to generate revenues is to leverage local public assets, including real estate. This approach to revenue development, often referred to as Urban Wealth Funds (UWF), is founded on collecting commercial assets under unified, professional management and managing them for the betterment of the local community. Better management of these assets reduces reliance on taxes for infrastructure investment while generating revenue to support other vital investment requirements.

The Authority's role in developing the revenue portfolio and resilience funding system. The Authority will have a *direct leadership role* associated with expanding the scale and diversity of revenues supporting resilience and climate mitigation projects across both communities. In Appendix 3 we provide a series of tables that describe the relative strength of revenue sources based on the key metrics described above. As the tables indicate, there will be situations where the Authority will be able to work relatively autonomously in its efforts to identify and secure funding; this is especially the case regarding grant opportunities. However, identifying and securing revenues from sources such as tax transfers, asset-based revenues, and even non-tax-based fees will require the engagement and endorsement of one or both jurisdictions.

Actions taken to date:

<u>Created a BIL and IRA database.</u> An important first step in developing a grant funding program is to understand where the opportunities are and the timing of application deadlines, matching requirements, etc. To that end, the Throwe Environmental Team established funding databases associated with the BIL and IRA programs to enable Authority leadership to identify all the potential funding opportunities associated with these two laws. Collectively they represent almost 400 distinct funded programs that can benefit state and local governments, resulting in an unprecedented amount of federal funding supporting a myriad of infrastructure priorities. As a result, there are funding opportunities associated with each of the four project priorities. Appendix 4 provides an initial and comprehensive list of BIL federal funding programs, categorized by issue and/or asset. Appendix 5 does the same for the IRA. Collectively these databases are searchable by project type as well as local government applicability; they provide an excellent starting point for establishing a grant funding strategy.

<u>Putting Assets to Work Playbook.</u> One of the first actions taken by the interim project team was to agree to participate in an innovative infrastructure financing project called the *Putting Assets to Work Incubator*. The Incubator launched on July 1, 2022 to explore the potential of unlocking underutilized publicly-owned real estate

assets to generate new revenue and new opportunities. The PAW Incubator was led by the Government Finance Officers Association, the Sorenson Impact Center and Urban 3, in collaboration with Atlanta, Georgia; the Resilience Authority of Annapolis and Anne Arundel County, Maryland; Chattanooga, Tennessee; Cleveland, Ohio; Harris County, Texas; and Lancaster, California.

The PAW Incubator consisted of two phases of work. Phase I consisted of asset mapping to better understand the size and value of the jurisdiction's real estate portfolio. The Phase I work is summarized by the visualizations included in the Playbook. In Phase II, the team worked with experts to evaluate various approaches and structures to put the jurisdiction's assets to work and consulted with representatives of the Authority and the two communities to understand local priorities and preferences that would maximize both jurisdiction's ability to move this work from concept to implementation. The final product was a Playbook, which comprises the implementation recommendations developed in Phase II.

Financing Mechanisms. The final component in the resilience investment process is financing and the management of money, including investing, borrowing, lending, and forecasting. In many ways the financing process represents the culmination of the resilience planning, project development, and revenue generation processes. In fact, without the success of these other components of the system, financing becomes irrelevant. Conversely, the financing process will ensure that project development and revenue allocation occur in the most efficient and effective way possible.

The role of the Authority in the financing processes. Finance is integral to the Authority's structure as defined by SB 457 and the County and City legislation that were the basis for its creation. However, while the structure and conditions that define what the Authority can and cannot do are codified in those legislations, its role in the financing process will be determined by how the organization interacts with the existing financing systems within each jurisdiction. Specifically, the Authority's role and purpose is not to assume responsibility for existing financing systems, but rather to enhance those systems in four primary ways:

- *Accelerating project implementation and scale:* the most important benefit of financing is that it accelerates implementation and project scale. Specifically, borrowing and other types of financing enable communities to address infrastructure needs when they are needed. A primary role for the Authority will be to accelerate implementation of essential infrastructure projects.
- *Effectively managing the inherent risk within the infrastructure financing and investment process:* every infrastructure project comes with inherent risks, but those risks are often amplified because of the impacts of climate change. The Authority can help mitigate investment risk through a variety of mechanisms, including appropriate and innovative partnerships with the private sector.
- *Enhancing efficiency by reducing cost of capital:* while accelerating implementation and managing risks are essential, they both come at a cost primarily in the form of expected returns on investment. The Authority can benefit both jurisdictions by helping to effectively balance and maximize the relationship between risk, project timing, and long-term costs.
- *Incentivizing innovation in the financing system:* finally, the Authority can and should play an integral role in identifying new and innovative financing techniques and mechanisms that can better manage the risk, timing, cost/investment relationship. This will be especially important as the Authority advances innovations in the project design and revenue generation processes. In fact, incentivizing financing innovation is one the most important roles that the Authority can provide to the community resilience system.

The Enabling Conditions. Unlike project and revenue development, financing is not necessarily something that is planned for. Rather, financing is enabled through the appropriate conditions. The first and most important enabling condition for the Authority was the provision in the SB 457 that allows resilience authorities to issue revenue bonds. Revenue bonds are supported by the revenue from a specific project, such as parking structures, concessions at stadiums, or entrance fees to parks and museums. Revenue bonds that finance income-producing projects are thus secured by a specified revenue source. Revenue bonds can be supported through long-term and codified revenues streams such as a tax or a fee that is transferred by the jurisdictions to the Authority.

While SB 457 prohibits resilience authorities from assessing and collecting taxes, the bill does enable authorities to assess non-tax-based fees, including those that would/could support infrastructure projects. Certainly, debt and revenue bonds will likely be the foundation of the Authority's primary financing processes. However, there are potentially other financing mechanisms that the Authority can deploy to build on this foundation, including:

- <u>Public private partnerships:</u> A public–private partnership (PPP, 3P, or P3) is a cooperative arrangement between two or more public and private sectors, typically of a long-term nature. In other words, it involves government(s) and business(es) that work together to complete a project and/or to provide services to the population. These types of partnerships can create efficiencies by improving project performance. In addition, when structured appropriately, P3s can reduce risk to local government, and the Authority, by linking project performance to contract payments. P3s are especially important for many project-based financing opportunities and could be a very effective tool for the Authority.
- <u>Joint development:</u> Joint development projects involve integrated development of public infrastructure improvements, with projects physically or functionally related to commercial, residential, or mixed-use development. Public and private investments are coordinated between agencies and developers to improve land owned by a public agency. The projects are designed to benefit both public and private entities as well as share costs among project partners. Joint development is especially important to the Authority because it can be the basis for generating asset-based revenues that were described in the Revenue Portfolio section of this plan. Specifically, the *Putting Assets to Work* project outlines how the Authority can take advantage of assets and joint development projects. Appendix X provides a summary of that project and its potential impact to the Authority.
- <u>Value capture financing.</u> Value capture financing is a type of public financing that recovers some or all the value that public infrastructure generates for private landowners. This type of financing process is popular in many urban areas where the public sector is often responsible for the infrastructure required to support development. This infrastructure may include road infrastructure, parks, social, health and educational facilities, social housing, as well as climate adaptation and mitigation tools.

  Value capture schemes secure and recover a portion of the benefits delivered by public investments, in order to offset the costs of the investment itself. Value Capture strategies operate under the assumption that public investment often results in increased valuation of private land and real estate. By capturing the subsequent increase in value, governments are able to recuperate funds, which can ultimately be used to generate additional value for communities in the future. Specific types of value capture financing mechanisms include:

  – <u>Special assessment districts:</u> Special district governments are independent, special purpose governmental units, other than school district governments, that exist as separate entities with substantial administrative and fiscal independence from general purpose local governments. Special district governments provide specific services that are not being supplied by existing general-purpose governments. Most perform a single function, but in some instances, their enabling legislation allows them to provide several, usually related, types of services. The services provided by these districts range from such basic social needs as hospitals and fire protection, to the less conspicuous tasks of mosquito abatement and upkeep of cemeteries.

– Tax increment financing: TIF is a tool used by municipal governments to stimulate economic development in a targeted geographical area. TIFs are used to finance redevelopment projects or other investments using the anticipation of future tax revenue resulting from new development. When a TIF district is established, the "base" amount of property tax revenue is recorded using the status quo before improvements. To the extent such efforts are successful, property values rise, leading to an increase in actual property tax receipts above the base. While the base amount of property tax revenue (the level before redevelopment investments) continues to fund city services, the increase in tax revenue is used to pay bonds and reimburse investors and is often captured as city revenue and allocated toward other projects.

- Green bonds: Green bonds were created to fund projects that have positive environmental and/or climate benefits. Most green bonds issued are green "use of proceeds" or asset-linked bonds. Proceeds from these bonds are earmarked for green projects but are backed by the issuer's entire balance sheet. There has also been green "use of proceeds" revenue bonds, green project bonds and green securitized bonds.
- Social impact bonds: Social impact bonds are unique public-private partnerships that fund effective social services through performance-based contracts. Impact investors provide the capital to scale the work of high-quality service providers. Government repays those investors when the project achieves outcomes that generate public value.

Section 2: Resilience Authority Action Plan.

The primary focus of this action plan is to ensure programmatic and implementation success within the first 12-24 months of the Authority's activities. This in turn will require executing a program and project launch process while at the same time creating the enabling conditions necessary for scaling and sustaining investment over time. These conditions will include developing a diverse, redundant, and scaled revenue pool, and establishing an innovative suite of financing tools and processes to accelerate implementation, create efficiencies, and lower implementation costs.

The most important first step in the launch process is to establish an initial project portfolio. While it may be tempting to begin the planning process by identifying a specific revenue source, usually in the form of a tax or a fee, the complexity and anticipated scale of achieving long-term climate resilience will require an array of revenue and funding sources, and the scale of each of these potential sources will be determined by the expected projects to be included in the portfolio and the estimated costs of implementation. The Authority can create a thoughtful revenue strategy that is founded on the details of the project portfolio.

Action 1: Create a Dynamic Project Portfolio and Launch Plan. The first and most important first step is to establish an initial project portfolio that is almost myopically focused on quickly moving projects to the "shovel ready" stage of development. Ultimately it is the on-the-ground projects that the Authority will finance and implement that will determine its success moving forward. Therefore, an action plan should prioritize implementing and constructing capital projects quickly. By quickly moving projects to the implementation phase, the Authority will be demonstrating to the entire community the effectiveness and importance of its mission. This includes investing in projects in key communities across the region that benefit all citizens. This in turn requires ensuring equity in the project implementation processes immediately.

Over time the project portfolio will evolve into a continuously evolving system where projects are identified, designed, installed, and financed based on changing local conditions, needs, and priorities. Given the dynamic nature of community resilience and climate mitigation, the process and system for identifying projects, especially in the early stages of the Authority's development, will be as important as the project portfolio itself. Over the past year the interim director and new full-time director have focused on interviews with leaders within County and City government to identify profile projects that have the potential to move to shovel-ready status within the next 12-24 months. Based on those conversations, four project categories were identified as immediate priorities:

- *Critical community infrastructure.* Protecting critical assets and civic infrastructure systems will be a primary function of the Authority. This will include mitigating climate impacts on road and transportation infrastructure. More specifically, the project portfolio should include nature-based solutions for mitigating the impacts of systemic flooding catastrophic storm events on vulnerable road networks.
- *Natural Infrastructure.* The Resilience Authority will work in partnership with the county and city to conserve and restore natural infrastructure. Coastal wetlands and shorelines can buffer storm surge. Vegetation can stabilize slopes. Reforestation can sequester carbon. Reconnection of floodplains and riparian wetlands can store floodwaters. And while lowering our risk of disaster damages, natural areas can provide us with an array of additional benefits: beautiful areas for recreation, habitat for native species, improved air and water quality, and higher property values.
- *Structural resilience.* Climate change will affect virtually every aspect of human life, including the buildings where citizens live and work. Climate change will continue to fundamentally alter the environmental conditions in which buildings are designed to function, and the impacts will be acute in coastal communities like Anne Arundel County and Annapolis. The Authority will invest in projects that improve the resilience of both public and private structures to withstand key climate impacts including flooding, heat, and storm events.
- *Resilient energy systems.* The Authority will work in partnership with the County and the City to accelerate the transition to renewable energy across the region. In addition, specific focus and investment will include insuring a reliable and resilient energy system, specifically in the most economically challenged communities.

These four project categories represent the initial scope and focus on the Authority.

Next steps:

<u>Populate the Climate Action Project Portfolio.</u> The combination of the asset inventory, the project categories, and the risk and vulnerability assessment provide the context for a comprehensive project portfolio designed to prioritize climate resilience and mitigation actions. The resilience financing process is designed to ensure the flow of money and capital throughout the infrastructure development process, which entails ensuring the most efficient risk adjusted investment possible. This will require a diverse portfolio of projects with unique investment profiles that in aggregate result in the most efficient and effective allocation of resources. Local resilience projects can and will take a myriad of forms. However, from a management perspective, they can be categorized based on three basic typologies:

1. Baseline projects and programs provide structure to the region's resilience system, including staffing support within the three jurisdictions, necessary studies and assessments (such as ongoing risk and vulnerability analyses), as well as project implementation.
2. Enterprise or outcome-based projects and programs are focused on many of the essential services that local governments specifically provide to residents and businesses. As the conversations with key experts during the discovery phase of this project indicates, climate resilience projects will overlap a variety of enterprise programs and outcome-based needs, especially at the county level. This includes wastewater/watershed management, drinking water management and delivery, emergency services, and stormwater/drainage mitigation. Each of these outcome-based programs is codified through an established enterprise program/fund and will be impacted by collective resilience implementation processes in some way.
3. Capital and infrastructure projects are the primary focus of the resilience financing process. These projects can be embedded within baseline or enterprise processes, but they are often implemented because of specific community needs, including:
   - *Protecting an essential asset.* The most targeted project approach is associated with protecting specific assets that are threatened by climate change. Within the NSFIH—Indian Head region this includes mitigating coastal erosion, and for built infrastructure, including roads and structures.
   - *Protecting an asset class or system.* Many community resilience projects are designed to protect a suite of assets within a particular system. This can include protecting road and transportation networks, residential and commercial buildings, or essential public utilities. Projects designed to protect an asset class are often coupled with regulatory or permit changes (i.e., Building codes, floodplain management, etc.).
   - *Protecting threatened geographies or communities.* Large-scale resilience projects are often designed to protect specific communities or neighborhoods from a variety of climate hazards and threats. These projects can include flood mitigation/abatement and transportation enhancements.
   - *Incentivizing outcomes.* Finally, resilience projects may be designed to address a particular hazard or desired outcome. These projects are often associated with enterprise fund activities, but they can also include other community priorities such as habitat restoration and protection.

<u>Commission the development of a Climate Action and Resilience Plan to establish the long-term vision and implementation process.</u> The plan should include:

- An updated risk and vulnerability assessment. This in turn should include an evaluation of how specific communities and regions with the County and City will be impacted by climate hazards.
- An analysis and estimate of the scale of mitigation and adaptation projects across the primary project categories, as well as at the community level.
- The typology of projects.
- An order of magnitude cost estimate.

Action 2: Create a Long-Term Revenue Portfolio Strategy. The successful implementation of the project portfolio will be the outcome most likely to define the Authority's long-term success. In turn, the capacity to build a revenue pool to support those projects will determine whether project implementation efforts are a success. The revenue pool will ultimately consist of multiple sources of funds, each with unique characteristics, restrictions, and benefits. The next step, therefore, is to create metrics and priorities for establishing an effective, dynamic, and ever-evolving revenue pool. These metrics will include:

- *The potential scale of the revenue source*. Successfully implementing the project portfolio over the long-term will require scalable revenues and resources. As the project portfolio is developed, each asset class and project within that asset class must be connected to a revenue source(s) that is sufficient to achieve desired outcomes. In addition, just as redundancy is a central tenet of community resilience, so too is the need for redundancy in the financing system. The Authority should have several funding options associated with achieving resilience infrastructure financing goals.
- *The potential longevity of the revenue source.* While securing short-term grant funding may be an obvious first step, in the long-term, it will be necessary for the Authority to establish permanent, dedicated, and long-term revenue streams.
- *The level of control on the part of the Authority regarding securing and investing the revenue source.* Securing and sustaining any revenue source comes with risk, but certain revenue sources require authorization from the jurisdictions. While the jurisdictions remain in control, the Authority as an institution may have reduced control.
- *The level of political dynamics.* This refers to the ease or difficulty associated with putting the revenue source in place. A low score indicates the political cost of creating and securing the revenue source is high; for example: establishing a new resilience fee or tax; raising an existing tax; and/or diverting an existing fee or tax to the Authority. High scores indicate less political friction; grant funding, for example.
- *The types of activities potentially supported by the revenue source.* An important reason for ensuring a diverse revenue portfolio is the limitations associated with many revenue sources. Because some funds can only be used for specific activities, the Authority will need to match myriad activities with diverse revenue sources. These activities include:
  - Administration;
  - Planning;
  - Project development and design;
  - Project implementation, including permitting and construction; and,
  - Long-term operations and maintenance.
- *The types of projects that can be supported by the funding or revenue source.* Finally, different sources of revenues will support different types of projects and programs. Some are appropriate for planning and program development, some will support capital projects, while others are appropriate for supporting necessary long-term operations and maintenance.

Next steps:

<u>Create and execute a comprehensive grant funding strategy.</u> In the long-term, the revenue portfolio will prioritize funding sources that are codified, or appropriate scale, and diverse in nature. In the short-term, the focus must be on establishing a grant funding strategy that will enable the Authority to take advantage of immediate funding opportunities. The first step in this process is to link each project included in the initial project portfolio with a potential grant program linked to either the BIL or IRA legislation.

<u>Create a long-term revenue portfolio template and implementation plan.</u> Once an actionable grant funding strategy is established, the next step will be to develop a more comprehensive long-term revenue plan. Again, the focus should

be on establishing strategies for identifying, investing, and when necessary leveraging long-term revenue streams, including innovative taxes and fees, as well as asset-based revenues through the use of Urban Wealth Funds (UWF). Critical features of UWFs make them an essential component of the Authority's long-term revenue strategy. that distinguish it from other methods governments might use to manage assets, including:

- Transparency. All assets are clearly identified and have a defined market value. Many governments don't know all the assets they own, and if they do know, they may not have a clear picture of the assets' value. For example, asset value is recorded at the historical acquisition cost, which is not a good indicator of current worth. Knowing the market value is important not for selling assets but for understanding their true worth— and making sure they are maintained in an economically sustainable way. A "fair" market value will help both jurisdictions understand their income-generating potential.
- Political independence. Consolidating a commercial portfolio within the Authority will help reduce fiscal risk and delegate financial responsibility and accountability to this new institution. As a relatively independent holding company that's at arm's length from short-term political influence, the Authority would delegate the management of the commercial portfolio to a professional management team, allowing the jurisdictions to focus on the wider economic issues.
- Clear objective of value maximization. A UWF should have a comprehensive business plan that shows the link between the budget and balance sheet—a balance sheet that demonstrates to stakeholders and the Authority the value of all assets (as well as its liabilities). A focus on net worth (assets minus liabilities) makes it possible to show that every proposal has a positive impact on the net worth. In other words, the decisions to leverage local assets will enable the Authority to leave the next generation better off, not worse.

Appendix 3 provides a series of tables that compare each of the likely revenue sources as we as an assessment of how each source helps address the on-going needs associated with the project launch strategy. The next step is to use this analysis as the framework for the comprehensive long-term revenue plan.

Action 3: Establish the long-term enabling conditions for scaling and sustaining resilience and climate mitigation investments. In the short-term, the Authority will likely focus on funding priority projects with grant revenues, specifically from programs within the BIL and IRA legislation. As a result, the financing processes that are associated with and require sustained revenue streams will be implemented in the future. Therefore, the immediate next step should be to establish a clear understanding of the enabling conditions and actions necessary for the Authority to prepare itself to implement financing processes when they become necessary. This will include evaluating the project and revenue portfolios to anticipate the types of financing systems that will be necessary in the future, and to establish the right conditions for enabling those systems to function properly.

Sustained success will be achieved when project implementation, funding, and financing are all functioning in synch to ensure community resilience in the long-term. This will require:

- Identifying and implementing large-scale capital projects that will address systemic threats from key climate hazards. This includes implementing renewable energy projects at scale across both jurisdictions.
- Transitioning the revenue system from a reliance on grants to codified and sustained sources of funding, income, and resources. This in turn will require financing processes that are designed to better manage long-term cash flows, reduce capital costs, and accelerate implementation.

- Creating an organizational business and operating plan. This includes building staff and organizational budgets that reflect increasing financing needs and expertise.
- Establishing project development processes that are reactive, based on science, and designed to ensure the economic, social, and environmental sustainability of the community in the long-term.

Conclusion. This strategic plan is a starting point for the launch and growth of the Resilience Authority of Annapolis and Anne Arundel County. Over the next year or two the Authority's team will continue to refine its organizational processes to better guide its projects and programs with the intended purpose of establishing a unified direction and purpose. Our hope is that the tools and processes that we have created will enable the Authority staff and board to prioritize efforts, effectively allocate resources, align shareholders on the Authority's goals, and ensure those goals are supported by data and sound reasoning.

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Appendix 1: Listing of Local Planning Documents

- Plan 2040, County General Development Plan
- Anne Arundel County Watershed Assessment and Planning
- Anne Arundel County MS4 Permit
- Naval Academy Annapolis Military Installation Resilience Review
- University of Maryland Annapolis/Anne Arundel County Resilience Action Plan
- Anne Arundel County Nuisance Flood Plan
- City Dock Action Plan
- Transitioning the Fleet to Electric Vehicles; Phase 2
- Solar Photovoltaics Feasibility Study for Anne Arundel County
- Sustainable Communities Act