THE PLAYBOOK

NORTH CAROLINA
RESILIENT COMMUNITIES PLANNING GUIDE

VOLUME 1 · DECEMBER 2024

NCORR
NORTH CAROLINA OFFICE OF RECOVERY AND RESILIENCY

N★C DPS
DEPARTMENT OF PUBLIC SAFETY

EQUAL HOUSING OPPORTUNITY

Table of Contents

Finding Your Way Around the Playbook

The *Playbook* is organized in four phases – Prepare, Assess, Plan, and Implement. You may complete all phases consecutively, or you may want to use certain sections and not others, depending on your community's needs and capacity.

- **Phase 1 – Prepare.** In Phase 1 you will create a customized scope of work, evaluate your community's capacity and level of preparedness, convene a steering committee, and create a community resilience vision statement and goals.
- **Phase 2 – Assess.** In Phase 2 you will develop your community's vulnerability assessment.
- **Phase 3 – Plan.** In Phase 3 you will develop and prioritize resilience strategies that, combined, form a plan. You will also identify and organize critical resources for success, adopt the plan if needed, and publish and communicate its strategies widely.
- **Phase 4 – Implement.** In Phase 4 you will implement the plan and assess and report progress.

The *Public Participation Supplement* covers best practices for community engagement across all four Phases.

As we've described, the work of building resilience is ongoing. As you implement strategies and learn from their successes, you should anticipate revisiting earlier phases with new information and perspectives. In fact, returning regularly to earlier phases will ensure that strategies are fresh and momentum continues.

The *Playbook* is just one component of the *North Carolina Resilient Communities Planning Guide*. The *Idea Book* provides a collection of resilience strategies and case studies to address a wide range of climate challenges, from coastal flooding to wildfire.

Figure 1. Resilience Planning and Action Process

The primary **elements of each phase** include:

- An introduction that summarizes the phase, its steps, and major outcomes.
- The "Why..." section explaining the importance of the phase for building community resilience and the motivation for the work.
- Two to four steps, with options for scaling the step up or down based on your community's needs, goals, and capacity. Many steps have optional associated exercises and templates. Exercises are included in the main text, while templates are in Appendix C.

GETTING READY

To lay the groundwork for your resilience planning effort, make sure that you have identified:

- ☐ The project's lead agency or organization
- ☐ A lead project manager
- ☐ Core project objectives
- ☐ A small group of two to five key staff who will form the core team for the project
- ☐ The departments, organizations, or staff that must endorse, support, or participate in your project; ensure that these organizations or individuals are on board

PHASE | 01
PREPARE

Exploring capacity, scoping the project, and setting goals are foundational to all resilience efforts. Phase 1 – Prepare details specific actions, information and resources to guide your community in the process of developing your resilience plan.

There are four steps in the Prepare phase:

Step 1.1 Assess capacity

Step 1.2 Create a scope of work and public participation framework

Step 1.3 Convene a steering committee

Step 1.4 Define your community's resilience vision and goals

STEP 1.1

Introduction: Why prepare?

We start with an assessment of your community's capacity in Step 1.1: Assess Capacity. This foundational step will help you right-size your project and find partners to add more staff and resources if desired. Developing a scope of work for your resilience plan, described in Step 1.2: Create a scope of work and work plan, establishes the boundaries for your resilience effort. It ensures that you are addressing issues, strategies, and challenges that are relevant to your community's needs and resources. This scope will guide you in determining appropriate levels of effort and resources related to public engagement, stakeholder collaboration, data collection, strategic planning, and plan implementation. In this step, you will also create a public participation framework to ensure that the plan is strengthened by community input and buy-in.

The most successful resilience planning efforts are championed by a broad range of community members and leaders. In addition to public participation, a steering committee will ensure that appropriate professional expertise is incorporated into your strategy. Steering committee engagement helps build collective commitment to successful plan implementation. Step 1.3: Convening a steering committee, covers development and agenda-building for your steering committee.

Finally, articulating resilience vision and goals, as captured in Step 1.4: Define your community's resilience vision and goals, will provide focus for your effort and reinforce the scope of the effort. Visions and goals can be helpful throughout a planning process. They can guide the use of limited resources. It can be helpful to refer to an agreed-upon vision and goals when disagreements come up or when a small detail or distraction takes center stage.

Step 1.1: Assess capacity

TASKS TO DO

☐	**1.1a: Assess capacity of the community or organization and identify gaps using the Assessing Capacity Exercise.**
☐	**1.1b: Locate needed resources (to address capacity using Appendix A. Potential Partners).**

1.1a: Assess capacity of the community or organization and identify gaps using the Assessing Capacity Exercise

Capacity can present a barrier to any kind of planning and implementation work, so it is important to assess your organization's capacity when you are in the Prepare phase of the planning process. With this knowledge, you will be able to scope a planning effort that fits your staff and resources or explore opportunities to partner with an external organization to help with the work you want to do. There are many resources and organizations available to assist local governments in all phases of building resilience. Also consider entities that will implement your plan, if not your department. Are they involved already? Do they have capacity to implement? It's a good idea to include potential implementers in the planning process from the beginning.

Use the questions in the Assessing Capacity Exercise to determine where additional assistance or experience may be needed. These questions will also help you understand what adopted plans, policies, and actions are already in place. This knowledge will help set the groundwork for your resilience planning effort and will also be valuable in Phase 2 – Assess, Phase 3 – Plan, and Phase 4 – Implement.

STEP 1.1

Assessing Capacity Exercise

WHO	PURPOSE
Project lead and/or core project team	Identify organizational capacity and gaps where assistance is needed. Use the following questions to identify gaps in capacity and where additional resources or technical expertise may be needed.

1. **Does the community have a building inspector, planner, certified floodplain manager (CFM), and/or emergency manager who could assist in understanding the community's vulnerability to hazards such as flooding, landslide, coastal hazards, etc.?**
2. **Does the community have relationships with larger organizations that might be helpful in planning or implementing resilience projects?** *See Appendix A. Potential Partners for ideas.* **What about local groups that could help connect with key stakeholder groups like faith or civic organizations or disaster relief networks?**
3. **Does your community have adopted plans that describe a community vision, values, or goals?** *The community vision, values, and goals may be helpful in developing a project scope that is consistent with existing community plans and desires.*
4. **Have you assessed your community's vulnerabilities in the past or do you know where to find this information? Does your community have adopted plans or documents, such as a hazard mitigation plan or wildfire management plan, that identify the community vulnerabilities to flooding, landslide, drought, wildfire, coastal hazards, or other vulnerabilities?** *Identifying plans that describe climate vulnerabilities may save time and money in your current planning process.*
5. **Do these or other adopted plans set policy, guide future investment for the community, or guide growth and development? Some examples include:**
   - Comprehensive, land use, small area, or corridor plan
   - Stormwater management plan
   - Transportation plan

- Hazard mitigation plan
- Emergency response plan
- Water, wastewater, or utilities plan
- Parks and recreation plan
- Housing plan
- Landslide plan
- Other special plans that examine special community issues or needs related to resilience

These documents will help ground your work in goals, strategies, and language that elected officials have already adopted.

6. **Do the adopted plans contain policies, actions, or projects that relate to resilience?** *Adopted policies, actions, or projects that relate to resilience demonstrate intentions that already have community buy-in. This analysis also helps you to understand what has been done and what has been identified as next steps in your resilience planning process. Use this information to frame how you move forward from this point.*

7. **Does your community participate in the FEMA National Flood Insurance Program (NFIP) or Community Rating System (CRS)?** *Communities that participate in the NFIP or CRS have adopted an ordinance regulating special flood hazards areas (SFHA). These communities may have additional policies, programs, or ordinances that will contribute to a resilience strategy.*

8. **Does the community have higher regulatory standards, like freeboard, or other policies that might help to guide development or infrastructure placement?** *Often, communities that participate in the NFIP or CRS have adopted standards above those that are minimally required by the state to regulate development in special flood hazard areas. Understanding these standards and policies will help inform your current efforts.*

9. **Does the community track repetitive loss properties within the NFIP?** *If your community does track repetitive loss, this will help you understand where there are "hot spots" for vulnerability to flooding or clusters of properties that have sustained repeated damage.*

10. **Does your community have a budget planning process that engages all departments?** *Understanding your community's budget process and how to get involved will ensure that projects identified through the planning process will be able to move forward into a recommended budget.*

11. **Does your community have a Capital Improvement Plan (CIP)?** *A CIP is the fiscal planning mechanism by which an elected body, such as a town council or board of commissioners, allocates its financial resources to implement long-term goals that are defined in adopted plans, studies, or other documents. The purpose of the CIP is to forecast and match projected revenues and major capital needs over a five-year period. Capital improvement planning is an important management tool that strengthens the linkage between*

STEP 1.1

community infrastructure needs and the financial capacity of the community. Understanding the CIP budget process and how to move projects into the process will ensure that actions in your adopted plan or strategy get implemented.

12. **Are projects identified in adopted plans incorporated in the budget and CIP? If not, why?** *Understanding if and why projects are being funded and implemented will help you learn how to move future projects forward. If projects are not being included and implemented, did they not make it into the budget planning process? Or did they go through the budget process but are not high enough priority to make it into the budget? Understanding these perspectives will help you better position projects identified through your current planning process for success.*

13. **Does your community have the capacity and time to write and manage grants or projects internally?** *If your community does not have the time and capacity to manage projects internally, how will your community retain the needed assistance? Will this require extra funding or time for the project? See Appendix A. Potential Partners for ideas on partners who may be able to assist your community.*

14. **Does your community have a standard process for seeking and retaining a consultant or firm for planning and infrastructure projects?** *Determine if your community has a process for hiring consultants. If not, see Appendix A. Potential Partners for ideas on partners who may be able to assist your community in developing the materials to hire a consultant.*

1.1b: Locate needed resources

After completing the Assessing Capacity Exercise, you should have a better understanding of where your community may need assistance in conducting the planning process and implementing its outcomes. In addition to Appendix A. Potential Partners, you may find additional ideas for partners in the *Idea Book* of the *North Carolina Resilient Communities Planning Guide*. The *Idea Book* calls out “Potential Project Leads, Experts, and Stakeholders” for each resilience topic, which may prompt additional ideas for external capacity.

STEP 1.2

Step 1.2: Create a scope of work and public participation framework

TASKS TO DO

☐	1.2a: Draft the scope of work, including Scoping Exercise. Use the Scope of Work Template in Appendix C, if desired.
☐	1.2b: Develop a public participation framework.

SCALE UP/DOWN

Ideas for Scaling Up Step 1.2:

- Conduct additional outreach and engagement.

Ideas for Scaling Down Step 1.2:

- Include a subset of your desired resilience planning tasks for this scope of work, or use a phased approach to make incremental progress on resilience planning.
- Integrate outreach & engagement with ongoing community activities or events.

1.2a: Draft the scope of work

A formal scope of work will guide you throughout your resiliency planning efforts. Creating your scope will allow you to define your project's boundaries and ensure all project needs are addressed. The scope of work serves the staff and volunteers who contribute to the plan; it can also help you build a scope of work for a consultant or partnering organization.

Your community's needs, budget, and schedule should drive the scope of work for your resilience planning efforts. The Scoping Exercise helps you think through what you hope to achieve through your resiliency planning efforts. The Scope of Work Template, found in Appendix C: Templates can be modified based on your needs, and it includes a step-by-step description of tasks, budget, and schedule for your community's resilience plan.

Your planning efforts do not have to lead to the creation of a standalone document, especially if you do not currently have the resources to create one. Particularly for smaller local governments, it may be more appropriate to include a resilience element for an existing plan or the creation of a document to provide supporting and enforceable language for a code update.

STEP 1.2

Scoping Exercise

WHO	PURPOSE
Project lead and/or core team	Identify key project elements that define the plan's scope of work. *Please answer the following questions. You will use your responses to create your scope of work, using the Scope of Work Template if desired. If none of the responses fit your needs, feel free to add your own response.*

1. Is your resilience planning effort focused on one specific climate-related hazard or vulnerability or multiple hazards and vulnerabilities?

☐ One specific hazard or vulnerability (If yes, which one? ______________________)
☐ Multiple hazards and vulnerabilities

2. What is the geography or spatial extent of your resilience planning effort?

☐ Small area (e.g., neighborhood or specific location)
☐ Community-wide (e.g., entire city, town, or county)
☐ Regional (e.g., group of counties or watershed)

3. What do you hope to achieve through your resilience planning effort? Select all that apply.

☐ **Share information and build awareness:** Gather and communicate information about community vulnerabilities and share solutions that are being or will be implemented to help build resilience.
☐ **Develop a consensus-based community resilience vision and goals:** Facilitate opportunities to work collectively to define a shared resilience vision and goals.
☐ **Assess hazards and vulnerabilities:** Analyze, map, and communicate the community's level of risk related to climate hazards.
☐ **Select solutions to enhance resilience:** Learn about the range of strategies that help build resilience and choose the solutions that fit the community best.
☐ **Implement strategies to build resilience:** Create a plan and identify the actions and resources needed to implement selected resilience strategies.
☐ **Track and demonstrate progress on becoming more resilient.**
☐ Other (describe): ______________________

4. What type of resilience plan are you creating?

☐ A standalone comprehensive resilience plan
☐ A resilience plan for a particular hazard

- ☐ A resilience element for an existing plan, like a land use plan or Comprehensive Economic Development Strategy
- ☐ Other (describe): ______________________________

5. **Which of the following options best describes your resilience planning effort?**
   - ☐ **Limited:** Address a single resilience issue or implement a specific resilience project.
   - ☐ **Comprehensive:** Address multiple resilience-related challenges or a set of projects.
   - ☐ **Exploratory:** Investigate a range of potential solutions and/or develop flexible options that accommodate uncertainty.

6. **What is the time frame for actions that your resilience planning effort will include? Over what period of time do you want to investigate projected climate changes?** *There is a difference between these two questions. One is a time frame for implementing the actions in your plan and the other is a horizon for the climate impacts addressed. For example, a bridge might be rebuilt in the next five years but will be constructed to accommodate 100 years of projected sea level rise. A one- to two-year budget or a five-year capital improvement plan can be incorporated into any of the time frame options.*

7. **Which of the following elements do you intend to include in your final resilience plan?** *Some of these elements may be found in other plans or may already be completed; others will be developed as part of the steps described in this Guide. This can be noted in your scope of work.*
   - ☐ **Resilience vision, goals, and objectives:** Desired future state of resilience and how it will be accomplished
   - ☐ **Process and participation:** Description of the planning process and community outreach and engagement activities
   - ☐ **Community context:** Description of the area's planning and community history; description of related efforts that might inform your communitiy's resilience efforts; demographics and socioeconomic profile; important community assets, including natural, cultural, and historical landmarks; community infrastructure (including natural infrastructure such as trees, dunes, estuarine shorelines, wetlands, or floodplains that are important for their protective value)
   - ☐ **Hazard identification, vulnerability assessment, and risk analysis**
   - ☐ **Resilience strategy identification and prioritization**
   - ☐ **Implementation:** Details about how strategies will be actualized and how progress will be monitored

8. **Which internal or external partners will help you achieve these goals and the scope? How are you planning to work with them?** *See Appendix A. Potential Partners for ideas.*

Use these responses and any other relevant information to create your scope of work, using the Scope of Work Template (Appendix C) if desired.

STEP 1.2

1.2b: Develop a public participation framework

Establishing community support at the beginning of your project generates a high return on investment when it is time to adopt and implement your resilience plan. Benefits of investing in robust and meaningful public participation in the planning process include:

- **Setting project expectations** by describing what the plan can—and cannot—do.
- **Establishing your community's unique definition of resilience** and directly responding to the community's needs.
- **Understanding your community's readiness** for a range of resilience programs, policies, and projects.
- **Incorporating local knowledge** into the vulnerability assessment.
- **Fostering knowledge exchange and relationship building** to guide planning and implementation.
- **Including community-driven resilience ideas and strategies** in the planning effort.
- **Building consensus and momentum** needed for the planning project's success by finding common ground and transforming conflict into opportunities for mutual understanding.

While there are many benefits to public participation in the resiliency planning process, it takes time to engage your community, listen to feedback, and incorporate that into the planning process. Listening well and incorporating feedback where possible develops trust with your community and demonstrates that their input is valuable. Developing trust with the community is vital in developing your resilience plan and implementing projects long term. It is important to anticipate and allow time during your planning process for thoughtful engagement. Additionally, it is equally important to inform and educate your local government leadership about the value and time this type of engagement takes.

To support strong public participation, the *North Carolina Resilient Communities Planning Guide* provides a *Public Participation Supplement (Appendix B),* a companion document on effective public participation techniques. This supplement includes information to help you identify participants, best practices for equitable engagement, strategies for outreach and engagement, options to scale your approach, and ways to measure your success in engagement.

Before you select a community engagement technique like meetings or a survey, identify the intent of public participation for each phase. Each phase benefits from a different type of public feedback. For example, a particular time to emphasize local input is during the vulnerability assessment, in which local knowledge can ground truth findings that have been based on technical analysis and professional expertise, for example:

- Areas of frequent flooding after rainfall
- Other climate impacts outside of major disasters
- Places that flood outside the regulatory floodplain
- Non-climate stressors likely to intersect with climate stressors (e.g., population growth or decline)
- Community assets, both tangible and intangible, that may be vulnerable
- Historic or cultural connections to vulnerable landscapes
- Experiences with recent disaster and disaster recovery
- Communities’ abilities to cope with identified impacts
- Other insights on the region’s strengths and weaknesses

TIP

Reach out to planners or community organizers and ask what has been successful in the past in your community.

STEP 1.2

Public Participation Exercise

WHO	PURPOSE
Project lead, core team	Create a road map guiding your planning effort's outreach and engagement activities.

Part 1: Define overall public engagement approach.

Has your community or organization recently conducted any successful resident outreach and engagement efforts? What worked? What did not?

How will you share information about the project and event?

- ☐ Project-specific website
- ☐ Webpage on a preexisting website
- ☐ Direct mailings
- ☐ Email newsletter
- ☐ Social media
- ☐ Live stream/public access channel
- ☐ Resilience plan steering committee or other group of community stakeholders
- ☐ Trained community members (i.e., neighborhood ambassadors, block captains)
- ☐ Workshops or public meetings
- ☐ Other (describe) ______________________________

How will you promote effective, accessible, and equitable outreach and engagement for this plan?

- ☐ Ensure multiple ways of participating at each project phase, such as in-person, virtual, verbal, written, etc.
- ☐ Provide online feedback avenues in the form of online surveys or virtual meetings
- ☐ Conduct targeted engagement for special groups like youth or seniors
- ☐ Conduct outreach at community events like an athletic tournament, festival, etc.
  List 2-3 specific events: ________________________
- ☐ Provide refreshments at events
- ☐ Host kid-friendly events
- ☐ Enhance accessibility of outreach and engagement approaches
- ☐ Incentivize participation through raffles, gift cards, or activities
- ☐ Compensate community members serving on the steering committee

- ☐ Translate written or audio-visual materials
  Languages: ______________________________
- ☐ Provide interpretation services at engagement events
  Languages: ______________________________
- ☐ Host events in locations accessible to public transportation if available

Are there times of the year, days of the week, and/or times of day that work well for resident engagement in your community?

Part 2: Develop a public engagement strategy for each of the four phases.

What is the purpose of engagement in this Phase?

- ☐ Inform/raise awareness (one-way flow of information)
- ☐ Consult the community (two-way flow of information)
- ☐ Collaborate with the community (two-way flow of information)

What kind of information will strengthen the content in this phase?

How will you use the feedback you gather?

- ☐ We are collecting feedback for informational purposes only
- ☐ We will consider feedback and make revisions as feasible
- ☐ We will only move forward with strategies if we have community consensus

Who needs to be engaged in this phase? Select all that apply.

- ☐ General public
- ☐ Select community members
- ☐ Key stakeholders or interest groups: ____________________
  Elected officials
- ☐ Funders or implementers
- ☐ Other: ______________________________

How will you engage them? What techniques will you use?

STEP 1.2

How will you advertise engagement opportunities?

- ☐ Project-specific website
- ☐ Webpage on a preexisting website
- ☐ Direct mailings
- ☐ Email newsletter
- ☐ Social media
- ☐ Posted flyers
- ☐ Information kiosks in public locations
- ☐ Direct invitations
- ☐ Live stream or public access channel
- ☐ Resilience plan steering committee or other group of community stakeholders
- ☐ Trained community members like neighborhood ambassadors, block captains
- ☐ Workshops or public meetings
- ☐ Other (describe) ______________________________

Use the answers from this Exercise and Appendix B. Public Participation Supplement to draft a description and schedule of outreach and engagement. The descriptions should be integrated into your scope of work, and the schedule of outreach and engagement should be integrated into your overall planning project schedule (see Scope of Work Template in Appendix C). This schedule is also available as a template.

Schedule of Outreach and Engagement Activities							
	[MONTH]	[MONTH]	[MONTH]	[MONTH]	[MONTH]	[MONTH]	[MONTH]
Phase 1 – Prepare							
[STRATEGIES]							
Phase 2 – Assess							
[STRATEGIES]							
Phase 3 – Plan							
[STRATEGIES]							
Phase 4 – Implement							
[STRATEGIES]							

Collect and maintain contact information for anyone who participates in any phase of the process. Send these contacts updates about any future engagement opportunities open to the public, and be sure to share the final version of the plan or plan content with them.

The Schedule of Outreach and Engagement Activities table is also available in Appendix C as a fillable template.

STEP 1.3

Step 1.3: Convene a steering committee

TASKS TO DO

☐	1.3a: Propose steering committee membership (see Steering Committee Exercise).
☐	1.3b: Invite steering committee members (see Steering Committee Invitation Template in Appendix C).
☐	1.3c: Draft steering committee schedule and agenda (see Steering Committee Schedule and Agenda(s) Template).

SCALE UP/DOWN

Ideas for Scaling Up Step 1.3:

- Expand steering committee membership or establish sub-committees to focus on specific plan tasks.
- Formalize steering committee organization and responsibilities by establishing an official task force or commission.

If thoughtfully organized and sustained, a steering committee composed of experts from a variety of relevant sectors and backgrounds helps guide, develop, implement, and advocate for your community's resilience plan.

1.3a: Propose steering committee membership

The steering committee is a group of people who actively support and participate in the planning process, bringing their expertise to help guide the effort and provide input. Specifically, they:

- Participate in regular meetings over the life of the planning effort (and often beyond).
- Provide feedback informing the plan's administration and policy direction.
- Participate in small group discussions about key planning topics.
- Provide local knowledge and expertise.
- Help plan and promote engagement opportunities, including supporting outreach efforts.
- Act as a liaison between community members and the core team, including sharing accurate information about the planning effort with the community.
- Attend and help facilitate planning events and workshops.
- Champion the plan's implementation and help identify implementation resources.
- Help monitor plan progress and success over time.

TIP
Communities and organizations have different rules and structures for forming oversight groups and naming/appointing members. Work with your municipal manager, mayor, council, or executive director to identify the appropriate framework and protocols.

STEP 1.3

Effective steering committee members are sources of community information and specialized knowledge in a sector relating to climate hazard resilience. They are respected members of the community, who are ready and willing to step into leadership roles. They are also committed to taking on the challenge of supporting implementation of the resilience plan. It is extremely important to include members who bring diverse expertise and perspectives to appropriately plan for climate hazard resilience. While many members have paid employment that covers time and travel related to involvement in a steering committee, some may not. Consider compensation for those members who need to be involved but are not being paid. This may especially hold true for representatives of historically underserved communities. Consider members representing the following groups while brainstorming ideas for a steering committee:

Typical membership

- Planning department
- Local appointed or elected officials
- Emergency management
- Natural resources or parks and recreation
- Transportation
- Public works
- Building or zoning code compliance
- Stormwater or other engineering

Additional beneficial members to include

- Representation from different geographic parts of your community
- Local business leader or chamber of commerce
- Council on aging or senior affairs
- Faith-based entities
- Nonprofits
- Youth or youth organizations
- Neighborhood organizations
- Agriculture
- Economic development
- Soil and water conservation
- Public health
- Utilities
- Public information
- Public safety
- Cooperative extension

Steering Committee Exercise

WHO	PURPOSE
Project lead, core team	Convene a steering committee that has people with a diversity of skillsets and expertise necessary for successful resiliency planning.

Brainstorm

- ☐ **Identify your target number:** The number of steering committee members is dependent on your needs, community size, capacity to manage the group, and other variables. Committees average between 5 and 30 members, with larger groups often breaking into subcommittees to focus on specific tasks. What is your target number (or range) of committee members?
- ☐ **Crowdsource ideas:** Solicit help from others who are familiar with your community and ask for recommendations. You can also convene in person to discuss ideas.

Create Short List

- ☐ **Narrow down your options:** Once you have generated your list of potential members, work as a group to narrow the list down to a size that makes sense based on your ideal committee size. We recommend identifying at least 10-20% more invitees than you would like on the committee, accounting for individuals unable or unwilling to participate.
- ☐ **Check composition:** Looking at your list of potential members, ensure that there is good representation of different areas of expertise. Checking for race, age, and gender diversity is also beneficial at this point.
- ☐ **Identify inviters:** Determine who will invite each potential steering committee member. Personal invitations like a phone call are great, but sending an email is also an option. If members of the core team have personal relationships with invitees, leverage those relationships when sending invitations.

STEP 1.3

1.3b: Invite steering committee members

Send or extend invitations on the same day if possible and establish a simple method for tracking invitees who have accepted or declined the invitation. Provide a firm date and clear instructions for responding in the invitation. Send a reminder email or reach out to invitees who have not responded two days before and the day of your response deadline. The Steering Committee Invitation Template (in Appendix C) provides example language. The best invitations come in the voice of the person sending them, so take the time to tailor it.

Once you have a full committee, send a group email confirming membership and thanking all who agreed to participate. If possible, provide the following information in this initial correspondence:

- A list of steering committee members' names, email addresses, and affiliations.
- The date, time, and location of the first steering committee meeting, including options for remote participation, if applicable.
- A draft or final agenda for the first meeting.
- An attachment describing the steering committee's role and responsibilities, information on standing meetings, the overall project timeline, and participation expectations.
- A request to come prepared to nominate or self-nominate a chair or co-chairs at the kickoff meeting, if desired; if you have a large steering committee, you may choose to also establish subcommittees.
- Contact information for the staff liaison for the steering committee.

1.3c: Draft steering committee schedule and agenda

Finally, set up a tentative schedule for how and when the steering committee will meet. Consult the Steering Committee Schedule and Agenda Template (in Appendix C) to help plan out the meetings.


Scuppernong Water Management Study
What Is This Project?
This Study Will:

STEP 1.4

Step 1.4: Define your community's resilience vision and goals

TASKS TO DO

☐	1.4a: Define a vision for your community resilience effort.
☐	1.4b: Draft community resilience goals.

SCALE UP/DOWN

Ideas for Scaling Up Step 1.4:

- Expand outreach and engagement efforts for community visioning and goal setting tasks or use innovative or interactive methods of soliciting community feedback and vetting goals.

Ideas for Scaling Down Step 1.4:

- Use existing plans or previous community feedback to develop your vision and goals.
- Identify a smaller, well-defined set of goals or prioritize your goals and work on them in phases.

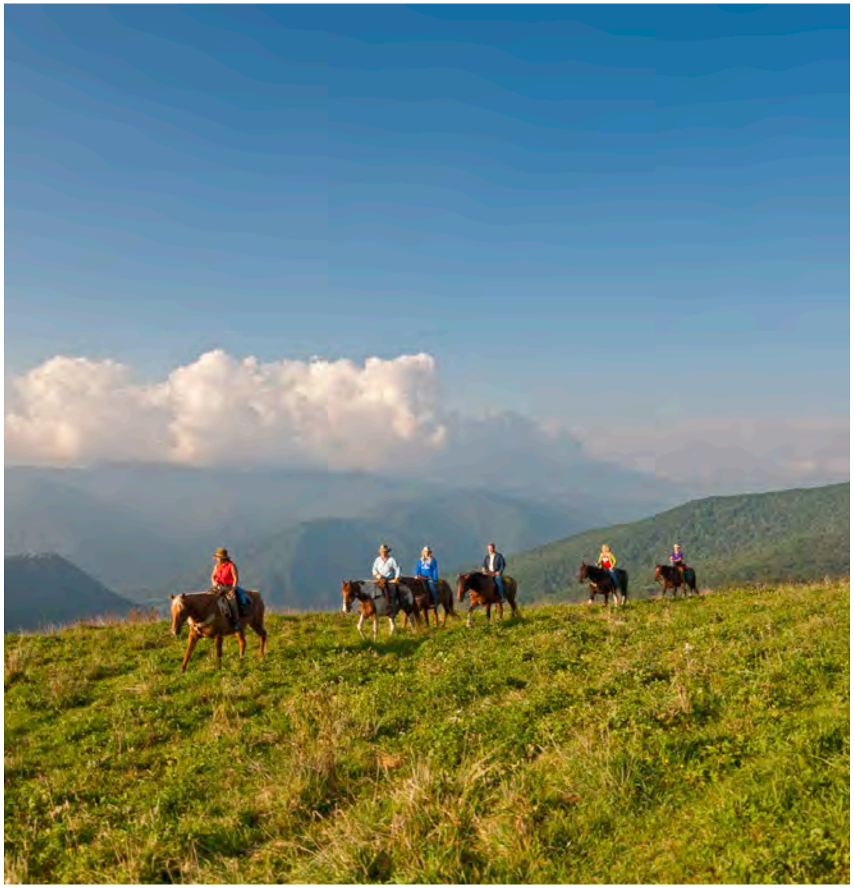
This step provides you with the actions, information, and resources needed to facilitate the process for defining your resilience vision and goals. Your vision statement will describe the resilient future your community hopes to achieve; your goals, which will eventually be supplemented by more specific actions, will help move your community closer to your vision.

This forward-looking perspective is very important to resilience planning. Defining a clear vision and goals for resilience to climate hazards establishes a shared definition of resilience; clarifies intended project outcomes; and helps build the consensus, momentum, and inspiration needed for your resilience plan to succeed. Establishing clear goals will help you prioritize limited resources in terms of funding, staff time, physical assets, and community efforts.

You can also choose to build on the vision in your comprehensive plan (or other document), which is a great way to integrate resilience into stated community values and existing plans. You will likely refine your goals over the course of the planning effort, but this initial draft will provide the foundation needed to begin identifying your community's resilience strategies.

Incorporating public engagement efforts to develop your vision and goals and to receive feedback is very valuable. This helps ensure that your vision and goals accurately capture the community's needs, challenges, opportunities, and desired outcomes. The combination of local knowledge and community-based ideas with scientific expertise can help determine where programs and interventions will be most effective in combating the adverse impacts of climate hazards.

The exercises in this step will guide you to complete visioning and goal setting, through engaging the public, your steering committee, or other project support staff. You may find that you also need to revise your scope of work and work plan based on your vision and goals or vice versa.



STEP 1.4

Visioning and Goal Setting Exercise

WHO	PURPOSE
Project lead, core team (optional: steering committee, public and key stakeholders)	Conduct engagement to gather community feedback and use this feedback to create or refine your community's resilience vision statement and draft goals.

Follow the steps and answer the questions below to gather feedback or information needed to identify a resilience vision and goals.

1.4a: Define a vision for your community resilience effort

A resilience vision describes or illustrates the community's desired future condition in how it is impacted by or responds to climate hazards or natural disasters. A vision statement can be short—one or two sentences—or it can be more extensive. It usually is written, and it can include images or graphics. The vision statement provides the basis for generating the community's resilience goals and objectives. There is no right or wrong way to write a vision statement, but strong visions share several characteristics. They are:

- Inspirational
- Forward-looking
- Descriptive and easy to visualize
- Conceptual, not overly specific
- Values-driven
- Unique to your community

What is the status of your visioning and/or goal setting?

- ☐ We do not have a vision statement or goals.
- ☐ We have a vision statement and/or goals but not specific to resilience.
- ☐ We have a resilience vision statement but not goals. *(if yes, skip to Section 2: Draft community resilience goals)*
- ☐ We have an existing resilience vision statement and goals. *(if yes, skip Step 1.4: Define your community's resilience vision and goals)*

What is your primary method for gathering the information or feedback needed to create a community resilience vision?

☐ Conduct public outreach and engagement.
☐ Ask steering committee.
☐ Refine an existing community vision.
(if yes, skip to Section 2: Draft community resilience goals)

If you are gathering feedback from the public or a group of people like the steering committee, below are suggested steps to stimulate ideas and prompt discussion. The Public Participation Supplement (Appendix B) also offers a variety of strategies for gathering public feedback. Skip to "Review your statement against the following characteristics of a strong vision…" on the next page if you are not conducting interactive exercises to create a vision.

Generate ideas:

1. **Find a facilitator:** Provide an experienced facilitator to guide discussions, establish ground rules for discussion, and clearly describe goals of the exercise and how feedback will be used.

2. **Encourage participation:** Challenge participants to think big, and ask participants to be descriptive and use their own words. If you have a large group, you may want to break out into smaller groups. If your community has a sizeable population that primarily speaks a language other than English, hire a translator to allow participants to contribute in their own language. The following questions can be used for in-person activities or for digital or paper surveys to stimulate ideas and discussion:
   - What does a resilient [COMMUNITY NAME] look like in [5, 10, 20] years?
   - What hazards need to be addressed?
   - What does it look like to live with these hazards into the future?

3. **Document discussion:** Ensure you have enough staff to take notes or ask participants to volunteer as scribes to help record key discussion points.

Draft the community resilience vision:

Review and aggregate the feedback you have gathered. List the top five ideas, themes, messages, and/or topics. If there are many emerging themes, it may be helpful to focus on those most related to climate hazard resilience. If you are generating your vision using existing information or an established community vision, use this step to translate the broader community vision into a more specific vision focused on resilience.

1.

2.

3.

4.

5.

STEP 1.4

Translate each theme or idea into a clear statement. You may want to try sentences that start with the following:

"[COMMUNITY] is..."

"Our community will be..."

"Our community will maintain..."

1.

2.

3.

4.

5.

Refine and aggregate these individual statements into a unified vision. There are lots of examples of vision statements online in comprehensive plans from across North Carolina and the United States.

Review your statement against the following characteristics of strong vision statements and refine if necessary. Your draft vision statement will be further refined after vetting and review by the community.

- Inspirational
- Forward-looking
- Descriptive and easy to visualize
- Conceptual, not overly specific
- Values-driven
- Unique to your community

1.4b: Draft community resilience goals

Your community resilience goals, if achieved, will help your community realize its resilience vision. The goals also help you identify, organize, and prioritize more specific resilience strategies as you continue developing your resilience plan. Like vision statements, effective goals usually share several characteristics. These goals:

- Are qualitative or descriptive, rather than measurable
- Are more specific than the vision
- Describe how to achieve the vision
- Set direction and inspire the community to take action

Use your community resilience vision and your responses to the questions below to create your draft community resilience goals.

What is your draft community resilience vision?

What needs to change or be accomplished in the community to achieve your vision?

Using active, present-tense language, translate the needs identified above into 3-5 resilience goals. Make sure each goal is qualitative and broad, and moves your community towards a more resilient future.

Tip: Use action words like “provide,” “enhance,” “improve,” “ensure,” “establish,” “maintain,” and “protect.”

1.

2.

3.

4.

5.

At the end of Phase 1 – Prepare you will have developed a scope of work, public participation plan, and steering committee, and will have formalized vision and goal statements. Now you are ready to begin Phase 2 – Assess.

PHASE | 02
ASSESS

Why assess?

Good resilience plans are based on a thorough analysis of a community's climate vulnerabilities and strengths. Phase 2–Assess includes identifying hazards of greatest concern and mapping them if possible, mapping and identifying built assets and socially vulnerable communities, and understanding the effect of the identified hazards on your community's assets and populations. At the conclusion of this phase, you will examine the overall findings and pull out those that are most critical to communicate and address. These findings will be written up to support the rest of the planning process and for general communications. Completing Step 2.1: Identify and map hazards of concern, and Step 2.2: Assess vulnerability, will assist you in developing the information necessary to complete Step 2.3: Synthesize vulnerability assessment findings.

Step 2.1 Identify and map hazards of concern

Step 2.2 Assess vulnerability

Step 2.3 Synthesize vulnerability assessment findings

STEP 2.1

Introduction: Options for the vulnerability assessment

This phase's guidance provides a flexible methodology that can be adapted to different levels of detail, technical expertise and resources. For example, some communities may have access to Geographic Information System (GIS) staff, some may have the resources to hire a consultant, and some may have neither of these. Each step in Phase 2: Assess builds upon previous steps to collect and summarize the information necessary to complete a vulnerability assessment.

To accommodate both low-tech and high-tech approaches, guidance is offered in two ways. The first is a **qualitative baseline approach**, which requires less time and expertise. Generally, the qualitative approach is the foundation for all vulnerability assessments, whether or not you will add more detail. The second option is to continue on from the qualitative approach and add **quantitative and mapping analysis**. Typically, this level of analysis requires more in-depth GIS analysis.

DEEP DIVE: THE CONCEPT OF VULNERABILITY

Assessing your community's vulnerabilities is an important step in creating an effective resilience plan, but what exactly is vulnerability? The U.S. Climate Resilience Toolkit defines vulnerability as the probability that a given community or asset will be adversely affected by hazards. Vulnerability is determined through consideration of three main criteria: exposure, sensitivity and adaptive capacity.

Vulnerability = Exposure + Sensitivity – Adaptive Capacity

The first step in determining the vulnerability of a community or asset is to understand the level of exposure present. Exposure refers to the probability that an asset or community may come into physical contact with hazards such as sea level rise, precipitation, temperature, heat waves and wildfires.

Once you have determined the level of exposure, you can determine the sensitivity of an asset or community to a hazard by identifying how much it will be impacted. This might involve identifying the structures (e.g., essential facilities, residential communities, schools), functions (e.g., energy delivery, emergency services), and populations (e.g., seniors, children, low-income communities) that could be impacted by a given hazard.

Lastly, adaptive capacity describes the ability of a community or asset to adjust to a hazard through changes in characteristics or behavior. A high adaptive capacity indicates that measures already exist to address projected impacts, thus reducing the overall vulnerability of a community or asset. By conducting a vulnerability assessment, you can better identify and incorporate adaptive measures that will help make your community more resilient overall.

Generally, in the qualitative approach you would describe vulnerabilities in terms like "low," "medium," or "high," whereas a quantitative approach will provide more specific numbers and maps to describe the vulnerabilities. Of course, you may choose to use quantitative analysis for some parts of your vulnerability assessment and not others.

Whatever the level of detail in your vulnerability assessment, the first step in your assessment work is to collect information and analysis that others have already done on your community's vulnerability. For example, check any relevant existing plans, such as:

- ☐ Local hazard mitigation plan, disaster recovery plan, or previous resilience plan (for example, Hurricane Matthew Resilient Redevelopment Plans)
- ☐ Local Threat and Hazard Identification and Risk Assessment (THIRA)
- ☐ Regional plans like a multijurisdictional hazard mitigation plan
- ☐ RISE Resilience Portfolio and Vulnerability Assessment (available for the eastern half of North Carolina)
- ☐ Local comprehensive land use plan
- ☐ Coastal Area Management Act (CAMA) plan
- ☐ Stormwater management plan
- ☐ Local or county economic development plan or Comprehensive Economy Development Strategy (CEDS) (which is required to address economic resilience)

These documents are great sources of information to start with. However, we do not recommend a wholesale replacement of this phase with your community's THIRA or local or regional hazard mitigation plan risk assessment. These analyses have information to get you started, but usually are very specific to FEMA requirements. They may not include all the components of your community's risk or resilience, especially considering population-based vulnerabilities specific to your community. They also may not have actionable conclusions, which is a goal of the vulnerability assessment outlined here.

TIP

What if my community does not have data or information about climate hazards and vulnerabilities?

North Carolina has fantastic data resources that are available for free. There are two lists of these resources in this chapter, one focused on hazards alone and one focused on mapping assets that might be affected by hazards. You can also consult the NC Resilience Exchange online.

STEP 2.1

Step 2.1: Identify and map hazards of concern

TASKS TO DO	
☐	2.1a: Identify hazards and key characteristics.
☐	2.1b: Describe past occurrences and future projections.
☐	2.1c: Describe hazard effects and spatial considerations.
☐	2.1d: Prioritize and summarize the hazard for your community.

SCALE UP/DOWN

Consult the *Idea Book* to learn more about how other communities have identified and mapped hazards in their communities.

Ideas for Scaling Up Step 2.1:

- Identify and map hazards that are a risk but less common to your community.
- Share the GIS layers of hazards of concern on a local GIS dashboard.
- Conduct a community engagement meeting or workshop to engage the community in identifying areas of known risk. Consult Appendix B. Public Participation Supplement to guide you.

Ideas for Scaling Down Step 2.1:

- Identify and map a small number of hazard risks.
- Build from hazards identified as part of another planning process or in adopted plans such as a hazard mitigation plan.

In this step, you will review the climate hazards affecting North Carolina using several resources described below and determine which are the highest concern for your community based on their potential impact. Climate hazards include weather or climate change related hazards. While this *Guide* is focused on building resilience to climate hazards, much of this information is relevant to other kinds of hazards like earthquakes, hazardous materials events, and infectious diseases.

Information about hazards will be summarized in a Hazards of Concern Table (see below for an example). For the **quantitative and mapping analysis**, the Hazards of Concern Table becomes a summary, with detailed documentation in writing and maps. Based on hazards or areas of concern, this approach would use GIS data to map the extent of certain hazard risks across the landscape, like flood risk or landslide risk, and describe the certainty of future projections.

Information Sources

Sources of information for identifying and mapping hazards of concern:

- Knowledge held by core team, steering committee, or community members. It can be incredibly valuable to capture information that people know but has not been documented.
- Other plans and vulnerability assessments, as described in the Introduction to this phase.
- Online resources listed in Resources for Identifying and Mapping Hazards on page V1-42.

Hazards of Concern Table (also available in Appendix C. Vulnerability Assessment Table Templates)

Hazards and Key Characteristics	Past Occurrences and Future Projections	Effects and Spatial Considerations	Priority
Example: Hurricane Key Characteristics: High winds, storm surge, shoreline erosion, heavy precipitation	In the past, three hurricanes/tropical storms since 2010 In the future, hurricanes are expected to increase in severity and have higher amounts of rainfall	Flood damage, road washouts, loss of power, crop loss Community-wide flood damage, road washouts, loss of power; White Birch subdivision access cut off during hurricanes and large storms; Jones Beach especially subject to erosion	High
[Insert hazards and key characteristics here]	[Insert past occurrences and future projections]	[Insert effects and spatial considerations]	[Insert priority]

STEP 2.1

Developing a hazards of concern summary

2.1a: Identify hazards and key characteristics

Select hazards to include in your Hazards of Concern Table based on local context, adopted plans or studies, and statewide documents, including the North Carolina Climate Science Report (Report Findings and Executive Summary, Plain Language Summary, 2020) and the State of North Carolina's Hazard Mitigation Plan (2018). Call out the key characteristics of each hazard as it affects your community.

Select among the following climate-related hazards most likely to impact North Carolina communities. Some of these hazards overlap with one another, like riverine flooding and hurricanes. You may wish to group these hazards or treat them separately, noting their similarities.

If capacity allows, this could be a good time in the planning process to engage your community as you identify and map these hazards. Your community can help you identify hazards of concern, as well as review your summary. Consult Appendix B. Public Participation Supplement to help you identify the outcomes you hope to achieve, determine your audience, and guide you through the best strategies to get there.

Flooding	Other
• Riverine flooding • Flash flooding • Stormwater flooding, not connected to a natural body of water • Tidal flooding, including sunny day flooding or king tides • Storm surge • Sea level rise • Dam failure	• Excessive heat and urban heat island effect • Hurricanes • Landslide • Saltwater intrusion • Rising groundwater tables • Land subsidence • Drought • Wildfire • Severe winter weather • Strong wind • Tornado

2.1b: Describe past occurrences and future projections

Looking back over the last 50 to 100 years, record any specific instances of each hazard or the general frequency in which the community has experienced the hazard. Use the North Carolina Climate Science Report (2020) to capture how scientists expect changes to occur with this hazard in the future.

For **quantitative and mapping analysis**, the table and accompanying documentation should capture data such as:

Mapping

- Special flood hazard areas (SFHAs), including but not limited to the 10-, 25-, 50-, 100- and 500-year floodplains
- Water surface elevations
- Estimated current flood risk, taking into account flooding sources not currently included in FEMA maps, such as NCEM's advisory map of current flood risk outside of the 100-year floodplain, if available in your area, or Flood Factor
- Future flood risk, such as Flood Factor
- Storm surge risk (NOAA's National Hurricane Center–Sea, Lake, and Overland Surges from Hurricanes [SLOSH] model, reflects estimated storm surge)
- Erosion rates (NC DCM)
- Historic flood extents and high water marks
- Areas with high groundwater occurrence
- Extent of impervious surfaces, which can be a good stand-in for stormwater flooding risk as well as urban heat island effect risk
- Wind risk zone
- Wildland-urban interface (WUI) or other measure of wildfire risk
- Areas susceptible to landslide (NC DEQ Landslide Hazard Data Viewer)
- Previous landslide occurrence locations and deposits
- Steep slopes
- Other hazard related data appropriate for your community

Data, including current trends and future projections

- Average daytime and nighttime temperatures and heat indexes
- Frequency of very hot days and very warm nights
- Annual hottest temperatures
- Cooling degree days
- Annual precipitation totals
- Local precipitation records

More advanced modeling might consider the extent of compound flooding during hurricanes or other coastal storms.[1] Compound flooding refers to flooding from multiple sources such as rainfall, riverine, or coastal flooding simultaneously or within a short period of time. For example, 2018's Hurricane Florence caused compound flooding in places like New Bern, Jacksonville, and Bogue Sound.

[1] https://collaboratory.unc.edu/wp-content/uploads/sites/476/2021/05/compound-flooding.pdf

STEP 2.1

2.1c: Describe hazard effects and spatial considerations

For each identified hazard, record the actual and potential impacts based on the hazard's key characteristics, past occurrences, and future projections. Focus on a high-level description of major effects. Using available tools, maps, and local knowledge, identify any specific places or locations in the community that are more or less likely to experience the impacts of each hazard.

2.1d: Prioritize and summarize the hazard for your community

For each hazard, conduct a simple prioritization exercise based on the likelihood of the hazard and its impact, using the matrix below. This prioritization will be used for the full vulnerability assessment and to develop resilience strategies and projects. Deciding how to categorize an impact and its likelihood is subjective and discussing these decisions with core team members and steering committee members or engaging the community will help build confidence in the prioritization of each hazard.

If a Hazard is...	Less Likely	More Likely
Low Impact	Low Priority	Medium Priority
High Impact	Medium Priority	High Priority

Use the prioritization in the Hazards of Concern Table to select the hazards that you will focus on for the resilience planning effort. You may choose to continue with all climate hazards or just the highest priority hazards for the remainder of the planning process.

Resources for Identifying and Mapping Hazards

Check NCORR's North Carolina Climate Resilience Data webpage and the NC Resilience Exchange for guidance on many of these datasets and others.

High-level screening of climate hazards common in your community.

Maps of physical risks to the U.S. landscape, including Mapping Climate Risks by County and Community (American Communities Project) Maps of physical risks to the U.S. landscape, including sea level rise; hurricanes; extreme rainfall; water stress; and heat stress, characterized by higher temperatures.

Climate Hazards Overlays Maps showing potential climate hazards. Users can perform a high-level screen to check if assets in their community are exposed to various threats.

Disaster & Risk Mapping (NOAA) Provides information on historic and future risks down to the census tract level of geography.

National Risk Index (FEMA) The National Risk Index is a dataset and online tool to help illustrate the United States communities most at risk for 18 natural hazards.

Hazard-specific resources providing greater detail on the characteristics of hazards in your community, including, for example, historic occurrences, severity of events, and more detailed geographic information.

North Carolina Flood Risk Information System The Flood Risk Information System (FRIS) contains digitally accessible flood hazard data, models, maps, risk assessments and data-based reports. It also provides geospatial base map data and imagery for download and use.

Advisory Flood Maps NC Emergency Management is developing maps of current flood risk outside of the 100-year floodplain, moving across the state over the course of multiple years to complete these time-intensive effort. They are called "advisory" maps to distinguish them from regulatory flood maps.

Flood Maps (FEMA) The FEMA Flood Map Service Center is the official online location to find all flood hazard mapping products created under the National Flood Insurance Program (NFIP). You can search for addresses or places across the entire U.S.

Coastal Risk Screening Tool (Climate Central) A set of interactive maps showing areas threatened by sea level rise and coastal flooding. As these maps incorporate big datasets, which always include some error, they should be regarded as screening tools to identify places that may require deeper investigation of risk.

Sea Level Rise Viewer (NOAA) Interactive map viewer and data available for download of sea level rise.

National Integrated Drought Information System Usable, reliable, and timely drought forecasts and assessments of associated risks to facilitate proactive decision-making. At Drought.gov, you will find information about current drought conditions, historical drought, drought impacts, outlooks, forecasts, reports, research, events, and news at the local to international levels.

Historic Probability of Large Wildfire (NOAA) Static maps and snapshots of historic probability of large wildfire across the country. Underling datasets also available for download upon request.

Landslide Maps of Western North Carolina Interactive maps of Western North Carolina showing landslide hazard areas. Some data available for download hosted on different websites.

National Inventory of Dams (FEMA) Interactive map of all known dams in the U.S., providing information about emergency response preparedness and date of latest inspection. This includes links to other general resources on preparedness for dam-related emergencies.

HAZUS Downloadable free software from FEMA that provides standardized tools and data for estimating risk from earthquakes, floods, tsunamis, and hurricanes. Hazus models combine expertise from many disciplines to create actionable risk information to increase community resilience.

STEP 2.2

Step 2.2: Assess vulnerability

A vulnerability assessment communicates the likelihood and extent of climate hazard impacts. To arrive at these findings, planners and analysts methodically explore the interaction between hazards on the one hand, and people, places, and infrastructure that matter to the community on the other hand. This analysis usually considers both the location and condition of people, places, and infrastructure. These factors make a big difference in how well a community can withstand any given hazard.

This assessment considers two types of vulnerability: physical and social. Physical vulnerability concerns structures, infrastructure and natural environmental features (all referred to as assets). Social vulnerability concerns people. The concept of social vulnerability helps us account for the divergent experiences of different people in the same hurricane, for example. While not a perfect proxy, we often look at issues like income, age, gender, disability, race and ethnicity, or language and national origin to help us understand why some populations suffer more during a disaster.

SCALE UP/DOWN

Consult the *Idea Book* to learn more about how other communities have assessed vulnerability.

Ideas for Scaling Up Step 2.2:

- Conduct an in-depth quantitative analysis with custom outputs.
- Consider multiple scenarios of flooding, for example the 10-year, 100-year, and 500-year storms.
- Identify and analyze impacts to all critical facilities affected.
- Engage the community at a workshop to identify and map assets vulnerable to hazard, socially vulnerable populations, and hot spots. Consult Appendix B. Public Participation Supplement to guide you.

Ideas for Scaling Down Step 2.2:

- Focus on one climate hazard for the vulnerability assessment and your resilience planning effort.
- Select only a few assets to analyze.
- Utilize the steering committee or other existing community groups, such as your planning board, to assist in identifying and mapping assets vulnerable to hazards, socially vulnerable populations and hot spots. Consult Appendix B. Public Participation Supplement to guide you.

TASKS TO DO

☐	2.2a: Identify and map critical assets from the built and natural environments.
☐	2.2b: Assess physical vulnerability.
☐	2.2c: Assess social vulnerability.
☐	2.2d: Identify any hot spots of overlapping physical and social vulnerability.

STEP 2.2

2.2a: Identify and map critical assets from the built and natural environments

Use the knowledge of the core team, steering committee, stakeholders, and community, along with online resources, to select assets to include in the vulnerability assessment. For this guidance, physical assets have been broken into four categories, Buildings and Critical Facilities, Infrastructure, Natural and Land Resources, and Community Assets. You can also use another categorization, such as FEMA Lifelines, if it works better for your community's planning context. Depending on resources or the focus of the plan, you may want to focus on just some categories or just some asset types.

Assets To Consider for Inclusion in Physical Vulnerability Assessment

	Buildings and Critical Facilities	Infrastructure	Natural and Land Resources	Community Assets
Asset Type	• Housing • Businesses (grocery store or pharmacy) • Healthcare facilities • Schools • Government buildings (especially those defined as critical) • Emergency services (police, fire, EMT, shelters)	• Roads, rail and bridges • Dams and levees • Energy production and distribution (electricity, natural gas, gasoline) • Water and wastewater (including septic systems, water towers, or pump/lift stations)	• Wetlands • Special flood hazard areas (SFHAs) • Sources of freshwater • Conservation areas • Dunes/beaches • Farmland • Parks, including state or federal parks • Forests • Natural areas • CAMA-designated Unique Coastal Geologic Formations • Wellhead protection areas	• Historically designated buildings, districts or locations • Culturally significant buildings, locations, artifacts or natural/land resources • Viewshed protection areas • Areas designated as National Historic Landmarks • Areas designated as Natural Heritage areas, NC Natural and Scenic Rivers, federal Wild and Scenic Rivers • Tree protection areas

Some questions to consider when identifying assets:[2]

1. Which assets are critical to maintaining safety, health and productivity in the community?
2. Which assets would have significant consequences to the community if they failed?
3. Are there unique or critical assets that the community relies upon?
4. What are the places or aspects that the community loves?
5. How do your goals relate to specific assets?

For the **baseline assessment**, list these assets in a consistent manner, including simple notes on location, condition and ownership. If not using GIS, consider mapping these assets on Google Maps or paper maps so that multiple assets can be viewed on one map.

For **quantitative and mapping analysis**, use GIS to map all assets and capture notes on location, condition and ownership. Review Resources for Identifying and Mapping Hazards to explore potential data sources on assets.

This step also provides an opportunity to engage your community if capacity allows. Examples of public engagement during this task include a simple electronic survey to ask the community for help in identifying buildings and critical facilities, infrastructure, natural resources and lands, and community assets vulnerable to hazards. You could ask participants to respond electronically with a list of assets, or paper copies of a survey could be made available at key community locations and returned in person or by mail or email. If more capacity allows, public engagement could include a public workshop with paper maps to identify assets or having a staff member attend at an existing community event with maps to engage attendees in identifying assets.

Consult Appendix B. Public Participation Supplement to help you determine your public participation objectives for this this activity, who from the public could best help you identify and map critical assets, and what type of engagement strategies you have the capacity to conduct.

[2] Adapted from RCCP Handbook, EPA/FEMA Regional Resilience Toolkit

STEP 2.2

Resources for Identifying and Mapping Assets

Check NCORR's North Carolina Climate Resilience Data webpage and the NC Resilience Exchange for guidance on many of these datasets and others.

Many local governments have identified structures and critical facilities at risk in their hazard mitigation plans. Consider checking there first. If your jurisdiction does not have a hazard mitigation plan, these resources may be helpful:

Structures and Critical Facilities

NC OneMap statewide parcel data Statewide parcel data available through an interactive map and by download.

North Carolina State Historic Preservation Office mapping tool Historic resources, sites and districts available through an interactive map and by download.

NC OneMap Data on the location of the following:

- Law Enforcement Locations
- Nursing Homes
- Medical Facilities

Infrastructure

CISA Gateway Map View National dataset that displays real-time information on critical infrastructure to increase situational awareness and provide a common operating picture of the nation's critical infrastructure.

Bureau of Transportation Statistics National transportation maps and their associated geospatial data for five modes of transportation including aviation, marine, rail, roads and transit.

NC Department of Transportation's data portal Includes NC DOT–maintained roads, bridges, and structures.

NC OneMap Data on the location of the following: Public Municipal Stormwater Systems.

Natural Resources

Land Cover (Esri) Collection of national land cover datasets available for viewing and mapping.

Shoreline Data Explorer (NOAA) Interactive map viewer and data available for download of shorelines.

North Carolina Natural Heritage Data Explorer North Carolina specific interactive map and data available for download showing Natural Heritage resources and other conservation values.

2.2b: Assess physical vulnerability

The final step in assessing physical vulnerability is to overlay hazard information with assets at risk and estimate the consequences to the community. To accomplish this, work through hazards of concern one at a time. Combine the information in your Hazards of Concern Summary with a list or map of assets selected for analysis. Where are assets exposed to this hazard? For a **baseline analysis** only, you may want to consider assets in groups by location, like "downtown area," or "Southwest neighborhood," or asset types, like "housing," "businesses," and "roads."

Then, using the judgment of the core team and other local experts, like the steering committee or other stakeholders, estimate the consequence of this exposure on the community. For example, a town hall with deferred maintenance may be more likely to experience hurricane damage than the library next door, which has a new roof and a higher first floor elevation. Flooding a substation will affect more households than flooding an individual home. Flooding a substation near a senior care facility may have particularly serious consequences for residents if the facility does not have adequate backup power.

To add **quantitative and mapping analysis**, run the overlay of hazard information and assets at risk as a GIS analysis. This is known as an exposure analysis. Export a list of assets and the hazards to which they are exposed. Note that some hazards, like extreme heat and wildfire risk, impact a wide area, so all assets in your community may be exposed.

With the **quantitative and mapping analysis**, look for additional data points to help understand the consequences of a hazard on an asset or an asset type. For example, North Carolina Emergency Management tracks the first-floor elevations for all buildings in the state, so with information about expected inundation levels, you may be able to see whether flooding will cause structural damage.

Whether you use quantitative and mapping analysis or stick with the qualitative baseline approach alone, list the highest vulnerability assets in the Physical Vulnerability Table, along with the address or location and ownership. You will likely want to break the table into multiple tables by type of asset or use spreadsheet software like Excel to manage the information. Using narrative text, describe likely impacts of hazards and their consequences to the community.

STEP 2.2

Physical Vulnerability Table, Baseline Analysis (Also available in Appendix C. Vulnerability Assessment Table Templates)

Hazard: *Example: Hurricane and riverine flooding for a community in the coastal plain*		
Asset at Risk	**Address/Location/Ownership, if applicable**	**Impacts and consequence to community**
Structures and Critical Facilities		
Housing on the south side of town	Between Main St. and the river/private ownership	Potential to displace over 200 households through flooding
Elementary school #2	64 Smith Street/local public ownership	Potential to flood in 100-year floodplain. Impact would disrupt education and cause community to revert to online learning; cost to repair or rebuild likely over $1 million
Fire station	Corner of Main St. & 1st St.	Potential to impact ability to provide fire service and respond if impacted by flooding
Electrical substation	Hwy 90	Potential to lose electrical service for half of the city if flooded
Infrastructure		
Hwy 275	Mile Marker 10-22	Potential to cut off Roseville from communities to the north. This route is main supply route for trucks and connects Roseville to the nearest hospital
Bridge – Greene St. Bridge	Greene St. Bridge (St. George County)	Potential of flooding to overtop bridge will cut off access between Roseville (St. George County) and Smith Town
Natural Resources		
Marsh	Marshes along the sound side of St. George County	Potential to worsen storm surge events if marsh lost. Marsh breaks up the wave energy and protects roads, bridges, and other key infrastructure

If capacity allows, this could be an opportunity in the planning process to engage your community. Examples of public engagement in assessing physical vulnerabilities include having your steering committee or other stakeholders (e.g., planning board, city council, or other stakeholder groups) review and provide feedback on a draft physical vulnerability analysis. This process might be as simple as presenting the analysis and discussing feedback or concerns that you can incorporate into your analysis.

Consult the Appendix B. Public Participation Supplement to assist you in determining your public participation objectives for this activity, who you might want to engage with to assess physical vulnerability, and what type of engagement strategies you have the capacity to conduct.

2.2c: Assess social vulnerability

Social vulnerability is a term describing how resilient a community is when confronted by external stressors to its people, such as a natural disaster. Climate change does not affect all people equally as socially vulnerable populations have less capacity to prepare, respond to, and recover from climate-related hazards. Socially vulnerable populations are especially at risk due to age, ethnicity, economic status, language ability, access to transportation or health care, housing type, and/or existing medial conditions such as physical disability, poor mental health, or chronic diseases such as kidney disease, diabetes, asthma, or heart disease that can be worsened by climate-related hazards. Climate-related hazards can have immediate impacts, like housing loss due to a hurricane, and may also have long-term impacts that negatively impact both physical and mental health, such as when routine health screenings are postponed. To learn more about how to integrate and plan for social vulnerability, explore Topic 7: Equity and Justice in the *Idea Book*. The *Idea Book* highlights potential partners and stakeholders who are important to include when assessing social vulnerability and includes several resources for doing this kind of assessment.

For the **baseline analysis**, develop a list of populations in your community that may be more vulnerable to a given climate hazard because of their demographics such as age, race, ethnicity, gender, income, language barriers, limited access to transportation, housing type, or physical disability. Next, consider the potential consequences of climate hazards to that community. This is referred to as “sensitivities to climate hazards” in the Social Vulnerability Table below. Some populations may have hazard-specific sensitivities, like seniors, children, and outdoor workers who are all more vulnerable to health effects from high heat. Other populations may have multi-hazard sensitivities, such as populations that do not speak English fluently, who may not receive critical and timely information about a hazard. Using the tools provided below or other resources, identify locations in your community where there are higher concentrations of socially vulnerable residents.

STEP 2.2

Social Vulnerability Table, Baseline Analysis (also available in Appendix C. Vulnerability Assessment Table Templates)

Population	Locations with Higher Concentrations of Population	Sensitivities to Climate Hazards
Examples below		
Nursing home residents	Nursing homes in special flood hazard areas (SFHAs) along the Green River	Unable to evacuate on their own during flooding event
Mobile home and RV park residents	Mobile home and RV parks along the Green River	Need advance warning to evacuate and move RVs ahead of flood event due to proximity of inhabitants to the river
Special needs or physically disabled populations	Adult care homes near the hospital along the Green River	Need advance warning time to evacuate ahead of event

For the quantitative and mapping assessment, add geographic data on vulnerable populations to your map of hazards and assets. Maps can help illustrate where socially vulnerable populations may have elevated exposure to climate impacts. Good sources of this data include the following resources. You may wish to download and use census data for specific socially vulnerable populations as well.

- CDC Environmental Justice Index Tool
- Justice40 Initiative's Climate and Economic Justice Screening Tool (CEJST)
- Environmental Justice Screening and Mapping Tool (US EPA) (census tract)
- EPA Supplemental Demographic Index (SDI) layer (socioeconomic indicators) in EPA's Environmental Justice Screening and Mapping Tool (EJScreen) NC DEQ Community Mapping Tool (Select Potentially Underserved Block Groups 2019)
- Neighborhoods at Risk (census tract, town, or county level; easier of the two tools to use) or Populations at Risk (census tract, town, or county level; more detailed data points)
- National Risk Index (FEMA) (census tract or county level)
- Social Vulnerability Index (SVI) Map (CDC) (census tract, town, or county level)

In addition to these mapping resources, use the knowledge of the core team, steering committee, and stakeholders to further define socially vulnerable populations in your community.

Make several maps of your community with social vulnerability data overlaid with hazards and assets. These maps can explore different kinds of social vulnerabilities and their proximity to hazards. For example, one map may focus specifically on the overlap between the floodplain and socially vulnerable populations. A different map might focus on a widespread hazard like high heat, identifying where populations at greatest risk for heat illness live and work. Add descriptive details based on the mapping to the Socially Vulnerable Populations Table and provide a narrative that explains the findings.

2.2d: Identify any hot spots of overlapping physical and social vulnerability

Using core team and steering committee knowledge, along with GIS data if available, identify hot spot areas in your community with a strong overlap of social and physical vulnerabilities. Make a list of these hot spots.

If capacity allows, ask for your community's help in identifying socially vulnerable communities (Step 2.2c) and hot spot areas (Step 2.2b) through public engagement. An example of public engagement during this task includes having the steering committee and other stakeholders (your local planning board, town council, or a specific stakeholder group) review and provide feedback on a list of socially vulnerable populations in the community and any identified hot spots. Feedback from this discussion should be incorporated into the analysis. This activity could be coupled with community engagement or be a standalone activity.

Consult Appendix B. Public Participation Supplement to assist you in determining your public participation objectives for this activity, who you might want to engage with to assess social vulnerability, and what type of engagement strategies you have the capacity to conduct.

STEP 2.3

Step 2.3: Synthesize vulnerability assessment findings

TASKS TO DO	
☐	2.3a: Complete Climate Vulnerabilities Synthesis Exercise.
☐	2.3b: Draft the vulnerability assessment.

In this step, you will figure out the most important takeaways from all the information you collected during the physical and social vulnerability assessments. These takeaways will play a central role in writing up the vulnerability assessment, along with a review of findings by theme or sector.

SCALE UP/DOWN

Consult the *Idea Book* to learn more about how other communities have assessed vulnerability.

Ideas for Scaling Up Step 2.3:

- Include more detail and more maps in your vulnerability assessment.
- Determine other uses for your vulnerability assessment, such as incorporation into your hazard mitigation plan.

Ideas for Scaling Down Step 2.3:

- Focus on a small number of key takeaways that are actionable by your community.

2.3a: Complete Climate Vulnerabilities Synthesis Exercise

WHO	PURPOSE
Project lead, core team	Document and share information about your community's climate related hazards and vulnerabilities.

Using the hazard and vulnerability assessment you created or information you identified in an existing plan, synthesize the findings of the vulnerability assessment, using the following questions as a guide:

1. What were the highest priority hazards included in the vulnerability assessment? Do any medium or high priority hazards need more awareness and attention in your community?

2. In the physical vulnerability assessment, which assets have a significant risk of impact from hazards and significant consequences to the community of that impact?

3. In the social vulnerability assessment, which populations or locations raised the greatest concerns about climate hazard vulnerabilities?

4. If not already captured, across both the physical and social vulnerability assessments, which findings stand out to you as most significant?

5. Which findings stand out as most actionable?

6. Which findings stand out as most urgent?

STEP 2.3

2.3b: Draft the vulnerability assessment

Use the findings from the Climate Vulnerabilities Synthesis Exercise to write up the most important conclusions of the vulnerability assessment. Be sure to support each of the key findings with some examples from your qualitative, quantitative, and mapping assessment data, including the source of the data. Vulnerability assessments generate a lot of information, so it is critical to pull out highlights and examine how the findings relate to one another. Otherwise, important findings can get lost in lists of detail. Be sure to give this step attention; it cannot be glossed over or completed quickly.

Compile these findings with the detailed results of the vulnerability assessment. We recommend organizing the findings by sector or theme, such as in the example outline on the following page. These sectors help us understand where the same asset or population is vulnerable to multiple hazards. Those assets or populations are places where multi-hazard resilience strategies will be most useful.

Example Vulnerability Assessment Outline

I. Executive Summary
   a. A clear set of summary findings tailored to the region
   b. Brief section on methodology, including stakeholder engagement
II. Community's strengths related to resilience
III. Hazards by type. Within each section, discuss risk today and in the future.
IV. Impacts by sector. Within each section, discuss vulnerability today and in the future. Note any work underway/committed to address vulnerabilities that are named.
   a. Housing
   b. Businesses or other economic development assets
   c. Critical facilities
   d. Critical infrastructure
   e. Land and environmental resources
   f. Social vulnerability and public health
V. Hot spots. Discussion of key issues in the area, including issues of social vulnerability
VI. Appendices
VII. Bibliography
VIII. List of data sources

Consider sharing the results of the draft vulnerability assessment to involve and engage stakeholders. At a minimum, consider sharing the draft vulnerability assessment with the core team, steering committee, and appointed or elected boards involved in your community's decision-making and ask for feedback. If capacity allows, you could consider hosting a community meeting in person or online to share the results of the vulnerability assessment. Sharing with stakeholders at this point in the planning process heads off major issues that could stall adoption of the plan. Explore Appendix B. Public Participation Supplement to assist you in scaling this activity up or down.

At the end of Phase 2 - Assess, you will have developed a data-backed vulnerability assessment and drawn out the most important conclusions from that study. Now you are ready to begin Phase 3 - Plan.

PHASE | 03
PLAN

Now that you have a stronger understanding of the greatest vulnerabilities in your community, Phase 3 – Plan helps you plan a set of actionable strategies. These strategies can take the form of proposed policies, projects, programs, or other initiatives. This phase will guide you through identifying and refining resilience strategies to address the goals and priorities you have already defined.

Step 3.1 Develop a long list of potential strategies to build resilience

Step 3.2 Prioritize strategies for a right-sized set of actions

Step 3.3 Develop implementation pathway and performance tracking

Step 3.4 Write and adopt your resilience plan or plan content

STEP 3.1

Introduction: Why plan?

The process of planning allows communities to propose multiple strategies that build resilience. This approach yields greater results than one-off projects, initiatives or policies. Other good reasons to plan include:

- Integration of resilience strategies into other documents that set forth spending priorities, such as capital improvement plans.
- Documentation of the need for a project, which supports funding requests, or the need for a policy, which can help build support over time.
- A resilience plan established before a disaster can help a community build toward a more resilient future after disaster. When state or federal assistance becomes available, communities that know what they want to use those resources for will have a much easier time navigating the funding streams.
- Preestablished strategies can also help a community rebuild stronger and faster, rather than simply building back to pre-event conditions that may leave a community just as vulnerable as it was before.

SCALE UP/DOWN

Ideas for Scaling Up Step 3.1:

- Engage subject matter experts in strategy creation and development. Explore Appendix A. Potential Partners, to identify partners with subject matter expertise.
- Use public participation techniques to brainstorm strategies. Explore Appendix B. Public Participation Supplement, for strategies appropriate for your community.

Ideas for Scaling Down Step 3.1:

- Focus on a limited type of action such as, for example, only capital projects.
- Limit strategy brainstorming to a small group such as the steering committee.

Characteristics of strong resilience strategies

As you brainstorm potential strategies to build resilience in your community, consider the following:

- **Multiple strategies to address a single vulnerability.** Think about multiple lines of defense. For example, a heat emergency might call for communication strategies, cooling centers, and a pre-disaster identification of high-risk households. Mitigating heat emergencies might also require weatherizing homes, a policy prohibiting electricity shutoffs during emergencies, and helping low-income households purchase air conditioners.
- **Strategies that have multiple benefits** within or outside resilience. For example, planting trees mitigates urban heat island effect. It also reduces energy costs and stormwater runoff, as well as beautifies a place. These additional benefits are called co-benefits.
- **Nature-based strategies.** Historically, we have underestimated the power of nature to reduce climate hazard vulnerabilities and overestimated the ability of infrastructure—and our ability to maintain infrastructure—to prevent damages. Check out the following pages for DEEP DIVE: Nature-Based Solutions.
- **Strategies that reflect local strengths**, such as significant natural resources, economic drivers, community structure, or buildings with historic importance.
- **Strategies that build on the vulnerability assessment.** Use best available science and stakeholder input. Explore Appendix B. Public Participation Supplement to identify ways to involve and engage stakeholders in developing these strategies.
- **Strategies that do not make a problem worse elsewhere.** Solving one community's flooding problem, for example, should not increase flooding for the next community downstream.

STEP 3.1

DEEP DIVE: NATURE-BASED SOLUTIONS

In FEMA's guide for local communities, Building Community Resilience with Nature-Based Solutions, FEMA defines nature-based solutions (NBS) as "sustainable planning, design, environmental management, and engineering practices that weave natural features or processes into the built environment to promote adaptation and resilience. Such solutions enlist natural features and processes in efforts to combat climate change, reduce flood risks, improve water quality, protect coastal property, restore and protect wetlands, stabilize shorelines, reduce urban heat, add recreational space, and more."

Strategies for NBS are diverse and one size does not fit all. Examples of nature-based infrastructure designed to reduce flooding and other water-related impacts to and from construction include, but are not limited to: land conservation; preservation of trees and other natural landscape features outside of the required footprint for construction; wetland restoration and protection; floodplain restoration; greenways; stormwater parks; living shorelines, including oyster reefs and dunes; green roofs; rainwater harvesting with cisterns; suspended and other permeable pavement for plazas, parking areas, and sidewalks; disconnecting impervious surfaces where such surfaces are used; rain gardens; bioretention areas; tree canopies and trenches; and vegetated swales.

While NBS vary, in many instances, they have several advantages over other kinds of solutions. They are often cheaper to install and maintain than grey infrastructure. They have added benefits of beautifying a site or landscape. NBS can often accommodate additional amenities, like educational signage, recreational opportunities, or elements specific to local culture.

While NBS are not a cure-all, North Carolina has only begun to tap their significant potential for communities. Many funding programs are starting to prioritize NBS, such as FEMA's Building Resilient Infrastructure and Communities (BRIC) and NC DEQ's Natural Infrastructure Flood Mitigation Program.

North Carolina also has tremendous land-based assets that support climate change mitigation and adaptation. These resources are natural and working lands. Natural and working lands in North Carolina include wetlands, forests, and farms that provide a variety of important economic, social, and environmental services. For more information, check out North Carolina's Natural and Working Lands Action Plan.

For more in-depth information, consider exploring the *Idea Book*, Topic 12: Planning and Decision-Making Frameworks, to learn more about different strategies and resources that may be helpful in your community's planning process.

Step 3.1: Develop a long list of potential strategies to build resilience

TASKS TO DO

☐	**3.1a: Decide on foundational characteristics of your plan or plan content.**
☐	**3.1b: Develop a long list of potential strategies.**

In this step, you will figure out what your final plan, or plan content, will look like. For example, you will determine if your plan will be long or short or whether it will include aspirational goals or focus on actions that are easier to take. Your resilience strategies should work to accomplish your resilience vision and goals as well as reflect your local strengths including natural resources, economic context, community structure, elements of historical importance, and more. To do this, refer to the results of your Assessing Capacity Exercise in Step 1.1: Assess capacity and your community's project scope, developed through the Scoping Exercise in Step 1.2: Create a scope of work for your community's resilience planning effort. Also consult your community's resilience vision and scopes, developed in the Visioning and Goal Setting Exercise in Step 1.4: Document your community's resilience vision and goals. In this step, you will also brainstorm a long list of potential strategies to consider including in your final resilience plan.

STEP 3.1

3.1a: Decide on foundational characteristics of your plan or plan content

Before digging into individual projects, plans, or policies, take some time to determine what you want from the plan content. The Strategy Development Groundwork Exercise asks questions to guide these decisions. We recommend summarizing the answers, and any other relevant priorities for your plan, in a paragraph. This is a good time to check in with the core team and steering committee to ensure a shared understanding. This exercise will also help anyone involved in developing the strategies for the plan.

Strategy Development Groundwork Exercise

WHO	PURPOSE
Project lead, core team	Determine the overall plan content and topical areas that the plan should address.

1. **Thinking about where your community is now and where you want your resilience to be, what is the gap between existing and ideal conditions?**
   - ☐ Large (we have a long way to go)
   - ☐ Moderate (we have a few major policies or projects to complete, but we're moving in the right direction)
   - ☐ Small (we're close, we just need to tie up some loose ends)

2. **What types of changes do you believe your community would make, to achieve greater resilience to climate hazards?**
   - ☐ Cautious: small tweaks to existing policies and projects that are the low-hanging fruit
   - ☐ Moderate: willing to try some new ideas but nothing that is too far outside the box
   - ☐ Aggressive: wholesale changes, innovative strategies, big results

3. **Based on the vulnerability assessment (developed in Step 2.3: Synthesize vulnerability assessment findings), what is the gap between existing and ideal conditions for each of the categories of vulnerabilities in your community? Rank each as large, moderate, or small.**
   - ☐ Buildings and critical facilities
   - ☐ Infrastructure
   - ☐ Natural resources
   - ☐ Human and social vulnerability

4. **Using your vulnerability assessment, identify your community's highest priority vulnerabilities to address. If these vulnerabilities are numerous, group them together in similar categories to facilitate strategy development.**

5. **Which of the topics in the *Idea Book* are the strongest match for your community, its vulnerabilities, and its resilience goals? Use these topical areas as a guide to group your strategy types.**

   __ Business and Economy

   __ Coastal Management

   __ Collaboration

   __ Communication and Education

   __ Ecosystem Protection, Restoration, and Enhancement

   __ Energy and Utilities (electric, gas, broadband, water (potable), wastewater, etc.)

   __ Equity and Justice

   __ Funding and Technical Assistance Mechanisms

   __ Housing

   __ Infrastructure and Capital Investment

   __ Land Use and Development

   __ Planning and Decision-Making Frameworks

   __ Public Health

   __ Stormwater Management and Flooding

6. **Refer to Step 1.1's Assessing Capacity Exercise. How might other plans your community already has feed into the new strategies you are developing in this plan? How can you strengthen or refine the strategies to help your community be more resilient? Are there gaps in existing strategies and new strategies are needed to address the vulnerabilities identified in the Vulnerability Assessment Outline in Step. 2.3: Synthesize vulnerability assessment findings?**

7. **Reference your resilience vision and goals from Step 1.4: Document your community's resilience vision and goals. Do the strategies you are developing work to implement or put into action the resilience vision and goals? Are the strategies consistent with and support the vision?**

STEP 3.1

8. **Do you have any goals for the overall composition of strategies in the plan? For example, is geographic balance a consideration? Is a diversity of kinds of approaches important? Are certain types of strategies important to include or exclude, like capital projects, nature-based solutions, or changes to policy and regulations? Refer to your responses to the Scoping Exercise in Step 1.2: Create a scope of work for your community's resilience planning effort.**

9. **Are there specific strategies that need to be included to address concerns identified through community engagement efforts or steering committee meetings in Phase 1—Prepare or Phase 2—Assess?**

3.1b: Develop a long list of potential strategies

Now that the stage has been set for the plan, work with the core team, steering committee, and the community, as capacity allows, to develop a long list of potential strategies that you will refine and narrow later. Selecting the final projects for inclusion from a longer set helps you make sure that the strategies are the best match for the aims of the plan and the needs of the community. Another advantage of a long list is that it allows for innovative ideas to take shape.

Potential strategies, including projects, policies, or other initiatives, may come from many locations:

- The companion to this *Playbook*, the *Idea Book*
- Previous discussions of the core team, steering committee, or stakeholder outreach
- Gaps identified during the Assessing Capacity Exercise in Step 1.1: Assess capacity
- Existing plans (see more detailed list of plans in the Assessing Capacity Exercise in Step 1.1: Assess capacity)
  - Regional/local hazard mitigation plans
  - Comprehensive plans
  - Comprehensive economic development strategies
  - Recovery or resilience plans, such as Hurricane Matthew Resilient Redevelopment Plans
  - Transportation plans
- Community input from meetings, workshops, and other public outreach
- Subject matter experts (See Appendix A. Potential Partners)

Here are some questions to prompt the development of the list:

- Has each of the highest priority vulnerabilities been considered?
- Are there overall sources of resilience, such as communication networks or housing quality, that should be addressed?
- Have we considered strategies from across the spectrum of capital projects, nature-based solutions, communications and outreach, studies or assessments, policy, regulation, or protocol changes?
- Are there strategies that we cannot do alone but would be feasible if we partnered with another jurisdiction, a nonprofit, or a business?
- Do we have a range of easier projects that are within reach and more transformational projects that might take time?
- Are there ongoing efforts in the community that could be enhanced to include resilience components?

After you create a long list of strategies, consider sharing a draft and meeting with the core team and steering committee. This will give you an opportunity to gain buy-in, refine the list, and determine if there are gaps or redundancies. If capacity and time allow, you could share the draft list with the community and ask for feedback. Utilize Appendix B. Public Participation Supplement to guide which engagement strategy might be most appropriate to gain the desired feedback. With limited staff and time, you could make the draft list of strategies available on the community's website and through existing communication channels, such as email lists or social media, to notify the community that their input is desired.

STEP 3.2

Step 3.2: Prioritize strategies for a right-sized set of actions

TASKS TO DO

☐	3.2a: Refine the long list of strategies.
☐	3.2b: Prioritize strategies.
☐	3.2c: Check for consistency.
☐	3.2d: Organize details for each proposed strategy.

There are endless strategies to strengthen climate resilience in your community, but resources like staff time, funding and leadership are more limited. This step will help you refine your strategies and select the most promising ones for inclusion in the final plan content. It will also ensure consistency within the strategies and with other plans, policies, or programs.

SCALE UP/DOWN

Ideas for Scaling Up Step 3.2:

- Conduct community engagement to help define prioritization criteria and to vet potential strategies. Refer to Appendix B. the Public Participation Supplement to guide your community engagement efforts.
- Expand prioritization criteria to include more resilience strategies.

Ideas for Scaling Down Step 3.2:

- Use standard prioritization criteria.
- Use a phased approach and focus on just one resilience goal at a time.
- Prioritize strategies that are most tangible and easy to implement.

3.2a: Refine the long list of strategies

Brainstorming may lead to great ideas that are too broad or vague to be considered a strategy. If an idea is too broad, take the time to identify more achievable and actionable strategies moving the community towards its resilience goals or consider breaking the project down into several smaller projects that work to achieve the broad outcome over a longer period. Additionally, examine your project scope and goals from Step 1.2: Create a scope of work for your community's resilience planning effort, and examine your community resilience vision from Step 1.4: Define your community's resilience vision and goals. Ensure that your strategies are consistent with the community resilience vision and work to accomplish the scope and goals of your effort. You can further refine your strategies by asking:

- How do we accomplish this strategy? What steps are needed to accomplish the task?
- Is additional research or another planning step needed to complete the strategy?
- Are there regulatory changes needed to accomplish this strategy?
- Is there education needed to accomplish this strategy?
- Is there a physical project needed to complete the strategy?

Active and specific language helps turn ideas into strategies. Active and specific language also helps when communicating about potential strategies to the core team, steering committee, and stakeholders.

Example

Original Idea	Refined Strategy
Increase capacity of stormwater management system *(action-oriented, but too broad)*	Assess performance and capacity of current stormwater system.
	Conduct a performance and feasibility assessment for stormwater upgrades.
Conservation subdivision regulations *(specific, but not action-oriented)*	Propose conservation subdivision regulations for adoption.

In practice, refining strategies and prioritizing strategies are likely to overlap. This overlap will strengthen the strategies, and refining the strategies can continue through the drafting process and even into implementation.

STEP 3.2

3.2b: Prioritize strategies

The next step is to winnow down the long list of strategies. In this section, we provide recommendations about a scoring technique to prioritize. The decision about whether to include strategies does not need to hinge on a structured prioritization process alone and should be developed in consultation with your core team, steering committee, and even the community. This prioritization highlights the strongest strategies and helps conversation with the core team, steering committee, and stakeholders.

To conduct prioritization, you can either use a standard prioritization method or select your own criteria.

Recommended prioritization criteria

- Magnitude of reduction in physical vulnerability
- Serves socially vulnerable populations
- Cost
- Social and political acceptability
- Provides cobenefits and does not risk harm somewhere else
- Ease of implementation
- Consistent with the vision and goals of the resilience plan and overall community vision, if one has been articulated in a comprehensive plan or other document

Additional criteria you may wish to consider

- Strategy addresses priority vulnerabilities.
- Strategy addresses priority locations.
- Strategy can be implemented by local government.
- We can acquire the resources to implement this strategy.
- We already have the resources to implement this strategy.
- This a low or no resource strategy.
- It will be more difficult or impossible to implement this strategy if we wait. / A problem will get worse if we do not implement this strategy soon.
- The benefits of this strategy will be equitably distributed.
- This strategy reduces social vulnerability.
- There are multiple benefits to this strategy.
- The strategy already has political or community support.
- This strategy is supported by another plan or policy.
- This strategy can be implemented quickly.
- The strategy is innovative or can be replicated in other places in the community.
- There are interim steps we can take now to help implement this strategy later.

Strategy Prioritization Exercise

WHO	PURPOSE
Project lead, core team, steering committee	Developing a refined list of strategies to move into implementation planning.

Follow the instructions below to identify a set of prioritization criteria and assess your preliminary resilience strategies.

Check each preliminary strategy against the prioritization criteria you have selected and defined. Evaluations can be simple. For example, each project can be awarded 0-5 points, or more, depending on the value of each you place on that criterion.

Building on the example strategy used above, "Assess performance and capacity of current stormwater system," a weighted scoring criteria might look like:

- Does the strategy address a high priority hazard?
  - If flood was a high priority hazard for your community, identified in Step 2.1 Identify and map hazards of concern, you would assign 30 points.
- Is the strategy consistent with your land use/comprehensive plan or adopted zoning?
  - If yes, assign 20 points.
- Does the strategy or project serve a socially vulnerable population?
  - If yes, assign 15 points.
- Does the project incorporate nature-based infrastructure?
  - If yes, assign 10 points.
- Does the strategy or project provide other co-benefits like public open space or recreational opportunities?
  - If yes, assign 5 points.
- Is this strategy a priority for the community?
  - If yes, assign 10 points.

You may wish to assign partial points if a strategy meets the criterion in part. For each strategy identified in the plan, you would tally the criterion.

The prioritization could be a sum of the total points or you could leave the scores separated by category, depending how detailed your prioritization process was. You may also weight the criteria based on your community needs and priorities, assigning more points to different categories.

Use this prioritization in conversation with the core team, steering committee, and stakeholders to determine the right set of strategies to meet the community's needs and vision for the plan content.

Engaging the community could be done as a part of or after the Strategy Prioritization Exercise. Review Appendix B. Public Participation Supplement to determine your objectives for the engagement effort, identify the audience that you would like to reach, and determine the best types of engagement strategies for your time and staffing levels. For example, host an open house meeting where the community could view the proposed strategies on large format boards. Give each attendee five colored dots to vote for their top five priorities. After the meeting, tally and rank the strategies based on the community's desires. This can supplement the Strategy Prioritization Exercise.

STEP 3.2

3.2c: Check for consistency

One way to ensure that your plan has a good shot at implementation is to examine its consistency with other plans, policies, and documents that guide community functioning and development. The Consistency Checklist Exercise will help you methodically identify synergies and conflicts with your draft strategies and preexisting plans and documents. A more thorough resource for ensuring consistency is provided afterwards.

Consistency Checklist Exercise

WHO	PURPOSE
Project lead, core team	Ensure that resilience strategies are consistent within the plan and with other community plans and policies.

Follow the instructions below to review your plan for internal and external alignment. If strategies fail to meet the tests of internal or external consistency, consider ways to reframe them or address challenges in a different way.

Internal Plan Consistency

Test each of your plan's preliminary strategies against the following statements:

- ☐ Does the strategy directly address your plan's resilience vision and goals? (See Step 1.4: Define your community's resilience vision and goals)
- ☐ Does the strategy contradict or conflict with another strategy?
- ☐ Could the strategy generate downstream impacts, worsening other hazards or making the hazard worse in another community or neighborhood?
- ☐ Does the strategy place an undue burden on a historically marginalized population?

External Consistency and Synergies

Review the visions, goals, and objectives in other adopted plans and policies to ensure your strategies are aligned with other community initiatives and identify opportunities for partnerships, collaboration, and resource pooling. Use a table like the one below to track information like relevant goals, complementary strategies, or contradictory strategies. Good plans to compare your strategies with include a comprehensive plan, hazard mitigation plan, and the regional Comprehensive Economic Development Strategy (CEDS), which is required to include an economic resilience component.

	Notes on relevant goals, complementary strategies, contradictory strategies		
Resilience Strategy	**Hazard mitigation plan**	**Comprehensive or master plan**	**CEDS**

Hold onto this information for creating a draft plan. A strategy that is supported in multiple plans signals commitment to local decision-makers and external funders.

A great resource to ensure consistency across your plans to build resilience is the Plan Integration for Resilience Scorecard.

STEP 3.2

3.2d: Organize details for each proposed strategy

As you get more specific about strategies, start adding details or notes where possible. Organize information for each project or action selected for inclusion with a template like the following:

Strategy Description	
Action name	Brief title for project, initiative, program, etc.
Description	Summarize the main components.
Vulnerability/vulnerabilities addressed by action	List vulnerabilities, noting those that were highest priority in the vulnerability assessment. Document importance, urgency and need; identify shared challenges; and establish common ground.
Type of solution	Infrastructure, nature-based solutions, outreach/education, policy or protocol, assessment, other.

STEP 3.3

Step 3.3: Develop implementation pathway and performance tracking

TASKS TO DO

☐	3.3a: Develop implementation pathways for each strategy in the plan.
☐	3.3b: Develop performance metrics and communications opportunities.

In this step, you will identify the resources needed for implementation and develop a path forward for obtaining those resources. Often, we think of resources as funding, but resilience strategies require other kinds of resources, too, like staff time, expertise, and community and political support. It is helpful to name these resources and consider where they come from, even if you are not planning to share all this material in the published plan. Use Appendix A. Potential Partners to brainstorm resources.

The second part of this step is devoted to measuring success for your plan. Selecting metrics ahead of time to track progress ensures that measuring success is not an afterthought. Measuring success is not just about reporting or accountability, although those are important reasons to track performance. Tracking success also creates a narrative about resilience work in your community, which builds momentum and justifies past, present, and future investments.

SCALE UP/DOWN

Ideas for Scaling Up Step 3.3:

- Engage partners and facilitate a roundtable to identify implementation resources.
- Consider a broad range of performance metrics that include indicators of resilience expected to move slowly over the long term.
- Create a data dashboard or StoryMap to track and share progress.

Ideas for Scaling Down Step 3.3:

- Focus on only implementing highest need and priority strategies.
- Focus on implementation resources that already exist in the community or are relatively easy to get.
- Integrate progress reporting with existing reporting or communications protocols.
- Select fewer metrics to report on, based on how easy it is to get the data.

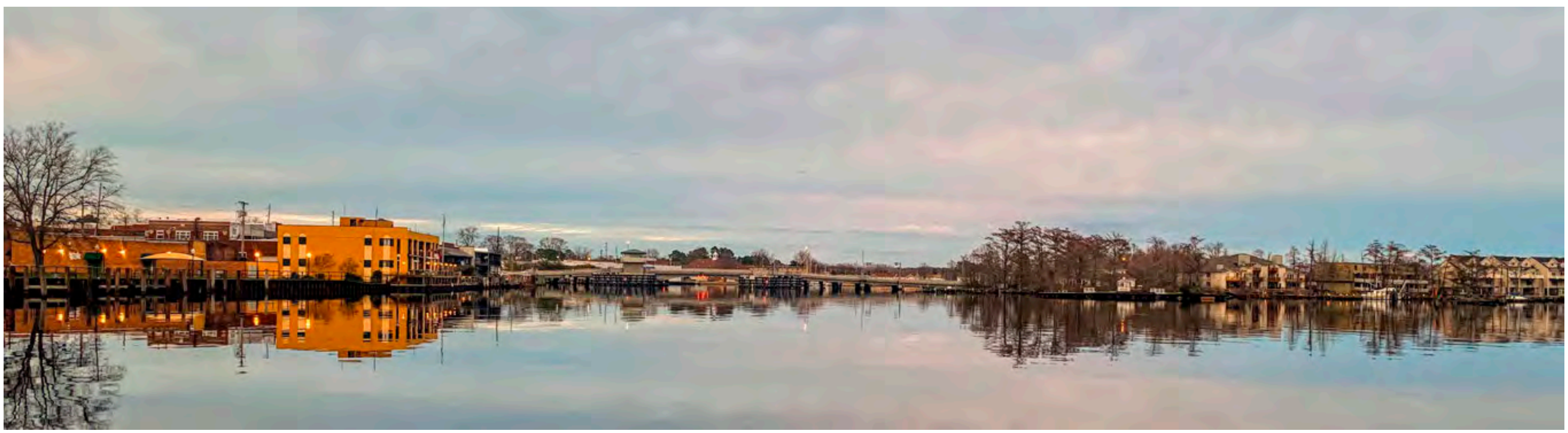
3.3a: Develop implementation pathways for each strategy in the plan

In the past, we have seen resilience plans that look great on paper but fall short when it comes to implementation. One reason is because the plan is not tied to the realities on the ground. These include limitations of capacity in local government and funding challenges. This section provides detailed guidance to help overcome these limitations by directly discussing them. Frank conversations are helpful here; the information that you publish for public consumption may be just a small selection of more detailed notes that you and your core team hold onto to help with implementation.

What if you have strategies that you like, but they do not have obvious pathways to implementation? Go back to earlier discussions about the overall characteristics of the plan in Step 3.1: Develop a long list of potential strategies to build resilience. Aspirational and ambitious plans do not always have a complete guide to implementation, which is okay. On the other hand, if you are looking for concrete and tangible progress in the near future, you may want to consider focusing your plan on those strategies where implementation is within reach. Do not lose track of bigger ideas, but they might live in a different section of your plan.

To consider the implementation pathway for each of the plan's strategies, you will need to discuss them one by one. This discussion benefits from the input of many partners who might not be on your core team but would be needed for implementation. The Implementation Workshop Exercise that follows offers a process for a larger group meeting on this topic.

Make sure to identify possible obstacles to implementation of each strategy and discuss ways to overcome those barriers. Key details to determine for each action include those in the table on the next page, also included as an Implemtation Template (also available in Appendix C).



STEP 3.3

Strategy Implementation Template	
Strategy: [Fill in]	
What organization or department will serve as the implementation lead for this strategy?	Identify the organization or department that is or may be responsible for leading implementation of the strategy. In internal notes, include specific names of people who will have a role, because it's important to engage them now, rather than after the plan is published. Do they have the capacity to take on this action or project? For any publicly published documents, do not include specific individual's names, but rather the organization or department. Does it have the capacity to take on this action or project?
Who will provide implementation support for this strategy?	Document the organizations, departments, agencies, and staff who are needed to implement the strategy. This may include existing staff, a hired consultant, and partners listed in Appendix A. Potential Partners, among others.
What is the implementation time frame for this strategy?	Break down each strategy or project into achievable tasks and phases in distinct time periods. Include gathering needed resources in your timeline (e.g., going through the budgeting process or applying for grants or finding an external partner to support your effort). Immediate Next Steps (0-6 months) Short Term (6 months–2 years) Longer Term (2+ years) Consider which projects would have an immediate start and which you will wait on.
What is the estimated cost to complete this strategy?	Estimate financial and human resources needed to implement each strategy. If you do not know what resources are needed, make this research an immediate next step. Look for projects like yours in the *Idea Book's* case studies. They might help identify potential project costs.
What other implementation resources might be needed to implement this strategy?	Consider personnel, leadership, community/political support, technical expertise, data/modeling, additional research or planning, or further conversation with key stakeholders.
What funding sources could be accessed to implement this strategy?	Identify possible funding sources, including local budget, grant funding, integrated with existing budget items like capital improvement, user fees, or public-private partnerships. Document specific details for the funding strategy, such as the names of grants and the calendar for budget planning in your community.
What would moving in the right direction look like for this strategy?	Briefly describe what moving in the right direction looks like for this strategy. Think broadly. You will explore measures of success in more detail in the next step.

Because this step requires a lot of information and conversation, you may wish to gather a group of potential implementers and big-picture thinkers for a focused session on implementation. The following exercise provides a suggested format.

Implementation Workshop Exercise

WHO	PURPOSE
Steering committee, core team, key stakeholders, potential funders, implementation champions	Identify the resources, information, and people needed to implement your priority resilience strategies through conversation with multiple partners.

Materials/Preparation

Select the list of strategies that you want the group to work on. This list might include all or just some of your projects. Consider your format; small group breakouts could discuss different projects from one another, or they could all discuss the same set of projects to ensure that everyone's expertise is included for each.

- Provide copies of priority resilience strategies (p. V1-78). Send in advance of the meeting and bring printouts for each participant.
- Printed implementation matrix posters. See the following example posters. Print these at 30" x 40" and put them on tables or on walls.
- Sticky notes
- Markers or pens
- Location large enough to accommodate invited guests
- Tables and chairs set up to face one another, either as one group or in smaller groups
- See Appendix B. Public Participation Supplement for equitable participation tips

Working together or in small groups, you will discuss and document needs and resources for each of your resilience strategies on a poster-sized Implementation Exercise. Ensure that there is a facilitator for each small group if you are using breakouts. Start by introducing the project or action and asking for clarifying questions before moving on to a discussion on implementation.

Invite participants to write ideas on sticky notes and add them to the large poster while conversation goes on. This helps get more people to contribute simultaneously while only one person is talking. The facilitator can act as scribe, writing down ideas while a person discusses them, if needed.

STEP 3.3

Example Poster for Implementation Workshop Template (also available in Appendix C)

Strategy or Project	Implementation Lead and Support	Implementation Timeline	Estimated Cost and Other Resources Needed	Possible Resources	Direction Check
Include resilience as part of capital improvement scoring process	Budget & Management (Andre Williams, Director)	Research models and provide report to council and mayor Pilot prioritization process Assess progress and success	Support from Council Staff time to research and write scoring language Training or guidance needed for staff? Staff time to capture progress and outcomes	Planning staff, summer intern	More funded projects consider hazard mitigation or resilience

3.3b: Develop performance metrics and communication opportunities

To develop performance metrics for your plan, first consider the reasons for reporting success that are most compelling for your community. These might include:

- Demonstrating accountability to community members
- Assessing progress for the purpose of revisiting and revising strategies later. This topic will be revisited in Step 4.2: Revisit and revise your plan regularly
- Building the will and momentum to continue to support resilience projects and resilience planning, including demonstrating the need for additional capacity and staff
- Educating people about the value of resilience work in your community. Audiences could include elected officials, community members, other departments, or potential future funders

These are all good reasons to track the success of your efforts, but the measures that you select might be different, depending on your goals. You may even want separate or overlapping sets of metrics for different purposes.

Use the table below to track the metrics as you develop them. Note that quantitative metrics are great, but some good success metrics are qualitative, especially when capturing interim progress on an effort. The US Climate Resilience Toolkit highlights a tool, Resilience Metrics, that may be helpful to further guide your community through developing and identifying metrics appropriate for your community.

Example Metrics Tracking Table for Community Strategies (also available in Appendix C)

Strategy	Direction Check	Metrics	Tracking and Report Lead
Describe the proposed strategy	*From implementation strategy*	*Identify one or more metrics for each strategy that you know can be feasibly assessed and reported. Also identify the data or resources needed to track and report each metric and how often each will be measured and shared.*	*Identify who specifically will track and report each metric; consider partners or organizations that might help track or report metrics.*
Elevate, enhance, and/or relocate roads most susceptible to flooding or wash out.	Roads/bridges that are passable more days of the year	Number of road or bridge closures per year	Engineer
Address repeated flood risk properties through property buy-outs	Fewer properties at risk for flooding	Number of flood risk properties purchased	Planning Director
Improve business preparedness	Businesses experience less loss and can open more quickly following an event	• Percentage of businesses with disaster preparedness, recovery, or business continuity plans • Percentage of equipment elevated above base flood elevation (BFE) • Time for businesses to reopen after event	Planning Director

STEP 3.3

As you develop your metrics, determine the process for reporting out, including the format and audience. The exercise below will help you explore who is responsible for putting together the report.

Communicating Progress Exercise

WHO	PURPOSE
Project lead, core team, and/or steering committee	Identify a process for sharing measurable successes.

Answer the following questions to set up a method for measuring and communicating progress on the plan.

How often will you create and distribute progress reports?

- Quarterly
- Biannually
- Annually
- Other: ______________________________

How will you provide progress reports? (Select all that apply)

- Electronically (email, social media)
- Web (static)
- Web (digital dashboard or other dynamic reporting tool)
- Public presentation, e.g., at a council meeting

What information will you include in your progress reports? (Select all that apply)

- Metrics for each strategy (current and trends over time)
- Narrative summary/update
- Highlights/accomplishments
- Calls to action
- Events/opportunities to participate
- Resources needed
- Resources or programs available to the community
- Key staff or personnel changes
- Other: ______________________________

Who is primarily responsible for aggregating the reporting metrics and creating the report?

Who will support them?

As you move toward writing and adopting your plan in Step 3.4: Write and adopt plan content, consider what information about performance metrics you would like to share for public consumption. Greater public exposure to performance metrics builds accountability on one hand; however, you may want flexibility in the details that you plan to report. At a minimum, you should include the basics of when you will report out and the topics and format. You may wish to keep more of the details in an internal-facing document.

STEP 3.4

Step 3.4: Write and adopt your resilience plan or plan content

Now that you have moved through Phase 1—Prepare, Phase 2—Assess, and most of Phase 3—Plan, you are ready to draft your resilience plan or integrate your resilience strategies into an existing document. Drafting and adopting a plan is a way for your community to share your resilience story and build a foundation for implementation. Further, formally adopting a resilience vision and goals demonstrates your community's level of commitment and how you will go about addressing the problems and needs identified through the planning process. This is important because it allows potential partners, funders, and even business investors to better understand community values, desires, and needs around resilience. Through greater understanding, they can determine if they are well suited to assist you or if your community is a place where they want to invest.

Your resilience plan responds to the questions you have already answered in Phases 1 to 3:

- How does your community define resilience?
- What are the vulnerabilities of your community?
- How do you achieve a more resilient future considering your vulnerabilities?
- Who will be responsible to carry out the actions that make your community more resilient?
- How much will it cost?

Whether you are writing a standalone plan or integrating resilience into an existing document, summarizing the content and key findings from the steps above will create the content needed to generate a draft plan.

Suggested Outline for a Standalone Resilience Plan

A. Cover page. *Create an engaging cover page including images of the community, the plan's title, your community or organization's name, and the date of the draft or adoption.*

B. Table of contents and acknowledgments. *Describe the plan's contents and thank plan participants and supporters, particularly the steering committee.*

C. Executive summary

D. Introduction

E. Resilience vision and goals from Step 1.4

F. Process and participation. *Describe the planning process and community outreach and engagement activities from Steps 1.1 and 1.2. Include photos of engagement events if available.*

G. Vulnerability assessment synthesis from Step 2.3. *Include full vulnerability assessment as an Appendix.*

H. Resilience strategies. *Introduce your resilience strategies, starting with the Strategy Description details from Steps 3.1 and 3.2.*

I. Implementation. *You may wish to include implementation plans with the individual strategies or in a separate section. Use the Strategy Implementation details from Step 3.3.*

J. Appendix: Vulnerability Assessment from Steps 2.1, 2.2, and 2.3.

Note that sections A through F should be relatively short in your plan, compared with sections G, H, and I, which cover the vulnerability assessment, resilience strategies, and implementation details.

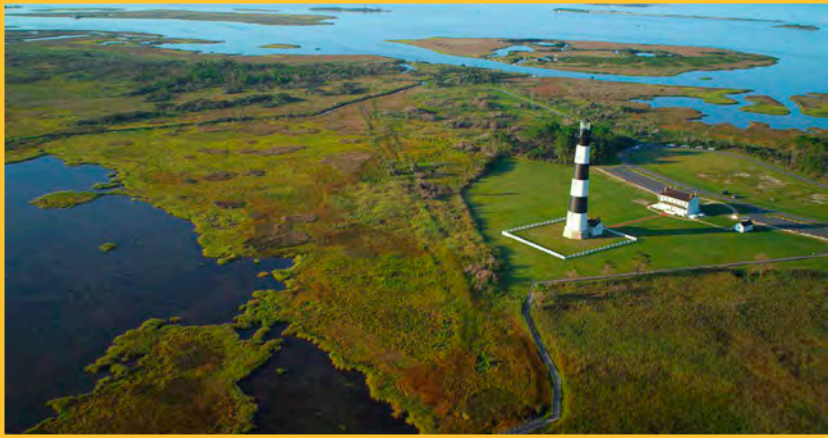
Once you have a draft plan, make sure to hold a final meeting with your core team and steering committee. Have the core team and steering committee review the draft plan and provide any final feedback. The more often and earlier you engage the core team, steering committee, and even the public in sharing feedback, the more likely there will not be major changes to content and you will have a successful plan adoption. This is also a good opportunity to share the draft plan with the community ahead of the adoption process. Consult Appendix B. Public Participation Supplement to determine what strategies will work best given your staffing levels and time.

Outreach for the final draft plan document might involve a community open house meeting. Sharing the draft plan on your community's website two weeks ahead of time would give stakeholders the opportunity to review the document. At an open house, participants could explore stations that highlight the different parts of the plan: resilience vision and goals; vulnerability assessment; and resilience strategies. At each station, a summarized copy of the relevant materials would be available. Staff might be positioned at each station to answer questions or provide clarifications. You could also give attendees the opportunity to provide written feedback at each station. This could be as simple as providing paper and pens as well as a collection basket for comments at each station. If you have specific concerns and want to ask for additional feedback, consider listing out several questions that you want to know more about from the community at each station.

Just like other planning processes, the adoption or integration of resilience strategies should follow the typical plan adoption processes for your community. This may involve presenting the draft document to appointed decision-making bodies, such as a planning board or the elected officials of your community. In addition, a public hearing may be required before adoption of your proposed plan. Whatever the final steps may be, make sure to consider them in your timeline toward adoption.

Now you are ready to begin Phase 4—Implement.

PHASE | 04
IMPLEMENT



Implementation is where the action happens. While this *Guide* covers planning, not how to do the projects in your plan, this phase of the process connects good planning to positive changes on the ground. It is included in the *Playbook* to lower the risk of writing a good plan that is never used. These strategies help keep your plan alive and motivate others to care about resilience outcomes as well. This phase includes ongoing steps that should occur more than once.

The *Idea Book* features 14 resilience topics that each contain strategies and a case study demonstrating real world examples of Phase 4—Implement. Each case study includes a section titled Making It Happen that breaks down key steps for successful implementation.

Step 4.1 Build local interest and desire for continued implementation

Step 4.2 Revisit and revise your plan regularly

STEP 4.1

Step 4.1: Build local interest and desire for continued implementation

TASKS TO DO

☐	4.1a: Share and promote the plan.
☐	4.1b: Convene local government staff leadership to discuss the plan.
☐	4.1c: Use your performance metrics strategy to communicate progress.

4.1a: Share and promote the plan

Once the plan is adopted, make sure to share the adopted plan with the core team, steering committee members, appointed and elected boards, and other interested stakeholders. Consider placing the adopted document on your community's website, sharing a press release about its adoption, and sharing on your community's social media platforms or other public-facing spaces.

Additional ideas to promote the plan

- **Create an executive summary or brochure:** Create a short summary of the plan including the resilience vision, goals, strategies, and implementation plan. Share via social media, email, personal correspondence and other means.
- **Distribute a press release.**
- **Announce the plan's completion:** Celebrate adoption/completion online and on social media, and email a link of the plan to all participants. Encourage the community to share the plan with their personal and professional networks.
- **Host a launch party:** Hosting an in-person or virtual launch event is a great way to retain interest in the plan, convene potential funders and implementers, celebrate the community's effort, and share the final product. This strategy can also be used to kickstart specific initiatives, provide annual plan updates, and celebrate progress.
- **Roadshow:** Identify meetings or other events for community groups and organizations and ask to give a plan update and make a call to action.

Additional ideas to sustain community engagement

- **Communicate:** Identify diverse communication channels to share progress and gather additional community input. Provide user-friendly ways for community members to offer suggestions, resources, and feedback.
- **Make engagement engaging:** Identify opportunities for events like resilient neighborhood walks, project showcases, business tours, networking, skill sharing, or socializing with a mission.
- **Celebrate success:** Small steps lead to big changes. And big changes take time. If you forget to highlight your small wins, it might feel like you're not making progress. Keep eyes on the long game by celebrating every step towards change, no matter how big or small.
- **Pay it forward:** Share your experiences and lessons learned with peers and help build a statewide practitioner's network for building community resilience.

STEP 4.1

4.1b: Convene local government staff leadership to discuss the plan

Sometimes, good plans sit on shelves because the value of the plan is not understood. Take time to sit down with your local government staff and walk them through the value of the plan and their role in implementation. In this step, plan meetings with several people who will be key to forward momentum on the plan. If these individuals have not been on the core team, you should plan a substantive meeting with them:

- Planning director, who may be focused on day-to-day permitting and need some time to digest how a long-range plan can be implemented and integrated into the department's workplan and budget process
- City or town manager
- Budget or finance director
- Staff identified in Step 3.3: Develop Implementation Strategy and Performance Tracking, as the implementation lead for the strategy
- Other individuals who are often involved in moving initiatives forward

Focus on helping these staff members see the big picture of your plan, including addressing vulnerabilities and investing in the future of your community, the intent and a few strategies from the plan, the process that you went through to develop it, and if there are shared goals or actions with other adopted plans. For staff identified as lead for strategies, consider hosting a group meeting or periodic, individual meetings throughout the year to learn which specific strategies they have been assigned and connect on the status of strategies being led by their departments. Discuss how your departments can work together to accomplish the strategies; identify priority strategies that should be moved forward in the next budget cycle, how the strategies can be worked in your department's yearly budget or Capital Improvement Plan (CIP), and if additional grant funding is needed to implement; and identify any barriers that may prevent strategies from being implemented. Further, examine the strategies where additional information might be needed for inclusion in your community's budget or to seek grant funding. This early and frequent discussion of your priority strategies will ensure you are prepared to move the strategies into the next budget cycle or apply for grant funding.

When setting up these meetings, consider timing of the budget cycle in your community. Some of your initiatives may require funding, and you will want them to get programmed into the local budget. If your community's budget process begins in February with a required adoption by July 1, start early to vet any additional information or partnerships that may be needed to implement the project. You will want to make sure these key individuals are informed of the value of the plan and its strategies before budget planning begins.

4.1c: Use your performance metrics strategy to communicate progress

Communicating progress is essential to demonstrating the need for the plan and obtaining the staff and financial resources needed to implement it. Put the schedule you developed for reporting on performance metrics in Step 3.3: Develop implementation strategy and performance tracking, into the calendar of the people responsible for aggregating data, writing the report, and disseminating it. Make sure that you share your progress with external audiences, like community members. At a minimum, place an update of the strategies on your community's website or consider presenting strategy updates to the community's planning board, elected body, or other related committees. Elected and appointed officials need to understand the impact of ongoing work and may not have a background in planning or resilience. These presentations are often higher impact than written updates.

Coordinate with your community's public information officer or staff person who is responsible for sharing news from your community to identify opportunities to provide updates to the public. If your community produces an annual report, consider including an update. Another way to share updates and performance metrics is to work with partners. Identify partners who were part of the initial planning process or who have shared interests, and have those partners share performance updates through their communication networks.

STEP 4.2

Step 4.2: Revisit and revise your plan regularly

TASKS TO DO

☐	4.2a: Reconvene the steering committee and core team to revisit the plan at least annually.
☐	4.2b: Update your plan.

4.2a: Reconvene the steering committee to revisit the plan at least annually

One of the hallmarks of resilience planning is flexibility. The future is full of unknowns, including climate change, development patterns, economic growth and challenges, internal capacity, and leadership changes. Reconvening the steering committee helps your resilience plan stay alive and relevant.

One of the key purposes of reconvening the steering committee is to look with fresh eyes at the plan and its performance so far. Identify areas where values may have shifted or the strategy to implement a project needs to be amended. Examine internal and external capacity to implement projects. Are additional resources, including staffing or budget, necessary to complete a project? Discussion may also include interim metrics that are not issued publicly. These metrics sometimes hold disappointing news, like a project that is not producing its intended benefits, or an unforeseen obstacle in implementation. The steering committee is the right forum to discuss these setbacks and make key decisions about whether to stay the course or make changes in approach. While some people see setbacks as failure, the field of resilience planning embraces the idea that failure is part of the process, as long as we learn from it. In fact, in the natural resources field, a practice called adaptive management builds regular progress check-ins and opportunities to change course into the process. Some resilience programs have borrowed this approach, ensuring honest performance assessment and the ability to change course.

The other key purpose of reconvening the steering committee is to look forward. Collectively, discuss the next steps for implementation. Are there new opportunities coming online? Which pieces of the plan are more or less relevant now? This conversation is especially important in tandem with the budget planning cycle to determine what to ask for in the local budget. For this reason, as with meetings with local government leadership, ensure that you consider the budget cycle timing in planning the steering committee reconvening.

4.2b: Update your plan

Effective plans are updated on a regular cycle, typically every five years. Hazard mitigation plans must be updated every five years. Comprehensive Economic Development Strategies get updated every five years. Many transportation plans must be updated on a four-year cycle. Updating your plan helps it stay relevant to community needs and continue to be taken seriously.

However, not every plan may need a wholesale rewrite. You may want to take the opportunity to dig deeper into a particular topic or type of project. Your vulnerability assessment may need small tweaks but it is possible that nothing major has changed. Use the performance data on your plan, along with local priorities and opportunities, to revisit and revise your plan.

You are now building a more resilient community. For inspiration and practical tips on how others in North Carolina have done the same, please view the Idea Book.

RESOURCES

RESOURCES

Stat. §§ 160D-501. (2020).
https://www.ncleg.gov/EnactedLegislation/Statutes/PDF/BySection/Chapter_160D/GS_160D-501.pdf

Final Report to the North Carolina Policy Collaboratory. NC Flood Resilience Study. UNC-Chapel Hill. May 2021.
https://collaboratory.unc.edu/wp-content/uploads/sites/476/2021/05/compound-flooding.pdf

RCCP Handbook, EPA/FEMA Regional Resilience Toolkit
https://www.deq.nc.gov/coastal-management/resilience/rccp-planning-handbook-1-1-2024/download?attachment

Building Community Resilience with Nature-Based Solutions. A Guide for Local Communities. FEMA. June 2021.
https://www.fema.gov/sites/default/files/documents/fema_riskmap-nature-based-solutions-guide_2021.pdf

International Association for Public Participation (IAP2) Spectrum of Public Participation (2018)
https://www.iap2.org/page/pillars

North Carolina Local Government Contracting: Quick Reference and Related Statues
https://www.sog.unc.edu/publications/books/north-carolina-local-government-contracting-quick-reference-and-related-statutes

APPENDICES

NORTH CAROLINA
RESILIENT COMMUNITIES PLANNING GUIDE

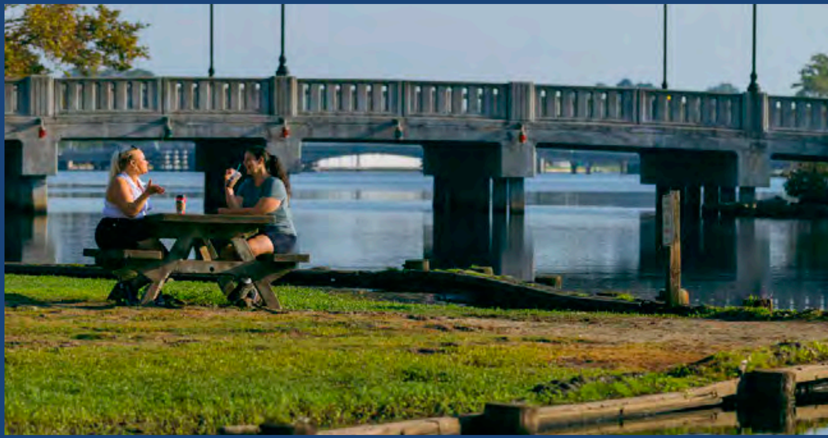
DECEMBER 2024

NCORR
NORTH CAROLINA OFFICE OF RECOVERY AND RESILIENCY

N★C DPS
DEPARTMENT OF PUBLIC SAFETY

EQUAL HOUSING OPPORTUNITY

APPENDIX | A
POTENTIAL PARTNERS



APPENDIX A

This list of potential partners is a summary of partners that can assist in various aspects of your resilience planning. For a more in-depth list of partners, subject matter experts, and other resources, check out the NC Resilience Exchange.

- **State Climatologist and State Climate Office**
- **Other State Agencies:**
  - NC Department of Environmental Quality, Division of Coastal Management
  - NC Department of Health and Human Services, Climate and Health Program
  - NC Department of Public Safety, Office of Recovery and Resiliency
  - NC Department of Public Safety, Division of Emergency Management (in particular, the floodplain mapping program)
  - NC Department of Transportation, Resilience Program
  - NC Natural Heritage Program, NC Department of Natural and Cultural Resources
  - NC Wildlife Resources Commission
- **UNC School of Government ListServs:** connect to various peer-to-peer networks such as
  - Planners and Planning Departments (ncplan)
  - Floodplain (ncfloodplain)
  - Emergency Management (ncem)
- **University Programs**
  - Eastern Carolina University, Community and Regional Planning Program and Coastal Studies Institute (CSI)
  - North Carolina Sea Grant and NC State University Extension
  - NC State University, Department of Landscape Architecture and Environmental Design, especially the Coastal Dynamics Design Lab
  - North Carolina Clean Energy Technology Center at NC State University
  - University of North Carolina at Chapel Hill, Department of City and Regional Planning
  - Collaboratory for Coastal Adaptation over Space and Time (C-CoAST)
  - UNC Asheville National Environmental Modeling & Analysis Center
  - Appalachian State University
- **Professional Associations**
  - American Planning Association – NC Chapter
    - APA Community Planning Assistance Teams
  - North Carolina Association of State Floodplain Managers
  - Storm Water Association of NC
  - NC American Institute of Architects
  - NC Association of Zoning Officials

- **Nonprofits**
  - The Conservation Fund, especially Resourceful Communities
  - Conservation Trust for North Carolina
  - Environmental Defense Fund
  - The Nature Conservancy
  - NC Inclusive Disaster Recovery Network at MDC, Inc.
  - Coastal Federation
- **Nonprofits with Environmental Justice or Disaster Recovery Expertise**
  - AMEXCAN
  - NC Black Alliance
  - NCVOAD
  - NC Environmental Justice Network
- **Regional Organizations**
  - Regional Council of Governments (COG)
  - Resource Conservation and Development Councils
  - Health Department
- **County Agencies and Committees**
  - Cooperative Extension Office
  - Soil and Water Conservation Office
  - County Engineer
  - Planning Department
  - Planning Board
  - Local Floodplain Administrator
  - Emergency Management
  - Drainage District Boards
- **Other**
  - AmeriCorps/VISTA
  - Conservation Corps North Carolina

APPENDIX | B

PUBLIC PARTICIPATION SUPPLEMENT

APPENDIX B

Contents

Introduction

Outreach and engagement are essential to the success of your resilience initiatives. The Public Participation Supplement to the *North Carolina Resilient Communities Planning Guide* provides information, tips and best practices to help you plan, prepare for, and facilitate effective communication and opportunities for engagement over the course of your project. It is a companion document to the *North Carolina Resilient Communities Planning Guide Playbook*. The *Playbook* walks you through the process of developing a resilience plan. Strong community engagement will improve the process and the end results. The *Playbook's* Step 1.2: Create a scope of work and public participation framework, refers you to this Public Participation Supplement to develop a plan for public engagement and feedback throughout the planning process. You may wish to consult this supplement at multiple points in your planning process.

Outreach

Public Agency → Community

Engagement

Public Agency ↔ Community

Outreach and engagement are separate, but related, actions requiring different approaches and strategies. **Outreach is a one-way flow** of information while engagement is building relationships with the community, listening to community needs, collaborating and providing people with the tools and information they need to participate in a public process. Outreach makes important information easy to understand and then shares it with those who need it in the community. This includes things like emergency alerts, understanding your flood risk and sharing resources. **Engagement is a meaningful, sustained, and intentional two-way exchange** of knowledge, information and ideas built on a foundation of trust, accountability and responsibility to the community.

Each community will have a different capacity and level of resources available to dedicate to public participation outreach and engagement. The information in this supplement is flexible and should be tailored to your unique context. The most common challenges in public participation include competing priorities, lived experience or barriers that lead to community disinterest in participation. Suggestions for overcoming these challenges are included throughout this supplement.

Identify Public Participation Objectives

Effective outreach and engagement are important to every planning effort and project, but the reasons to connect with the public and other stakeholders vary. Different project phases have different goals or objectives. The most common reasons for outreach and engagement include:[1]

- **Raising awareness:** Introducing the effort to the public and stakeholders, providing information about how to learn more and how to stay involved and setting expectations for the project's process and outcomes.
- **Setting context and framing key issues:** Providing the public, stakeholders and elected officials with balanced and objective information to assist them in understanding alternatives, opportunities and solutions.
- **Consulting the community:** Gathering feedback on alternatives, analysis and decisions.
- **Involving the community:** Ensuring that the community's concerns and aspirations are understood, considered and reflected in the plan.
- **Collaborating with the community:** Partnering with the public and key stakeholders at every project phase to identify and select alternatives, strategies and other preferred solutions.

[1] Adapted from International Association for Public Participation (IAP2) Spectrum of Public Participation (2018)

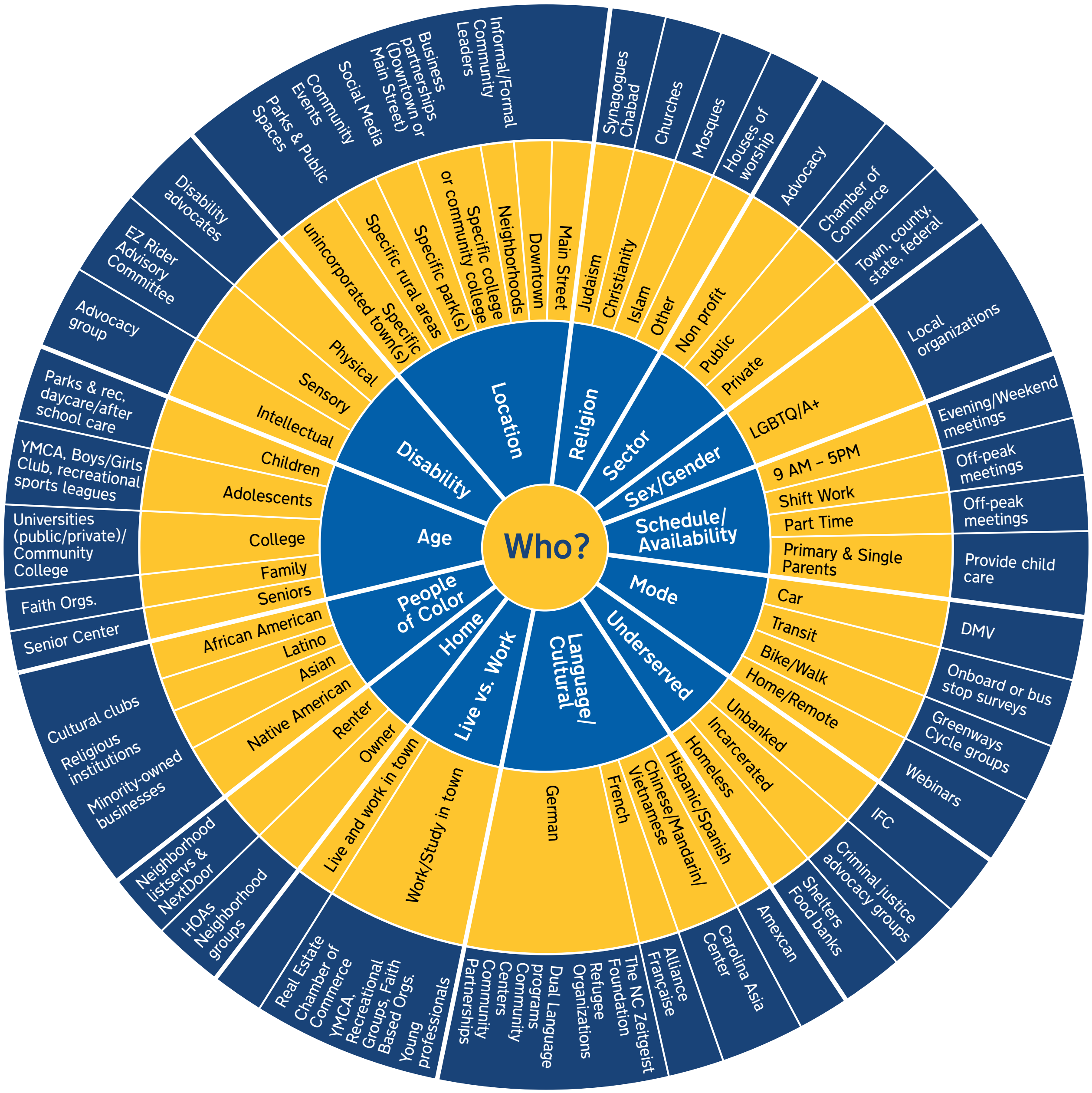
Objective	Example Activity
Raise awareness Build brand/project awareness, provide information, offer accountability for process and outcomes.	Let community members know the planning process is beginning and that their feedback impacts outcomes. Provide a way for the public to sign up and receive project update emails.
Set context and frame issues Provide the tools and information people need to make informed decisions.	Illustrate tradeoffs through a hands-on activity by asking participants to learn about project options and then "spend money" on their highest priority projects.
Consult Request and gather feedback on alternatives, analysis, and/or decisions.	Administer a public survey asking the community to weigh in on a preferred option or project.
Involve Work directly with the public, stakeholders and elected officials to hear, understand and consider their concerns and aspirations.	Conduct a workshop where participants can share their ideas, discuss concerns, and explore possible resilience strategies.
Collaborate Community-generated vision, goals and strategies.	Conduct a workshop or a more extended multiday charrette with staff, community members and elected officials to envision and plan a more resilient community through facilitated discussions and activities. Participants might have the opportunity to provide specific feedback on their vision or prioritize goals and strategies.

Identify Participants

Your outreach and engagement objectives also guide who needs to participate and the audience for outreach. Knowing your audience helps you identify strategies with a higher likelihood of success. It also ensures that public participation is representative of your community. It is important to make room for a broad range of perspectives and opinions.

Typical Groups for Engagement	Who is included?
General population	Anyone and everyone who lives, works, owns a business or spends time in the community.
Select community members	People or groups impacted by, or with a specific interest, in project outcomes; may be geographic-based or project-based.
Key stakeholders	Agencies, organizations, interest groups, etc. impacted by, or representing people impacted by, project outcomes.
Elected or appointed officials	Leaders representing the community at large or specific places or interests in the community. This might be a council, commission or planning board member.
Funders, implementors and champions	People who can help build support for the plan or who have access to resources needed for implementation.

To brainstorm more diverse engagement beyond your typical participants, use the engagement wheel on the next page. The wheel identifies different characteristics and interests of community members and helps draw out considerations for their engagement in a planning process. For example, if age diversity is an important component, you can start with the broad category of age, then subdivide into more specific groups like teens or seniors. The outermost ring provides guidance on how and where to engage each subgroup.


Who?
Location
Main Street
Downtown
Neighborhoods
Specific college or community college
Specific park(s)
Specific rural areas
Specific unincorporated town(s)
Informal/Formal Community Leaders
Business partnerships (Downtown or Main Street)
Social Media
Community Events
Parks & Public Spaces
Religion
Judaism
Christianity
Islam
Other
Synagogues Chabad
Churches
Mosques
Houses of worship
Sector
Non profit
Public
Private
Advocacy
Chamber of Commerce
Town, county, state, federal
Sex/Gender
LGBTQ/A+
Local organizations
Schedule/ Availability
9 AM – 5PM
Shift Work
Part Time
Primary & Single Parents
Evening/Weekend meetings
Off-peak meetings
Off-peak meetings
Provide child care
Mode
Car
Transit
Bike/Walk
Home/Remote
DMV
Onboard or bus stop surveys
Greenways Cycle groups
Webinars
Underserved
Unbanked
Incarcerated
Homeless
IFC
Criminal justice advocacy groups
Shelters Food banks
Language/ Cultural
Hispanic/Spanish
Chinese/Mandarin/ Vietnamese
French
German
Amexcan
Carolina Asia Center
Alliance Française
The NC Zeitgeist Foundation
Refugee Organizations
Dual Language programs
Community Centers
Community Partnerships
Live vs. Work
Work/Study in town
Live and work in town
Real Estate Chamber of Commerce YMCA, Recreational Groups, Faith Based Orgs. Young professionals
Home
Owner
Renter
HOAs Neighborhood groups
Neighborhood listservs & NextDoor
People of Color
Native American
Asian
Latino
African American
Cultural clubs
Religious institutions
Minority-owned businesses
Age
Seniors
Family
College
Adolescents
Children
Senior Center
Faith Orgs.
Universities (public/private)/ Community College
YMCA, Boys/Girls Club, recreational sports leagues
Parks & rec, daycare/after school care
Disability
Intellectual
Sensory
Physical
Advocacy group
EZ Rider Advisory Committee
Disability advocates

Potential Participants and Community Stakeholders

Use the list of key participants in the table to identify organizations and departments to involve in your resilience planning effort. This list is intentionally broad to help spark ideas. Everyone does not need to be engaged at every phase of planning. The example participants may be relevant at different points in your resiliency planning effort for different reasons. The table indicates the types of participants and examples of each. For instance, if you want to understand the cultural resources that may be at risk in your community, you can refer to the examples under the cultural resources type of participant. Or, if you need subject matter expertise regarding stormwater services, you can refer to public works stakeholders.

Depending on the size of your community and local government, some of these potential participants and community stakeholders may not exist, and your ability to reach a broad audience will be more limited. In these cases, consulting with representatives from a larger regional or state organization may be helpful.

Type of participant	Examples
Advisory boards and commissions	• Planning commission or board • Soil and water conservation district • Stormwater • Transportation • Zoning board of appeals • Environment, natural resources, cultural resources • Historic preservation • Recreation
Businesses and business advocacy organizations	• Chamber of commerce • Economic and workforce development • Downtown or business improvement district • Small businesses • Startups and business incubators • Restaurants and food service • Retail establishments • Personal service establishments • Design professions – engineers, architects and landscape architects • Insurance providers • Home builders

Type of participant	Examples
Clubs, non-profit organizations and interest organizations	• Community-based organizations (CBO) • Main Street organizations • Environmental advocacy organizations • Land trusts • Rotary Club • Kiwanis Club • Faith-based organizations and groups • Homeowners' associations (HOA) • Cultural- or language-based interest groups • Age-based (seniors, youth) organizations • Recreation groups
Cultural resources	• Historic preservation organization • Arts council • Museums • Libraries • Tourism or visitor's bureau • State or federal parks and lands
Education	• Childcare providers • Pre-kindergarten • K-12 • Higher education
Elected officials	• Senator or congressional representative (or staff) • State senator or assembly person • County commissioners • Mayor • Town, city or county commissioners or council members • Soil and water conservation district representative

Type of participant	Examples
Emergency management and services	• Emergency management • Hazard mitigation • Police • Fire • Emergency medical services (EMS)
Environment and natural resources	• Environmental planner • Coastal zone planner • Natural resources • Soil and water conservation district representatives • State or federal parks, lands or other assets
Federal agencies and departments	• Federal Emergency Management Agency (FEMA) • Environmental Protection Agency (EPA) • Department of Transportation (DOT) • Department of the Interior (DOI) • Department of Health and Human Services (DHHS)
Financial institutions and funders	• Community Development Finance Institution (CDFI) • Foundations • Philanthropic organizations
Health and social services	• Healthcare providers • Public health department or clinic • Public housing • Retirement living facilities • Senior center • Community center • Hospital

Type of participant	Examples
Media	• Local or regional television stations • Radio stations (especially Spanish or other non-English stations) • Newspaper and other news media • Local social media personalities • Local bloggers or social media groups/sites
Municipal administration	• Finance or budget officer • Municipal attorney • Manager or assistant manager (county, city or town)
Planning, development and land use	• Planning director • Sustainability planner • Chief resilience officer • Land use or long-range planner • Development review or short-range planner • Certified floodplain manager • Code enforcement • Parks and recreation • Zoning administrator • Councils of government or regional commissions • Developers and real estate professionals

Type of participant	Examples
Public services and public works	• Public service or public works director • Facilities maintenance director • Sanitation manager • Water operations • Stormwater manager or utility representative • Transportation • Transit providers • Utility providers • Metropolitan Planning Organization (MPO) • Rural Planning Organization (RPO) • Engineer
State agencies and departments	• Agriculture and Consumer Services • Environmental Quality, including its divisions of Coastal Management and Water Resources • Commerce, including its Small Business Advisors team and Rural Economic Development Division • Emergency Management, including its National Flood Insurance Program (Floodplain Management) team • Health and Human Services • Transportation • Insurance

Best Practices for Equitable Engagement

Successful outreach and engagement requires thoughtful strategies to ensure accessibility so participants have opportunities to receive information and participate. Accessibility includes physically accessible events, which are easy to attend and are held on days and times that take into consideration various schedules. Accessibility also refers to being psychologically accessible, or making the meeting space safe and comfortable for participants to share information. Additionally, culturally-linguistically accessible means people can participate in their preferred language or mode of communication and are not required to participate in unfamiliar or uncomfortable ways. Overall, equitable engagement represents your community's geography, race and ethnicity, age, gender and other demographic characteristics. Equitable engagement also emphasizes and centers historically marginalized community members.

People give many reasons for not participating in planning engagement and outreach efforts, but common reasons include:

- Lack of knowledge of the political system or the opportunity
- Previous negative community engagement experience
- Economic barriers; needing to focus on basic needs of self and family
- Not seeing one's own culture or identity reflected in meeting format or content
- Fear of being judged, and feeling emotionally unsafe or unwelcome
- Transportation barriers
- Childcare needs
- Spiritual beliefs and practices
- Immigration status
- Meeting time or date does not consider work schedules, religious holidays, mealtimes or other family needs
- Historical patterns of municipal decisions do not reflect community input; broken promises made by politicians or government staff, resulting in reinforced distrust of government and institutions[2]

These challenges may result in engagement efforts that always attract the same group of people, are unfruitful, or do not produce representative community input because community members are uncomfortable or uninterested in public meetings or workshops altogether. To address these challenges, you may want to consider establishing a resident "ambassador" or "champion" program to work with and through established community leaders (compensating them for their time if possible), or providing childcare at outreach and engagement events. Additionally, you may consider conducting outreach and engagement at well-attended community events that are already occurring, like farmers markets, cultural or holiday celebrations, block parties, festivals and school or sporting events. Meeting community members where they already gather helps you reach a wider range of people than may normally be comfortable coming to a government building and reduces the resources you need to support such an event.

The following table provides recommendations for ways to enhance your outreach and engagement efforts specific to some of the common challenges you may face in community engagement.

[2] Adapted from *Equitable Community Engagement Blueprint,* City of Durham, and Groundwork USA and "Establishing Norms", Advancing Racial Equity in Schools

Challenges in community engagement	Outreach strategies to address challenge
You anticipate challenges based on a historical lack of trust.	Building trust and sustaining engagement by establishing relationships with community leaders and residents through dedicated efforts like small group listening sessions. Holding pop-up events in locations or at events where the community already gathers. Considering the needs already voiced, and ensuring your messaging and outreach acknowledges those needs.
Participants do not reflect the community's demographic profile.	Providing childcare, food, compensation or transportation service to increase participants' ability to attend events. Finding organizations or individuals who can speak on behalf of a particular community or providing two-way information exchange.
Your target participants work in service industries or have school-aged children.	Varying the days and times of your engagement events and conducting events at non-traditional times in non-traditional locations (e.g., transit stop surveys, school or sports events).
You have significant shares of older or younger people in the planning area.	Conducting targeted outreach and engagement using methods and focusing on issues important to youth or seniors.
You have non-English-speaking residents in the planning area.	Translating outreach materials and provide interpretation services at events; make sure residents know there will be interpretation.
You have residents who are hearing- or vision-impaired.	Providing enhanced accessibility services (e.g., sign language interpretation) at events. Consider a hybrid meeting option or recording the meeting to make it safe and easy for those with physical disabilities to attend.

Name and Reinforce Ground Rules or Group Norms

To ensure participants in your community engagement efforts feel welcome, you should establish and reinforce agreements of mutual respect and confidentiality including:

- **Stay engaged.** Limit distractions, mute your microphone when not actively speaking, listen to speakers even if you don't understand their perspective.
- **Speak your truth and acknowledge it is only part of the truth.** Your experience is not universal.
- **Accept and explore your discomfort.** Engaging in difficult conversations in a meaningful way often means stepping outside of your personal comfort zone. This is normal and necessary.
- **Be okay with a lack of closure.** Difficult situations require long-term commitment to change. Commit for the long-haul and identify the steps needed to get started.
- **Step up and step back.** If you talk a lot, try listening more, even when you have something to say; this helps create space for others to speak. If you are someone who tends to hold back in these types of forums, take a chance to step up and share your thoughts.
- **Disagree with an idea, not a person.** Be intentional about language, tone and intent.
- **Be respectful.** Assume best intentions but make no other assumptions. Stay curious and ask questions to better understand.[3]

[3] Adapted from "Establishing Norms", Advancing Racial Equity in Schools

Identify Strategies for Outreach and Engagement

After identifying who you need to engage, and any specific challenges or other considerations, next think about how you will do it. Outreach and engagement strategy selection depends on your plan goals, phasing, timeline, target participants and available resources. The table below introduces outreach and engagement approaches and, using icons, identifies how the strategy is executed, the relative level of effort (i.e., required time and resources), and the outreach or engagement goals that each strategy helps achieve. As you read through the ideas, identify the options you believe would work best in your community, and consider them for inclusion in your scope of work (*Playbook*, Step 1.2) and public participation framework.

Technique	Description	How	Level of Effort	Best for...
Workshop	Interactive events where people exchange information and collectively identify/prioritize goals, issues, challenges, and brainstorm solutions.	In person Virtual	Medium	Gathering, sharing background and contextual information Getting feedback/considering alternatives
Design Charrette	Appropriate for placemaking and physical design topics. During a charette, facilitators prepare on-the-spot plans, sketches, and illustrations or present ones that have been prepared for the event beforehand. Participants are asked to provide instant analysis and feedback on the designs.	In person Virtual	High	Raising awareness/project recognition Getting feedback/considering alternatives
Open House	Drop-in education or informative events to keep the community informed and engaged. Feedback and input on information can also be collected during this type of event.	In person	Medium	Raising awareness/project recognition Getting feedback/considering alternatives
Focus Group	Brings together a small group of like-minded stakeholders (e.g., bicycle enthusiasts or members of a church congregation) to discuss issues of particular concern to them.	In person Virtual	Low	Gathering, sharing background and contextual information
Community Conversation	Facilitators go where community members are (e.g., senior centers, schools, low-income housing developments, community centers, barber shops/beauty salons, sporting events) to talk with them about their vision and goals for their community.	In person	Medium	Gathering, sharing background and contextual information Getting feedback/considering alternatives Storytelling/documentation

Technique	Description	How	Level of Effort	Best for...
Interviews	One-on-one conversations with community members to dive deeper into their concerns and vision for their community. Can be organized or conducted on the fly on street corners.	In person Virtual	Low	Gathering, sharing background and contextual information Storytelling/documentation
Walking Tour	Led by community members, facilitators are shown around streets and neighborhoods and shown issues and opportunities from the perspective of the people who live, work and play there.	In person	Medium	Raising awareness/project recognition Gathering, sharing background and contextual information Storytelling/documentation
Educational Forums	Usually involve presentations by thought leaders and facilitated discussions. Important when there is a need for knowledge exchange within the community about emerging issues, best practices, etc.	In person Virtual	Medium	Raising awareness/project recognition Gathering, sharing background and contextual information
Roadshow	A set of prepared materials and posters that can be distributed at various existing community events. Facilitators set up a table at the event, and passersby can ask questions about the project and provide feedback.	In person	Medium	Raising awareness/project recognition Getting feedback/considering alternatives
Pop-Up	Facilitators can share materials at various public spaces (e.g., street corners, bus stations, grocery stores, parks, coffee shops) ask community members questions, hand out information and collect feedback.	In person	Medium	Raising awareness/project recognition Getting feedback/considering alternatives
Storytelling	On-the-spot solicitation of local stories from community members. Can be part of workshops, standalone pop-up events or leveraged with other similar arts, cultural or educational events. Stories can be gathered in written, visual, oral or video formats.	In person Virtual	Medium	Gathering, sharing background and contextual information Storytelling/documentation
Survey	Using online or printed copy tools to gather information from the public and stakeholders. Surveys can be paper or online and utilize questions, words or pictures.	In person Virtual	Medium	Gathering, sharing background and contextual information Getting feedback/considering alternatives
Demonstration Projects	Short-term, low-cost installations in public spaces to attract passersby, engage them in conversations about the municipality, and provide examples of the types of solutions, projects or spaces that could exist.	In person	Medium	Raising awareness/project recognition

Technique	Description	How	Level of Effort	Best for...
Webinar/ Livestream	For those who cannot make it to in-person events, webinars and live broadcast events allow people to participate in the process, receive project information, ask critical questions and provide feedback remotely.	Virtual	Low	Raising awareness/project recognition Gathering, sharing background and contextual information
Vision Book	Displayed in public locations, like a library; allows for in-person, anytime engagement by writing feedback in a "vision book." Participants may be asked to describe their vision for the municipality, for resilience or their values.	In person	Low	Gathering, sharing background and contextual information Getting feedback/considering alternatives
Public Installation	Posters and flyers with project information and FAQs displayed prominently in public spaces. There may be opportunities for engagement, such as a chalk board mural with the statement "The Future of [COMMUNITY] is…" allowing community members to complete the sentence. No facilitation necessary.	In person	Medium	Raising awareness/project recognition Getting feedback/considering alternatives Storytelling/documentation
Website	A way to provide and collect information. Resource for educational materials, process and timeline information, upcoming meetings/events and postings for feedback and surveys.	Virtual	Medium	Raising awareness/project recognition Getting feedback/considering alternatives
Social Media	Platforms like Facebook, X (formerly Twitter), and Instagram can be used to advertise planning efforts, promote community engagement, and host surveys. These sites often attract participants who are new to the public process or who may be fearful of participating in person.	Virtual	Low	Raising awareness/project recognition Getting feedback/considering alternatives
Photography Initiative	Community members receive disposable cameras or create an online version of the initiative through Instagram to capture both positive and challenging daily experiences in the municipality. The photographs are printed and displayed in a public space and/or online.	In person Virtual	Medium	Gathering, sharing background and contextual information Storytelling/documentation

Technique	Description	How	Level of Effort	Best for...
Explainer Video	High production value videos (animated or live action) can be one of the most effective ways to communicate complex planning concepts and policies. Videos can include interviews, moving infographics and many other exciting communication techniques. Videos are shown at meetings and are accessed online for free.	Virtual	Medium	Raising awareness/project recognition Storytelling/documentation
Video Tour	To set community context and provide background information, a video tour can be produced for a project. The tour introduces the project extent, key contextual information, and helps tell the community's story.	In person Virtual	Medium	Storytelling/documentation
Video Documentation	Videos can capture and share engagement efforts, helping to tell the story of a project. These can be short videos to share on social media or longer videos to memorialize a project's public involvement efforts and outcomes.	In person Virtual	Medium	Storytelling/documentation
ESRI Story Map	The online Story Map platform is an engaging way to use maps, spatial information, photos and videos to share the story of a place or product online.	Virtual	Low	Storytelling/documentation Gathering, sharing background and contextual information
Newsletter	Produced and distributed when key milestones are met to keep the public up to date with progress. May be online, email or in print.	Virtual	Low	Raising awareness/project recognition
"Table Talk" Dinner Party Kit or "Out of the Box" Campaign	Small groups such as families and roommates receive a box with educational materials, worksheets, prompting questions and self-facilitated exercises. They sit down together to complete the exercises and return their materials—with their feedback—to the project team for analysis.	In person	Medium	Gathering, sharing background and contextual information Getting feedback/considering alternatives
Podcast	Work with community members to capture their experiences and their vision via audio diaries or a podcast.	In person Virtual	Medium	Gathering, sharing background and contextual information Storytelling/documentation
Video Diaries	Work with community members to capture their experiences of city life and their vision for the municipality in video or audio diaries or a short docuseries.	In person Virtual	Medium	Gathering, sharing background and contextual information Storytelling/documentation

Spreading the Word

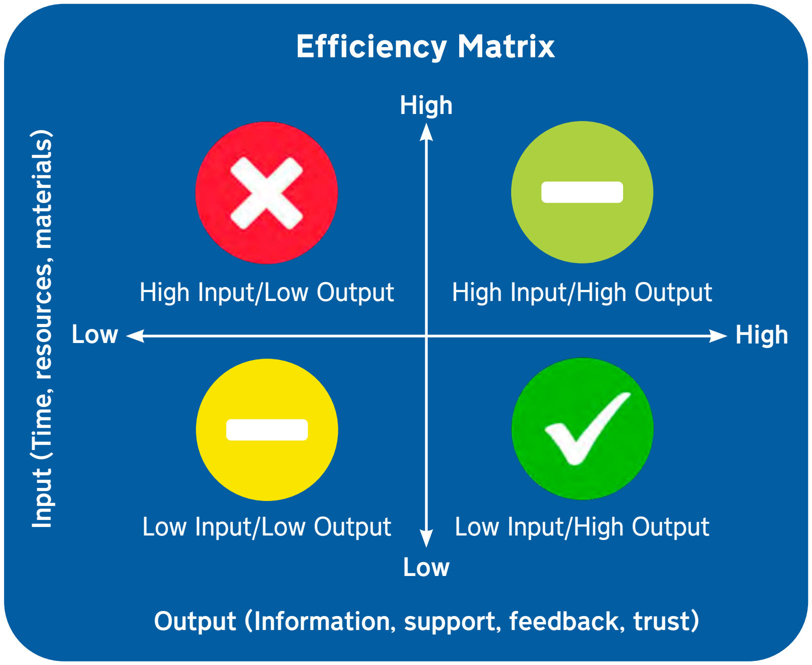
Use the following strategies to share information about opportunities to participate:

- **Tell People:** A personal invitation is an effective way to generate interest. Set goals for your project team and steering committee members challenging them to connect with people via email, call, text or a visit.
- **Enlist Trusted Organizations:** Ask long-standing and trusted community partners to help spread the word.
- **Promote through Mailings:** Include project information in municipal mailings like utility or tax bills.
- **Leverage Digital Neighborhoods:** Ask steering committee members to share information via neighborhood email listservs, homeowners' associations, NextDoor online platform, and virtual neighborhood bulletin boards.
- **Connect with Local Media:** Reach out to community-based media like a local newspaper and/or community bloggers and share information.
- **Use Social Media:** Create and share information via Facebook, X (formerly Twitter), Instagram, TikTok, etc.; ask community organizations to share with their networks as well.
- **Speak with Community Groups:** Ask to attend meetings of neighborhood associations, Main Street groups, city or town committees and other groups to provide updates.
- **Translate Materials:** If your community has populations that speak languages other than English, translate flyers and invitations into languages commonly spoken in your community.

Scaling Your Approach

Available resources are typically the limiting factor when considering which strategies to apply for a project's outreach and engagement efforts. This is true for both small and large municipalities and counties but may feel especially challenging for those with limited staff. Aligning strategies with your target participants and project goals ensures the most efficient use of limited resources. When identifying strategies for your resilience plan, increase efficiency by:

- Choosing "low input, high output" strategies, meaning strategies requiring few resources but generating good results. These strategies will vary based on your needs and target audience (see Efficiency Matrix below).



- Scaling strategies to make them more feasible. For example, by using Zoom or PowerPoint to record a 30-second audio/video update to share on social media versus a video produced by a professional videographer.
- Working with a public information officer from your municipality, county, or a local tourism/visitor's bureau to develop and share information about your effort. You may be able to identify a partner outside your organization who has resources to assist you in developing your outreach and engagement strategy or in disseminating information.
- Utilizing existing community groups or attending community events hosted by others to evaluate strategies and information. Examples of this include using the community's planning board or council/board meeting to share or receive information from the community or attending an Earth Day event hosted by a local nonprofit at a community park to seek public input.

Measuring Success

Successful, meaningful, and equitable outreach and engagement is achieved when participants reflect the overall community. By regularly assessing if we are meeting this goal, we can hold ourselves accountable and recalibrate the approach if needed. The table below identifies various measures of success and example metrics you can use to assess your outreach and engagement efforts. If you find that you are not meeting the performance metrics you've established, revisit the Best Practices for Equitable Engagement section of this document and recalibrate your approach. Consider which measures of success might be useful for your planning effort as you review the following table.

Measure of Success	Example Metrics
Characteristics of Participants (should reflect the planning area)	• Demographic characteristics (age, race, language) of participants, survey respondents, etc. • Geographic distribution of participants, survey respondents, etc. • Overall stakeholder characteristic types or subtypes engaged (e.g., resident, visitor, part-time resident, business)
Accessibility	• Number of participants attending events with interpretation services • Number of participants traveling to events via transit • Number of events held concurrently with scheduled neighborhood events • Effectiveness of outreach to Limited English Proficiency (LEP) participants
Equity	• Number of events with childcare • Days, times and locations of engagement events are varied
Reach and Effectiveness	• Number of attendees at events (in person and/or virtual) • Number/frequency of engagement opportunities • Number of comments received (if applicable) • Number of survey responses (if applicable)
Integration and Communication of Feedback	• Comments/feedback tracked, documented, and responses provided • Project/plan clearly describes how community feedback informed outcome(s) • Accessible summaries of feedback and input are available

Conclusion

Strong community engagement and outreach will improve your resilience plan by putting the knowledge and creativity of your community to work. But community engagement and outreach are also key to eventual implementation of your plan's strategies. Community buy-in, support, and excitement about the actual work outlined in your plan is essential to obtaining the political will of decision-makers and in supporting requests for funding, both from your municipality or county and from grant makers. With the information, tips, and best practices outlined in this Public Participation Supplement to the *North Carolina Resilient Communities Planning Guide*, you now have the tools you need to create an effective, equitable, and accessible public participation framework to support your plan.

APPENDIX | C
TEMPLATES

APPENDIX C

Contents

All Appendix C documents are also downloadable as editable Word and Excel files on the *North Carolina Resilient Communities Planning Guide* webpage at www.resilientplanning.nc.gov.

Scope of Work Template

Supports Step 1.2: Create a scope of work and public participation framework. This can be integrated into a request for proposals (RFP) or request for qualifications (RFQ) or used as an internal scope of work. Feel free to customize the template or use only some parts to fit your needs. ***You will need to refer to your answers from the Scoping Exercise in Step 1.2 of the Playbook.*** *Also consider reviewing the guide* ***North Carolina Local Government Contracting: Quick Reference and Related Statues*** *by Norma Houston for additional guidance on contracting requirements.*

Introduction

This is a scope of work for [NAME OF COMMUNITY, GROUP, OR ORGANIZATION]'s resilience plan. This document describes the elements of the plan and informs the work plan guiding this project. The goal of this project and the plan is to address [INSERT RESPONSE(S) TO QUESTION 1 FROM SCOPING EXERCISE: Is your resilience planning effort focused on one specific climate related hazards or vulnerability or multiple hazards and vulnerabilities?].

Here's an example of what this might look like when you are finished:

This is a scope of work for the Town of Smithville Resilience Action and Implementation Plan. This document describes the elements of the plan and informs the work plan guiding this project. The goal of this project and the plan is to address our community's vulnerability to climate-related hazards.

Plan Focus

[INSERT NAME OF COMMUNITY, GROUP, OR ORGANIZATION]'s resilience plan will focus on building resilience over a [INSERT RESPONSE TO QUESTION 6 FROM THE SCOPING EXERCISE: What is the time frame for actions that your resilience planning effort will include? Over what period of time do you want to investigate projected climate changes?] time frame for [INSERT RESPONSE TO QUESTION 2: What is the geography or spatial extent of your resilience planning effort? AND A BRIEF DESCRIPTION OF THE WHOLE PLANNING AREA].

The following climate hazards and vulnerabilities will be considered and addressed in this plan:

[INSERT A BRIEF DESCRIPTION OF THE SPECIFIC HAZARDS AND VULNERABILITIES TO BE ADDRESSED. IF YOU INTEND TO ADDRESS MULITIPLE HAZARDS AND VULNERABILITIES BUT ARE NOT SURE WHICH YOUR COMMUNITY MIGHT BE MOST IMPACTED BY OR YOU ARE SCOPING A BROAD-BASED RESILIENCE PLAN, INCLUDE A LONGER LIST OF CLIMATE-RELATED HAZARDS MOST LIKELY TO IMPACT NORTH CAROLINA COMMUNITIES.]

This planning effort focuses on building resilience by creating a [INSERT ANSWER TO QUESTION 5] plan focusing on [INSERT ANSWER TO QUESTION 6]. Specifically, [INSERT A BRIEF DESCRIPTION OF YOUR ANSWER TO QUESTION 3: What do you hope to achieve through your resilience planning effort?].

Here's an example of what this might look like when you are finished:

> *The Town of Smithville's Resilience Action and Implementation Plan will focus on building resilience over a ten-year period and will investigate projected climate changes in the coming thirty years for the Town of Smithville. The town is a small, rural community with a population of 2,500.*
>
> *The following climate hazards and vulnerabilities will be considered and addressed in this plan: increased intensity of precipitation and the town's vulnerabilities to flooding and erosion; high heat and public health vulnerabilities; and drought and vulnerability to wildfires.*
>
> *This planning effort focuses on building resilience by creating an exploratory plan focusing on actions the town can take within the next five years to address climate change impacts projected to occur over the next 25 years. Specifically, by developing a consensus-based community resilience vision and goals and assessing the hazards and vulnerabilities most likely to impact our town, we will be able to select solutions to enhance our resilience.*

Tasks

The following tasks will be completed to create [INSERT NAME OF COMMUNITY, GROUP, OR ORGANIZATION]'s resilience plans.

Unless otherwise described, the tasks and subtasks below are more fully described in the North Carolina Resilient Communities Planning Guide Playbook. If other local plans, policies, or documents are important for context or for completing the work, include them here and provide a link. Delete project tasks, subtasks or deliverables that are not relevant to your project.

For each task, identify the following elements as relevant to your needs. Don't forget to estimate resources needed for outreach and engagement activities.

> ***Subtasks:*** *Each task's individual elements or specific deliverables. Use the steps in the Playbook as a starting point.*
>
> ***Lead:*** *The individual responsible for managing and executing the successful completion of the task.*
>
> ***Support:*** *The staff or people needed to complete each task.*
>
> ***Level of Effort:*** *The estimated number of hours required for successful completion of the task.*
>
> ***Budget:*** *The estimated resources needed to complete the task, based on hours and personnel.*

Task A: Process and participation

Subtask A1: Develop public participation framework (*Playbook* Step 1.2).

Subtask A2: During Phase 1, lead the following engagement activities: [LIST ENGAGEMENT ACTIVITIES]

Subtask A3: During Phase 2, lead the following engagement activities: [LIST ENGAGEMENT ACTIVITIES]

Deliverable(s): [DESCRIBE DELIVERABLES] *Facilitate outreach and engagement as described in your scope of work and public participation framework. Provide a brief narrative, supporting graphics, and images describing the planning process and outcomes of community outreach and engagement activities.*

Lead: [INSERT LEAD]

Support: [INSERT PEOPLE OR STAFF NEEDED TO COMPLETE TASK]

Number of community engagement meetings, type (steering committee or general community and in-person or hybrid), **and timing:** [INSERT NUMBER OF MEETINGS AND TYPE]

Level of Effort: [INSERT NUMBER OF HOURS TO COMPLETE TASK] hours

Task Budget: $[INSERT ESTIMATED BUDGET]

Task B: Define your community's resilience vision and goals. (*Playbook* Step 1.4)

Subtask B1: Develop a vision for your community resilience effort, using the Visioning and Goal Setting Exercise.

Subtask B2: Develop goals to support your vision, using the Visioning and Goal Setting Exercise.

Subtask B3: Conduct community engagement and steering committee meetings as outlined in the public participation framework (Task A and Step 1.2).

Subtask B4: [INSERT ANY OTHER SUBTASKS NEEDED]

Deliverable: [DESCRIBE THE DELIVERABLES] A narrative, supported by graphics and/or data, of the resilience vision and goals, including a description of the desired future state of resilience and how it will be accomplished.

Lead: [INSERT LEAD]

Support: [INSERT PEOPLE OR STAFF NEEDED TO COMPLETE TASK]

Number of community engagement meeting, type (steering committee or general community and in-person or hybrid), **and timing:** [INSERT NUMBER OF MEETINGS AND TYPE]

Level of Effort: [INSERT NUMBER OF HOURS TO COMPLETE TASK] hours

Task Budget: $[INSERT ESTIMATED BUDGET]

Task C: Vulnerability assessment (*Playbook* Steps 2.1 – 2.3)

Subtask C1: Identify and map hazards of concern, including the following: Identify hazards and their key characteristics; Describe previous occurrences in the community, along with historic and potential future impacts; Determine the level of concern (high, medium, low) for the hazard for your community; Summarize this information in a Hazards of Concern Table (*Playbook* Step 2.1).

Subtask C2: Assess vulnerability, including the following: [INSERT ANY SPECIFICATIONS ABOUT DATA SOURCES AND QUANTITATIVE OR MAPPING ANALYSIS DESIRED] (*Playbook* Step 2.2).

Subtask C3: Conduct community engagement and steering committee meetings as outlined in the public participation framework (Task A and *Playbook* Step 1.2)

Subtask C4: [INSERT ANY OTHER SUBTASKS NEEDED]

Deliverable: [DESCRIBE THE DELIVERABLES] A narrative and tables, maps and other graphics, providing a comprehensive understanding of vulnerability in the planning area.

Lead: [INSERT LEAD]

Support: [INSERT PEOPLE OR STAFF NEEDED TO COMPLETE THE TASK]

Number of community engagement meeting, type (steering committee or general community and in-person or hybrid), **and timing:** [INSERT NUMBER OF MEETINGS AND TYPE]

Level of Effort: [INSERT NUMBER OF HOURS TO COMPLETE TASK] hours

Task Budget: $[INSERT ESTIMATED BUDGET]

Task D: Resilience Plan

Subtask D1: Develop a list of strategies that have been prioritized by the steering committee and through community engagement (*Playbook* Steps 3.1 and 3.2).

Subtask D2: Develop implementation pathways and metrics for each strategy. This information should include: the organization or department that will serve as the implementation lead for this strategy; who will provide implementation support; the implementation time frame; estimated cost; other implementation resources; funding sources; and what success would look like for this strategy. In addition to being listed in written format, provide an implementation matrix that summaries each strategy and its implementation pathway (*Playbook* Step 3.3).

Subtask D3: Conduct community engagement and steering committee meetings as outlined in the public participation framework (Task A and *Playbook* Steps 1.2 and 1.3).

Subtask D4: Assist staff in the adoption of the plan by attending city/town/county meetings necessary for adoption including planning board and town/city council or board of commissioners meetings.

Deliverable: Create a resilience plan that brings together and describes Task A: Process and participation; Task B: Identify and describe resilience vision and goals (*Playbook* Step 1.4); Task C: Vulnerability Assessment (*Playbook* Steps 2.1 – 2.3); and the subtasks of Task D: Resilience Plan. The outline for the plan should include the following components:

A. Cover page
B. Table of contents and acknowledgments
C. Executive summary
D. Introduction
E. Resilience vision and goals (*Playbook* Step 1.4)
F. Process and participation. *Describe the planning process and community outreach and engagement activities (Playbook Steps 1.1 and 1.2). Include photos of engagement events.*
G. Vulnerability assessment synthesis (*Playbook* Step 2.3). *Include full vulnerability assessment as an appendix.*
H. Resilience strategies (*Playbook* Steps 3.1 and 3.2)
I. Implementation

Lead: [INSERT LEAD]

Support: [INSERT PEOPLE OR STAFF NEEDED TO COMPLETE THE TASK]

Number of community engagement meeting, type (steering committee or general community and in-person or hybrid), **and timing:** [INSERT THE NUMBER OF MEETINGS AND TYPE]

Level of Effort: [INSERT NUMBER OF HOURS TO COMPLETE TASK] hours

Task Budget: $[INSERT ESTIMATED BUDGET]

Task E: Framework for Implementation

Subtask E1: Develop framework and task list necessary for plan promotion that outlines the community approach to sharing the plan internally with staff and externally with the public.

Subtask E2: Sort and provide list of strategies by responsible person/agency that can be shared at a larger staff meeting to review each department's responsibilities for plan implementation. Include the Strategy Implementation (*Playbook* Step 3.3 Develop Implementation Pathway and Performance Tracking) Matrix for each strategy.

Deliverable: Materials described in Subtask E1 and E2 above that are necessary to implement the plan.

Lead: [INSERT LEAD]

Support: [INSERT PEOPLE OR STAFF NEEDED TO COMPLETE THE TASK]

Number of community engagement meeting, type (steering committee or general community and in-person or hybrid), **and timing:** [INSERT THE NUMBER OF MEETINGS AND TYPE]

Level of Effort: [INSERT NUMBER OF HOURS TO COMPLETE TASK] hours

Task Budget: $[INSERT ESTIMATED BUDGET]

Create a schedule based on the tasks above and the primary plan milestones to accompany your scope and help you stay on track. Modify the example below as needed to fit your specific plan.

*This schedule begins at planning kick off as outlined in the scope of work. However, make sure you allow enough time in the planning process for advertising for, interviewing, and selecting a consultant (consistent with the practices typically for retention of a consultant in your community) to assist your community in the plan development process. Retaining a consultant may take eight to twelve weeks depending on the requirements of your community and who has to approve the contract. Also consider reviewing the guide **North Carolina Local Government Contracting: Quick Reference and Related Statues** by Norma Houston for additional guidance on contracting requirements.*

The time to complete each task will vary for each project and community. Factor in staffing levels, availability of your consultant and turn-around time for producing materials and getting feedback from your steering committee and community at large. Relevant Playbook Steps and Exercises are noted in this table for ease of use. Remove them from your final version.

	[Year] Aug.	Sept.	Oct.	Nov.	Dec.	[Year] Jan.	Feb.	March	April	May	June	July	Aug.
Task A: Process and participation													
Task B: Identify and describe resilience vision and goals (*Playbook* Step 1.4)													
Task C: Vulnerability Assessment (*Playbook* Steps 2.1 – 2.3)													
Task D: Resilience Plan													
Task E: Framework for Implementation													
[List other Tasks]													

Schedule of Outreach and Engagement Activities

Supports Playbook Step 1.2: Create a scope of work for your community's resilience planning effort.

Use your answers from the Playbook's Public Participation Exercise and Public Participation Supplement to draft a schedule of outreach and engagement activities. After completing this schedule, make sure to integrate it into the overall project schedule and make revisions based on that, if needed. The timing of outreach and engagement activities will vary with each project and community. Factor in staffing levels, availability of your consultant, and turn-around time for producing materials and getting feedback from your steering committee and community at large.

	[Year] Aug.	Sept.	Oct.	Nov.	Dec.	[Year] Jan.	Feb.	March	April	May	June	July	[Year] Aug. & beyond
Phase 1: Prepare [Describe outreach activities for this phase.]													
Appoint Steering Committee													
Conduct Kick Off Steering Committee Meeting – Orientation to Planning Process													
Conduct Steering Committee Meeting #2 – Community Engagement Approach													
Conduct Steering Committee Meeting #3 – Resilience Vision & Goals													
Conduct community meeting 1 – Resilience Vision & Goals													
Phase 2: Assess													
Conduct Steering Committee Meeting #4 – Identify & Map Hazards of Concerns													

	[Year] Aug.	Sept.	Oct.	Nov.	Dec.	[Year] Jan.	Feb.	March	April	May	June	July	[Year] Aug. & beyond
Conduct Steering Committee Meeting #5 – Identify Critical Assets & Assess Vulnerability													
Conduct Steering Committee Meeting #6 – Review Vulnerability Assessment													
Conduct community meeting 2 – Vulnerablity Assessment													
Phase 3: Plan [Describe outreach activities for this phase.]													
Conduct Steering Committee Meeting #7 – Develop list of potential strategies & prioritization exercise													
Conduct Steering Committee Meeting #8 – Review final prioritized strategy list													
Conduct Steering Committee Meeting #9 – Develop implementation pathways													
Conduct community meeting 3 – Provide feedback on draft strategies, conduct prioritization exercise, and review implementation pathways													
Conduct community meeting 4 – Provide feedback on draft plan													

	[Year] Aug.	Sept.	Oct.	Nov.	Dec.	[Year] Jan.	Feb.	March	April	May	June	July	[Year] Aug. & beyond
Planning Board Meeting													
Town/City Council or Board of Commissioner Presentation													
Town/City Council or Board of Commissioner Adoption													
Phase 4: Implement [Describe outreach activities for this phase.]													
Distribute press release for adopted plan													
Conduct Steering Committee Meeting #10 – Develop and discuss outreach strategies													
Conduct Department Head Meeting with those identified as project lead to communicate their departments responsiblity for implementation. Include manager and finance director as well as others identified													
Conduct pre-budget meeting with project leads													
Conduct quality meetings on project status													

Steering Committee Invitation Template

Supports Step 1.3: Convene a Steering Committee

Use the template and follow the instructions below to create an invitation for your potential Steering Committee members. The template is designed to assist the project lead and core project team in drafting an invitation to potential steering committee members that will help them make an informed decision about their ability and desire to participate. The template includes several best practices for more equitable participation including offering flexible meeting formats and meeting times, providing childcare and refreshments, and sharing detailed information about the time commitment. Delete those that you do not plan to use. The Public Participation Supplement provides additional information and ideas for promoting equitable and accessible participation opportunities.

Dear [NAME],

On behalf of [COMMUNITY, ORGANIZATION, DEPARTMENT], I'm pleased to invite you to serve on the [PLAN, PROJECT NAME] Steering Committee. The addition of your expertise, leadership and strong community connections would greatly enhance our ability to create and implement a responsive, equitable and actionable resilience plan for [COMMUNITY, NEIGHBORHOOD, ETC.].

The [PLAN, PROJECT NAME] Steering Committee will play a critical role in the planning effort. As a member, you can expect to:

- Attend and participate in regular meetings
- Guide plan development
- Share expertise and local knowledge related to key resilience topics
- Get the word out about the plan and opportunities to participate
- Plan, promote, and attend engagement events
- Champion the plan's implementation, help identify resources, monitor plan progress and success over time, and regularly revisit the plan's actions

Steering Committee members can anticipate dedicating approximately [XX] hours per month to resilience planning efforts, including a standing [MONTHLY, BIWEEKLY, WEEKLY] meeting. The [MONTHLY, BIWEEKLY, WEEKLY] standing meeting will alternate between meeting on [DAY/TIME 1] and [DAY/TIME 2] to better accommodate the various schedules of committee members. We also have a remote meeting option through [PLATFORM], if necessary.

To accept this invitation to serve, or if you have any questions or concerns, please reply to [CONTACT] at [CONTACT INFORMATION] by [RESPONSE DEADLINE]. If you want to participate but have challenges preventing you from serving in the role as described, please let us know. We will work with you to find a solution! We also understand if you're not interested or able to participate at this time.

We look forward to your response and we thank you for your continued support and leadership in our community.

[INSERT CLOSING SALUTATION AND SIGNATURE]

Steering Committee Schedule and Agenda Template

Supports Step 1.3: Convene a steering committee. This template will assist the project lead, core project team, and (optionally) the steering committee chair or cochairs in identifying milestone steering committee meetings and creating meeting agenda outlines.

Complete the table below to map out a schedule for your steering committee meetings during the planning process. Align meetings with the process steps described in the scope of work. After completing the schedule, integrate it into the overall project schedule, adjusting as needed. Please note that the timing of steering committee meetings will vary for each project and community. Factor in staffing levels, availability of your consultant, availability of your steering committee to meet, and turn-around time between meetings for summary and production of materials. Relevant Playbook Steps and Exercises are noted in this table for ease of use. Remove them from your final version.

	Milestone	Steering Committee Meeting Topic	Tentative Date (align with scope of work and project schedule)	*Playbook* Step	Associated *Playbook* Exercise
PHASE 1: PREPARE	Conduct steering committee kick off	Kick-Off Steering Committee Meeting – Orientation to Planning Process and review of project scope (*Playbook* Step 1.2).	October {insert date/year}	Step 1.3 Convene a steering committee	
	Develop a public participation framework	Steering Committee Meeting #2 – Community Engagement Approach. Review and receive feedback on the public participation framework (*Playbook* Step 1.2 and Public Participation Exercise).	November	Step 1.2 Create a scope of work for your community's resilience planning effort	Public Participation Exercise
	Identify vision and set goals	Steering Committee Meeting #3 – Resilience Vision and Goals. Review and provide feedback on the draft resilience vision and goals developed by staff.	December (avoid the later two weeks due to the holidays)	Step 1.4 Document your community's resilience vision and goals	Vision and Goal Setting Exercise

	Milestone	Steering Committee Meeting Topic	Tentative Date (align with scope of work and project schedule)	*Playbook* Step	Associated *Playbook* Exercise
PHASE 2: ASSESS	Identify and map hazards	Steering Committee Meeting #4 – Identify and Map Hazards of Concerns. Have committee identify hazards/characteristics, describe occurrences in community (historic and future impacts), determine level of concern.	January	Step 2.1 Identify and map hazards of concern	
	Assess physical and social vulnerability	Steering Committee Meeting #5 – Identify Critical Assets and Assess Vulnerability. Have committee identify critical assets from the built and natural environments through mapping exercise. Have committee assess physical and social vulnerability using the vulnerability table (poster size) exercise.	January	Step 2.2 Assess vulnerability	
	Create a vulnerability assessment	Steering Committee Meeting #6 – Review Vulnerability Assessment. Have committee review the Climate Vulnerabilities Synthesis Exercise and Findings (*Playbook* Step 2.3) as well as the mapped hot spots (*Playbook* Step 2.2).	February	Step 2.3 Synthesize vulnerability assessment findings	Climate Vulnerabilities Synthesis Exercise

	Milestone	Steering Committee Meeting Topic	Tentative Date (align with scope of work and project schedule)	*Playbook* Step	Associated *Playbook* Exercise
PHASE 3: PLAN	Create draft list of prioritized strategies	Steering Committee Meeting #7 – Develop List of Potential Strategies and Prioritize. Have committee develop a long list of potential strategies, based on the foundational characteristics of your plan identified through the Strategy Development Groundwork Exercise. Have committee prioritize strategies using dot voting on sticky notes.	March	Step 3.1 Develop a long list of potential strategies to build resilience Step 3.2 Prioritize strategies for a right sized set of actions	Strategy Development Groundwork Exercise
	Develop final list of prioritized strategies	Steering Committee Meeting #8 – Review Final Prioritized Strategy List. Have the committee review, discuss, and provide feedback on the final strategy list prepared by staff (*Playbook* Steps 3.1 and 3.2).	March	Step 3.1 Develop a long list of potential strategies to build resilience Step 3.2 Prioritize strategies for a right sized set of actions	
	Develop strategy implementation tables	Steering Committee Meeting #9 – Develop Implementation Pathways. Have the committee participate in the Implementation Workshop Exercise to develop implementation pathways for each strategy. Have the committee review and provide feedback on the performance metrics developed for each strategy.	April	Step 3.3 Develop implementation pathway and performance tracking	Implementation Workshop Exercise Communicating Progress Exercise
PHASE 4: IMPLEMENT	Develop and discuss outreach strategy	Steering Committee Meeting #10 – Develop and Discuss Outreach Strategy. Have the committee participate in a brainstorming activity to identify ways to share and promote the plan in the community.	July	Step 4. 1 Build local interest and desire for implementation	

Vulnerability Assessment Table Templates

Supports Playbook Step 2.1: Identify and map hazards of concern. Fill out the template below with your community's information and delete the examples provided.

Hazards of Concern Table

Hazards and Key Characteristics	Past Occurrences and Future Projections	Effects and Spatial Considerations	Priority
Hurricane *Key Characteristics: High winds, storm surge, shoreline erosion, heavy precipitation*	*PAST- Three hurricanes/tropical storms since 2010; more frequent, high intensity rainfall events* *FUTURE- Hurricanes are expected to be more intense and frequent. (Utilize the* ***North Carolina Climate Science Report*** *or* ***RISE Regional Vulnerability Assessments*** *for each region to address future impacts)*	*Flood damage, road washouts, loss of power, crop loss* *Community-wide flood damage, road washouts, loss of power; White Birch subdivision access cut off during hurricanes and large storms; Jones Beach especially subject to erosion*	*High*
[INSERT HAZARDS AND KEY CHARACTERISTICS]	[INSERT PAST OCCURANCES AND FUTURE PROJECTIONS FOR EACH HAZARD]	[INSERT EFFECTS AND GEOGRAPHIC SCOPE FOR EACH HAZARD]	[INSERT PRIORITY (HIGH, MEDIUM, LOW) FOR EACH HAZARD]

Supports Playbook Step 2.2: Assess vulnerability. Fill out the templates below with your community's information and delete the examples provided.

Physical Vulnerability Table (Baseline Analysis)

Example Hazard: Hurricane and riverine flood for a community in the coastal plain		
Asset at Risk	**Address/Location/Ownership if applicable**	**Impacts and consequence to community**
Structures and Critical Facilities		
Housing on the south side of town	*Between Main Street and the river/Private ownership*	*Potential to displace over 200 households through flooding*
Critical Facilities and Infrastructure		
Elementary School #2	*64 Smith Street/local public ownership*	*Potential to flood in 100-year flood. Impact would disrupt education and cause community to revert to online learning; cost to repair or rebuild likely over $1m.*
Natural Resources		
Marsh along River Road	*Between Green Street and Church Street*	*Potential to lose the protective value of the marsh to River Road and the homes on the west side of River Road.*

Social Vulnerability Table (Baseline Analysis)

Population	Locations with Higher Concentrations of Population	Sensitivities to Climate Hazards
Nursing Home	*Sunshine Meadows Nursing Home- off of River Road*	*Nursing home is at risk of being cut off from road access to the hospital during a flood event.*

Strategy Implementation Template

Supports Playbook Step 3.3: Develop implementation pathway and performance tracking. Use the template and delete content that you do not plan to use.

Strategy Implementation Table

Strategy: [Fill in the strategy]	
What organization or department will serve as the implementation lead for this strategy?	*Identify the organization or department that is or may be responsible for leading implementation of the strategy. In internal notes, include specific names of people who will have a role, because it's important to engage them now, rather than after the plan is published. Do they have the capacity to take on this action or project? For any publicly published documents, do not include specific individual's names, but rather the organization or department. Does it have the capacity to take on this action or project?*
Who will provide implementation support for this strategy?	*Document the organizations, departments, agencies, and staff who are needed to implement the strategy. This may include existing staff, a hired consultant, and partners listed in Appendix A, among others.*
What is the implementation time frame for this strategy?	*Break down each strategy or project into achievable tasks and phases in distinct time periods. Include gathering needed resources in your timeline (e.g. going through the budgeting process or applying for grants or finding an external partner to support your effort).* *Immediate Next Steps (0-6 months)* *Short Term (6 months-2 years)* *Longer Term (2+ years)* *Consider which projects would have an immediate start and which you will wait on.*

Strategy: [Fill in the strategy]	
What is the estimated cost to complete this strategy?	*Estimate financial and human resources needed to implement each strategy. If you do not know what resources are needed, make this research an immediate next step. Look for projects like yours in the Idea Book's case studies. They might help identify potential project costs.*
What other implementation resources might be needed to implement this strategy?	*Consider personnel, leadership, community/political support, technical expertise, data/modeling, additional research or planning, or further conversation with key stakeholders.*
What funding sources could be accessed to implement this strategy?	*Identify possible funding sources, including local budget, grant funding, integrated with existing budget items like capital improvement, user fees, or public-private partnerships. Document specific details for the funding strategy, such as the names of grants and the calendar for budget planning in your community.*
What would moving in the right direction look like for this strategy?	*Briefly describe what moving in the right direction looks like for this strategy. Think broadly. You will explore measures of success in more detail in the next step.*

Example Poster for Implementation Workshop

Supports Step 3.3: Develop implementation pathways for each strategy in the plan. Use the template and delete content that you do not plan to use.

Example Poster for Implementation Table

Strategy or Project	Implementation Lead and Support	Implementation Timeline	Estimated Cost and Other Resources Needed	Possible Resources	Direction Check
Include resilience as part of capital improvement scoring process	*Budget & Management (Andre Williams, Director)*	*Research models and provide report to council and mayor* *Pilot prioritization process* *Assess progress and success*	*Support from Council* *Staff time to research and write language* *Training or guidance needed for staff?* *Staff time to capture progress and outcomes*	*Planning staff, summer intern*	*More funded projects consider hazard mitigation or resilience*
Conduct an assessment and map drainage ditches and other stormwater conveyance systems.	*Public Works (Susan Harrell, Director)*	*Draft scope of work* *Retain consultant* *Engage the community* *Complete assessment and mapping*	*Council approval* *Staff time to retain consultant, prepare scope, orient the consultant to the project/community* *Cost of assessment and mapping- Approximately $150,000*	*DEQ grant* *Non-profit partner will assist with community engagement*	*Completed assessment and mapping*

Example Metrics Tracking Table for Community Strategies

Supports Step 3.3: Develop performance metrics and communication opportunities. Use the template and delete content that you do not plan to use.

Strategy	Direction Check	Metrics	Tracking and Report Lead
Describe the proposed strategy	*From implementation strategy*	*Identify one or more metrics for each strategy that you know can be feasibly assessed and reported. Also identify the data or resources needed to track and report each metric and how often each will be measured and shared.*	*Identify who specifically will track and report each metric; consider partners or organizations that might help track or report metrics.*
Elevate, enhance, and/or relocate roads most susceptible to flooding or wash out.	Roads/bridges that are passable more days of the year	Number of road or bridge closures per year	Engineer
Address repeated flood risk properties through property buy-outs	Fewer properties at risk for flooding	Number of flood risk properties purchased	Planning Director
Improve business preparedness	Businesses experience less loss and can open more quickly following an event	• Percentage of businesses with disaster preparedness, recovery, or business continuity plans • Percentage of equipment elevated above base flood elevation (BFE) • Time for businesses to reopen after event	Planning Director