Alliance for National & Community Resilience™

ANCR™

Using the ANCR™ Community Resilience Benchmarks® with the NIST Community Resilience Planning Guide

November 3, 2020

Contents

Using the ANCR™ Community Resilience Benchmarks™ with the NIST Community Resilience Planning Guide

Introduction

The Alliance for National & Community Resilience (ANCR) was established to support communities in understanding and improving their resilience. ANCR's primary focus has been on development of Community Resilience Benchmarks (CRBs) —a coordinated set of benchmarks that allow communities to assess their current state of resilience, regional risks and identify a path forward. While benchmarking is a valuable component of a community's resilience initiative, benchmarking alone is not enough to make progress. Communities must undertake a strategic process that sets them up for success.

The National Institute of Standards and Technology (NIST) issued the *Community Resilience Planning Guide for Buildings and Infrastructure Systems* in 2016 to provide communities with a six-step process for setting priorities and allocating resources to manage risks for their prevailing hazards (see Figure 1). The companion *Economic Decision Guide for Buildings and Infrastructure Systems* provides a standard economic methodology for evaluating alternative resilience options for improving community resilience.

While the NIST Guide focuses on buildings and infrastructure, it does provide an effective approach to supporting community-level resilience holistically and for other community functions. As described in more detail below, the ANCR CRB system also addresses social and organizational resilience. We recommend including these aspects as part of the community's resilience planning efforts.

The ANCR CRB system can be effectively used alongside the *Community Resilience Planning Guide* to help establish community priorities, identify metrics and monitor progress. This implementation guide provides communities with an effective approach to implementing resilience plans using the NIST *Community Resilience Planning Guide* and the ANCR CRB system. This Implementation Guide also provides additional insight gained from earlier work of the Community & Regional Resilience Initiative (CARRI), an initiative of the Meridian Institute. Guidance on the benchmarking process itself is contained in the *ANCR™ Implementation Guide: Community Resilience Benchmarks™*.

Step 1: Form a Collaborative Planning Team

Because leadership is critical to building community resilience, the first step is to establish a core team of community leaders to manage and drive the process. While community resilience is informed and executed by the core team, a dedicated community official is needed to provide continuity, elevate the importance of resilience, provide authority for convening stakeholders, and engage public support. Everything flows from this stage and builds upon the relationships and norms established here.

While leadership is essential, so too is the engagement of the community to inform and validate the planning process and get buy in for the investments or measures that will implement the ultimate plan.

The Resilience Leadership Team (RLT) should include representatives from relevant agencies to share results and identify actions that support improvements across community functions. The Mayor's Resilience Cabinet in Washington, DC is one example of such an approach. The Team should also include, either as formal members or as a dedicated advisory panel, members of the community including representatives of business, philanthropy and residents. Special attention should be given to assure that these members reflect the needs and perspectives of all residents of the community—particularly vulnerable or historically marginalized residents.

Figure 1: Community Resilience Planning Guide Steps

Step 1.1 Establishing the Resilience Leadership Team

The RLT is responsible for two major thrusts of activities:

1. Assessment, visioning, planning, and implementation of resilience improvement actions.
2. Engagement of the whole community in the process to strengthen the community's resilience.

A successful resilience effort requires an RLT that has four key qualities:

1. It represents the full fabric of the community;
2. It is committed to achieving greater community resilience;
3. It can mobilize the resources necessary to achieve greater community resilience, both within and outside the community; and
4. It works as a team for the community and is not driven by individual agendas.

The leadership of the effort should reflect the full fabric of the community and be formed in a way that emphasizes inclusiveness. Once the RLT is formed, each major group of stakeholders (e.g., business, non-profits, faith-based community, government, disadvantaged neighborhoods) within the community should be able to look at the team and be confident that their issues and concerns will be represented. Further, the RLT should not include individuals who are regarded as polarizing or divisive.

- Regardless of how ambitious your resilience program is, the RLT should be broadly based and include the diverse interests within your community.

As a group, the RLT should:

- Have a demonstrated commitment to the community;
- Be willing to put in the hard work necessary to achieve success;
- Represent the diverse perspectives of the community;
- Include those who control resources necessary to affect change in the community, and
- Include trusted voices that assure the community that time and resources will be used well.

When considering individuals as potential members of the RLT, look for members who are:

- Recognized as leaders;
- Good communicators and, more importantly, good listeners;
- Willing to work to resolve conflict and strengthen relationships;
- Willing to rise above their own interests to find ways to make the entire community more resilient;
- Skilled at building bridges across diverse interests and finding common ground; and
- Recognized for humility, honesty, and inquisitiveness; a sense of humor is also an important trait.

The number of members on the RLT will vary from community to community. It is most important that RLT members are effective as a group, represent diverse constituencies within the community, and possess the qualities discussed earlier. The RLT needs to be large enough so that each demographic and institutional group believes that their group's perspectives are represented.

If there is no leader within the community for a particular community function (e.g., electricity is supplied by a regional, not a local, entity, or a regional non-profit plays an important role in providing services for your community), take a more regional approach and invite regional or state leaders to participate on your RLT.

A community's resilience journey is ongoing. Thus, the RLT membership is likely to change over time. Champions of a resilience initiative may be useful in the assessment and planning stages but may add little value in terms of carrying out the action plan. Conversely, those members skilled in implementation may lack the vision to discern a desired direction for the community. As one set of problems is solved, others are likely to come to the fore, requiring a different set of resources for resolution. Hence, different leaders may be needed to guide the effort as time goes on.

Step 1.2 Defining the Community's Geographic Boundaries

In Step 2, the NIST Guide calls for understanding the community dynamics that will help drive resilience. In advance of this step, it is important for the RLT to adequately define the scope of the community and the potential constraints on action. Providers of key functions will be identified in Step 2.

ANCR has specifically elected to focus at the community scale, recognizing that communities can take many forms and that responsibility for some community functions fall outside a specific geographic area. This resilience strategy process and the Community Resilience Benchmarks should be generally applicable at the level of a campus to an incorporated city to a metropolitan region to a state. Where practical, the results from individual communities can be rolled up to provide insight on the resilience of a larger area.

Defining and describing a community's boundaries can be useful in several ways:

- To identify significant parts of the community not previously considered during the formation of the RLT. You may think of someone else to add to the group.
- To help define the parameters for benchmarking and resource allocation.

- To help you look at your community in its regional context. If your community is a part of a larger geographic or political entity (e.g., a neighborhood within a larger city or an unincorporated community in a county), it is helpful to identify the community's physical connections to the rest of the region.
- To help you begin to think about what your community can and cannot do. All communities have resources, but many of the problems facing your community are likely to transcend the resources you currently have. As you begin your resilience journey, it may be best to start tackling the things that your community has the resources to change. Early success within your community will give you additional credibility when you begin to seek resources and support from outside the community.

The description of your community's boundaries can take several forms. A Geographic Information System (GIS) map of your community (e.g., a shape file) can be a useful way to describe it. This method helps community members "picture" the community and their place in it. A GIS map can also be useful because it will allow you to prepare overlays of important information (e.g., flood prone areas within your community).

If you don't have access to GIS, then you may be able to use a static electronic file (such as a PDF) that contains a map of your community. You can also prepare a description of your community's boundaries in a basic word-processing document. Whatever form you use, it is important that all RLT members agree with how the boundaries of the community are defined and described.

Step 1.3 Engagement and Awareness Strategy

Reaching increased resilience is a journey which requires participation of the whole community, so one of the most important elements of your resilience program will be your communication with and engagement of your fellow community members. While initially formulated in this step, the engagement and awareness strategy will be further leveraged in the steps that follow.

This guide will help communities develop robust community awareness and engagement strategies. The guide:

- Defines awareness and engagement for purposes of community resilience;
- Presents a series of principles to guide community engagement; and
- Outlines a series of strategic considerations for resilience communications, including:
  - » identifying resilience messages;
  - » selecting target audiences;
  - » identifying desired outcomes for awareness and engagement; and
  - » selecting specific methods for communicating with and engaging target audiences.

- ▶ ANCR Resources:
  - ▸ Identifying Target Audiences
  - ▸ Identifying and Tailoring Methods for Message Delivery

Awareness is critical to successfully increasing resilience within a community. Fundamentally, the goal of awareness activities is to increase community members' and organizations' understanding of resilience, its importance, and its benefits, so they can effectively participate in actions to make themselves and the community more resilient. Equally important is communicating the cost or danger of not undertaking a resilience planning and implementation process. Thus, these activities should be started from the very beginning of a community's resilience improvement efforts, ideally during Step 1 of the process, as soon as the RLT is formed.

In addition to making the community aware of what community resilience is, the awareness activities will also need to foster an understanding of

- How a community becomes more resilient, and
- How individual community members can engage in the process to influence the outcome.

Community engagement is essential to developing a robust and widely accepted resilience program and to motivating members and organizations to act. Engagement activities help

- Develop broad-based community ownership;
- Connect community members;
- Develop trust;
- Form partnerships;
- Solicit input or feedback on aspects of the community resilience program; and
- Gain involvement in community resilience improvement activities.

When carefully conceived, engagement opportunities will complement awareness activities (described above), capture valuable input and feedback from the community that will help design a resilience program, and result in effective participation, involvement and action of community members.

Additional considerations:

- If a public meeting is used to report the results of each step, consider how much advance notice the public should have and when planning for each meeting and the related communications must begin.
- If a website and/or Facebook page will provide links to information about each step of the process, consider the best timing to launch these pages and what will be required to set them up and keep content current.
- If a public meeting or stakeholder meeting will be used to gather input on priorities, consider when advanced planning for the meeting must begin.
- If a survey will be used, consider timing for development and testing, as well as for collecting data and analyzing results.

▶ ANCR Resource: Principles for Effective Awareness and Engagement

Step 1.4 Setting up for Success

The RLT's early actions will define the long-term trajectory of the community's resilience efforts. Establishing expectations and procedures up front will help form a strong foundation for the steps that follow.

Handling of Input and Involvement

Each stage of the resilience process will generate potentially large quantities of information and require many activities. Throughout the process, community members will need to see that their input is being heard, incorporated, and responded to. The community's acceptance of the products and results of the resilience process will depend upon the perceived fairness, openness, and transparency of the process used. The community's receptiveness to messages and willingness to take action to improve resilience depend largely on:

- Transparency and openness of the process;
- Engagement and representation of everyone in the community;
- Inclusion of the community's core values; and
- An iterative process that evolves and adapts with the community over time.

It will be important to identify the process for synthesizing, incorporating, and responding to feedback. Some of the questions you will want to have answers to before the first activity occurs:

- Who will record and maintain documentation of community input and feedback?
- What kinds of documentation will be kept?
- How broadly will it be shared?
- Who decides which input will be incorporated into documents and plans?
- Who determines who will be involved?
- What practices should be instituted to "safeguard" the transparency, fairness, and inclusiveness of your resilience process?

Step 2: Understand the Situation

In this step, the community assesses its risks and its current resilience. The ANCR Community Resilience Benchmarks (CRB) provides communities with a framework for conducting such an assessment. Results of the benchmarking process identify which aspects of the community are resilient and which require further attention.

The NIST Guide recommends that communities understand the social dimensions of the community including demographics and the social institutions that support the community before, during and after hazard events. Some of this work should be completed in Step 1 as you identify the RLT and the community stakeholders that should be involved in the process.

As described in further detail below, ANCR has taken a systems-based approach to community resilience, electing to capture the impacts of hazards and resilience initiatives on members of society from the perspective of each community system. In keeping with the mission of promoting holistic approaches to resilience, ANCR has taken the perspective that important societal issues such as equity and assuring the needs of vulnerable populations are identified and recognized must be embedded across the resilience discussion rather than be a separate initiative. Therefore, the community should look to the individual benchmarks for insight into the types of social demographics and vulnerabilities to consider.

Step 2.1 Identifying Community Functions

It is essential that your community understand and consider explicitly the connections and resources from your region that support your community's daily function. A community's economy usually extends beyond the community's borders and events outside the community can have profound impacts on a community's economic, social, and environmental vitality. Many of the services essential to the community often come from outside (e.g., a regional utility may provide electric power). If a crisis occurs, the speed of a community's recovery may well depend on relationships between community leaders and regional organizations.

ANCR has identified 19 community functions that help define communities and contribute to their ongoing resilience (see Figure 2). Each community function helps sustain the community. By identifying who provides that service for the community and the role each provider plays, you are also identifying a broader group of stakeholders for community resilience.

Figure 2: Community Functions

It is likely that there will be more than one provider for each community service. You should identify points of contact for each. It is important that the RLT recognizes ties that extend beyond the community – in times of distress, the organizations and points of contact identified may be sources of resources critically needed by the community.

One or more members of the RLT should connect with each of the points of contact to brief them on the resilience effort and to ask for their assistance.

- ANCR Resource: Community Functions and Stakeholders

Step 2.2 Identify Metrics

Having a set of metrics early in the resilience process is essential to help identify vulnerabilities and strengths, communicate effectively with stakeholders, and monitor progress. ANCR has gathered subject matter experts to identify the key metrics across the 19 community functions. The metrics contained in the CRB system are intended to be relatively easily to assess by community members involved in the various functions while also giving the RLT and broader community a comprehensive, easily understandable approach to monitor progress.

Based on outcomes from prior steps in this process or unique needs of the community, the RLT may wish to identify additional metrics beyond those contained in the CRB system. Those should be captured and communicated as part of the resilience planning and implementation process.

Step 2.3 Determine Hazards, Assess Risks

While the NIST Guide recommends identifying community hazards in step 3, ANCR contends that understanding hazards and risks are an essential element of understanding the situation and provide an important basis for determining goals and objectives in step 3.

An important part of assessing your community's resilience is determining its risks. Risk is a function of threats, consequences and vulnerabilities.

Potential threats include natural hazards, technological hazards, terrorism, pandemics, and economic recession. You should determine the frequency of occurrence for each hazard – how likely each hazard is to occur.

After estimating the frequency of occurrence, you will estimate the potential level of severity – what the consequences might be.

Vulnerability is the capacity of the community to withstand the disruptive event.

Risks should be determined for both the community and individual community functions. The CRB process will walk through the process of determining the risks to community functions based on the community-level threats identified and the specific characteristics of each individual function. The cumulative results of the CRB process provides an assessment of the community's vulnerability.

Assessing Threats

The community should take a comprehensive approach to assessing its threats that includes both historic occurrences and the likelihood for threats to materialize into the future.

The community should also consider other elements of risk to determine threats to the community. These include potential changes in risk due to climate change (particularly due to sea level rise, frequency and intensity of storms, and changes in extreme heat or cold events) and anticipated changes in population demographics and the building stock. The community should also consult hazard maps developed by federal and state agencies including flood maps developed by the Federal Emergency Management Agency (FEMA) and maps for other hazards contained within building codes and standards developed by organizations including the International Code Council and American Society of Civil Engineers.

Federal agencies including FEMA, National Oceanic and Atmospheric Administration (NOAA), U.S. Geological Survey (USGS), U.S. Global Change Research Program (USGCRP) and Environmental Protection Agency (EPA) maintain some of this information. State agencies and local universities including extension services may be good sources of information as well. The state, county and/or city hazard mitigation plan may already have much of this information.

If you choose to perform a more quantitative analysis, you can use the HAZUS-MH Risk Assessment Tool for floods, hurricanes, windstorms, or earthquakes. The tool can provide maps of areas within the community that potentially would be impacted if one of these natural hazards occurred.

Assessing Consequences

There are a few options for how to estimate the potential consequences facing your community. You may choose to simply use your best judgment to estimate the potential level of severity.

The following guidelines may be useful for this less formal approach:

- High – impacts so severe the community doesn't have the resources to respond or recover and will need outside help.
- Medium – damage so severe that the community is unlikely to be able to recover in 1 to 2 years' time without outside help.
- Low – community has either acted so that impact is low, has resources for recovery, or has made agreements that will provide the resources for recovery.

In addition, you may also choose to do a more formal qualitative analysis like a benefit-cost analysis. FEMA provides tools to help conduct such analysis.

Step 2.4 Identify Key Assets and Vulnerabilities

The CRB system focuses on the overall resilience of the community based primarily on the practices and policies it has in place. At the same time, it is important to identify key physical assets that support community functions. The individual benchmarks can help initiate this process and monitor progress (e.g., Buildings Benchmark requirements 4 and 5 on highly vulnerable buildings and critical facilities respectively). The NIST Guide provides a process for identifying the potential vulnerabilities of the current building stock and infrastructure in Volume II.

Step 2.5 Complete the Community Resilience Benchmark Process

The benchmarking process is described in depth in the *ANCR Implementation Guide: Community Resilience Benchmarks (CRB)* but summarized here to illustrate its integration into the resilience implementation process.

The CRBs are designed to provide a community with a high-level snapshot across 19 community functions. The community functions identified by ANCR are provided in Figure 2 and described in further detail in Appendix A. While ANCR believes these functions represent important aspects of a community, the individual benchmarks may be used individually or in combination depending on the needs of the community. For example, community leaders may recognize that the availability and affordability of housing may be an issue in their community. Therefore, the community may want to initially focus on the Housing Benchmark and related Neighborhoods and Buildings Benchmarks.

The benchmarks for each functional area are structured around requirements (actions, plans, policies, etc.) identified as crucial to resilience within the functional area. The requirements associated with any given aspect of the functional area are organized across three tiers: Essential, Enhanced, and Exceptional. Each "higher" tier demands a greater level of community commitment, investment, and/or engagement to achieve and presumably will have greater impact on enhancing community resilience. Within each Benchmark requirement, to meet the Enhanced or Exceptional benchmark all the requirements of the Essential, or Essential and Enhanced benchmarks, respectively, must also be demonstrated as well.

Acceptable Evidence and Commentary are provided for each of the Benchmark requirements to assist the user in understanding the overall purpose of the requirement and some of the means for demonstrating achievement. In some cases, the community may have identified or implemented strategies that meet the intent of the requirement but may not fit with the identified acceptable evidence. The community should document this alternative approach or evidence.

A community may use the Benchmarks in two ways: as a self-assessment tool or for third-party certification of its resilience. The self-assessment option is intended to provide a community with an indication of its resilience and potential for certification without undertaking the full requirements for certification. This allows communities to inform their planning processes and set a pathway to achieving resilience. In some cases, a community may wish to be formally recognized for its level of resilience and use such results to market itself to potential business and residents.

Regardless of whether the community chooses the self-assessment or certification approach, the CRBs can provide valuable information to inform the RLT and the resilience improvement measures deployed in the steps that follow.

A member of the RLT should be given responsibility for managing the benchmarking process—a Benchmark Manager. At a community level, the process is likely best managed by someone with support from the highest levels of government and with roles and responsibilities that cut across community functions. This Benchmark Manager may reside in the mayor's or city manager's office or serve as the community's chief resilience officer. The Benchmark Manager will be able to provide a high-level understanding of the overall community resilience based on the results from analysis within each functional area. Responsibility for each functional area is likely to be delegated to the relevant department(s) for their review.

Then you will examine how the community functions, and the assets and policies that influence its resilience and how they could be harmed by the most significant threats the community faces.

- Resource: *ANCR Implementation Guide: Community Resilience Benchmarks*

Step 3: Determine Goals & Objectives

Based on discussions amongst the RLT and the results of the benchmarking process, the community is now prepared to have a meaningful dialogue to help formulate an approach to community resilience based on a common vision and a consistent basis of knowledge. Results of the benchmarking process provide a framework for presenting information to the community and a pathway for more in-depth discussion on priorities and potential actions.

Central to engagement of the community in advancing resilience is the establishment of a common vision. A vision that incorporates resilience recognizes the inevitability of change and the need to be poised to respond and adapt to changing conditions.

Because visioning is a cornerstone of good planning and governance, the process prompts the community to revisit its vision in the context of resilience and provides tools and guidance so that it can involve the full fabric of the community in that discussion. The activities in this step include the following:

- Revise community resilience vision (or create a new vision if one does not exist);
- Identify resilience goals;
- Communicate the vision to the community; and
- Obtain community feedback and revise the vision as needed.

Resources include guidance on how to incorporate resilience into an existing vision or create a new vision for a resilient community. The system provides guidance on how to involve the community in the visioning process and communication tools to support community participation.

Communities that have a vision are nimbler and adept at seizing opportunities—be it from a disaster, economic opportunity, or other trend that causes change within the community. Examples from recent crises show that a vision speeds up the recovery process by allowing the community to more quickly start the rebuilding process. Communities that lack a shared vision and experience a crisis are forced to regroup and develop a collective vision for where they should head while simultaneously trying to field response and recovery operations.

Step 3.1 Developing a Shared Community Vision

A vision is a concise expression of a community's aspirations and desired end state. A resilience-focused vision reflects the community's core values, which are critical in the development of a resilience-focused vision. Developed correctly, it should inspire and energize the community to work together.

Having a vision is important for any community. It describes who the community is and what it aspires to become. The vision is the destination in the community's journey to greater resilience, and to reach it, the community develops a "road map" for how to get there.

The development of a shared community vision requires input from the entire community; the process and resulting vision should inspire individuals, families, businesses, and organizations to see themselves included in the vision. Developing a shared vision is a long-term process, so the community should develop the best vision possible given its current situation, needs, constraints, and resources. The vision may need periodic updates to make sure that it represents the community's current conditions.

The visioning process highlights opportunities for anticipating risk, minimizing impact, and for fostering survival, adaptation, evolution, and growth. A visioning process can help a community develop a greater sense of pride, responsibility, and self-awareness. The visioning process is an opportunity to address and capture equity, economic, environmental, cultural, and other community values.

Having a clear sense of direction should help the community make considerable (and faster) progress whenever there is a "bump" in the road. Knowing where it wants to head can also help it make a compelling case for directing resources.

▶ ANCR Resource: Visioning Process Guide

Revising an Existing Vision

Communities that have an existing vision are a step ahead. This guide contains the information such communities will need to revise their existing vision(s) to reflect resilience concepts.

The following actions will help the RLT revise an existing community vision:

- Collect and review the existing vision(s).
- Is the existing vision up to date?
- Does it explicitly describe a desired state of resilience? Is it a long-term vision?
- Does it address the gaps and shortfalls identified during Step 2?

Revise the existing vision to ensure that it considers community representation, values, data, and goals. Make sure to reflect the community's aspirations for a more resilient future.

Table 1 shows questions the community should consider.

Table 1. Visioning Questions for Consideration

Goals	▪ Does the existing vision describe a desired state of resilience (most likely a long-term vision)? ▪ Does it provide the community with guidance for post crisis recovery? ▪ Does it include resilience goals and specific guidance to achieve them?
Representation	▪ Who was involved in developing the community's vision? ▪ Was the full fabric of the community represented?
Values	▪ Does it represent what is most important to the community? ▪ Does it include equity, economy, environment, culture, and other community-specific values?
Data & Self-Assessment	▪ Does it include the gaps and shortfalls identified by the Community Resilience Benchmarks?

Beginning the Visioning Process

Not all communities will have already developed a shared community vision. For those communities, this guide contains the information needed to develop a community vision of a more resilient future.

The process to develop the vision should include:

- Task force/committee;
- Community Resilience Benchmarks outcomes and other relevant community information;
- Visioning workshops that engage the full fabric of the community;
- Community vision statement and articulated resilience goals;
- Community engagement to gain feedback from the community; and
- A community celebration – to celebrate successful completion of the visioning process and to instill a sense of ownership and pride within the community.

In this activity, the Resilience Leadership Team will work with the community to develop a shared community vision to:

1. Identify the desired outcome for the visioning process.
2. Review the Community Resilience Benchmark report developed during Step 2.
3. Select an appropriate visioning process.
4. Conduct activities in the Awareness and Engagement Plan (developed in Step 1) to obtain community input on the vision.

Step 3.2 Identifying Desired Outcomes

The RLT will need to review the activities for each step and determine the need for broader community communication and involvement. This process generally calls for broadening engagement as the community moves through the process.

To help determine at which points community engagement would be effective, the RLT should consider what decisions, documents, or plans would benefit from community input or approval and/or where they would like community members and organizations to take action. The RLT should then determine for each opportunity whether the purpose of the opportunity is to:

- Provide information and increase understanding;
- Gain community input or feedback;
- Enlist participation;
- Solicit action or involvement; or
- Some combination of the above.

Awareness activities should be constructed to distribute information broadly, while effectively increasing understanding. Engagement events should be structured to efficiently gather constructive feedback and spur action from community members. In addition, for each opportunity, there should be clear expectations of how the interaction will occur, how input can be structured and submitted, how members can participate or be involved, and/or how individuals/organizations can take the necessary actions so that each opportunity is as effective as possible.

When thinking about the form that each engagement opportunity should take, it is important to consider:

- What type of feedback or action is needed?
- Who is the target audience(s) that can provide the needed feedback or action?
- How difficult will it be to engage each audience and obtain their feedback or action?
- How will community feedback be incorporated into the decision-making process?
- How will feedback be summarized and/or responded to (if at all)?

Step 3.3 Identify Resilience Goals

Now that a vision has been developed, it is time to think about the resilience goals, the transition from what can be to how the community is going to get there! This information will help to develop resilience goals based on the community's vision of a more resilient future.

Goals help communities that have a clear vision of their resilient future focus on specific actions to reach that envisioned future. For a community seeking to develop resilience goals, it is important to understand that long-term goals are based on the shared community vision. These goals enhance resilience in each focus area.

When developing the community's resilience-focused goals consider the following questions.

- What does the community need to do, short and long term, in order to fulfill its vision?
- Which goals need to be long term?
- Which goals need to be short term?
- Do the goals address the gaps and shortfalls identified during Step 2?

Step 3.4 Communicating and Finalizing the Vision and Goals

Now that you have a draft resilience vision and goals for your community, it is critical that you share them with the community and obtain feedback and buy-in. The RLT's task is to confirm your vision and resilience goals. Revisit the Awareness and Engagement Plan and revise as needed to reflect how you will share and confirm your vision with your community.

Acceptance of the community's vision and goals will depend largely on the:

- Transparency and openness of the process;
- Engagement and representation of everyone in the community;
- Inclusion of the community's core values; and
- Use of an iterative process that revisits the vision over time, as the community changes and grows.

Regardless of where the community begins the visioning stage, the steps described here can be adapted to the community's needs. The level and depth of community involvement in the visioning process will also differ from one community to the next. If community involvement was low during the drafting of the vision, greater engagement may be necessary to gain community acceptance. The broader community needs to understand the draft vision so they can provide input and ultimately develop a sense of acceptance and ownership.

The steps below will help refine how to communicate with community members about the vision/goals and seek their feedback.

1. Revisit the Awareness and Engagement Plan and devise activities to communicate the vision, obtain feedback, and revise the draft vision and goals;
2. Implement awareness and engagement activities;
3. Gather feedback for modifying the vision and goals;
4. Review feedback and modify the vision and goals (as appropriate); and
5. Communicate the vision back to the community and establish a schedule for future revisions.

▶ ANCR Resource: Vision and Goals Communication and Feedback Guide

Step 4: Plan Development

In Step 4, the RLT develops an action plan that lays out a practical path between the community's current state (output from Step 2) and its vision of what it wants to become (output from Step 3). Communities that are already implementing a strategic plan may simply incorporate resilience goals into their existing efforts.

Step 4 takes the resilience goals developed or sharpened during Step 3 and prompts the RLT to develop actions to meet them. It reminds the community of the gaps identified during Step 2 and asks the RLT to develop corresponding actions and sort them into priorities of low, medium, and high importance. The higher-level requirements within the CRB system can provide direction on potential actions to enhance the community's resilience.

The RLT undertakes the action planning process through answering a series of questions (e.g., what are the specific actions that will meet this resilience goal?) and drilling down into greater levels of specificity about what is required to complete each action. As members of the RLT answer the questions, they are simultaneously building the action plan. The activities in this step include the following:

- Identify actions to address resilience goals;
- Identify resources to complete actions;
- Evaluate the factors that will affect the community's ability to execute the actions;
- Develop a prioritized action plan, including a Disaster Recovery Plan that identifies responsibilities for recovery;
- Share the action plan with the community;
- Adjust action plan as necessary to incorporate community feedback and most recent resource estimates;
- Identify success metrics that will guide monitoring and evaluation; and
- Name the people and groups who will take responsibility for each action and work to ensure effective implementation.

Step 4.1 Identify Actions to Address Resilience Goals

Preparing to Create an Action Plan

The RLT should capitalize on planning processes or work already underway in the community. Existing planning processes for capital projects to improve community systems (the siting and construction of a new school or a community facility, for example), plans to strengthen local economic development, or plans for community services may all contain opportunities that can be incorporated into or built upon in the resilience action plan. Community projects and planning processes generally include public engagement and participation that could be good sources of information about community needs and priorities. These processes could be sources of community contacts and participants as well.

The RLT should strongly consider integrating the resilience action plan into traditional community planning, such as local: Comprehensive Planning; Emergency Management Planning, and Continuity of Operations Planning. The resilience plan should be integrated with other community plans including transportation plans, economic development plans, sustainability plans and master plans.

Integrating the resilience action plan into these established planning processes can facilitate plan revision, harmonization, and implementation as well as avoid duplication of effort and conflict between community activities. Additionally, integration can help get new groups of stakeholders involved. For example, including resilience in private sector Continuity of Operations Planning can help engage the private sector in action planning for resilience.

First, the RLT should determine how existing plans relate to community resilience initiatives. The RLT should work to either integrate resilience into the existing plans or incorporate appropriate elements into the resilience action plan.

Planning Resources

FEMA, the American Planning Association (APA) and others have developed planning resources that are particularly useful when integrating hazard mitigation and recovery into existing community planning processes. Resources for action planning include:

- *Planning for Post-Disaster Recovery: Next Generation* developed by FEMA and the American Planning Association including a series of Briefing Papers;
- Hazard Mitigation: Integrating Best Practices into Planning by APA; and
- FEMA has compiled the following resources:
  - Hazard Mitigation Planning Resources
  - Integrating Hazard Mitigation into Local Planning: Case Studies and Tools for Community Officials
  - Local Mitigation Planning Handbook
  - Long-Term Community Recovery Planning Process: A Self Help Guide

While many resources provide excellent guidance on developing an action plan focused on hazard mitigation and recovery, resilience has a much broader scope. The resilience action plan should address all aspects of the vision and resilience assessment, including those that go beyond traditional mitigation and recovery, such as including the full fabric of the community, strengthening social functions within the community, and focusing on returning to a "new" normal as quickly as possible.

In addition to actions to prevent or mitigate damage, the plan should include ways to strengthen the community, so that the community is better prepared to face its hazards. For example, when a community increases its social capacity, it also strengthens its ability to communicate and work together on a regular basis. Thus, the community is better able to organize, cooperate, and recover following a disaster.

A resilience action plan incorporates preparedness, response, and recovery with disciplines such as economic and community development to ensure community vitality and strong social function regardless of what conditions a community may face.

Community Engagement

Engaging a diverse audience and all sectors of the community is critical to action planning. Without sound engagement, there is a real risk that the actions will not encompass the whole community and participation will be limited, profoundly impacting the scope and success of the plan and the overall community resilience effort.

Developing Actions

The action planning process begins with developing a list of potential resilience improvement actions based on the vulnerabilities identified by the Community Resilience Benchmark (CRB) process in Step 2 and the resilience goals that were developed in Step 3. Resilience improvement actions are discrete activities which are measurable and supportive of improving day-to-day community function as well as post-crisis recovery. This "laundry list" of all potential actions will be refined later in the process.

Actions shouldn't be limited to the whole community level; organizational and individual resilience should also be addressed in these actions. The actions should also include responsibilities, funding sources, and metrics to gauge progress. This level of detail is critical, as it provides a roadmap for implementation of the action plan.

There are likely several areas to take action to improve community resilience. From the CRB process, each identified resilience gap is an important cue to develop an action to achieve the needed resilience improvement. Similarly, each of the resilience goals should be addressed in a series of actions that help the community achieve the desired future state of resilience.

At this point in the process, the focus should be on brainstorming actions. Prioritization will come later. All potential actions should be identified, even if they seem infeasible at the moment.

Once completed and implemented, this set of actions should mitigate the consequences of threats, both pre- and post-disaster. In addition, the actions should increase the community's functional capacity and its ability to resist threats, as well as allow the community to bounce back rapidly in the event of a crisis. Not all of these actions may be immediately feasible or financially possible; however, this step of the planning process is an opportunity to take on the tough issues that must be addressed over time. Since the actions will be prioritized by feasibility in the next step, nothing should be taken off the table.

For each action, the estimated timeframe and cost should be identified. These are important considerations when prioritizing actions. At this point, the estimated timeframe and cost may not be known in detail, but as much detail as is known now should be identified and then these estimates refined later as more information becomes available.

- ANCR Resource: Resilience Action Plan Matrix

Recovery Planning in the Action Plan

Regardless of other actions identified, one action on the list should be the development of a recovery plan for the community.

Most communities are accustomed to developing emergency response plans, hazard mitigation plans, continuity of operations or disaster response plans. They may not be as familiar with specific plans for recovery. Resilient communities deliberately plan for recovering the functions, services, activities, and rhythms of day-to-day life. Experience has shown that having a recovery plan in place prior to a disaster can expedite the community's recovery. If a crisis occurs, resilient communities are opportunistic. They consider in advance of a crisis how their vision of a more resilient future can guide the decisions they make and the steps they take to achieve a full recovery.

The recovery plan should address the spectrum of short- to long-term actions needed for recovery. Short-term recovery actions that may be considered include:

- Plans for debris removal and management;
- Establishing damage assessment teams to accelerate the process for identification and replacement of lost or damaged assets; and
- Create continuity of operations plans for government, key businesses, and community services in the immediate aftermath of a crisis.

Longer-term planning looks beyond the initial weeks and months following a crisis and helps guide the community to recover the rhythms of its normal activity – with an eye toward the more resilient future state that it wants to achieve.

The recovery plan should address the significant threats, gaps, and shortfalls identified in Step 2 within the context of the community vision developed in Step 3. Recovery planning should help the community anticipate what impacts crises might have and what actions must be taken to get the community "back in business" as soon as possible. The plan should explicitly consider the recovery of individuals and families; the local economy; health and other social services; the community's built environment, including housing, infrastructure, and public facilities; and the natural environment, including land and water use.

While some recovery planning may have already been done, for many communities, these plans are focused primarily on short-term recovery. If a plan already exists, it should be reviewed to determine whether it fully addresses the recovery considerations of a resilient community.

Additional Resources for Recovery Planning include:

- FEMA guidance includes:
    - National Disaster Recovery Framework;
    - Community Recovery Management Toolkit;
    - Pre-Disaster Recovery Planning Guide for Tribal Governments;
    - Pre-Disaster Recovery Planning Guide for State Governments;
    - Pre-Disaster Recovery Planning Guide for Local Governments;
- After Great Disasters: How Six Countries Managed Community Recovery from the Lincoln Institute of Land Policy;
- The National Voluntary Organizations Active in Disasters Long-Term Recovery Guide;
- Planning for Hazards: Pre-Disaster Recovery Planning by Colorado Department of Local Affairs

▶ ANCR Resource: Creating a Recovery Plan

An important aspect of recovery planning is naming a recovery team in advance of the crisis. The recovery team guides the community's efforts to recover and redevelop in the event of a disaster, starting even before a disaster occurs. In much the same way that an emergency response task force is charged with handling response and the immediate challenges of a disaster, the recovery team guides the long-term recovery through all phases of the process.

The recovery team can help the emergency response task force avoid taking actions that may inhibit recovery and point to actions that could be taken during the response phase to facilitate recovery. The recovery plan should identify the organizations that would be represented on the recovery team, and, if possible, the positions of their representatives (e.g., Economic Development Director). The selection of the recovery team should conform to the guidance for forming the RLT.

Step 4.2 Identify Resources to Complete Actions

Types of Resources

Resources—people's time and effort, money, and equipment that are required to complete actions—are critical to implementation.

The availability of these resources must be taken into account when prioritizing actions. For example, repairing a bridge requires access to specialized machinery. Without this resource (or adequate funding to hire a contractor), the action is nearly impossible, a factor affecting how it should be prioritized.

When assessing resources, the entire community should be examined. The local government, state government, business community, non-profit organizations, colleges and universities, faith-based community, and other community stakeholders all have important resources to offer.

Interviews with potential providers of resources are an important tool to understand the relevant programs, funding sources, and physical resources in the community. Reports, plans, and other community documents are important sources of information on community resources and can be used to inform interviews with local stakeholders. Interviews will also provide the RLT with an understanding of where resilience fits into the existing functions of local organizations and where it could be easily added. Community meetings and discussions, which engage a large group of people, will help identify community resources as well.

Table 2 provides an overview of many of the types of resources in the community and where to go to find more information about them. For example, available staff to carry out an action is an important resource. To learn about what staff resources are available, look at relevant organizations' organizational charts or talk with department heads about who might have time available for resilience improvement activities.

Table 2. Types of Resources for Resilience Action

Type of Resource	Sources of Information
Staffing (sufficient number and training of staff)	▪ Local government organizational charts ▪ Availability of technical assistance from regional or state agencies ▪ Interviews with department heads and relevant staff
Funding Allocations	▪ Annual operating budget ▪ Capital improvement budget ▪ Interviews with department heads and relevant staff
Maintenance / Operations	▪ Existing literature on maintenance costs ▪ Interviews with department heads and relevant staff
Benefit of Mitigation Action	▪ Benefit-cost analysis software/methodology ▪ Judgment of experts ▪ Existing literature ▪ Case studies of similar implemented actions ▪ Economic impact assessment
Cost of Mitigation Action	▪ Order of magnitude cost estimates (e.g., Action A costs five times more than Action B) ▪ Judgment of experts ▪ Local contractors Case studies
Contribution to Economic Goals	▪ Judgment of experts ▪ Evaluation of community's comprehensive plan, economic development plan, and other community plans and policies
Outside Funding Required	▪ Order of magnitude cost estimate ▪ Evaluation of state and federal funding programs

Resources Outside the Community

Outside of the community, there may be both financial and non-financial resources available. There are many government grants, loans, and technical assistance opportunities available for communities that can be applied to resilience activities. There may also be opportunities to leverage private sector funding streams. The following resources document potential funding streams:

- Center for Climate and Energy Solutions, *Financing Resilience*.
- *U.S. Climate Resilience Toolkit, Funding Opportunities*.
- *Financing Climate Resilience: Funding and Financing Models for Building Green and Resilient Infrastructure in Florida*. O'Connell and Connors, Harvard Kennedy School of Government.

Adding Resources to the Action Plan

When actions were initially developed, they were assigned an estimated cost. Now, the sources of funding and other non-financial resources (staff time, equipment, in-kind donations, etc.) should be identified for all actions. Estimated cost of the actions should be refined now as well, if possible.

Step 4.3 Evaluate Challenges, Barriers, and Other Factors that Affect the Ability to Execute

Challenges, Barriers and Other Factors

There are challenges, barriers, and factors other than resources that are also critically important to action plan implementation. Identifying these critical success factors will greatly enhance a community's ability to effectively implement the plan. Such factors include but are not limited to:

- A community's political will to tackle a problem or undertake a specific action;
- Cultural considerations that affect acceptance of a given action; and
- Other intangibles that affect the ability to complete an action.

For example, while it may make the most sense to expand a hospital rather than build a new one, this solution may not be an acceptable action within a historic district.

The process for identifying factors is similar to the process for identifying resources. The same community research and interviews that are undertaken to understand resources can be used to identify factors.

There will not always be enough information to identify the relevant factors for each action. Potential challenges and sources of information to reveal those challenges are outlined in Appendix A.

- ▶ ANCR Resource: Potential Factors Influencing the Feasibility of Resilience Actions

Step 5. Plan Preparation, Review and Approval

While an action plan is a valuable tool, it may present an overwhelming list of things to do and may require unrealistic financial support. As a result, actions identified in the plan's development must be prioritized. Prioritization will allow the community to act on the highest impact, most critical, actions first, saving the others for later. Prioritization may also help to tackle actions that give the community "quick wins," thus building community energy to tackle tougher, longer-term problems later.

Step 5.1 Prioritization and Defining Success

Beginning Prioritization

Up to this point brainstorming has been used for action development. Now, as prioritization begins, there are a few questions that should be kept in mind in order to guide the process. The questions below have been adapted from the Florida Department of Community Affairs and the Florida Division of Emergency Management's guidebook *Post-Disaster Redevelopment Planning: A Guide for Florida Communities*:

- Which goal in the community vision does this action address?
- Which need identified in the Community Resilience Benchmarks does this action address?
- Would the action be implemented pre-disaster or post-disaster?
  - » If pre-disaster, what is an estimated start date and duration of the action?
  - » If post-disaster, would the action be implemented during the short-term or long-term recovery phase?
- What agency or organization has the lead responsibility for implementation?

- What resources are needed and are there funding sources available?
- What is the mechanism for implementation (e.g., policy or regulation, program, procedure, etc.)?
- What is the targeted population or organization (e.g., specific jurisdiction, geography, or group)?
- Is participation required or voluntary?

Prioritization is the step where the brainstormed list of potential actions becomes a true action plan. There are many different ways to prioritize actions and many communities, particularly local governments, may already have a prioritization system in place. If this is the case, this system should be used for developing the resilience improvement action plan as well.

- ▶ ANCR Resource: Sample Prioritization Matrix

Prioritizing Actions

Based on the resources and factors identified in the previous steps, the RLT will create a prioritized action plan, outlining the actions for immediate implementation. Some actions will be ready for immediate implementation while some will drop lower in the list. While some actions identified with low priority will fall "below the line" of implementation in the final action plan, none should disappear entirely.

Recovery planning should be prioritized as an action in the final action plan since it is potentially high impact and low cost.

Selecting Metrics to Evaluate Success

Now that actions have been identified to address the resilience goals, the resources needed to complete these actions are identified, and the factors that will affect the ability to execute the action plan have been evaluated, it is time to consider metrics. How will the community know if it is reaching its goal to become a more resilient community?

Reaching higher levels of performance in the Community Resilience Benchmark (CRB) process can be one means of measuring progress. The community may identify additional metrics based on the specific and unique details of the action plan.

The following steps will help develop the necessary metrics to evaluate progress:

1. Define success (using the vision and resilience goals)
2. Identify project milestones
3. Develop success indicators
4. Adjust the action plan

Define success (using the vision and resilience goals)

Always keep in mind that the overarching measure of success is a more resilient community.

Defining success is a critical component of the evaluation process. To develop a realistic definition, the vision and resilience goals developed in Step 3 should be revisited. The vision and goals describe what is important to the community and where it is heading.

When measuring success, there are three questions to ask:

1. Was the action completed on time?
2. Was the action completed on budget?
3. Did the action produce the desired result? Did it achieve its resilience goal? Did it improve the community's resilience?

For some actions, success will be self-evident. Short-term actions may be successful as long as they are completed on time and with the available resources. However, defining success for longer-term actions is more complicated. For multi-year actions, setting short-term supporting goals allows the community to track interim progress. Keep in mind that some actions will require on-going maintenance efforts to assure their long-term success.

Be aware that completion and success are not the same thing. Completion signifies the conclusion of action(s) to implement the action plan on time and within budget. Success means implementing action plan deliverables to a level of quality that meets the community's needs and expectations for increased resilience.

Once success is defined for the actions, milestones will be developed to measure completion and indicators to measure success of these actions.

Identify project milestones

Project milestones are scheduled events that indicate the completion of an action plan item. They are measurable and observable tasks that serve as progress indicators. They are checkpoints to make sure that the implementation of the action plan is progressing at an acceptable pace. These should be tracked as part of a project management system, similar to other community projects.

Develop success indicators.

Developing appropriate success indicators will require an alignment of the community's resilience goals with social, organizational and infrastructural resilience benchmarks generated in the CRB process. A success indicator will need to be identified for each action. Success indicators suggest not only that the action has taken place, but more importantly, that the action has successfully improved some aspect of the community's resilience. Success indicators may be qualitative or quantitative.

Quantitative and qualitative indicators will help the community measure the substantive improvements taking place (e.g., number of historic homes restored, number of participants in neighborhood associations, etc.) as well as the more subtle improvements such as an increased sense of community.

Be aware that looking only at positive trends may mask negative issues that also need to be addressed, so both positive (e.g. increased number of individuals and families with an emergency preparedness kit) and negative (e.g. increased number of individuals living in flood plains) indicators should be used.

Adjust the action plan

Once success is defined, milestones are identified, and indicators are developed, there will probably be places where the actions are not realistic and need additional refinement. Now that there is a solid definition of success and sound project milestones and indicators, it is a good idea to adjust the actions accordingly. This is a good time to make sure that the plan has the staff and monetary resource allocations necessary for evaluation.

Step 5.2 Socializing the Action Plan within the Community

Revisit Your Awareness and Engagement Plan

Now that the draft action plan is complete, it is critical to share the plan with the community and gain their support for the actions. The Awareness and Engagement Plan is used to identify the activities necessary to share the action plan with the community. This process will be similar to the process for communicating the draft vision and resilience goals in Step 3.

Adoption of the Action Plan and willingness to implement it (as with the vision and resilience goals in Step 3) will largely depend on:

- Including the community's core values in the action plan;
- Engaging broad segments of the community; and
- Conducting a transparent and open process.

This will likely involve using an iterative process that adjusts the plan over time.

Awareness and Engagement Goals

The awareness and engagement activities must:

1. Create awareness and understanding of the activities that the community is taking to strengthen its resilience, and
2. Encourage community members and organizations to carry out individual resilience activities and, where appropriate, find people to help with implementation.

The broader community needs to understand the draft action plan, so they ultimately develop a sense of acceptance and ownership and will participate in carrying out the actions. Specific awareness and engagement activities should be carried out with organizations within the community who will be needed to help carry out some of the proposed actions.

The awareness and engagement activities undertaken will help determine who should be recruited for implementing each of the proposed actions and which organizations and individuals need to be involved in the work groups formed to carry out the proposed actions.

Revising the Awareness and Engagement Plan

The information within the Awareness and Engagement Plan should be reviewed and refined based on these awareness and engagement goals and what has been learned from the previous stages. Changes should be considered in:

- Process
- Messages
- People
- Methods

Parts of the Awareness and Engagement Plan may need to be modified to support action plan development. Be sure to consider whether any changes are needed in:

Process – The process designed to engage the community should be open and inclusive. Community members should feel that their opinions are welcome and valued. How the feedback gathered will be used should be explained up front and any changes in the action plan should be explained to the community.

Messages – The message should be tailored based on the goals of 1) building awareness and support and 2) motivating participation and leadership.

People – The critical community members who must be informed in order to gain support for the action plan should be determined. People who should be recruited for implementation (as a work group leader or participant) should be identified as well.

Methods – The methods that are best suited to achieve the goals of awareness and participation should be decided upon. Methods which allow the plan to be broadcast across the community should be considered, in order to receive broad attention and support. Methods that will allow the broader community to comment and provide input on the plan should be included. Additionally, specific individuals whose help will be needed for implementation should be targeted.

Step 6: Plan Implementation and Maintenance

Once the community has established its action plan, the elements of the plan must be executed to realize the resilience vision. This step includes building awareness and engagement in the community and identifying parties responsible for implementing the components of the action plan. In many cases, these responsibilities should permanently reside with the responsible parties rather than the RLT. The RLT (or a designated person or department) should retain its function as a coordinating body with responsibility for monitoring progress, communicating with the community, managing the benchmarking process, and maintaining institutional knowledge.

Step 6.1 Responsibilities Assigned and Accepted for Each Element of the Action Plan

The responsibility for implementation will fall to designated bodies whether work groups, governmental departments, or community organizations. While these groups may include or be led by members of the RLT, these groups are distinct entities tasked with the implementation of specific actions. The RLT may either nominate all members of the implementation work group, or they may nominate one person or organization to lead each action. If only the leadership is nominated, this person or organization must identify the other members of the group.

Forming the responsible groups provides a valuable opportunity for the RLT to invite new participants into the process. Participants for specific groups will most likely need to include those with knowledge and expertise specific to the action being implemented, including organizations which have authority and/or responsibility for a particular issue. New participants bring a fresh perspective and subject matter expertise to the process. Well selected implementation work groups are critical to ensuring effective implementation.

Formalizing Action Ownership

Before implementation begins, it is important to confirm and clarify the responsibilities for actions in the plan. This way, all responsible parties are aware of the scope of their work and the responsibilities they have accepted.

A formal way to clarify and confirm responsibilities is through a Memorandum of Understanding (MOU). This document is a voluntary, non-binding agreement that lays out responsibilities and commitments of the various parties involved. Whether or not an MOU is used, the RLT should clearly articulate the purpose of the action, the goal it is aimed at achieving, the timeline that is estimated for completion, the responsible parties who need to be involved, and metrics for success.

Transitioning to Implementation

Now it is time to begin implementation of the action plan. The action planning process is designed to produce results, not just a report. Therefore, implementation is critical to the action planning process. In this step, the prioritized action plan, with clearly identified responsibilities, timelines, and funding sources, will be prepared to be put to work.

Transitioning Ownership

While the Resilience Leadership Team has been the steward of the process thus far, implementation most likely requires a different organizational structure. As with creating the implementation work groups, this transition provides a valuable opportunity to adjust the leadership of the resilience effort. While some RLT members may be ready to leave their leadership role, others may be ready to step up and take a more active role. Additionally, this transition provides a valuable opportunity for the leadership to adjust and refine its structure.

Step 6.2 Launch Implementation Work Groups

An implementation work group is a group tasked with carrying out a specific action area of the community's plan. Membership of the work groups may include representatives from government, non-profit organizations, the private sector, and other essential groups within the community. Implementation activities include developing implementation strategies, monitoring and measuring progress, as well as reporting on that progress.

Implementation work groups are necessary for the successful execution and completion of the vision, goals, and action plan. Having multiple work groups should facilitate the implementation process and help with the distribution of the workload based on specific areas of focus and expertise. The presence of multiple work groups may also require careful coordination, consistent communication among and across the work groups, and attentive watch from the RLT.

Moving from action planning into the implementation phase requires a careful balance of intuitive foresight and careful project management.

Defining the Work Group

Before each work group embarks on implementation, the RLT should have a transparent process to help define their roles, responsibilities, and expectations. This step will help you organize the work groups so they can begin work.

The following actions will help you define the work groups:

- Determine the type and number of work groups needed to implement the plan.
- Identify who must participate in the implementation process.
- Develop a charter that identifies the work group's purpose, responsibilities, and scope.

Determine the type and number of work groups needed to implement the action plan. Based on the actions identified in the plan, the RLT should determine what kind and how many work groups are needed to begin the implementation process. The type and number of work groups will depend largely on the scope of the community's resilience goals and plan items. For this purpose, categorizing goals and actions may help identify areas of focus for each work group. The RLT may have already begun to identify key individuals and organizations to participate in the implementation process. Depending on the circumstances they may have identified specific individuals to serve as work group members and/or leaders. Every work group should have a clearly designated leader or chairperson.

Identify who must participate in the implementation process. The following questions will be helpful in identifying who should participate in the implementation work groups.

- Who needs to be part of the implementation process because they have:
  - » Natural ownership
  - » Authority
  - » Resources
  - » Knowledge
- Other stakes/interests?
- Who should be represented because implementation will affect them directly?

- Are there regional partners who need to be included?
- What size should the work group be?

Develop a charter or other documentation to define the work group's purpose, responsibilities, and scope. A charter, or similar documentation, will help define the purpose, responsibility, and scope of each work group. This will help ensure that all parties share a clear understanding of their charge and how to fulfill it. Creating the space to identify and address any concerns regarding the work group's purpose and activities will be essential for the successful completion of this step.

It is also essential to identify the roles and responsibilities of key individuals and organizations helping the implementation work groups. If there are multiple organizations involved in the implementation process, a memorandum of understanding (MOU) or other written documentation for each of the groups may be needed. These documents may serve as resources when clarification is necessary. It is critical to define clearly each work group's leader and his or her responsibilities.

Launching the Work Group

Now that you have clarified each work group's scope, responsibilities, expectations, and roles have been clarified, the work groups are ready to launch and begin work.

Each work group should convene, and members should become thoroughly familiar with its charter as well as with the community's action plan and resilience goals to make sure they understand their role during implementation.

Each work group needs to take the following actions to begin implementation:

- Develop an implementation strategy.
- Share their implementation strategy and determine the progress reporting schedule with the RLT.

Develop an implementation strategy. Each work group needs to identify the steps and activities it will need to take in order to implement its portion of the community's action plan. It should distinguish between actions that are ready for implementation and actions that need in-depth consideration and planning.

It is important to look for opportunities to integrate activities from existing plans and processes. By incorporating these actions, less effort and resources will be duplicated. See FEMA's resources on "Implement, Integrate and Maintain Mitigation Planning Activities."

For some implementation activities, the use of project management tools may be helpful to manage the process. Some communities may already use a robust project management system to manage and track similar activities.

Regardless of the project management tools used, the work group should keep in mind the following questions when developing the implementation strategy:

- Steps and activities
  - What are the activities and steps necessary to implement the action plan?
- Funding and resources
  - Are the funding and resources identified in the action plan sufficient?
  - Are the sources for funding and resources in the action plan accurate?
  - Is there a need to identify additional sources?
- Timing
  - Has the workgroup established an implementation timeline?
  - Does each step of the implementation timeline have a target date?

- Who
    - Is the right group of people (organizations, groups, individuals, etc.) involved in the implementation process?
    - Are there additional regional partnerships/relationships that need to be involved?
- Progress
    - How will the work groups measure and monitor progress?
    - When and how will they report on progress?

Share the work group's implementation strategy and determine the progress reporting schedule with the RLT. The work groups should share their implementation strategy with the RLT so they can review and approve it. Upon finalizing approval, the RLT must make sure that the necessary funding and resources are available.

Plans require periodic updates in response to changing conditions, so the work group and the RLT need to determine a progress reporting schedule. As work progresses, updates are especially important for a resilience-focused action plan. Updates will help evaluate the action plan's effectiveness, recalibrate as needed, and keep the work group, the RLT, and the broader community apprised of progress or lack of progress towards improved resilience. Plans without monitoring and progress updates can become outdated and irrelevant.

The following questions will help when developing a progress reporting plan:

- Is the action/project on time?
- Is it on budget?
- What has the work group accomplished?
- What challenges have been encountered?
- What is the approach to overcoming these challenges?
- What additional information does the work group want to convey?
- Does the action plan need to be amended or revised?

Remember to use the guidance for selecting metrics in Step 4 to refine the evaluation and progress reporting plan.

Step 6.3 Implement Awareness and Engagement Activities

Now, the RLT should carry out the activities identified in the revised plan.

Ideally, a mix of methods has been selected that will achieve broad dissemination but still ensure that critical groups are reached for the activities designed to acquaint the community with the action plan and gain their buy-in. A mix of different mediums such as short videos, brochures, public meetings, etc. will increase the effectiveness of outreach across the community. The criteria and protocols established early in the process to govern how feedback is gathered, documented, and handled for inclusion must be clear to everyone.

Since one of the goals in this stage is to gain broad support for the action plan and to enlist community members to take action to increase resilience, the plan should include asking for their action and involvement. It is important to clearly articulate what the community needs to do.

Finding People to Help with Implementation

It is likely that the plan contains actions for which other community organizations' help is needed. To find individuals and organizations that can help lead and support implementation, a series of outreach activities will be needed. This can take the form of one-on-one and group discussions to explain the resilience effort.

The groups who assume responsibility for specific actions may have information and requirements that affect the specifics of the action plan. These exploratory discussions may result in adjustments to the specifics of the action plan.

Relationships are a tremendous asset. Trusted advisors can help determine who can support and lead implementation. Engagement activities should be used to cultivate critical relationships around specific actions, if they do not already exist. Key allies can help ensure the action plan will hit the mark and meet community expectations, building the foundation for the community roadmap to resilience.

Community engagement activities will help identify people to serve on and lead the Implementation Work Groups. At a minimum, the awareness and engagement activities conducted in Step 4 should aid in identifying who should lead the implementation of each action in the plan.

Again, be sure to keep in mind the entire fabric of the community and the needs, experience and knowledge of populations that may not have the resources or the voice to engage in execution of the action plan, but who will be affected by the outcomes.

Step 6.4 Adjust Action Plan as Necessary

As a result of the awareness and engagement activities, several kinds of feedback and information may have been gathered that can strengthen the action plan and its implementation:

1. General input and feedback on the overall acceptability of the plan.
2. Feedback on specific elements of the plan, including suggestions for adjustments.
3. Reconnaissance about who is ideal to lead and participate in implementation.
4. Requests from individuals and organizations who want to be a part of implementation.

It is essential that all the feedback and input are documented and handled according to the criteria identified in the Awareness and Engagement Plan. Possible requests for more information about resilience or questions about involvement and participation should be followed up on quickly. Where appropriate, the action plan should be adjusted based on the feedback received.

Any adjustments to the plan should be communicated back to the community.

Tracking and Communicating Success

So far, the work groups have identified outcomes, developed a strategy for implementation, obtained approval from the RLT, and received the necessary funding and resources. They are now ready to begin work!

As implementation begins, a few quick, early successes could give the process a boost and help maintain momentum. One of the most important things each work group will do, in addition to implementing the plan, will be tracking and communicating success.

Communicate

Frequent communication is crucial for the implementation process. Each work group may need to review the Awareness and Engagement Plan to devise a strategy and identify actions and tools necessary to keep the communication – with the RLT and broader community – flowing. Additional guidance for awareness and engagement activities can be found in Step 1.

Engage

If they aren't already represented in the work group, additional public-private and/or regional partners, such as community volunteer groups and businesses, may be needed in order to implement the action plan. Everyone involved must be thoroughly familiar with the action plan and their role to implement it.

Track

It is important for the work group to track the progress it is making. As the work group tracks progress, it should use the guidance provided in Step 4 for selecting metrics and evaluating success to assess progress and develop reporting timeline.

The RLT and the broader community will expect periodic updates on the progress made to date. As a consistent part of the journey toward greater resilience, the work groups should report to the broader community on progress made. Sharing the successes and challenges of the implementation of the community's action plan is important for keeping community members engaged; nothing is more exciting and energizing than seeing and hearing tangible evidences of accomplishment and improvement.

If the work group already has a robust project management tool with reporting capabilities, use it. During implementation, work groups may have discovered the need to revise or make additions to specific items within the action plan. The work groups should recommend changes, as needed, within their reports to the RLT.

The work groups and the RLT will have to decide on their communication strategy to report progress to the broader community. The Awareness and Engagement Plan and the communications strategy will be useful as they work on this important aspect of the implementation process.

The following questions should be addressed in the progress report:

- Is the action/project on time?
- Is it on budget?
- What has the work group accomplished?
- What challenges have they encountered?
- What is the approach to overcoming these challenges?
- What additional information does the work group want to convey?
- Does the action plan need to be amended or revised?

Step 6.5. Evaluate

Step 6.5 is the phase of resilience building that is ongoing. On an annual basis, as well as when individual projects are completed, the Team evaluates progress toward achieving the community's shared vision and reports that progress to the community. The Team should continue to use the assessment tools from Step 2 including the Community Resilience Benchmarks (CRBs) to monitor progress. Periodically the Team should return to an earlier stage in the process including reviewing goals and objectives (Step 3) and planning (Step 4) and revise the action plan based on updated findings. This step also includes tests and exercises to help the community monitor its resilience improvement progress and resources for conducting a post-crisis assessment if the community experiences a crisis or other disturbance.

Activities in this step include the following:

- Monitor progress of individual actions and the overall resilience program;
- Return to an earlier stage for refinement (if needed);
- Request third-party monitoring and evaluation;

- Identify how to test the community's resilience against threat(s);
- Test resilience and recovery against threat(s) and evaluate the results (or if appropriate, conduct a post-crisis assessment of community performance); and
- Revisit and revise goals as necessary.

Benefits include the ability to incorporate resilience considerations into existing tabletops or other exercises and the capability to roll the outcomes from the tabletops and exercises directly into a revised action plan.

Continual Improvement

Implementing community resilience is not a one-time initiative. Communities are constantly evolving as new business and residents move in; the local, regional and national economy changes; hazards, risks and vulnerabilities shift; societal expectations adjust; and technologies and practices progress.

The six-step process outlined above should set the stage for an ongoing cycle. Outcomes from the evaluation process in step six should form the basis for a new round of implementation starting with a new assessment in Step 2. While the participants in the initial organizing and leadership team established in Step 1 may change over time, hopefully the overall function remains in place to execute the ongoing pursuit of community resilience.

Certification under the CRB system is valid for a period of three years, but communities are encouraged to use the benchmarks in the intervening years to monitor their progress and inform decision making. This approach will also help streamline the re-certification process.

Conclusion

Congratulations on starting your community's journey to enhanced levels of resilience. The *NIST Community Resilience Planning Guide for Buildings and Infrastructure* and the ANCR Community Resilience Benchmarks provide a set of resources to help guide the resilience planning and implementation process.

ANCR would appreciate your feedback on this implementation guide and the CRBs as you work your way through this six-step process.

---

[1] National Institute of Standards and Technology. Community Resilience Planning Guide for Buildings and Infrastructure: Volumes I and II. NIST Special Publication 1190. 2016.

[2] National Institute of Standards and Technology. Community Resilience Economic Decision Guide for Buildings and Infrastructure Systems. NIST Special Publication 1197. 2015.

[3] Developing the Mitigation Plan: Identifying mitigation actions and implementation strategies. Federal Emergency Management Agency. 2003.

[4] https://www.floridadisaster.org/globalassets/importedpdfs/post-disaster-redevelopment-planning-guidebook-lo.pdf

[5] https://www.fema.gov/emergency-managers/risk-management/hazard-mitigation-planning/implementing

[6] Contact ANCR at ANCR@resilientalliance.org or through the Contact Us page at http://www.resilientalliance.org.

Appendix A: ANCR Resources

- Identifying Target Audiences
- Identifying and Tailoring Methods for Message Delivery
- Principles for Effective Awareness and Engagement
- Community Functions and Stakeholders
- Visioning Process Guide
- Vision and Goals Communication and Feedback Guide
- Creating a Recovery Plan
- Potential Factors Influencing the Feasibility of Resilience Actions
- Sample Prioritization Matrix

Identifying Target Audiences

Identify the target audience(s) important to your resilience improvement process. Think about all the groups and segments which make up your community. If you are unsure of these groups, begin with what you know (being as comprehensive as possible) while searching for other information.

Identify which groups should be targeted for any specific messages associated with each step. Consider which of these groups will be particularly important to reach if your community is going to make progress in improving its resilience. For steps where engagement is desired, be clear about the type of involvement (and its value) that is expected from each targeted group or individual while also considering the benefits and costs for those groups to participate. Faculty at nearby community colleges, non-profit community service groups, or local government community information websites can be good sources of this type of information.

When thinking about who to target for awareness and engagement, some key groups to consider include:

Public Sector Entities

Elected officials and government employees are tasked with supporting and leading their communities. Successful community-based programs usually include and partner with public sector leadership. Public sector leadership includes local and regional government officials; state and federal government representatives; representatives from disaster and crisis response teams, such as fire departments and first responders and community agencies, such as health departments, human services, and economic development agencies.

Private Sector Business and Organizations

The private sector plays a central role in providing jobs and creating wealth within a community. An engaged private sector will help the community better understand its resources and target post-crisis recovery and response to get people back to work, thus helping stabilize the community's economy. In addition to the major employers and small businesses in a community, awareness and engagement activities targeted to the private sector should also include groups which are composed of representatives from business or are aimed directly at business interests such as the chamber(s) of commerce, other business coalitions, and organized labor.

Non-Profit Organizations

Increasingly, non-profits play critical support roles in the community. Sometimes they act unilaterally, but many times, non-profits work in partnership with other non-profits, faith-based organizations, private entities, and local government. Not only do they often provide essential services and functions in the community but in some cases they themselves may be major employers in the area. Connecting with these organizations can facilitate engagement with existing partnerships and relationships for resilience activities. Important non-profits to consider include those that offer health care, human services, economic development, and community organizing support.

Faith-Based Organizations

As with non-profits, faith-based organizations often provide critical community support services such as health care and human services and often have existing partnerships with other community members, groups, and organizations. Faith-based organizations include religious congregations, non-profits, and alliances.

Cultural/Ethnic Groups

Many U.S. communities are multi-cultural or have residents from a variety of ethnic backgrounds. Identify which cultural or ethnic groups may require special attention in your activities to inform and involve their members in improving community resilience.

Community Organizations

There are several community organizations, such as professional associations, social clubs, neighborhood associations, and citizens' organizations that have large constituencies that could be critical to engage in the resilience process. These organizations may not be as obvious or connected to traditional leadership, but they may offer a different way to engage a broader segment of the community.

Neighborhood or Geographic Areas

Some communities have highly developed neighborhood or geographic differentiations that have implications for how people gather information and choose to participate in civic processes. Consider whether your community has these demarcations and plan how you will get information to those residents and how you will motivate them to participate in improving your community's resilience.

Specific Demographic Groups (including special needs)

You will likely need to tailor your communications and your calls to action based on the demographics of your community. Communities with high numbers of retiring baby boomers will need much different methods of communication and feedback than communities composed primarily of young, urban professionals. Consider the key age groups which make up your community and plan for how you will engage them.

Informal Leaders

In many communities, important and influential individuals, social groups, and/or networks may have no formal or official form of identification. Particularly, for some cultures and ethnic groups, community influence and decision-making may reside solely, or at least in part, in these "informal" leaders or networks. These informal leaders and networks can be critical to successful community function and welfare. It is important to understand how these critical informal leaders and networks take shape and influence the community and how best to include them in the process. Engaging the leaders of some of these informal networks could prove invaluable in many communities and is essential in some.

Identifying and Tailoring Methods for Message Delivery

Identify and tailor the method(s) to deliver the messages to the targeted audience(s). For each stage, determine which methods you will use to provide information, gain input, provide acknowledgement, and obtain involvement. A good awareness and engagement strategy will utilize a mix of methods specifically targeted to key audiences.

The selection of communication methods (or modes) should also consider known communication preferences for some population segments. Professional literature or local experts can provide help on matching communication methods to population segments. Some specific methods to consider grouped by those that are most useful for awareness, those most useful for engagement, and those which can be used for both (you may think of others not listed here) are listed below.

Methods Most Effective for Creating Awareness

Traditional Media

Television, radio, and newspapers are important sources of news and information in a community and may be particularly effective in reaching certain groups who do not have on-line communication access. These mechanisms may also be important for populations with older members who tend to rely on these means more than other population segments. Community messages can be communicated through these traditional mechanisms to reach a broad segment of the population.

Displays and Presentations at Related Organizations, Meetings, and Conferences

Look for opportunities to display or present information about resilience and the resilience process at local facilities, meetings, and conferences. For example, the local Chamber of Commerce, Visitors Center, and other groups may be willing to display a poster or “one-pager” about the RLT’s work and or provide handouts for visitors. Similarly, they may provide opportunities to include flyers, brochures, reports, etc., related to the process as handouts for members and guests at their regular meetings and special events. Annual home and garden shows, neighborhood festivals, or other local community events may offer low cost options for community organizations to have booths featuring their work.

The RLT may wish to identify some members who will act as “ambassadors” for resilience, seeking opportunities to make announcements or be a featured speaker about the resilience work at meetings of a wide variety of community organizations. For example, a representative of the local American Red Cross chapter serving on a resilience advisory group in Gulfport, Mississippi, spoke briefly to the Leadership Gulf Coast class about the importance of resilience. Another representative of the resilience effort attended meetings of the local VOAD (Voluntary Organizations Active in Disaster). Conversely, the RLT can support related organizations in sharing information about their work at resilience meetings and activities.

Organizational Constituencies

Community organizations often have large constituencies with whom they communicate regarding a number of issues. These communication channels could be leveraged as a more direct way of targeting important groups or audiences. These include Rotary and other civic organizations, churches, scouting groups, sports leagues, professional associations, neighborhood associations, and many other ways that people gather and communicate within a community. For example, brief articles, news items, or announcements about the resilience initiative and its activities might be included in these organizations’ email or print newsletters, including a link to the RLT webpage.

Methods to Gain Engagement

Survey

Surveys can be used to gather both objective and subjective data on individual, business, and household characteristics, perceptions, and activities. Surveys can be used to gather input from a broader segment of the population. They may be targeted to reach a very diverse audience or specific sectors of the population. Online survey tools such as Survey Monkey provide free or low cost means to develop, test, and implement surveys. For example, this tool has been used by several members of the Leadership Charleston class to create a survey on resilience communications. Results from this survey will be used to better structure community resilience activities in the Charleston community.

Public Comment

Providing opportunities for the public to offer comment, through electronic means, traditional mail, or in-person participation can ensure that anyone in the community interested in providing feedback has an opportunity. An email link on the RLT website, comment cards that are collected at public meetings or mailed in afterwards, and survey questionnaires are all options for collecting public comments.

Methods Effective for Both Awareness and Engagement

Website

It will be helpful for the RLT to have a website to display information about the resilience initiative. It may also be helpful (depending on the makeup of your community) to set up a Facebook or other social media page for the initiative. These pages allow their users to indicate support for an initiative (helping to build awareness and support), receive alerts about updates, provide mechanisms to quickly spread news about the initiative, and provide a link to the initiative's main website.

Social Media and Online Tools

Increasingly there are many new ways to communicate electronically. Online communication can be tailored to specific audiences or made widely available to reach a broad audience. Social media and online tools can be time-consuming, but they are often available at low to no cost. These means can be very important for reaching younger segments of the population. One caution is that they must be kept up-to-date to be useful; however, with so many options, there is a great opportunity to be targeted and efficient with awareness efforts. Some tools to consider include:

- E-Mail (such as group e-mails or neighborhood list-serves)
- Online discussion groups (such as Google Groups)
- Social networks (such as Facebook and LinkedIn)
- Blogs (through services such as Wordpress or BlogSpot)
- Micro-blogs (such as Twitter)

Social Networking

Blogs (Wordpress, BlogSpot), micro-blogs (Twitter), and social networks (Facebook and LinkedIn) provide new opportunities to engage with communities and their members. These tools can help target a broader and/or different segment of society. It is important to note that social networking technologies take work and need to be tended and responded to as diligently as other, more traditional engagement methods.

Public Meetings

Public meetings may offer a more personal environment to share messages about resilience and the process and will likely be an important component of your process. Public meetings are open to the community at large and can be used to educate, collect feedback, generate discussion, and serve as a space to develop partnerships and relationships.

These meetings may be large "town hall" conversations or they may be smaller gatherings of work teams, committees, or discussion groups. Steps 3 (Engage) and 4 (Plan) will likely require and benefit from the use of public meetings, but group activities may be scheduled periodically throughout the process to present results to the general public and other key stakeholders.

Determine at the outset what types of meetings you may want to hold, and at which points in the process you will hold them. Think about whether the planned meeting is an open meeting, by "invitation only", a working meeting, etc. Be sure to consult with and abide by "sunshine laws" and other regulations which affect meetings involving government agencies and participants.

Stakeholder Meetings

Similar to public meetings, stakeholder meetings can be used to educate, collect input or feedback, generate discussion, and provide an opportunity to develop partnerships and relationships; however, in some instances it may be helpful to limit attendance to relevant stakeholder groups or representatives in order to keep the meeting and feedback process more manageable. Keeping the meeting to a certain size may require some pre-work to explain the process to the community or affected stakeholders so as not to generate controversy.

The RLT may choose to convene groups of stakeholders for one-time meetings or the groups may have longer commitments for a series of meetings. For example, the RLT may wish to appoint a community resilience advisory group with representatives from key public, private, and non-profit organizations. This group might meet periodically with the RLT to provide input on the resilience process and assist with awareness and engagement. Where relationships are already established among participants, consider the use of on-line webinars in addition to public meetings. Consider also the use of private websites and online discussion forums to support such stakeholder groups.

Collaborative Decision Making

Collaborative decision making can be used with key stakeholders to work through challenging decisions involving multiple points of view. This collaboration can take the form of public or stakeholder meetings or a series of dialogues. Collaborative decision making is distinguished from other types of engagement by a desire to confer decision-making power to a group of individuals. It can be more time-consuming and often requires that ownership of the process is shared by the group, but it can result in more robust solutions to challenging issues.

Training

Training can be targeted at specific community stakeholders to increase capacity, develop a specific skill set, and/or help groups and individuals engage more fully in resilience activities.

Principles for Effective Awareness and Engagement

Efforts to promote awareness must begin as soon as the RLT is organized and formal efforts begin. In addition, each step of this process will be enhanced by greater community awareness. The following are helpful principles to keep in mind when designing awareness and engagement activities.

Before Starting Community Awareness and Engagement

1. Be clear about the purpose or goals of the communication effort and the populations or communities you want to engage.
    a. Communicate to the community about why participation is worthwhile, recognize the barriers to participation, and where appropriate, establish incentives to support participation.
    b. Be clear about the ultimate goals of community engagement such as, (1) seeking data, information, advice, and feedback to help design programs; or (2) partnering and sharing control with the community.
2. Be willing to become as knowledgeable as possible about ALL the facts, conditions, and characteristics regarding the breadth and depth of your community. Don't rely on just the opinions, perceptions, and facts that you have always held true or are comfortable with.
    a. Resilience is, in part, a learning experience. During this process, your community must be prepared to examine itself in terms of its economic conditions, political structures, social norms and values, demographic trends, history, and experience with engagement efforts.
    b. Learn as much about the community as possible, through both qualitative and quantitative methods and from as many sources as feasible, in order to map community assets, develop a picture of how business is done, and identify the individuals and groups whose support is necessary.
    c. Understand how engaging a community may affect existing efforts and partnerships.
3. Establish relationships, build trust, work with the formal and informal leadership, and seek commitment from your community organizations and leaders to create processes for mobilizing the community.
    a. Be clear about who is engaged, at which points they are engaged, and what their role in the engagement process is.
    b. Respect and involve community members and opinion leaders who understand the community; generate their "buy-in" by developing an ongoing and substantive partnership.
    c. Adhere to the highest ethical standards.
4. Partnering with the whole of the community is necessary to create change and improve resilience.
    a. The individuals and groups involved in a partnership must feel that they each have something to contribute and something to gain. Every party in such a relationship also holds important responsibility for the outcome of an effort.
5. For community resilience efforts to succeed, all people who comprise a community must see resilience as their responsibility.
    a. Community members and organizations need to "own" the issues, name the problem, identify action areas, plan and implement action strategies, and evaluate outcomes.

For Awareness and Engagement to Succeed

6. People in a community are more likely to become involved if they can identify with the issues being addressed, consider them important, and feel they have influence and can contribute.
    a. All aspects of community engagement must recognize and respect community diversity. Awareness of the various cultures of a community and other factors of diversity must be paramount in designing and implementing community engagement approaches.
    b. Diversity may be related to economic, educational, employment, and health status as well as to differences in cultures, language, age, mobility, literacy, and interests. Engaging these diverse populations (the "full-fabric" of the community) will require the use of multiple engagement strategies.
7. Be prepared to release control of actions or interventions to the whole community and be flexible enough to meet the changing needs of the community.
    a. The community engagement process is a way to facilitate behavior change that is acceptable to the community. Change will occur in relationships and in the way institutions and individuals demonstrate their capacity and strength to act on specific issues.
8. Community collaboration requires long-term commitment.
    a. Building trust and helping communities develop the capacity and infrastructure for successful community action takes time. Before individuals and organizations can gain influence and become players and partners in community decision-making and action, they may need additional resources, knowledge, and skills.

Community Functions and Stakeholders

Title	Function	Stakeholders
Buildings	Ensuring structures are fit for use	Homeowners; realtors; builders and developers; commercial property owners; building supply companies; emergency shelters; housing focused NGOs; civic building permit writers and inspectors
Business	Ensuring economic vitality	Small businesses; major employers; chamber(s) of commerce; business support centers; regional suppliers; economic development organizations; unions; workforce
Communications	Messaging and delivering of information to residents	Those human networks and organizations involved in messaging; media organizations; public information officers; post offices
Communications infrastructure	Enabling communications	Telecommunications providers; telecom regulators; telecom workforce
Culture and recreation	Providing opportunities for physical health and cultural growth	Organizations promoting or providing cultural, recreational or athletic events; libraries; parks and public works departments; youth and adult sports leagues; museums
Education and training	Enable community members to participate in community life and to contribute to the community	Educational institutions; those involved in workforce training (e.g., job training centers, unions)
Energy	Enable the community to live, work and travel	Electricity generators; electric transmission companies; state and local regulators; liquid fuel retailers and distributors; energy workforce; utility support organizations (e.g., decon/waste management, parts suppliers); real estate developers; consumers
Finance	Ensure community has financial resources	Banks; insurers; credit unions; mortgage and payday lenders; local investment entities (e.g., CDFIs, CDCs); credit rating agencies
Food	Ensure the community has an adequate food supply	Food distributors and retailers; food banks; restaurants; public health departments; farmers markets
Governance	Making and implementing community decisions	Organizations involved in making community-wide decisions
Housing	Providing adequate housing to meet community needs	Housing authorities; citizens; housing advocates; employers; financial institutions; developers
Local government	Provide governmental services reliably and fairly	Municipalities, special purpose/assessment districts; regional boards or governmental organizations (e.g., Council of Governments)
Natural environment	Ensuring the health of the community's natural environment	Public health and public works departments; environmental regulatory agencies; environmental interest groups; environmental cleanup contractors; consumers of ecological services

Neighborhoods	Providing social capital and support	Individuals; families; neighborhood associations; crisis shelters; crisis centers; social service providers; labor exchanges
Public health and healthcare	Protecting public health and providing health care	Medical practices; hospitals; community clinics; medical health facilities; hospice and home health providers; public health department; ambulance services; pharmacies; laboratories; nursing homes and rehab facilities; morgues; health care workforce and consumers
Public safety and security	Ensuring community safety and security	Law enforcement; court system; correctional facilities; fire departments; emergency management organizations (including EMTs and CERT teams); private security firms; specialized workforces
Solid waste	Handling and disposing of solid waste	Solid waste haulers, treatment and disposal organizations; recycling organizations; chemical and equipment suppliers; environmental regulators; public
Transportation	Enabling movement of people and goods	State and local departments of transportation; air- and seaport authorities; freight and passenger carriers; road and bridge owners; maintenance and other support contractors; transportation workforce; real estate developers; public
Water	Providing water and wastewater services	Water and wastewater utilities; water quality regulators; water-testing labs; chemical and equipment suppliers; utility workforce; real estate developers; consumers

Visioning Process Guide

In this activity, the Resilience Leadership Team will work with the community to develop a shared community vision to:

1. Identify the desired outcome for the visioning process.
2. Review the Community Resilience Benchmark report developed during Step 2.
3. Select an appropriate visioning process.
4. Conduct activities in the Awareness and Engagement Plan (developed in Step 1) to obtain community input on the vision.

1. Identify the desired outcome for the visioning process.

Building resilience is an incremental process that should help the community move from its current state of resilience to an envisioned higher level of resilience. The visioning process should enable the community to imagine how it will act (Step 4) to become more resilient.

A community's visioning process should be collaborative and transparent about what it is and how it will take place. The vision should represent what is most important to the community and address community-specific values (e.g., a small-town feel, sustainable community, vibrant downtown, etc.).

2. Review the Community Resilience Benchmark report developed during Step 2.

The Community Resilience Benchmark report captures the community's current level of resilience and provides a good overview of its gaps and shortfalls. The community vision needs to include those gaps and shortfalls as well as the aspects of the community that citizens cherish.

A successful visioning process helps a community understand itself and how its current weaknesses, challenges, opportunities, and strengths can help build a better community in the future. The community should carefully analyze its daily operations and the information captured in the CRB report and threat analysis to understand strengths, weaknesses, opportunities, and threats that can affect the community's resilience.

The visioning process is an opportunity to imagine a more resilient future for the community. Consider which elements the community would most want to see improved in the future or which elements the community would most want to capitalize on in the future to promote resilience.

3. Select an appropriate visioning process.

There is no "one way" to conduct a visioning process. The key is to construct a process that is open, transparent, inclusive, and clear and which meets the community's sense of involvement, level of effort, and opportunity for participation.

There are several good resources available to help a community plan for a visioning process.

- The American Planning Association (APA) is a leader in helping communities envision and plan for better futures;
- International City/County Management Association (ICMA) has several resources including Local Planning: Contemporary Principles and Practice;
- "The Community Visioning and Strategic Planning Handbook" developed by the National Civic League;
- The Community Tool Box's "An Overview of Strategic Planning or VMOSA," Chapter 8 Section 1;
- The Pennsylvania Land Trust Association's Community Visioning Guide; and
- The National Academies' *Healthy, Resilient, and Sustainable Communities After Disasters: Strategies, Opportunities and Planning for Recovery*.

4. Conduct visioning activities identified in the Awareness and Engagement Plan.

The RLT should reach out to and educate the community about their daily operations, their strengths and weaknesses, and opportunities for improvement. Charettes, brainstorming sessions, town hall meetings, and public service announcements (among others) can be effective methods for reaching and educating the community during the visioning process and obtaining feedback. The RLT must clearly communicate the purpose and benefits of having a vision and why community feedback is important. It should also describe the process and desired end-state. Table 3 provides some visioning fundamentals to consider.

While the process to develop the shared vision should be an opportunity to hear diverse perspectives within the community, not everyone needs to agree with everything. The final product should be forward thinking, attainable, and adaptable. The vision should "stretch" the community's reach so that it is opportunistic and able to adjust to changing conditions. Finally, as the process for developing a vision takes place, it will likely help spell out the actions that need to be taken next, helping the community transition with ease to the next stage of the process, Action Planning.

Do not be too concerned if developing a full-blown vision seems too difficult for the community at this point. The vision can be refined and improved over time. The important thing is to get started with a fair and transparent process. At a minimum, a simple vision statement should be composed and the community should move on to work on its resilience goals.

Table 3. Visioning Fundamentals

People	▪ Inspired leadership and someone to "run the show" ▪ Representation from the whole community ▪ Support of powerful allies
Values	▪ Responsibility (individual and collective) for the process and its outcomes ▪ Trust, understanding, respect, and hard work
Tools	▪ Positive and action-oriented language ▪ Lessons from past efforts (both successful and unsuccessful)
Goals	▪ Broad community consensus on the vision ▪ Improved collaboration within the community's region

Vision and Goals Communication and Feedback Guide

The steps below will help refine how to communicate with community members about the vision/goals and seek their feedback.

1. Revisit the Awareness and Engagement Plan and devise activities to communicate the vision, obtain feedback, and revise the draft vision and goals;
2. Implement awareness and engagement activities;
3. Gather feedback for modifying the vision and goals;
4. Review feedback and modify the vision and goals (as appropriate); and
5. Communicate the vision back to the community and establish a schedule for future revisions.

1. Revisit the Awareness and Engagement Plan and devise activities to communicate the vision, obtain feedback, and revise the community's draft vision and goals.

By this stage, there should be a better understanding of how awareness and engagement work in the community – i.e., how individuals in the community want to be involved. This is an opportunity to review and refine the initial information within the matrix developed during Step 1. Lessons learned from the previous steps should be used to revise and improve the messages, target audiences, etc.

When refining the matrix, the RLT should consider the following:

- Process – establish the protocols for how community feedback will be collected and included. Not all ideas and input will find their way into the accepted vision and goals, so the RLT needs to decide how this part of the process will work.
- People – determine who will need to be involved as a partner, planner, implementer, overseer, and constituent.
- Methods – decide how and when the community will be engaged. Take into consideration the needs and preferred forms of communication of each segment of the population. For instance, Twitter may be an appropriate way to engage younger people but is not appropriate for boarder engagement, especially of older generations or others with limited access to the internet.

Identify and tailor the method(s) necessary to deliver the messages to the targeted audience(s). Determine which communications methods to use to provide information, gain input, and provide acknowledgement. A mix of methods should be utilized, specifically targeted for key audiences. Make sure to consider the communication preferences for different population segments. Everyone who is willing to provide feedback should be able to do so regardless of age, religion, income, language or cultural background, so the RLT should plan to use feedback mechanisms that will allow each of the target audiences to provide feedback and ideas. Commonly used methods include traditional media (newspaper, radio, etc.), online and social media tools (Facebook, Twitter, etc.), fliers, community forums, and meetings, etc. Consult the "Identifying and Tailoring Methods for Message Delivery" resource for specific communications methods to consider.

2. Implement awareness and engagement activities.

Successful implementation of the activities devised by the RLT will depend greatly on careful coordination. Sharing the protocols for collection and inclusion of the community's feedback (and carefully following them) will build trust and community buy-in to the process. The process should be clear to the community from the very beginning.

During this step, the RLT should carry out its planned outreach activities, giving the community the opportunity to review and provide comments on the draft vision and goals. This is necessary to ensure community ownership and acceptance of the final product.

Given the aim to reach diverse segments of the community, information should be disseminated in different mediums such as short videos, brochures, public meetings, etc.

3. Gather input and feedback and modify engagement activities as needed.

Connecting with the broadest segments of the community is integral to collecting sufficient input and feedback to revise the vision.

While broad consensus is the ideal outcome, keep in mind that it is not possible to please everyone. The goal is to ensure that the process is broadly inclusive, transparent to the community, and carried out in a way that everyone's ideas are handled respectfully. All feedback must be documented.

At the end of this process, it is most important that community members:

- Know about the process;
- Have an opportunity to provide their feedback; and
- Feel that they have been "heard" through respectful engagement and the documentation of their feedback.

4. Review feedback and modify the vision and goals as appropriate.

The RLT should sort through the feedback and determine how to incorporate it into the vision/goals. It is essential to remember that while not all comments and feedback can be incorporated into the vision, they should be carefully reviewed, documented, and handled respectfully.

The focus should be to verify that the vision/goals represent the full fabric of the community and that they support a more resilient future. The feedback received should give an indication on how well the community understands the need to have a resilience-focused vision. If people seem confused about the process or the need for resilience, there may be a need for further education and awareness building activities.

5. Communicate the vision and goals back to the community and establish a schedule for future revisions.

In this last step, the community should be thanked for their input and bring the visioning process to closure. This is an opportunity to remind people why the vision and goals are important.

A resilience vision will need to be updated periodically as conditions within the community change. Some communities may face crises like major floods or a deep economic recession while others may experience more subtle changes like an aging population or increasing migration. Regardless of the circumstances, it is important to determine a specific period for revisions and updates. In some cases, the community may want to specify that they will revise their vision immediately following a crisis.

Resilience Action Plan Matrix

Strategic Outcome Target/Goal							
Result/Impact Indicator							
Outcome Objective(s)	Outcome indicators	Outputs	Activities	Timeframe	Responsible Party	Budget Estimate	Budget Source

Adapted from the United Nations Office of Disaster Risk Reduction

Creating a Recovery Plan

Whether there is an existing recovery plan, or one needs to be developed from scratch, the recovery plan should address the following questions:

Short-term

- Which key aspects of the resilience vision should shape short-term recovery planning?
- Are there pre-existing plans, mechanisms, and processes for rapid damage assessment?
- Have damage assessment teams been identified and trained?
- Are there pre-existing plans and mechanisms (e.g., contracts) for debris removal and management?
- Do the response and short-term recovery plans include access for business owners and critical community service operators to their facilities?
- Does the community and region have a coordinated plan for the return of communication networks for critical business and community service functions?
- Is there a program to encourage and support continuity of operations planning for the community as a whole as well as for key sectors and functions?

Longer-term

- What characteristics of the community are essential to safeguard and maintain?
- What day-to-day activities will need to be maintained or restored?
- What is required to recover these day-to-day activities?
- What essential elements of the community's economy must be rapidly restored?
- What daily functions performed in the community will need to be restored in order to foster a sense of normalcy?
- What steps must be completed in order to restore or recover these functions?
- Are there opportunities that future crises might provide that should be capitalized upon (e.g., building code or land use changes that could be enacted during rebuilding and recovery)?
- What mitigation actions might be taken that would prevent or reduce impacts of future crises?
- What regional actions need to be taken in order to accelerate the return to normal for the community?
- What are the hidden dependencies and interdependencies that may affect the return of critical services, activities, and characteristics of the community?

Recovery planning does not need to be laborious to be effective. The community should consider these questions and document the desired actions and decisions. The plan can consist of bulleted text, lists of actions, or written paragraphs. The important thing is to deliberately consider what the community needs to do in order to safeguard and return to its normal, day-to-day operations.

Potential Factors Influencing the Feasibility of Resilience Actions

The table below provides an overview of many of the types of factors in a community and where more information might be available about them. For example, community acceptance of the proposed action may be critical to success. To determine whether or not there is the necessary community acceptance, interviews with key community leaders within the government, non-profit organizations, and neighborhood advocacy organizations might be used, as well as an examination of community plans and newspapers to determine the viewpoints of community members.

Considerations	Sources of Information
Community Acceptance	▪ Interviews with government staff, non-profit organizations, and neighborhood advocacy organizations ▪ Community plans ▪ Newspaper articles
Adversely Affects Segment of Population	▪ Maps showing demographics (race, age, income, voting districts, etc.) with locations of proposed mitigation actions
Technical Feasibility	▪ Judgment of mitigation experts, scientists, and engineers ▪ Existing literature/studies on the action
Long-term Solution	▪ Judgment of mitigation experts ▪ Existing literature/studies on the action
Secondary Impacts	▪ Judgment of mitigation experts ▪ Existing literature ▪ Maps showing environmentally sensitive resources with locations of proposed mitigation actions ▪ Scientific and/or engineering evaluations
Political Support	▪ Interviews with elected officials ▪ Newspaper articles
Local Champion or Plan Proponent (respected community member)	▪ Interviews with elected officials, community leaders, and private sector participants in planning process
Public Support (Stakeholders)	▪ Interviews with government staff, non-profit organizations, and neighborhood advocacy organizations ▪ Newspaper articles ▪ Public meetings
State Authority	▪ Research of state codes ▪ Contact with state attorney general's office
Existing Local Authority	▪ Research of local codes and ordinances ▪ Local legal counsel

Action Potentially Subject to Legal Challenge by Opponents (stakeholders who would be negatively affected)	▪ Research by local legal counsel ▪ Maps, census, plans
Historic Preservation	▪ Research of local, state, and national regulation ▪ National Trust for Historical Preservation resources on historic preservation and disaster preparedness, recovery, and response - http://www.preservationnation.org/resources/technical-assistance/disaster-recovery/
Land/Water Bodies Effects	▪ Maps, studies, plans ▪ Coordination with state and federal resource agencies, including compliance with all relevant statutes and regulations
Endangered Species Effects	▪ Maps, studies, plans ▪ Coordination with state and federal resource agencies, including compliance with all relevant statutes and regulations
Hazardous Materials and Waste Sites Effects	▪ Maps, studies, plans ▪ Hazardous waste site databases ▪ Coordination with state and federal resource agencies, including compliance with all relevant statutes and regulations
Consistency with Community's Environmental Goals	▪ Maps of land use, zoning, sensitive areas, projected growth ▪ Interviews with government staff ▪ Review of local plans and policies
Consistency with Federal Laws	▪ Contact with federal agencies

Sample Prioritization Matrix

	Criteria									
Action	**Funding Availability**	**Impact on Resilience**	**Political Will**	**Administrative Feasibility**	**Community Acceptance**	**Legal Authority**	**Environmental Benefit**	**Technical Feasibility**	**Score**	**Priority Level**
1	High	High	Low	Medium	Medium	High	Low	Low	16	Medium
2	Low	Low	Medium	High	Low	Low	Medium	Low	12	Low
3	High	High	Medium	High	High	Medium	High	High	22	High

Note: Actions are scored based on the number of “high”, “medium”, and “low” scores they receive, where “high” = 3, “medium” = 2, and “low” = 1