

A Guide to Public Participation in Hurricane Affected Areas



In partnership with:





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ACKNOWLEDGEMENTS

American Planning Association's Planning and Community Health (PCH) program developed this public participation guide to help planners conduct public engagement activities with a special focus on design charrettes. PCH advances practices that improve human environments to promote health and equity through policies, education, and place-based interventions.

This work was supported through the subaward conducted under the National Environmental Health Association's U.S. CDC Cooperative Agreement # CDC-RFA-OT18-1804. APA is grateful to the following partners for their guidance throughout the project:

- **National Environmental Health Association** (NEHA): NEHA's mission is to advance the environmental health professional for the purpose of providing a healthful environment for all.
- **Region II Head Start Association**: The Region II Head Start Association serves early childhood programs in New York, New Jersey, Puerto Rico and the US Virgin Islands.

APA is especially grateful to the following individuals for their invaluable feedback and support throughout the project:

- Arthur Wendel, MD (ATSDR)
- Manjit "Mike" Randhawa, MD (NEHA)
- Rosie DeVito (NEHA)
- Joyce Dieterly (NEHA)
- Andrew Roszak, JD (Region II Head Start Association)
- Ivis Garcia Zambrana, PhD, AICP (The University of Utah)
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INTRODUCTION

Public participation can help communities shape their environments in a way that promotes inclusion and community ownership. Methods for public participation vary depending on the scope of a project, resources for engagement, the final desired outcome, and the level of community interest. In hurricane-affected areas, local context and preferences are important when seeking input from community members. Some public participation strategies may be more successful than others. In some situations, using a variety of public participation methods can help capture diverse perspectives on community issues. This guide provides a variety of strategies, methods, and considerations for engaging the public in hurricane-affected areas.

About the Guide

This guide provides an overview of strategies and methods for public participation to incorporate community perspectives during planning and redevelopment processes. The goal is to build the capacity of planners to conduct public participation processes, especially in hurricane-affected areas. Planners can also use this guide to identify the public participation approach for communities impacted by

hurricanes. A detailed description of "design charrette" as a public engagement tool is provided to help guide (re)development projects.

Planners working in hurricane-affected areas are the primary audience of this toolkit. This guide can also be useful to elected officials, developers, community-based organizations, and other community stakeholders that are engaged in public participation processes.

The guide has the following three segments:

- Public Participation Process: Provides an overview of public participation considerations with a special focus on hurricane-affected areas
- Methods for Public Participation: Provides examples of public participation methods and the criteria to be used to select a method
- Design Charrette Supplementary Guide: Provides a detail description of the process for organizing a design charrette.

These materials can be used in conjunction with other guidance to develop a public participation plan customized for a community.

SECTION 1: THE PUBLIC PARTICIPATION PROCESS

Areas impacted by disasters have an opportunity to recover as resilient, healthy, and more equitable communities. Public participation is central to promoting equitable and healthy development and should consider community needs, stages of redevelopment, and political will.

Overview

Public participation is key to ensuring that investments and developments are in line with a community's vision. Public participation strategies can encourage participants to collectively identify solutions for their communities that will impact community environments including economic, social, and environmental systems. It is necessary to focus on public participation for redevelopment projects because projects that incorporate community values are more likely to encourage a sense of place, generate community buy-in, and encourage ownership of the final product (Herd 2019).

There are a variety of methods and techniques for public participation (see Section 2). It is key to remember that "[t]he choice of method is less important in determining the success or failure of a process than the institutional context, the resources committed, and the detailed design" (Involve 2005). A project may use a series of public engagement activities, ranging from traditional approaches, such as town halls and workshops, to newer methods, such as participatory budgeting and design charrettes, to broaden the appeal and effectiveness of engagement activities with diverse participants (de la Peña, et al. 2017).

There are challenges to implementing meaningful public participation activities—residents may have competing demands on time, agencies may have limited resources, and community stakeholders may have different priorities. Engagement activities may generate conflict in a community, or they may bring to the surface ongoing challenges outside of the scope of the project. Planners have an opportunity to create spaces where community members can discuss priorities, identify opportunities to improve community conditions, and generate consensus among community members.

Public participation processes should aim to gather input from community members early on in a decision-making process so that they can use their local knowledge to inform the process and have a meaningful

impact on the future of their communities. Public participation can encourage a sense of community ownership and build capacity among residents. Further, inclusive and equitable public participation plays an important role in community health. The Inclusive Healthy Places framework identifies public participation as one principle to create a healthy and inclusive public realm. Under this framework, community engagement, civic trust, and social capital should drive public participation (Gehl Institute 2018). Planners should consider incorporating these considerations into public participation processes.

Project teams (including planners and other professionals) can create better products with resident input. Residents are experts on their communities—they understand characteristics that shape the built environment and can propose design recommendations that complement community conditions. Public participation can provide opportunities for project teams to learn from residents and made changes to plans that will benefit a community.

Public Participation in Hurricane-Affected Areas

Public participation can positively impact recovery planning in hurricane-affected areas and can help such areas be better prepared for future hurricane events. Addressing community resilience includes improving access to resources and services, retreating from areas subject to conditions like flooding, and encouraging mitigation and reuse of contaminated areas.

Public participation in hurricane affected areas can take place during post-disaster recovery, following a hurricane, or during pre-disaster recovery, which takes place before a community experiences a hurricane. These two phases are fluid and can happen simultaneously. It may be more challenging to address resiliency in pre-hurricane planning because the community may not see an immediate need. Post-hurricane planning may need to take place in a condensed time period because of the need to rebuild the community. Planners can work to overcome these hurdles.

During pre-hurricane planning, planners can build connections with community members, which can serve as a long-lasting foundation built on trust and mutual understanding. Pre- and post-hurricane planning can work in concert with one another to support the goals of the community, promote resiliency, and encourage an expedited recovery. Communities can consider developing a public participation plan that outlines a strategy for the pre- and post-hurricane recovery planning process (Schwab 2014).

1.1 THE PROCESS

A public participation plan can be a useful tool to identify strategies that meet the desired outcomes. A public participation plan should include the following elements:

- A description of the purpose, context, process, and desired outcome of the public participation process. This will be helpful in identifying public participation activities that correlate with the desired level of participation.
- An outline of intended strategies to conduct outreach. This component should focus on reaching a broad audience within the community and involving stakeholders that represent relevant community perspectives.
- A description of how the project team will use the information from the public participation process. This framework can be used to inform the public of their roles in the process.
- A description of how to communicate public participation impact on the final products. This will connect the public participation process with implementation.

Outcomes from public participation are based on three factors: purpose, context, and process. Understanding the relationship between these factors can help planners develop robust public participation strategies that are connected to existing community conditions. A purpose is a desired change, or changes, that will result from a public participatory process. Context refers to the circumstances that shape a public participation process, including community history, stakeholders, resident values, community conditions (e.g., affected by hurricanes), and existing methods to enact change. Process is how the team will engage a community through participation methods (Involve 2005). These three factors shape the outcome, or how the public participation process results in change. Examples of public participation outcomes include developing new ideas, generating consensus on future activities, and creating partnerships to address identified issues.

Projects may have multiple outcomes with different levels of importance—these may be categorized as "primary" and "secondary" outcomes. Outcomes can occur on a short- or long-term scale. When planning for public participation, planners can consider desired outcomes and timescales, which can inform the type of public participation method to use.

A key consideration for public participation plans is identifying the appropriate level of public participation. The International Association for Public Participation (IAP2) developed a Spectrum of Public Participation that identifies the different levels of participation. The spectrum ranges from "inform" (the lowest level of public participation) to "empower" (the highest level of public participation). Different levels of public participation may be appropriate throughout the life of a project. Figure 2 (on page 6) illustrates the various level of public participation along a Spectrum. It presents the public participation goal of each level, along with the commitment that organizers make to the public when engaging them in the process.

Participants should be made aware of the expected level of participation from the beginning of their involvement—this will help:

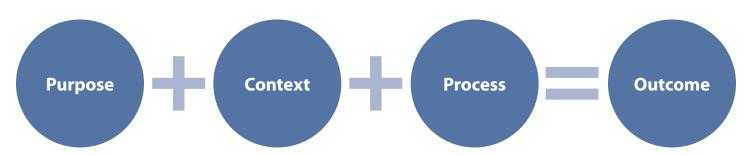


Figure 1. This graphic illustrates factors that, when combined, lead to the public participation outcomes. Source: Involve 2005

IAP2 Spectrum of Public Participation



IAP2's Spectrum of Public Participation was designed to assist with the selection of the level of participation that defines the public's role in any public participation process. The Spectrum is used internationally, and it is found in public participation plans around the world.

	INCREASING IMPACT ON THE DECISION				
	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

Figure 2 The Spectrum of Public Participation identifies different levels of public participation. Source: © International Association for Public Participation (2018)

- Manage expectations for how participants can contribute to a project.
- Set a foundation for a conversation about alternative solutions.
- Provide an opportunity for organizers to share how decision making will take place throughout a project.

Engaging in participatory processes when project decisions have already been made can breed mistrust among community members and may contribute to reduced participation in future community activities. Therefore, it is beneficial to convey the impact that community participation had on previous projects and highlight how a new participatory process could lead to

positive outcomes for a community.

Project details, relevant community data, and alternative solutions can equip participants with the information they need to make decisions about a proposed community change. It may be appropriate to share information, solicit feedback, and collaborate to identify solutions for the community at different stages of a project.

A public participation plan can be a useful tool to create a coordinated effort for citizen involvement. It can help identify opportunities to engage community members at different levels. Public participation plans may be appropriate for activities that impact communities at a larger scale, such as comprehensive or neighborhood plans updates. Municipalities, regions, or states may have predetermined

requirements for public participation. In such cases, if there is flexibility, a public participation plan can help outline a process that suits community needs. The Institute of Local Government (2018) created the Think, Initiate, Engage, Review, and Shift (TIERS) framework for planning public participation activities. They are:

- Think: Assess current conditions and alternatives for public engagement
- Initiate: Generate approach for public engagement
- Engage: Apply public engagement strategies
- Review: Reflect on public engagement activities
- Shift: Use information gathered from the public participation process to create change

Public participation plans can include goals for effective engagement. Goals should be based on project parameters and be SMART (Specific, Measurable, Achievable, Realistic, Time-Bound). Using this model can ensure that project team members have a shared understanding of what the public participation activities will achieve.

the necessity to engage in post-disaster planning, which requires more time for deliberation. This tension can impact public input and engagement. An effective public participation plan should allow a community to heal and to address immediate needs. In circumstances where communities are evacuated, greater participation can be expected only once community members have returned to their homes.

Public participation strategies that account for these

Public participation strategies that account for these challenges can support a prompt and inclusive recovery. It is important to note that conditions after a hurricane may be different than during pre-disaster planning, so planning processes should be flexible enough to accommodate community circumstances. Strategies for public participation in hurricane-affected areas include (Community Planning Workshop 2010; Federal Emergency Management Agency (FEMA) 2011; Schwab 2014):

- Work with communities to identify priorities for longterm recovery planning. This way, planning processes are relevant to community members, which can sometimes result in greater levels of engagement.
- Keep conversations focused on topics relevant to big picture issues. In areas that have experienced a hurricane, community members may be interested in discussing issues other than long-term planning, such as emergency response and short-term community issues. However, the facilitators should lead the group to accomplish the predetermined goals of the activity.
- Prepare for conversations related to preservation of previous community structures and adapting to changing conditions. It is worth highlighting in those conversations

1.1.1 Public participation in hurricane-affected areas

Public participation in hurricane-affected areas can look different than in other communities. Public participation is challenging in such areas because of competing priorities, resource constraints, and the long-lasting emotional, mental, and physical health impacts on residents. Post-disaster conditions can be high-speed, and so the activities that could have spread out over time may need to be expedited. Communities may experience a surge in interest, which can support efficient decision-making processes. However, larger interest from multiple stakeholders can also present a challenge when seeking consensus.

Communities may experience tension between the yearning to start a speedy post-disaster recovery and

CASE EXAMPLE: Waterbury, Vermont

In 2012, after Tropical Storm Irene created significant flooding in their downtown area, the Town of Waterbury engaged in a series of public participation activities, including community visioning sessions, a public meeting, and a "Community Recovery Fair" to identify options for FEMA Long-Term Community Recovery planning assistance (Schwab 2014). This approach for combined public participation activities engaged community members, stakeholders, and decision makers to prioritize and ultimately select projects to support community recovery.

that there is an opportunity to rebuild in ways that will improve resilience to stressors like hurricanes and adapt to changing climate conditions.

- Some recommendations for recovery, such as relocation, may be perceived as a threat to property rights. Involving the public early to consider alternatives for recovery can help address questions and maintain a transparent recovery process.
- Empower community members to share their perspectives and ideas about recovery. Solutions identified by community members can generate community support, facilitating a quicker recovery process.

Communities can identify and implement strategies to ensure that the built environment can absorb stressors

CASE EXAMPLE: Cedar Rapids, Iowa

Cedar Rapids used a variety of public participation strategies to recover after heavy flooding in 2008. Stakeholders from a variety of agencies and organizations, including government offices, neighborhood associations, and faith-based organizations created a partnership called the Recovery and Reinvestment Coordinating Team (RRCT) (FEMA 2011). This team organized public participation events like open houses and public meetings to ultimately develop a Framework for Reinvestment and Revitalization, followed by a Neighborhood Reinvestment Action Plan. The city has implemented projects for flood recovery as part of their Capital Improvement Projects.

CASE EXAMPLE: Hillsborough County, Florida

Hillsborough County engaged stakeholders to develop a Post-Disaster Redevelopment Plan as part of a Hazard Mitigation Grant Program. Participants served in eight technical advisory committees that impact different components of recovery, including land use, housing, and communications. The plan's public outreach component identifies strategies to engage with the public around topics like redevelopment policies, encouraging transparency, and including the public in redevelopment processes after a disaster.

that come with hurricanes. During public participation processes, experts can provide alternatives that improve community resilience, such as implementing green infrastructure and avoiding building in flood plains. Residents can work to identify solutions that are appropriate and feasible for their communities.

Planners can consider the conditions in their communities before engaging in public participation processes. Questions that can be used to identify community engagement responses include:

- Are there requirements for public participation?
- Has the community moved forward with an emergency response plan?
- What previously created planning documents can help inform recovery planning efforts?
- What factors impact timelines (including funding availability, identified risks and vulnerabilities, community priorities)?
- Are there opportunities for residents to identify and implement solutions for both short- and long-term outcomes?
- What are existing concerns from stakeholders for recovery planning?
- What resources does the community have at their disposal for implementing changes?
- What is the history of public participation in relation to hurricanes (successes, challenges, strategies that work)?

1.2 ROLE OF THE PLANNER: BALANCING EXPERT AND FACILITATOR RESPONSIBILITIES

Planners engaged in public participation processes may be faced with two competing roles: they can serve as experts, or they can serve as facilitators. Both roles come with different responsibilities. A primary distinction between the two roles is that a planner serving as an expert can provide opinions about alternative courses of action, while a planner serving as a facilitator should remain neutral about project outcomes; or, they risk losing participant trust. In cases where they must serve in both roles, facilitator and expert responsibilities should be divided between different planners.

1.2.1 The Planner as an Expert

During a public participation activity, planners can share their expertise and provide contextual information to the participants. The planner serving as an expert can:

- Provide overviews of existing systems and opportunities for change
- Serve as a resource to participants, providing data and contextual information to participants
- Apply technical skills during public participation processes
- Propose alternatives that balance community needs and other stakeholder needs, without compromising community values.

1.2.2 The Planner as a Facilitator

When serving as a facilitator, planners can use the information to identify appropriate options for public participation. A planner serving as a facilitator can:

- Engage communities and promote citizen involvement.
- Serve as a connector among stakeholders.
- Share information about the public participation process with participants.
- Express goals for public participation activities.
- Ensure that a public participation activity is completed within the predetermined time.
- Serve as a mediator in circumstances where there is conflict.
- Encourage participants to abide by rules for effective communication.
- Identify community goals to form a vision.

Planners serving as facilitators should aim to foster authentic and inclusive participation. Facilitation is a skill, and they should be trained to use it to accomplish the goals of public participation activity. In some circumstances, planners may manage the public participation process. In other instances, they may help local government representatives or other organizations lead the process and follow the requirements. Regardless of the mechanism, planners can provide information and help community members shape their communities.

1.2.3 Planning Roles in Hurricane-Affected Areas

The role of planners will vary depending on the needs of the community during disaster recovery process. Planners can work collaboratively with emergency management professionals and participate in emergency management processes, such as serving on an emergency management team. According to Schwab (2010), the role of the planner in areas impacted by hazards, such as hurricanes, can include:

- Facilitating public engagement processes that consider hazard mitigation before or after a hurricane
- Integrating hazard mitigation into planning processes and identifying opportunities for implementing project
- Providing a comprehensive perspective to reduce risk to human life and property
- Influencing policy to highlight hazard mitigation as a priority
- Drafting and implementing land-use regulations that consider hazard mitigation
- Incorporating hazard mitigation in every stage of the planning process

Public participation and outreach in hurricane-affected areas can contribute to a local culture of disaster awareness. Communities planning for resilience must consider different hurricane-impact scenarios. This proactive approach allows community members to consider risks and vulnerabilities, and helps with rebuilding efforts if impacted by a storm. It is key to involve all stakeholders in this conversation to help reach community consensus on recovery principles and actions (Schwab 2010). Some hurricane-affected areas have recovery plans in place before a severe weather event takes place. Planning processes and mechanisms, such as hazard mitigation plan updates, resiliency plans and adaptation plans, are opportunities to engage the public in pre-disaster recovery planning.

Communities already impacted by natural disasters can engage residents to identify connections between goals in existing plans and priorities for redevelopment. Pre-disaster recovery plans can lead to an organized and efficient approach to a community's post-disaster recovery. Developing a plan helps communities to understand their existing resources and needs, recognize opportunities for long-term hazard mitigation and resilience, and establish relationships and processes that can help a community recover in the event of a disaster.

Foster Relationships With Community Leaders

In hurricane-affected areas, planners can foster relationships with community leaders to support public participation and coordination. These relationships can help planners connect with community groups that are often hard to reach. Community leaders, such as community organizers, local council members and other government leaders, nonprofit or business leaders, volunteer or faith leaders, and long-term residents, can:

- provide knowledge and a comprehensive understanding of the communities
- identify community needs and resources present in a community
- act as key contacts and liaisons for planners in order to engage and empower community members, especially in communities where some groups may not always have a voice in community governance (FEMA 2011)

Planners can foster relationships with community leaders by engaging in ongoing conversations where they provide information to organizations about opportunities for public participation. Organizations can provide information on preferred options for engagement, community concerns, and in some instances, opportunities to connect with stakeholders. During ongoing public participation activities, it can be helpful to engage in regular meetings with community leaders to strengthen communication channels and maintain momentum for public participation (FEMA 2011).

Empower Local Action

Public participation is an opportunity for community members to lead, rather than follow, during planning processes. Planners can empower local action by helping community members identify priorities, organize support, and evaluate outcomes. Supporting and encouraging communities to lead their own resilience activities builds social capital and provides a powerful incentive for members to sustain action and involvement. Methods for empowering local action include incorporating disaster-planning discussions into the existing format of community meetings, as well as integrating public and community institutions into the planning process by hosting town hall meetings (FEMA 2011).

1.3 STRATEGIES FOR EFFECTIVE ENGAGEMENT

While public participation can be accomplished through a variety of methods, it can be valuable to apply strategies that will maximize community engagement and empowerment. Planners who engage in public participatory processes have a variety of strategies at their disposal to promote effective community engagement. The following sections include strategies planners can use to achieve the desired outcomes from public participation activities. For specific methods and techniques of public participation, see Section 2.

CASE EXAMPLE: Jamestown, Colorado

In 2013, Jamestown engaged in a public participation process after experiencing landslides and mudslides following historic flooding. The community initially made use of a Quick Topic board, a previously accessible resource, to share information about recover efforts. Community members used the board to ask questions, receive information, and provide comments. Once recovery efforts were underway, the town developed a more robust system of connecting with residents, including hosting community meetings; sharing updates through social media, website updates, and a digital newsletter; and reaching residents through phone calls (FEMA 2017).

1.3.1 General Strategies

A public participation process benefits from overarching strategies. Herd (2019) identifies five fundamental guidelines for successful meeting facilitation. They are:

- **1.** Remember that a group gives a facilitator power.
- 2. Respect all participants throughout the process.
- 3. Remain neutral to maintain trust.
- 4. Engage people actively.
- **5.** Practice meeting facilitation to improve skills.

Throughout a public participation process, planners and other facilitators can apply the following recommendations to support community involvement:

- Include diverse participants in the conversation. To support inclusive participatory processes, project members can enlist support from community groups and leaders to spread the word.
- Identify opportunities for cross-sector collaboration.
 Some public participation events, such as design charrettes, benefit from having expert input and from varied stakeholder.
- Consider other ongoing public participation processes.
 Agencies interested in public participation can work to avoid simultaneous activities and reduce participation fatique.
- Include a variety of activities that encourage interpersonal exchange, small group collaboration, and

Community-level projects will require a different approach to public engagement than regional planning projects, with varying points of contact and opportunities for residents to provide the feedback. A project at the community level may have a denser, shorter time frame than projects at a regional level. Regional-level projects may require adjustments to accommodate more people, such as materials translated to different languages, a longer marketing campaign to ensure turnout, and access to large community spaces.

large-scale involvement. These strategies can be appropriate, depending on the type of input sought out by a project team.

- Identify meeting spaces where community members are comfortable expressing their opinions. Community members can provide information on the preferred location for activities.
- Engage in public participation congruent with project scale. Project scales impact the type of public participation processes that are necessary.
- Communicate clearly. Sharing information in ways that are consistent and accessible can help facilitators maintain consistency and engage a broader audience.

Public participation in hurricane-affected areas may require additional focus on elements of the public participation process and disaster-specific considerations. These include:

- Trust. Community members undergoing a recovery process can benefit from trusting public participation processes. This can be a challenge in hurricane-affected areas, where external organizations can be involved in early communications about recovery but may not be present for the length of the recovery process.
- Communication. Sharing information with communities impacted by hurricanes can provide consistency and updates about recovery planning processes.
- Event location. Ensuring that public participation activities are held in accessible locations can increase community involvement.
- Timing. Engaging in public participation related to recovery is a balancing act between multiple factors. It is important to engage in long-term conversations after emergency response processes have been set into motion and communities begin to recover. However, resources for recovery may be available for a limited time;

early action can help a community recover and prepare for future storms.

1.3.2 Before an Event

Before a public participation event takes place, project team can implement strategies to encourage inclusive resident turnout. In hurricane-affected areas, previously existing methods for communication may not be functional, or there may be different preferred methods for exchanging information.

- Consider local context, traditions, culture, and preferences when selecting a time, date, and location. If possible, aim to repeat activities at different times to ensure that a variety of community members can participate.
- Share invitations to events well in advance of a meeting, in formats that are likely to be welcomed by the community. For example, for wide-reaching public participatory processes, consider announcements in languages most commonly spoken in the community.
- Consider a multifaceted marketing campaign to encourage involvement from all community members, including historically underrepresented groups. For ideas on options to inform the public, refer to the Citizen Participation and Consultation Toolkit (U.S. Department of Housing and Urban Development 2014).
- Invite experts to participate in the conversation. Depending on the project scope, it may be appropriate to invite architects, engineers, public health professionals, policy experts, and local community leaders to share their expertise during a public participation process.
- Incorporate participatory strategies that will allow residents to express themselves and reduce language and literacy barriers. Use translation services based on community need and incorporate activities that are accessible for community members with different levels of literacy.

- Plan the event such that all the selected activities can be completed within the allocated time. Participants are sharing their time to support a project; therefore, keeping to schedule demonstrates respect for their contribution.
- Identify and proactively address barriers that could prevent community members from participating, such as needs for child care, food for meetings during mealtimes, or other incentives for engagement. Providing these services shows residents that the project team values their input.
- Plan for an evaluation.

1.3.3 During an Event

Facilitators are responsible for moving activities forward during a public participation event. Their guidance can help community members work together toward the desired outcome.

- Create an event atmosphere that is welcoming and inclusive. Playing music during the beginning of an event, providing beverages and snacks, and greeting participants can encourage residents to contribute during the public participation event.
- Communicate public participation goals at the start of an event. This encourages participants to address the issues at hand and to ask questions about the process.
- Share how public input will be used to shape the project. This can help residents understand why their participation is important, and it will set expectations about project outcomes.
- Set ground rules. Communicating ground rules at the beginning of the process will ensure that participants are on the same page.

- Provide a variety of opportunities for participants to engage in conversation. Some strategies, such as hands-on activities, may appeal to some participants more than others.
- Provide opportunities for groups to report out at the end of the activity.
- Summarize the next steps. This will reiterate information shared at the beginning of the event and provide participants an opportunity to ask questions.
- Provide information about how participants can receive updates or meeting summary information after the event has concluded.
- Collect feedback to inform the evaluation.

1.3.4 After an Event

Once an activity is completed, a project team can work together to process the information gathered during an event. In areas impacted by hurricanes, this portion of the public engagement process may depend on external timelines, such as recovery efforts.

CASE EXAMPLE: Greensburg, Kansas

Greensburg, Kansas, adopted a green redevelopment approach after experiencing a tornado that caused significant damage to the community. The Greensburg Long-Term Community Recovery Plan focused on supporting climate resiliency and adaptation strategies. This approach was developed after identifying community values and goals through public participation activities with hundreds of residents and community stakeholders.

Short-term (within 12 months)

- Gather input and develop ideas on potential changes
- Create materials that represent proposals
- Build concensus on proposed changes to goals, policies, or actions
- Conflict resolution over current land use changes

Medium-term (within 12 months-5 years)

- Changes to community planning documents, policies, or programs
- Policy proposal and adoption proposal
- Implementation strategies, such as changes to review processes

Long-term (after five years)

- Changes to communities, such as improved public places, access to services, and updated processes for development
- Sustained partnerships that address community concerns

Figure 1. This figure presents some outcomes from public participation processes, organized by timeframe. (Herd 2019; Involve 2005)

FEMA Whole Community Approach

Communities can be better prepared for hurricanes when community stakeholders are involved in planning processed (FEMA 2017). Promoted by FEMA, the Whole Community approach to emergency management is one engagement strategy that planners and communities can use to frame disaster planning processes and engage community stakeholders. Whole Community principles include:

- Understanding and meeting the actual needs of the whole community
- Engaging and empowering all parts of the community
- Strengthening what works well in communities (FEMA 2011)

There are several benefits of a Whole Community approach, including:

- More informed, shared understanding of community risks, needs, and capabilities
- Increase in resources through the empowerment of community members
- More resilient communities (FEMA 2011)

Incorporating Whole Community concepts before a hurricane can aid in building relationships with the community and developing trust among stakeholders.

- Summarize community input.
- Report activity results back to the community and specify next steps.
- Conduct a debrief and review feedback.

1.4 PUBLIC PARTICIPATION OUTCOMES

Public participation outcomes are changes that result from public participation. Some public participation process may lead to systemic changes, while others may lead to incremental changes. The outcomes from the process can be short, medium, or long term. Figure 3 identifies some outcomes that can result from a public participation process.

Outcomes can be identified by comparing the goals of the public participation process with the final impact on a community. For example, if the goal is to create a design proposal for a site that meets the needs of a developer and a community, a successful outcome would be a design that is acceptable to developers and the community members. Impact of the outcomes will vary depending on the scale: for private site-based projects, the outcome may be limited to the immediate surrounding neighborhoods, such as changes in density, placemaking, and mitigation of local conditions, such as protection from sea-level rise. Larger projects, such as infrastructure developments, may have wider-reaching implications, such as impacts to local traffic patterns, increased utility demands, and access to resources, such as green space.

Additional Resources

Planners who are aware of what to expect and what to do when a disaster strikes will be far better positioned to assist the community with recovery (Schwab 2014). Thus, it is crucial that planners are skilled at the participatory techniques and disaster recovery process. A variety of resources can help planners prepare for hurricane recovery, including:

- PAS Report 576: Planning for Post-Disaster Recovery: Next Generation provides information on recovery planning efforts.
- PAS Report 595: A Planner's Guide to Meeting Facilitation highlights the role of the planners when engaging the public.
- PAS Report 560: Hazard Mitigation: Integrating Best Practices into Planning
- Pre-Disaster Recovery Planning Guide for Local Governments
- U.S. Environmental Protection Agency's (EPA)
 Public Participation Guide

SECTION 2: METHODS FOR PUBLIC PARTICIPATION

Public participation methods should be adapted to match community needs and they should vary according to the context, projects, and desired outcomes. This section will discuss how suitable these approaches are, depending on various characteristics such as desired level of public participation. Methods in this section range from activities that require extensive periods of preparation to activities that can are quicker to implement. Many of these strategies can be used in conjunction with one another: workshops might incorporate games, design charrettes might include

visual preference and appraisal, and forums might include web-based engagement strategies. It is up to the project team to determine what strategies are most appropriate for their context.

2.1 TYPES OF PUBLIC PARTICIPATION

The following is an overview of a variety of public participation methods that planners and others can use, though others may exist.

Activity	Charrette
Purpose	To identify solutions for the built environment (including the site-based development) using community and project information, such as potential local impacts, to identify alternative actions and reach a consensus on a preferred solution.
Level of Engagement (see Figure 2, Spectrum of Public Participation)	Collaborate, Empower
Description	A charrette is an intensive and collaborative design process that brings stakeholders together to develop a preferred alternative for a project. They can vary widely in implementation, depending on the project, context, outcome, resources, and subject. A full charrette can take up to seven days to complete. This type of activity requires facilitators, data on existing conditions, the help of experts who can incorporate design recommendations between sessions, and a committed group from the community. Charrettes can focus on topics such as site planning, policy, comprehensive planning processes, and economic development.
Audience	Design charrettes can accommodate different amounts of people throughout the life of the activity. Charrettes should include (Lennertz and Lutzenhizer 2014): Decision makers Representatives impacted by project decisions Key informants Potential advocates for a project Participants that can stop the project process
Additional Information	Charrettes may also include other methods of public participation such as community visioning, walking audits, and community mapping. For more information on how to organize a charrette, see Appendix A: Design Charrette Supplementary Guide.

Activity	Community Action Planning
Purpose	To identify problems and empower stakeholders to identify solutions for community challenges.
Level of Engagement (see Figure 2, Spectrum of Public Participation)	Collaborate, Empower
Description	In community action planning, participants work together to identify challenges and implement actions. They first prioritize the challenges, discuss alternatives, identify implementation steps, and then monitor changes after the action has been taken. Action planning can take several days, with some activities lasting up to five days. This method can present some roadblocks, depending on the political conditions and budgetary considerations of the municipality; however, it may be fitting for communities that require problem identification.
Audience	Participants in this activity include community representatives and technical advisors from municipal departments, such as housing and health. This activity is well-suited for a limited number of stakeholder representatives.
Additional Information	For more information about how to conduct a community action planning process, click here.

Activity	Community Mapping
Purpose	To identify how community members interpret places around them.
Level of Engagement (see Figure 2, Spectrum of Public Participation)	Consult, although it can be used to involve and collaborate.
Description	A community mapping activity can provide community details that may not be captured through other strategies. It can be useful, for instance, to understand factors such as perceived levels of safety, inclusion in public spaces, opportunities for increased community services, and even environmental justice considerations. This technique focuses on spatial aspects of the community and requires supporting materials to capture the information, such as printed maps. Community mapping activity can be done in person at kiosks and community-wide events or through online activities. A community mapping activity can be a component of other methods, like a charrette.
Audience	Participants in the activity include community members and technical advisors to assist with mapping and spatial analysis. In addition, elected officials and representatives from local services and facilities should also participate.
Additional Information	For more information about community mapping, click here.

CASE EXAMPLE: Washington State's Map your Neighborhood

In 2011, the Washington State Emergency Management Division engaged in a community mapping activity called "Map your Neighborhood." This project helped gather information on potential hazards, such as where natural gas and propane tanks were stored, as well as resident information, such as a list of residents who might need additional assistance in case of an emergency. A similar approach can be used in areas impacted by hurricanes—residents can provide information about existing community hazards and identify conditions that may benefit from planning interventions before a hurricane.

Community Mapping in Hurricane-Affected Areas

In hurricane-affected areas, community mapping can reveal patterns based on visually illustrated data including demographic information, infrastructure locations, public transportation needs, and community resources, such as meeting spaces (FEMA 2011). Communities can also gather information on recovery goals and assets, such as partnerships and resources, that can help a community recovery after a hurricane (FEMA 2017). It is critical that a cross section of stakeholders within the organization are fully engaged in the data collection effort.

Existing data that identifies and maps community features can provide a baseline view of the community across various dimensions, characterizing what existed before the disaster and how it may change or has changed as a result of a hurricane. This information is important for scenario planning, where planners can help a community identify risks and vulnerabilities in the built environment in the case of hurricanes.

Activity	Forum
Purpose	To create a space where stakeholders can exchange information with one another or with decision makers.
Level of Engagement (see Figure 2, Spectrum of Public Participation)	Inform
Description	This type of public participation activity provides an opportunity to bring in groups that can be challenging to reach through other public participation methods (Community Places 2014). Forums can be an opportunity for community members to learn more about a specific topic, or to collect feedback from stakeholders about changing community circumstances. They typically last no longer than a day but can be a recurring activity.
Audience	Community members, stakeholder, decision makers.
Additional Information	For more information on how to organize a forum, click here.

Activity	Games
Purpose	To create opportunities for stakeholders to learn from a simulated scenario and to identify opportunities to act.
Level of Engagement (see Figure 2, Spectrum of Public Participation)	Inform, Consult
Description	This type of public participation activity allows participants to simulate real-life circumstances and apply strategies to address community challenges. It can be used as part of other methods of public participation. Depending on the type of the game, participants may have to be divided into smaller groups for this activity.
Audience	Stakeholder, community members, decision makers
Additional Information	For examples of a public participatory games focused on community flooding, click here.

Activity	Strategic Planning
Purpose	To identify actions that address current community conditions based on expected change.
Level of Engagement (see Figure 2, Spectrum of Public Participation)	Collaborate, Empower
Description	In this process, community members can work together to evaluate information, identify alternative methods of action, and to understand how decisions made in the present can impact the future (Sanoff 2000). Strategic planning is forward-facing: it can be driven by a compelling condition, such as an opportunity or perceived risk, and less focused on historic trends. A strategic planning process can result in a set of steps for implementation, organized around a central condition, and can generate consensus among stakeholder groups. Strategic planning can be a recurring activity, with future iterations focusing on different issues and opportunities.
Audience	Community members, stakeholders, decision makers, experts.
Additional Information	For more information on how to organize a strategic planning event, click here.

Activity	Visioning
Purpose	To identify where community members would see their community in the future.
Level of Engagement (see Figure 2, Spectrum of Public Participation)	Involve, Collaborate, Empower
Description	In this process, individual perspectives about the future of a community are compared to identify common themes and desired outcomes. Some processes focus on identifying preferred futures, or current trends shaping a community, or ongoing activities to support the preferred outcomes. Outcomes from this approach can include a vision statement and a plan that identifies goals and implementation strategies (Sanoff 2000; New Jersey Department of State, Office of Planning Advocacy n.d.). Visioning can take place in a variety of settings, including a workshop, or through mobile engagement strategies to capture information from stakeholders that may not typically engage in public participation activities.
Audience	Community members, stakeholders.
Additional Information	For an example of a community visioning process, click here .

CASE EXAMPLE: Fairfax County, Virginia

Fairfax County, developed a tabletop activity to inform residents on strategies identified in a pre-disaster recovery plan. The activity incorporated information highlighted as part of the pre-disaster recovery plan and included simulated experiences related to disaster recovery. The team organizing the activity collected feedback from the tabletop experience to identify areas for improvement for future updates to the plan.

Activity	Visual Preference and Appraisal
Purpose	To gather information from stakeholders about their interpretation of a proposed change to the built environment.
Level of Engagement (see Figure 2, Spectrum of Public Participation)	Consult, Involve
Description	In some projects, stakeholders can provide feedback on preferred options of projects that will impact their communities. Sample materials that can be used in this strategy include maps and renderings for site-specific changes. In many cases, project teams may propose design options of proposed developments or ideas for future community resources, such as wayfinding options or sites for community services. This method is distinct from community mapping: the visual preference and appraisal approach asks participants to review alternatives and select their preferred options, whereas community mapping can be used to gather information about existing conditions or desired community changes, instead of providing information about existing or desired community changes. This method can be conducted during in-person at activities like workshops, or they can be conducted remotely through community surveys.
Audience	Community members, stakeholders
Additional Information	For more information about visual preference surveys, click here .
Activity	Web-Based Engagement
Purpose	To provide an option for remote engagement.
Level of Engagement (see Figure 2, Spectrum of Public Participation)	Inform, Consult, Involve, Collaborate
Description	Web-based engagement can supplement activities like community forums and strategic planning by collecting information through web-based applications. This technique is used to collect feedback from those stakeholders who are unable to participate in the in-person community engagement activities. However, it should be noted that web-based engagement may be a barrier to participation for stakeholders who may not have internet access, or who may not be as computer savvy as others.
Audience	Community members, stakeholders, experts.
Additional Information	For an example of web-based engagement, click here.
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Activity	Workshop To an analysis to be a state of a sile to a sile to a state of a sile to a sile to a state of a sile to a sile
Purpose	To engage stakeholders in a series of collaborative learning activities in a group setting.
Level of Engagement (see Figure 2, Spectrum of Public Participation)	Inform, Consult, Involve, Collaborate, Empower
Description	Workshops create a space to engage community members in a variety of techniques that support information exchange and collaboration. This activity requires expert facilitators, and a clear expression of the goals, challenges, and time limits of the project. A clear understanding of goals and time limits before the workshop could help the participants and the facilitators measure its impact.
Audience	Community members, stakeholders.
Additional Information	For an example of a workshop, click here .

2.2 SELECTING AND IMPLEMENTING A PUBLIC PARTICIPATION APPROACH

Selecting a public participation approach depends on:

- The desired level of public participation
- Project phase
- Project restrictions, such as budgets and timelines
- Project requirements, such as state or federal requirements for public participation
- Partnerships with community organizations
- Previous community experience with public participation
- Cultural preferences for community engagement
- Available resources to commit to public participation through the project planning phase

Community groups that represent diverse community members (especially community-based organizations) can also help to identify methods or techniques that may lead to the most inclusive public participation process. Opportunities to engage should be provided to all community members, including those that have been historically left out of decision-making processes. Barrier to inclusive engagement may include (Community Places 2014):

- The capacity and ability of different stakeholders to participate: Community members may encounter different conditions that make public participation challenging, such as accessibility and scheduling constraints.
- Reaching groups, such as young people, minority groups, and historically underrepresented groups: Groups can respond differently to information in different formats.
- Varying access to community infrastructure: Some participants may encounter challenges, like access to transportation options, that can limit their involvement in public participation processes.
- Contested or divided communities: Projects may touch on "hot-button" issues that have been points of conflict, which can impede efforts to build consensus and has the potential to alienate some participants.
- Rural isolation: Some community groups may be impacted by a project but may face challenges taking part in public participation because locations may not be convenient.
- Gaps in information: Participants may have different levels of information, which can influence informed decision-making and participation.
- Literacy/numeracy levels and dominance of oral culture: Community groups may have preferences in how they receive information.

When there are overrepresented or underrepresented groups, planners can apply multiple strategies to encourage participation that is representative of the community. Planners have opportunities to mitigate potential barriers and improve public participation through the following public participation design considerations (Community Places 2014; Herd 2019):

- Conduct outreach activities to inform the public and engage community leaders in sharing information.
- Engage with community leaders to identify opportunities to connect with variety of groups.
- Use techniques and engagement methods that provide options for various community groups to participate.
- Develop an understanding of community issues that may arise during a public participation activity.
- Identify locations and accessible venues that are welcoming to all groups.
- Adapt the number and type of engagement events to increase appeal of public participation.
- Use interpreters and signers to ensure that community members can receive and share information.

Diverse participation can be addressed before starting an engagement activity and throughout a public participation campaign. Creating a public participation plan that focuses on inclusive and authentic participation can encourage representative community participation. See Section 1 for more information on public participation plan.

Table 1 summarizes key considerations when selecting a strategy for participation.

2.2.1 HYPOTHETICAL SCENARIO

A community in a hurricane-affected area receives funding to create a neighborhood plan that is based on community values, addresses equitable access, and identifies climate resilience and adaptation solutions. A planning team proposes the following public participation strategies to complete the project.

Community forum. The team decides to host a community forum to inform the community about the new neighborhood plan. The team also decides that they will consult the public by requesting input on areas that are of most interest to community members. The team selects this strategy because they would like to reach a diverse group of community members.

Strategy	Level of Involvement	Resources	Participants
Charrette	Collaborate	Resource intensive—lead time needed to promote activity, expertise, space, community data, time from participants (4 to 7 days)	Design team, community stakeholders, decision makers
Community Action Planning	Collaborate, Empower	Support from different municipal actors, community involvement	Representatives from government agencies, community members
Community Mapping	Consult, Involve, Collaborate	Community data, visual information, such as maps.	Community members, stakeholders
Forum	Inform	Not resource intensive—can make use of existing structure, such as community spaces	Community members, decision makers, stakeholders
Games	Inform, Consult	Requires community space, multiple copies of game materials, and facilitators	Community members, decision makers, stakeholders
Strategic Planning	Collaborate, Empower	Requires appropriate timing, community support	Community members, decision makers, stakeholders
Visioning	Involve, Collaborate, Empower	Flexible needs. Requires information about existing conditions and method to record input provided by participants	Community members, stakeholders
Visual Preference and Appraisal	Consult, Involve	Prepared materials (renderings, maps) for appraisal, method to record participant input	Community members, stakeholders
Web-Based Engagement	Inform, Consult, Involve, Collaborate	Identify appropriate outlets (websites, social media sites, surveys, etc.), marketing	Community members, stakeholders
Workshops	Inform, Consult, Involve, Collaborate, Empower	Depends on length of workshop and activities performed during workshop	Community members, experts, decision makers, stakeholders

Table 1 This table compares various public participation strategies based on the standard level of involvement, scale, resources for implementation, and participants.

- Community visioning. The team takes feedback received during the community forum to identify potential topics for conversation during a community visioning activity. Participants develop a vision statement and desired outcomes.
- Workshops. From a visioning process, the team identifies that the desired outcome is to encourage rebuilding in areas that are more protected from risk and provide benefits to all members of a community. The team uses a series of workshops to get feedback on identified solutions and identify shortcomings. Community members use community mapping and strategic planning to identify current conditions and potential solutions.
- Web-based engagement. After the plan is put together,

the team uses web-based engagement to receive feed-back on the draft version of a plan.

CASE EXAMPLE: Public Participation Plan of the Memphis, Tennessee, Urban Area

The Memphis Urban Area Metropolitan Planning Organization created a Public Participation Plan to identify strategies to bring in public perspectives for a variety of projects and programs. The plan includes a variety of methods for public participation, including facilitated workshops, display booths, and guided tours.

■ Forum. Once the plan is adopted, the team hosts a forum to inform the public and to celebrate the final product.

Conclusion

Public participation provides benefits to communities, particularly in hurricane-affected areas. Planners may be brought in public participation processes to serve as experts or as facilitators. When serving as a facilitator, planners can implement a broad range of strategies to encourage community members to share their perspective on proposed changes in their communities. Public participation methods, such as community mapping and workshops, can engage stakeholders at various level of public participation, ranging from informing to collaborating. Depending on project scale, planners have opportunities to apply a variety of methods and find an approach that works best for the community.

Public participation can vary just as much as the communities that make use of them. Effective public participation creates an opportunity to involve stakeholders in processes that can be more successful with their input. Representation in these activities can help build trust between community members and government agencies, which can lead to additional engagement in future activities. Public participation acknowledges that community members are experts in the spaces they call home. When combined with opportunities to implement community changes, public participation can result in stakeholder consensus, greater community support, and solutions that consider diverse community perspectives.

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APPENDIX A: DESIGN CHARRETTE SUPPLEMENTARY GUIDE

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"A design charrette is a time-limited, multiparty design event organized to generate a collaboratively produced plan for a sustainable community." (Condon 2008)

INTRODUCTION

Public participation is a process rather than a single event. It consists of a series of activities and actions over the full lifespan of a project or a plan to inform the public and obtain their input (U.S. Environmental Protection Agency 2014). A public participation plan (PPP) can be developed in a disaster-affected area to inform and engage the public in recovery and rebuilding process.

Design charrettes are often included in public participation plans. They create an opportunity to address physical design challenges and to identify solutions collaboratively (Herd 2019). Charrettes can be used as a conflict resolution and consensus building tool, and they include engagement from key stakeholders to develop

ideas for an implementable design that is based on existing conditions. They can also promote trust among community members, and result in creative solutions that have community support (Lennertz and Lutzenhiser 2014).

Purpose

The purpose of this supplementary guide is to assist planners with conducting a design charrette in disaster-affected areas. The guide provides planners with an overview of the design charrette process and how it can be used as one method to promote public participation during the planning and redevelopment processes. It is a supplementary guide to the public participation guide.

A charrette is a public participation method that uses stakeholder input and design strategies to create consensus, identify solutions for a project, and develop a sense of ownership over a planning process. The term originates from the French word for "small cart." Such carts were used in Paris by l'École des Beaux-Arts to collect architecture projects. Students would work on their projects as they traveled to school, illustrating an intense and collaborative work period that shares similarities with the current day public participation method (Lindsey et al. 2003).

Activity	Charrette		
Purpose	To identify solutions for the built environment (including the site-based development) using community and project information, such as potential local impacts, to identify alternative actions and reach a consensus on a preferred solution.		
Level of Engagement	It can range from empowering participants to collaborating with them for identifying solutions.		
Description	A charrette is an intensive and collaborative design process that brings stakeholders together to develop a preferred alternative for a project. They can vary widely in implementation, depending on the project, context, outcome, resources, and subject. A full charrette can take up to seven days to complete. This type of activity requires facilitators, data on existing conditions, the help of experts who can incorporate design recommendations between sessions, and a committed group from the community. Charrettes can focus on topics such as site planning, policy, comprehensive planning processes, and economic development.		
Audience	Design charrettes can accommodate different amounts of people throughout the life of the activity. Charrettes should include (Lennertz and Lutzenhizer 2014): Decision makers Community groups historically left out of decision-making processes Representatives impacted by project decisions Key informants Potential advocates for a project Participants that can stop the project process		
Additional Information	Charrettes may also include other methods of public participation such as community visioning, walking audits, and community mapping.		

DESIGN CHARRETTE PROCESS

Although the charrette process emerged from the urban design and architecture disciplines, and its historical application has been for design problems related to the built environment, it is highly adaptable because it is process-oriented. Many issues that are not necessarily considered design related can be addressed from a design thinking lens. Planners are finding charrettes to be increasingly relevant for addressing policy challenges and resolving contentious issues within communities. The process is the same, but engagement activities during a charrette are adapted to align with the purpose and outputs of the project. Charrettes are a great way of bringing together experts and community members to identify preferred community solutions, and they can generate support from the community to implement a solution together.

After a disaster, there is a surge in development and redevelopment projects, and design charrettes are useful for such projects. The design charrettes bring community members, stakeholders, and decision makers together to work with a design team to consider alternatives and identify solutions. They offer an opportunity to collaborate on designing and developing solutions to pressing community needs. Site-specific projects can involve both policy and regulatory components, such as determining a need for zoning variances and site-specific zoning map amendments (Herd 2019). Further, charrettes are community-building events and are especially helpful to build social support post-disaster.

A project may be suitable for a design charrette in cases where projects (Lennertz and Lutzenhiser 2014):

- have significant community impacts and make use of public and private funds
- are in communities where groups have different perspectives about solutions and may benefit from reaching consensus

- generate large design challenges
- will result in implementation

The charrette process (based on the NCI Charrette System) typically follows a three-phase framework: 1) preparation, 2) charrette, and 3) implementation (Figure 1).

There are many ways of conducting a charrette. This guide focuses on a combination of approaches recommended by the National Charrette Institute, the U.S. Environmental Protection Agency, and others.

Preparation: Before a Design Charrette

Organizing a charrette requires preparation. Many of the steps outlined in this section can happen simultaneously or may have been completed for previous public participation processes. The pre-design charrette preparation involves:

- project assessment and organization
- stakeholder research and involvement
- base data research and analysis
- determining charrette logistics.

This phase can take between one and nine months and depends on the amount of time needed to assemble data to inform charrette activities and to connect with stakeholders.

Step 1. Project assessment and organization. The first phase of the charrette process includes several activities related to process design and information gathering. Important components of this process include (National Charrette Institute (NCI) n.d., U.S. Environmental Protection Agency n.d., Todd and Lindsey 2016):

- identify goals for the public participation process
- assemble leadership team that will work with facilitators to organize a charrette.
- host charrette preparation meetings to define project



Figure 1. Charrette Three-Phase Framework (NCI n.d.)

participant roles, ground rules, and responsibilities (EPA n.d.).

- create guiding materials, including a plan that identifies implementation steps and timeframes for completing tasks.
- Identify factors that impact design and data needs, such as environmental conditions and community information
- Generate the decision-making framework, which can specify what criteria must be met to signify that the team has made a decision.
- Discuss logistics information, such as available resources and project budget.

The activities conducted during a charrette should be recorded as part of a charrette schedule. This schedule can include information on different activities, participants, time, duration, and comments (Condon 2008). These components help identify resource needs and encourage responsible time keeping.

According to NCI, stakeholders are "anyone who can approve, provide valuable information, promote or block the project, as well as anyone directly affected by the outcomes of the project" (NCI n.d.).

Step 2. Identify stakeholders and their roles. A

preliminary stakeholder analysis can be conducted to make a quick assessment of who should be included in a charrette process. In circumstances where stakeholders may not be willing or able to participate in a design charrette, it may be helpful to contact stakeholder groups before organizing a design charrette to know more about the factors that are preventing them from participating in the charrette. Based on the discussion and responses, the leadership team should focus on mitigating those factors.

A stakeholder analysis includes recording information about participants that will be affected by a project, or who may be able to influence a project. The leadership team can identify specific persons or affiliations, their respective viewpoints, potential contributions to the charrette process, and participation in charrette activities. Once stakeholders are identified, they can be categorized as primary stakeholders, secondary stakeholders, and general stakeholders,

depending on their relationship the project (Lennertz and Lutzenhiser 2014). This will influence how they contribute during the design process—primary stakeholders may be invited to all meetings, while general stakeholders may participate in public activities, like informational workshops and plan presentation meetings.

Design charrettes require various participants serving in different roles. A sponsor is an entity that starts and supports a design charrette. Experts, or specialists, are professionals who can help participants connect ideas to information and are responsible for creating the final products. Participants are stakeholders who bring community knowledge, including values and preferences, to the design charrette process. These stakeholders and their responsibilities are outlined in Table 1.

A **leadership team** should be formed first to assess and organize a project and may include experts and participants. A sponsor organization may have an idea of who would need to be involved in this part of the process. The leadership team should:

- Gather and analyze site and community information in preparation for participant review.
- Work before a design charrette to help determine goals and outcomes.
- Lead the sponsor group and the charrette participants through the charrette process from beginning to end.
- Produce the final plan and ensure successful implementation

A **facilitator** plays a key role in organizing stakeholders and may begin working on stakeholder involvement in the preparation phase. According to Herd (2019), a facilitator's role is centered on:

- designing the overall agenda and process of organizing the participants, materials, and space
- providing introductions and reviews at each phase of the charrette process
- providing oversight as the process unfolds to make sure all participants are fulfilling their roles and making progress

A **sponsor team** is responsible for guiding the charrette process to completion. The sponsor group and the leadership team will play important roles in coordinating and identifying stakeholders for the charrette. For the charrette process to be successful, broad community involvement is necessary as stakeholders are involved in the

Stakeholders	May include		
Sponsor	local government(s), regional and state agencies, federal agencies, such as the U.S. Environmental Protection Agency and the Federal Emergency Management Agency.		
Experts	 planners, urban designers landscape architects environmental health professionals public health officials economists ecologists engineers 	 historians local policy experts real estate specialists geovisualization experts emergency managers and recovery managers (in areas recovering from a storm) facilitators 	
Charrette participants	 local government agency staff and elected officials community residents (from adjacent to the site and across the community) minority and ethnic groups site owners neighborhood associations news media business owners community historians realtors and financial institutions indigenous peoples 	 faith-based organizations local civic organizations local organizers trade, industrial, agricultural, and labor organizations environmental and environmental justice groups public health, scientific, and professional representatives and societies research, university, education and governmental organizations and associations nonprofit community-based organizations public involvement practitioners 	

Table 1. This table includes stakeholder groups, recommendations on who may fit into those groups, and their responsibilities. Adapted from EPA (n.d., p. 9) and Lennertz and Lutzenhizer (2014)

design process through a series of short feedback loops or meetings. Stakeholders can be made aware of the different roles, the degree of commitment required by each participant, and when they will be needed during a charrette. Some of these participants may be invited to serve in different roles and not all participants or resource team members will be needed during the full length of the charrette.

A group of **interdisciplinary specialists** provides expertise in design, development, and facilitation, provides feedback to participants, and captures ideas during the charrette. This group can also be called a "specialist team" or a "resource team." They gather and analyze relevant information, work with community members to identify ideas, and ensure successful implementation of the of the project.

Step 3. Invite charrette participants. Facilitators can use multiple outreach methods to encourage diverse and representative participation in the charrette. This step significantly impacts who is present during a design charrette process. It can be time consuming, so begin outreach as early as possible in the process. Considering inviting community members by:

- attending neighborhood meetings, engaging churches and organized groups
- arranging one-on-one meetings with key stakeholders and community leaders
- engaging through mailings, phone calls, and e-mails
- sharing written information, such as handbills and signs
- updating web-based outreach, including social media outreach and website updates, and newsletter announcements (Lennertz et al. 2008)

Participants who are aware in advance can have more time to prepare for participation. Frequent contact and follow-up with potential participants are crucial to building relationships with community members. Facilitators should also consider what voices are traditionally underrepresented in decision-making processes and identify strategies to reach out to them. Further, attempts should be made to engage more youth directly in the planning process (Herd 2019). It may be helpful to consider if there are stakeholder missing from the conversation throughout this process—inclusive processes can make sure that a project receives community support.

Charrettes are typically between 30 and 60 people but can reach up to 200 participants (Condon 2008). This number can be informed by who is relevant to include during the process, space availability, and experts who can help facilitate conversations.

Working with Diverse Groups

A facilitator should respect each participant's role as a stakeholder, work to mitigate any language or cultural barriers, make concerted efforts to ensure the ability of all participants to engage fully in the process, and show appreciation of all participants' involvement (e.g., provide interpreters, if necessary) (Herd 2019).

Step 4. Goal setting and outcomes. Determine the desired project goals and outcomes. For instance, the project goals for design charrettes can be:

- gathering adequate information to inform project decision making
- outlining site reuse challenges, opportunities, and key considerations
- formulating an effective long-term site reuse/recovery strategy
- identifying resources and organizations that can help foster a site's reuse/recovery (EPA n.d.).

Goals and outcomes can be revisited and updated throughout the charrette process as participants learn more about proposed changes and discuss values that will inform a project. A project's specific context should determine the participation needs and methods of input needed for conducting the charrette.

Step 5. Gather and analyze data. Information gathering and feasibility studies ensure that charrette participants can make recommendations based on current conditions. This is usually comprised of extensive gathering, studying, and analyzing the existing conditions of a site including:

- physical characteristics, such as flooding and stormwater information
- adjacent land uses

- site history information
- local land-use regulations and community initiatives
- infrastructure and access
- regional land-use trends
- previous land uses that may impact environmental health (EPA n.d.)

The type of information and level of detail required varies with each project. The base data that goes into the charrette process includes:

- the results from any public interactions or engagements
- any preexisting plans, reports, or studies (Madill et al. 2018)
- any pertinent data for the site, transportation, market, social/cultural, economic, regulatory, public health, environment, and urban design

Project data and information should be distilled into key themes and findings, which can help participants incorporate relevant conditions during the design charrette. Materials must be easily understood, compelling, and contain visually pleasing graphics to present to stakeholders. It is important that the charrette resource team provides high-quality, legitimate information that serves as a foundation for meaningful participation (EPA 2014).

Experts can help with identifying information. Table 2 identifies activities to help gather information before a design charrette. Facilitators can select ways of representing this information, ranging from preceding informational workshops to presentations and printouts on the day of the charrette.

Information-Gathering Activities

- Conducting interviews in the community, with project participants and state agency and local government staff
- Visiting the site, its adjacent surroundings, and the larger community
- Gathering, mapping, and analyzing site and community information
- Identifying key future land-use considerations, including opportunities and challenges

Table 2. Before a charrette, a team can gather information that will help participants generate project alternatives (Adapted from EPA n.d., p. 11)

Considerations for Hurricane-Affected Areas

Hurricane-affected areas can include additional information to encourage safer community development and avoid exposure to environmental contaminants. Involving public health and environmental health experts in the conversation can bring greater awareness about the connection between the built environment and community health.

Additional pieces of information include:

- Structural impacts from previous hurricanes
- Infrastructure that may be at higher risk
- Model projections on how future hurricanes can impact the environment

Step 6. Secure Materials and Location. Before the charrette, ensure that the team has the materials necessary to conduct a charrette. They include:

- Audi- visual materials, lighting, extra batteries
- Location-specific materials, such as signs, seating, workstations
- Charrette supplies, including packets of information and participation materials, printed maps, paper, drawing supplies

A leadership team can check a charrette venue in advance to ensure that all components are in working order. This includes making sure the site is accessible and welcoming, arranging stations for breakout sessions and larger group meetings, and coordinating with people who control the site to make sure that the space will be available at the times specified in a charrette agenda.

Event: During a Design Charrette

The charrette itself is the central design event that results in a preferred solution, developed by stakeholders and connected to implementation. "Feedback loops" or cycles of community input between experts and stakeholders are a key component of the charrette process. A charrette should last a minimum of four days but can be longer (Lennertz and Lutzenhiser 2014). The charrette process involves multiple groups, including community members, a design/ expert team (including facilitator), and a leadership team. During the process, different participants may be needed.

For example, the community members can be invited to public meetings and open houses, while the expert team may consist of a small group of professionals synthesizing information for the charrette participants.

Design charrettes provide an opportunity to consult the public (receive information about preferences), involve participants (consider values and concerns in final decision), collaborate to create a solution (identifying solutions during the decision-making process), or empower participants to make a decision (specify that identified solution will be implemented) (International Association for Public Participation 2018). The phases below focus on creating plans. Plans can vary in scale, ranging from site plans to regional plans.

According to NCI Charrette System, the charrette should involve multiple phases. These phases can take place over several days. They include:

Public meeting and community vision (Day 1)

- Community members learn about project details
- They break out into small groups to discuss their vision of the community. This small group activity is typically facilitated by a team of experts with a design background who can help the members think from a design perspective. These ideas are later shared with the larger group.

Alternative concepts development and feedback loop #1 (Day 2)

- The expert team then works to create a series of alternative plans based on input collected during the community visioning phase.
- The team meets with key stakeholders and develops concept alternatives.

■ Preferred plan synthesis and feedback loop #2 (Day 3)

- In the next meeting, usually a public meeting or open house, participants review the alternatives and give their feedback. The expert team leads them through a series of questions intended to identify unresolved issues.
- After the first round of review, the expert team synthesizes the input to narrow the number of alternatives and creates detailed plans for those alternatives. Doing so moves them closer to a consensus vision and preferred plan.

■ Plan development and feedback loop #3 (Day 3 and 4)

• In the next meeting, charrette participants provide their feedback on the detailed plans, identify

- preferences, and present criticisms. They are welcomed to provide feedback using a rating system to compare the alternatives against the project objectives and public vision. The best features from each option are merged into a new solution.
- Equipped with the information and input from the public open house, the design team moves forward to draft the final, preferred design in detail.
- The team analyzes the project's performance and creates implementation strategies.

Production, public presentation, and review (Day 4 and 5)

- The design/expert team further refines and narrows the feedback into a final plan and set of implementation documents using all community input.
- Project participants review the framework and presentation materials.
- On the final charrette meeting with stakeholders, the design team presents all elements of the projects for public confirmation.
- The expert team also develops a project implementation strategy that discusses key next steps and highlights parties' roles and responsibilities during plan implementation.

These steps can be condensed into back-to-back sessions or they may be spread out to allow for time to generate plans. Even though it may not be ideal, these steps can be compressed to shorten the charrette process. This decision should be made by the leadership team, in coordination with facilitators and designers, and would depend on factors such as urgency, resources, and community willingness. A project with greater complexity will require more time to address challenges (Lennertz and Lutzenhiser 2014); however, simpler projects may be able to complete the three feedback loops within four days.

A charrette process benefits from having multiple feed-back loops where stakeholders can share their opinions and preferences with the expert team. During the kick-off meeting, the leadership team works with project participants to review the goals and components of the charrette process. Participants should be informed of their roles and responsibilities and be introduced to the resource team. Explaining the charrette objectives and providing transparency about the **level of participation** (allowed by the process) will help avoid confusion later in the process (Herd 2019). Several aspects should be considered on the day of the charrette.

On the day of the activity:

- Ensure that the meeting area is clearly marked with wayfinding signs.
- Position volunteers to welcome and guide participants.
- Check that the space is ready with materials and is welcoming (appropriate temperature, light music, snacks and beverages are available, name tags, and programs/ informational packets)
- At the start of the activity (Herd 2019; NCI n.d.):
- Have someone start the meeting. This can be a member of the sponsor team or a community leader/representative.
- Introduce sponsors, experts, and present stakeholders.
 Discuss the roles that each group will play during the design charrette process.
- Explain goals, expected level of participation, and potential outcomes.
- Provide overview of the plan for the day, highlighting activities, and identifying working spaces.
- Discuss data briefly. Introduce materials that can shape decision making during the charrette.
- Identify rules for participation. Ground rules ensure that participants are engaging in a way that is respectful, keeps conversations centered on the task at hand, and is oriented toward meeting objectives for the meeting (Herd 2019, p. 7). They include:
 - Only one person speaks at a time.
 - Be courteous and respectful towards one another.
 - Make decisions by consensus.
 - Everyone is encouraged to participate.
 - Share brief comments.

Once the charrette process has been introduced, the initial activities focus on education and orientation for charrette participants.

- Provide information and orient charrette participants. This can include a site visit, more in-depth conversations about the site and surrounding spaces, or a brief presentation on existing site conditions.
- Restate goals for project and expectations for participants to help everyone understand their role in shaping the project.

At all points of the design charrette, facilitators should follow the three pillars of successful participation (Herd 2019):

- 1. Gain and maintain the trust of the participants.
- **2.** Remain neutral on substantive and procedural aspects of the discussion.
- **3.** Always show respect to all participants.

Using data. In the charrette process, visualizations play an important role in the formulation and communication of design concepts. Various types of visualizations, including sketches, renderings, maps, and photos, are used to present architectural designs and planning scenarios. Visualizations can create awareness about important site conditions and provide a valuable insight into places/spaces and people's interaction with them. Data and graphics can help a charrette team:

- Understand the Community. Complete a thorough inventory and assessment of the physical, social, and economic aspects of the community. Maps, photos (historic and current), graphs/charts of demographic information, and other data serve as a basis for decision making. Context is critical, so if necessary, the data should focus on the geographic area beyond the neighborhood in which the project is located.
- Visualization & Visioning. Drawings and pictures are some of the best tools for accurately depicting what is intended or expected. Words alone generate a different mental image for each person, but pictures are seldom misunderstood. Visualizations can help a community understand values and priorities shared by other participants. For example, after a visioning session, the design team can summarize information using presentations, word clouds, or other charts or graphics to represent contributions. (EPA n.d.).

The final graphics presented during a charrette should include before-and-after visualizations, an illustrative plan depicting area where growth and change are anticipated, as well as diagrams and illustrations to convey key concepts.

Charrette Activities. Charrette activities combine intensive and collaborative working sessions with public workshops, site visits, and feedback collection. Activities conducted during the charrette should be carefully designed and selected because they determine the level of engagement and the type of feedback that is received from the participants. Facilitators can focus on interactive activities that engage participants in multiple ways, allow for various perspectives, and elicit feedback (Thompson 2017).

Once charrette participants have been informed of the design problem, discussed the existing site conditions, and oriented towards addressing the project goals, activities should focus on the development of alternatives. The leadership team and the expert team can address any information gaps and conduct fact-checking as needed when the alternatives are being drafted. Activities can include SWOT analysis, asset mapping, and dot voting (Herd 2019).

Wrap Up. The charrette culminates with a final presentation to the community, which connects the momentum developed during the charrette process to build and maintain long-term support for the project. During this process, facilitators can:

- Discuss the work completed over the entire charrette process.
- Explain next steps, such as decision-making processes and implementation plans.
- Collect feedback on the overall organization of the charrette including the agenda, quality of experts and facilitators, and space before participants leave the charrette space.
- Provide information on how participants may be engaged after the charrette is completed.
- Highlight how stakeholder input will lead to community changes.
- Celebrate community accomplishment.

Implementation: After a Design Charrette.

The momentum following the charrette should be used for plan adoption and implementation to ensure continued support from the community members. It involves project status communications, product refinement, and public presentation and product finalization. This phase lasts two to four months.

Follow up and next steps. Post-charrette planning requires continued participant engagement as well as gathering and compiling feedback once the design charrette process is complete. It is important to note that work on the project continues after the charrette is completed. The final phase of the charrette process, plan adoption and implementation, involves document refinement and further feedback, which occur through stakeholder discussions and follow-up meetings after the charrette. This allows everyone to check in on the refined charrette plan and to allow for multiple feedback loops. A charrette process can reduce

implementation challenges by avoiding poor post-charrette communication with stakeholders, ensuring that a project is implemented in a timely fashion (i.e., close to the timeline presented to participants), engaging stakeholders early in the process to avoid opposition from people who were not properly involved, and working with experts to ensure that

General considerations for developing implementation plans in areas with environmental concerns (EPA n.d.):

- Create a timeline that identifies charrette activities and timeframes for various stakeholders
 (local government agencies, developer, community members, sponsors, etc.).
- Identify opportunities to create systems, such as institutional controls and site decision-making process, to ensure parties follow decisions.
- In cases of environmental hazards, coordinate with government agencies to identify how to support environmental health and adequate site protection over the long-term.
- Work with community members to discuss site liability and to address concerns.
- Apply planning interventions, such as drafting policy updates, changing planning documents, and creating incentives that encourage site reuse.
- Encourage local governments to adopt strategies that make use of a community's reuse planning capacity.
- Explore opportunities to apply for monetary resources, such as grants, loans, and technical assistance, to assist with implementation. Additionally, consider how information from this activity can shape future outreach initiatives.
- Record activities to include at future public participation strategies.

A charrette is an intensive collaboration process; however, it provides an opportunity for stakeholders to influence the final outcomes from a project. Whether participants are engaged in a consultation, collaborative, or empowerment purpose, both the charrette leadership team and participants can benefit from having conversations about values and preferences.

data is available and correct to avoid critical design flaws (Madill et al. 2018).

CHARRETTE CONSIDERATIONS IN HURRICANE-AFFECTED AREAS

There are several considerations planners should be aware of when including the design charrette process in the public participation plan for recovery planning efforts. One consideration is determining if a community is charrette-ready, or ready to engage stakeholders, share data, and host a meeting in a space that can accommodate participants and charrette activities (Madill et al. 2018). The community may be ready for a charrette if there is enough time for preparation and access to the right resources, including:

- *People*. Participants should be informed of the process and be willing to participate. Experts should be available to help apply design ideas.
- Data. Data is a key component of creating implementable plans. It may take time to gather information, including site details and environmental conditions, as well as the expertise to package the data in a format that is user-friendly. Experts should be contacted to identify what materials are needed for them to successfully engage in the design process.
- Place. Selecting a location is critical to ensure community-wide engagement. Additionally, taking stock of needed resources, such as materials to generate plans and components like catering and transportation options, will help determine the type of budget necessary and if additional resources are needed.

In addition to assessing whether a community is ready for the design charrette process, it is necessary to also take into consideration the public participation challenges that may arise when implementing charrette activities. Issues like a lack of trust, histories of exclusion, divided opinions, siloed experts, and meeting fatigue can be addressed by engaging in a charrette process that seeks to find solutions generated by stakeholders (Madill et. al 2018). Planners have opportunities to help overcome these challenges by planning a design charrette approach that is inclusive, respectful, and aims to implement solutions generated by charrette participants.

In hurricane-affected areas charrettes can help move recovery forward in an expedited manner. Collaborative processes like these are effective tools that can be used for identifying solutions through community consensus. A design charrette can help a community collectively determine where they would like to see their community in the future by assessing various factors, including changing conditions after a hurricane, histories of redevelopment efforts, a variety of stakeholders, safety concerns, and conditions that influence site development. Because visualizations are an important component of charrettes, they can encourage participants to agree on feasible solutions more quickly than other collaborative processes.

Following a hurricane, communities will need to make decisions about redevelopment that may be impacted by environmental conditions. Environmental conditions, such as the presence of toxics, air quality, and water conditions, can affect environmental health and cause conflict in hurricane-affected areas. A charrette can help overcome these challenges by bringing together resources and diverse community perspectives. In hurricane-affected areas, this process can be expedited because participants may be interested in community recovery, which can encourage consensus on decisions and even partnerships to help implement solutions.

Charrettes offer several other benefits to decision

making in projects that address environmental and land use conflicts (EPA n.d.). They can:

- Encourage conflict resolution between parties with varied perspectives by identifying shared interests and solutions that benefit all participants.
- Enable education and capacity building among participants and groups responsible for implementation.
- Set realistic expectations by using comprehensive information.
- Provide an opportunity to employ an efficient process for identifying design solutions with limited limit the amount of time and resources.

Further, the design charrette process may be one part of the larger public participation plan. In hurricane-affected areas, participants may select resilience strategies such as moving a portion of their community out of high-hazard areas, integrating green infrastructure strategies, and policies to improve connectivity and livability of the residents. Collectively, communities can use charrettes as a platform to discuss redevelopment alternatives and identify solutions that align with community interests and project goals.

ADDITIONAL RESOURCES

Helpful Links

- The National Charrette Institute
- Crafting Charrettes That Transform Communities
- *A Planner's Guide to Meeting Facilitation* (PAS 595)
- The Charrette Handbook

APPENDIX REFERENCES

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