Acknowledgements


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The Communities Advancing Resilience Toolkit (CART): The CART Integrated System is a community intervention designed to enhance community resilience through assessment, group processes, planning, and action. The CART Integrated System engages community organizations in collecting and using assessment data to develop and implement strategies for building community resilience. CART tools described herein can assist community organizations in systematically assessing their communities with respect to disaster prevention, preparedness, response, and recovery.

Resilience can be thought of as an attribute (an ability or capacity), a process, and/or an outcome associated with successful adaptation to, and recovery from, adversity. Building a resilient community involves more than assembling a collection of resilient individuals. Community resilience requires that the community as a whole cope effectively with, and learn from, adversity. A resilient community has the ability to transform the environment through deliberate, collective action.

CART recognizes the importance of information and communication in a community’s resilience and it uses information and communication to build that resilience. Three key aspects of group behavior are at the foundation of CART:

- Communication among group members permits the group to pool skills and knowledge to achieve better outcomes,
- Members can learn and grow as a result of group interactions, and
- Group participation can facilitate acceptance and implementation of group goals.
CART stimulates communication, analysis, and action, and it contributes to community participation and collaboration, community self-awareness, critical reflection, and skill development. CART encourages public engagement in problem solving and the development and use of local assets to address community needs. CART is designed to strengthen and empower communities, not to compare or rank them.

**CART Domains**

CART addresses four overlapping, interrelated domains that both describe and affect community resilience:

<table>
<thead>
<tr>
<th>Domain</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection and Caring</td>
<td>Includes participation, relatedness, shared values, support systems, a sense of fairness, and hope.</td>
</tr>
<tr>
<td>Resources</td>
<td>Includes natural, physical, human, financial, information, and social resources.</td>
</tr>
<tr>
<td>Transformative Potential</td>
<td>Includes the ability to identify and frame collective experiences, data collection and analysis, planning, and skill building that create the potential for community change.</td>
</tr>
<tr>
<td>Disaster Management</td>
<td>Includes disaster prevention and mitigation, preparedness, response, and recovery</td>
</tr>
</tbody>
</table>

Communication is an important element of all four domains. Communication can foster connection and caring. Communication channels contribute to a community’s resource base. Communication is necessary for the transmission of information that contributes to critical reflection, skill building, and transformation. Effective communication is essential for disaster management.

**CART Integrated System**

The CART process typically begins with an assessment survey that addresses the four resilience domains, participants’ personal relationship to their community, demographics of respondents, and additional concerns developed in conjunction with community partners. The CART survey provides a snapshot of strengths and challenges that are
meaningful for the particular community and the organizations participating in the process. Survey results can be used to develop a community profile that describes the community from the perspective of respondents. The initial survey is followed by a series of meetings in which participants interpret survey findings within the context of their community and identify potential information gaps. Other assessment instruments described herein can be used to refine the profile as needed.

As part of creating the community profile, participants work together using group processes to explore the meaning of community, perceptions of the community resilience domains as applied to specific community concerns, and potential actions that can build resilience. Based on assessment results and knowledge of their community, group members may undertake strategic planning to increase community resilience. Members identify local hazards, community strengths and weaknesses, opportunities for improvement, factors outside the community that might advance or impede progress, and other relevant concerns. Groups then establish goals related to issues they choose to address and engage in planning to develop strategies and an action plan to enhance community resilience in support of the goals they have established. Prior to implementation, groups may disseminate plans among community members and organizations for consideration and possible revision. The strategic planning component of the CART Integrated System is currently under development.

The following diagram is a graphical representation of the process underlying the CART Integrated System. At each stage in the process (shown in boxes) participants (underlined) engage in various activities using CART instruments. The solid arrows show how data and information flow from the community at each stage in the process as community members work with CART instruments. Data and information also flow from stage to stage as participants build on and augment the work of prior stages. The dashed arrows show potential changes in, or effects of, the CART intervention on community resilience characteristics. At every stage of the process, there is the potential for change in community members’ understanding of, and contributions to, community resilience.
The CART Process

1. Generate a Community Profile
   - CART Team & Partners
   - CART Assessment Survey
   - Key Informant Interviews
   - Data Collection Framework
   - Other Assessments

2. Refine the Profile
   - Community Work Groups
   - Community Conversations
   - Neighborhood Infrastructure Maps
   - Community Ecological Maps
   - Stakeholder Analysis
   - SWOT Analysis
   - Capacity and Vulnerability Assessment
   - Additional Assessment

3. Develop a Strategic Plan
   - Community Planning Groups
   - Goals & Objectives
   - Strategies & Action Plan

4. Implement the Plan
   - Community Leaders and Groups
     - Dissemination & Adoption
     - Evaluation & Refinement

Source: Communities Advancing Resilience Toolkit: The CART Integrated System®, 2011, Pfefferbaum RL, Pfefferbaum B, Van Horn RL, Terrorism and Disaster Center, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma, United States.
**CART Tools**

The following CART tools are described herein:

**CART Assessment Survey**

This field-tested survey instrument assesses a community’s resilience across four CART domains, explores participants’ personal relationship to their community, and queries standard demographics. The CART survey design encourages the addition of items to address specific concerns for your organization and/or community.

**Key Informant Interviews**

Key informant interviews generate qualitative information from individuals who are knowledgeable about your community. Instructions provide guidance for selecting key informants and conducting interviews. Sample questions are included to address various aspects of community resilience, each of the four CART domains, terrorism preparedness, and public engagement.

**Data Collection Framework**

The data collection framework identifies the type and sources of existing data that may be useful in a community’s strategic planning to build community resilience to terrorism and disasters.

**Community Conversations**

Community conversations foster the exchange of information, ideas, and opinions among members of your community. Instructions help facilitators to convene and conduct conversations. Sample questions are provided.

**Neighborhood Infrastructure Maps**

This tool provides guidance for mapping the physical infrastructure of a neighborhood. Such maps improve your awareness of a neighborhood. They can be used to introduce your organization to a community and to initiate networking with neighbors.

**Community Ecological Maps**

This visual tool for describing the nature and strength of relationships within a community can provide a foundation for improving relationships and partnerships.
**Stakeholder Analysis**

Stakeholder analysis will help you to analyze the potential influence of key individuals, groups, and organizations. It provides information to garner support for, and limit opposition to, your activities.

**SWOT Analysis**

This strategic planning tool provides information for analyzing a community’s resources and capabilities. Additionally, the tool aids in developing strategies to utilize strengths, pursue appropriate opportunities, overcome weaknesses, and reduce vulnerabilities.

**Capacity and Vulnerability Assessment**

This tool is particularly useful in communities where groups may be impacted differently depending on, for example, socio-economic status, health, or ethnicity.
General Information and Guidelines for Using CART Tools

CART tools, designed to be used by an organization or team to address clearly defined objectives, can help you to think in depth about your community and to assess and analyze it with respect to community resilience and disaster prevention, preparedness, response, and recovery. The tools assist you in asking questions about, and undertaking a methodical review of, your organization, objectives, and initiatives. In doing so you may discover areas in which you need or want to alter your plans, involve local constituents, strengthen relationships, and counter negative effects.

Most CART tools are appropriate for an all-hazards environment, though some may be used more appropriately with a specific hazard in mind. For some tools, it is essential that you identify a clear, attainable, time-limited, and preferably measurable objective. Other tools can be used to shape or reframe objectives. While individual tools can be used alone, many work best when used in tandem.

Implementation of CART tools requires active participation and interaction among members of your organization and involvement with the community. Sources of information when implementing tools may include members of your organization, formal and informal community leaders, public officials, neighborhood residents, selected professionals, other key informants, a variety of other stakeholders, existing studies by local organizations, local newspapers, your public library, and the Internet.

After reading the entire description of a tool, consider whether it is pertinent for your organization and needs. Note that there are considerations at the end of each tool that may be relevant for your purpose. Make note of considerations that may affect how you progress through an application. Templates provided for some tools (see Appendix C) help you to understand what to consider when implementing the tool. Often it is less important where you put something in a template, than that you attend to it in your analysis.
**Human Subjects Protections**

Many organizations (such as universities and health care providers) have established mechanisms to protect human research subjects through an institutional review process that requires consent to participate. Follow the requirements of your institutional review board if your organization has one. Use consent forms if you plan to address sensitive, personal information.

**Terrorism and Disaster Center**

You are invited to contact the Terrorism and Disaster Center (TDC) for assistance when you contemplate initiating a CART project for your community. TDC may be able to assist you with online data collection and analysis. Please contact TDC by e-mail at tdc@ouhsc.edu.

The primary value of CART is its contribution to community participation, communication, self-awareness, and critical reflection, along with its ability to stimulate analysis, collaboration, resource sharing, skill building, and purposeful action. We encourage you to use the CART tools with this in mind. In doing so, you can foster community resilience.
Tool: CART Assessment Survey

**Brief description of the tool**

The CART assessment survey uses a field-tested instrument which assesses a community’s resilience across the four CART domains (Connection and Caring, Resources, Transformative Potential, and Disaster Management), explores respondents’ personal relationship to their community, and queries standard demographics. The CART survey design encourages the addition of items to address specific concerns for your organization and community. Survey results provide a snapshot of strengths and challenges that are meaningful for the particular community and organizations participating in the process. Refer to Appendix A for survey instruments.

**Reasons for using the tool**

The CART survey is a mechanism for gathering baseline and follow-up information about a community. Ideally, the survey is used to initiate a process to build community resilience to disasters or other adversities by stimulating communication, analysis, and action.

**When to use it**

While you can survey at any time, it is helpful to do so early in the CART process and again after you undertake a major initiative or implement a new program. The survey is especially useful prior to, or as part of, key informant interviews and community conversations.

**Instructions**

**Step 1: Identify the community.** CART relies primarily on traditional definitions of a community as people, resources, organizations, structures, and systems in close geographic proximity (e.g., a city or neighborhood), while recognizing that physical boundaries and borders are imprecise descriptors of a community. Determine your community boundaries prior to surveying. Consider the reach of your organization,
officially recognized boundaries that dictate significantly the flow of resources, natural
boundaries created by terrain features, and traditionally recognized boundaries known to
local residents.

**Step 2: Prepare additional survey questions and finalize the instrument.** Review the
CART survey instrument, several versions of which are contained in Appendix A. Consider
gathering additional organization- and community-specific information (e.g., perceptions
about the adequacy of local shelters or the availability of educational opportunities in the
community) that could be useful to your organization and community. Develop questions
to gather this additional information, recognizing that people may not complete a lengthy
questionnaire. Pilot test your survey instrument with friends or colleagues to be sure new
questions are appropriately worded and to determine how long it takes to complete the
survey.

**Step 3: Select the survey delivery method and the sample.** The survey can be
administered in person, over the telephone, through postal mail, or online. In
determining which method to use, consider which method will reach the greatest number
of subjects, generate the highest response rate, require the least time and skills for data
entry and analysis, and cost the least to administer and analyze. A random sample of your
community is ideal to the extent that it permits you to generalize from survey responses
to the entire community, but some organizations do not have ready access to a database
to generate such a sample at reasonable cost. Alternative, purposive samples (which
include individuals chosen because they meet specific criteria such as being
particularly knowledgeable about an issue) may include a mix of community leaders,
neighborhood members, selected professionals, and/or representatives of community
organizations.

**Step 4: Invite participation in the survey.** Prepare an introductory statement that you will
use to invite participation in the survey. The introduction should include information
about your organization and the purpose of the survey. You should explain how the
results will be used and discuss confidentiality issues. CART survey results generally are
presented for an entire sample or sub-samples so that identifying information about
individual participants need not be collected and, if it is, should not be reported.
Step 5: Implement the survey. Implement the survey in accordance with your chosen delivery method(s). Send follow-up requests for responses at least once after your initial contact and in accordance with a deadline you establish.

Step 6: Analyze responses. Analysis of survey responses for the core community resilience items generally focuses on the percentage of respondents who agree (those who indicate they agree or strongly agree) with individual items. A community profile can be developed based on these and other survey items. After calculating the percentage of individuals who agree with each community resilience survey item, identify your community’s strengths and challenges. CART strengths (approximately 25% of survey items with the highest percent agreement) and challenges (approximately 25% of survey items with the lowest percent agreement) should differ by at least 10 percentage points. Potentially important relationships, including the implications of demographics, also should be considered as part of your data analysis.

Step 7: Interpret results. CART survey results represent the perspective of those who participate in the survey and must be interpreted by members of the community. This can be done as part of CART community conversations and/or key informant interviews.

Considerations

Terrorism and Disaster Center. You are invited to contact the Terrorism and Disaster Center (TDC) for assistance when you contemplate initiating a CART project for your community. TDC may be able to assist you with online data collection and analysis. Please contact TDC by e-mail at tdc@ouhsc.edu.

Human subjects protections. You should not need to collect personal health information. If you decide to do so, you will need to work with a recognized institutional review board to ensure that human subjects protections (including consent processes) are in place.
Tool: Key Informant Interviews

**Brief description of the tool**

Key informant interviews generate qualitative information from individuals who are knowledgeable about your community and/or your concern. Questions available as part of the CART Integrated System address various aspects of community resilience, each of the four CART domains (Connection and Caring, Resources, Transformative Potential, and Disaster Management), terrorism preparedness, and public engagement. Refer to Appendix B for sample questions.

**Reasons for using the tool**

Key informant interviews can be meaningful as part of processes to augment survey or other information, assess needs, identify and solve problems, formulate goals and objectives, plan and design new programs, and evaluate existing programs.

**When to use it**

Key informant interviews may be conducted at any time in the CART process. They can be useful before you implement other instruments (e.g., to shape specific features associated with your application of an instrument) or after you implement other instruments (perhaps to interpret results). They also are useful as a separate tool to gather specific information from informed individuals. It is recommended, but not essential, that you administer the CART survey with key informants before you interview them.

**Instructions**

**Step 1: Clarify the purpose of your interviews.** Interviews are time consuming for you and your key informants, and they can enhance or diminish your relationship with those key informants depending on how well you perform. Interviews should have a purpose.
which you need to clarify for yourself and your subjects. Be sure you know why you are conducting interviews and what you intend to do with the information gathered.

**Step 2: Prepare questions.** Review the available CART questions and conduct background research to augment them if necessary. Select, write, and edit questions to enable you to gather the information you are seeking. Questions should be neutral, specific, open-ended, and clearly worded. Avoid leading questions in which you imply an expected answer within the question. For example, rather than asking *How disconnected are the people in this neighborhood*, consider asking *How connected are the people in this neighborhood* since the former suggests that you expect to find a lack of connection.

**Step 3: Structure the interview.** Create a structured guide to keep the interview on track and within time limits (typically 1 hour or less). Your guide should include an introduction, questions organized in a logical order, possible probes (used to gather additional information related to a response or to clarify or correct misunderstandings), transition statements, and a closing.

**Step 4: Select and contact key informants.** In selecting key informants, you want to identify accessible individuals who are knowledgeable about the issues you plan to address in the interview, willing to share that information, and available to meet with you. When you contact potential subjects, identify yourself and the organization you represent, explain the purpose of the interview and how results will be used, and indicate how long the interview will take. If there is any chance that you will address protected health information, discuss confidentiality issues and seek approval through a recognized institutional review board. Be flexible about the schedule and location for the interview since you will need to accommodate your key informants. Show respect for subjects throughout the process by maintaining a professional and courteous manner and honoring time constraints.

**Step 5: Prepare for the interview.** Practice conducting interviews and taking notes until you are comfortable with the questions, the structure, and the process. Knowing the questions and role playing the interview with a teammate or friend will help to ensure that you
can conduct the interview within designated time limits. Choose a location(s) without distractions that is comfortable for you and your subjects.

**Step 6: Conduct the interview.** When you meet with a key informant, once again identify yourself and the organization you represent and explain the purpose of the interview and how results will be used. Ask your subject if he/she has any questions before you start the interview. Ask one question at a time, listen (and let your subject know you are listening by commenting occasionally), and take notes. Remain neutral in asking questions and listening to responses. Stay focused on the purpose and structure of the interview, taking care to maintain control so that your subject does not take too long to answer questions or stray off topic. Maintain eye contact while taking notes. When you complete the interview, thank your subject and tell him/her how to get in touch with you should he/she so desire. Also send a written thank you note following the interview.

**Step 7: Analyze the interview.** Immediately after each interview, make additional notes regarding responses and observations and summarize key points so you will not forget them. Consider your subject’s objectives, needs, and interests when assessing the accuracy of the information gathered.

**Considerations**

**Probes.** Probing is used to draw out a subject, to gather additional information related to a response, or to clarify or correct misunderstandings. Examples of probing are: *Can you tell me more?* and *Are there other examples?*

**Tape recording.** If you plan to tape record interviews, you must obtain permission from your subjects. If taping, verify that the recorder is working and take notes as well just in case the recorder fails.

**Alternative arrangements.** Face-to-face interviews permit you to observe facial expressions and body language, but they are more time consuming and may be less convenient for your subjects than alternative approaches such as email or telephone interviews. While email interviews allow your informants to answer questions
at their convenience, email responses may be less complete and you may be unable to ask follow-up questions.

**Human subjects protections.** You should not need to collect personal health information. If you decide to do so, you will need to work with a recognized institutional review board to ensure that human subjects protections (including consent processes) are in place. When using consent forms, review confidentiality concerns and requirements with your key informants when you schedule the interview and again at the beginning of the interview.
**Tool: Data Collection Framework**

**Brief description of the tool**

The data collection framework identifies the type and some sources of existing data that may be useful in a community’s strategic planning to build community resilience.

**Reasons for using the tool**

The data collection framework can facilitate the collection of data about your community. Data collected can improve your knowledge of your community, helping you to tell the story of the community, to identify local capacities and vulnerabilities, and to anticipate the complexities you may encounter as part of local disaster prevention, preparedness, response, and recovery. Use of the tool provides information to supplement other readiness and response activities such as capacity and vulnerability assessment and neighborhood infrastructure mapping.

**When to use the tool**

Data can be collected at any time to learn more about your community. Data should be updated regularly and any time significant changes occur within the community. Data collection also can be beneficial as a part of orienting new members to your organization and community.

**Instructions**

**Step 1: Review and download relevant U.S. Census data.** Census data for your local area are available at http://factfinder.census.gov. The American Community Survey (ACS) is an ongoing survey that provides data annually. Community fact sheets include:

- demographic characteristics (e.g., sex, age, race, and number of housing units);
- social characteristics (e.g., total number of households and households by type, marital status, education, school enrollment, disabilities, and languages spoken in the home);
- economic characteristics (e.g., labor force participation, employment data, occupations, industries, income, health insurance coverage, and poverty); and
- housing characteristics (e.g., occupancy, owner/renter, available vehicles, and heating fuel).

**Step 2: Review and download relevant data from the Centers for Disease Control and Prevention (CDC).** SNAPS, available at [http://emergency.cdc.gov/snaps/](http://emergency.cdc.gov/snaps/), provides local-level community profile information nationwide that can be browsed by county and state and searched by zip code. SNAPS can be helpful when responding to public health emergencies at the state, Tribal, and local levels. It provides a "snapshot" of key variables for consideration in guiding and tailoring health education and communication efforts to ensure that critical public health messages are accessible, understandable, and timely for diverse audiences. Data include, for example, population by gender, ethnicity, languages spoken at home, countries of origin, major religions, name and location of migrant health clinics, disabilities, heating fuel, vehicles available per household, education, household phones, and licensed broadcast media outlets.

**Step 3: Review and download relevant data from the Community Health Status Indicators (CHSI) Report.** CHSI data are available at [http://www.communityhealth.hhs.gov/](http://www.communityhealth.hhs.gov/). The CHSI Report provides an overview of key health indicators by county. The report, containing over 200 measures which can be displayed on maps or downloaded in a brochure format, can provide information for a community needs assessment, the quantification of vulnerable populations, and the measurement of preventable diseases, disabilities, and deaths.

**Step 4: Amass other data describing your community.** The table below lists data elements that may be particularly useful for building community resilience to disasters. Potential data sources will vary somewhat by community, but they typically include:
✓ Census data (see Step 1 above)
✓ Municipal offices
✓ Local and state emergency management and public health offices
✓ Community information and referral organizations
✓ Social service agencies
✓ Health and human service associations (e.g., hospital and nursing home associations)
✓ Economic development organizations
✓ Business associations (e.g., Chamber of Commerce, Business Networking International)
✓ Professional associations
✓ Studies by local and state newspapers, banks, foundations, and universities

See the template in Appendix C.

<table>
<thead>
<tr>
<th>Data Element</th>
<th>Special Considerations</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic data</strong></td>
<td>Consider geographic size and population density. Consider recent trends.</td>
<td></td>
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<tr>
<td>Sex</td>
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<td>Age</td>
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<td>Race and ethnicity</td>
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<td>Disabilities</td>
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<td>Employment and unemployment</td>
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<td>Income and poverty</td>
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<td>Health status</td>
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<td>Education attainment</td>
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<td>Literacy</td>
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<td>Primary language</td>
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<td>Marital status</td>
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<td>Religious affiliations</td>
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<tr>
<td>Other</td>
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<tr>
<td><strong>Household data</strong></td>
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<tr>
<td>Children per household</td>
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<td>Elders per household</td>
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<tr>
<td>Vehicles available/operational</td>
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<tr>
<td>Phones by type (landline, cell)</td>
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<tr>
<td>Heating fuel by type (e.g., electricity, coal, wood)</td>
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<tr>
<td>Cooling system by type (e.g., air conditioner, evaporative cooling, fan)</td>
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<tr>
<td>Other</td>
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<tr>
<td>Data Element</td>
<td>Special Considerations</td>
<td>Findings</td>
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<tr>
<td><strong>Housing data</strong></td>
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<td>• Occupancy</td>
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<td>• Home ownership</td>
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<td>• Multi-unit developments</td>
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<tr>
<td>• Homeowner associations</td>
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<tr>
<td>• Length of home ownership</td>
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<tr>
<td>• Other</td>
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<tr>
<td><strong>Education</strong></td>
<td></td>
<td>Include public, private, and charter schools. Indicate any specialty education institutions.</td>
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<td>• Schools</td>
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<td>• Colleges and universities</td>
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<td>• Vocational/technical schools</td>
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<td>• Apprentice and internship opportunities</td>
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<td>• High school equivalency and adult literacy programs</td>
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<td>• Job training organizations (e.g., Job Corps, Goodwill job training)</td>
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<td>• Other</td>
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</tr>
<tr>
<td><strong>Business, occupational, and economic data</strong></td>
<td></td>
<td>Include number by type. Highlight crisis-relevant businesses such as hardware stores and lumber suppliers.</td>
</tr>
<tr>
<td>• Major and minor industries by type</td>
<td></td>
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<tr>
<td>• Major and minor businesses by type</td>
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<tr>
<td>• Occupations by type</td>
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<tr>
<td>• Licensing boards</td>
<td></td>
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<tr>
<td>• Labor unions</td>
<td></td>
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<tr>
<td>• Employment agencies</td>
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<tr>
<td>• Employment/career centers</td>
<td></td>
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<tr>
<td>• Office parks</td>
<td></td>
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<tr>
<td>• Shopping malls</td>
<td></td>
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<tr>
<td>• Hotels and motels</td>
<td></td>
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<tr>
<td>• Restaurants</td>
<td></td>
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<tr>
<td>• Professional associations</td>
<td></td>
<td></td>
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<tr>
<td>• Other</td>
<td></td>
<td></td>
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<tr>
<td><strong>Transportation data</strong></td>
<td></td>
<td>For bus and train stations and airports, indicate distance to closest sites.</td>
</tr>
<tr>
<td>• Fuel stations</td>
<td></td>
<td></td>
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<tr>
<td>• Bus stations</td>
<td></td>
<td></td>
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<tr>
<td>• Train stations</td>
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<tr>
<td>• Elevated trains/light rail stations/subways</td>
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<tr>
<td>• Airports</td>
<td></td>
<td></td>
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<tr>
<td>• Highways</td>
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<tr>
<td>• Bridges</td>
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<tr>
<td>• Tunnels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Element</td>
<td>Special Considerations</td>
<td>Findings</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Health and human services</strong></td>
<td></td>
<td></td>
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<tr>
<td>Hospitals</td>
<td></td>
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<tr>
<td>Clinics</td>
<td></td>
<td></td>
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<tr>
<td>Nursing homes</td>
<td></td>
<td></td>
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<tr>
<td>Assisted living facilities</td>
<td></td>
<td></td>
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<tr>
<td>Social service providers by type</td>
<td></td>
<td></td>
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<tr>
<td>Physicians</td>
<td></td>
<td></td>
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<tr>
<td>Mental health service providers</td>
<td></td>
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<tr>
<td>Support groups</td>
<td></td>
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<tr>
<td>Food banks</td>
<td></td>
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<tr>
<td>Existing shelters</td>
<td></td>
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<tr>
<td>Contingent shelters</td>
<td></td>
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<tr>
<td>Sanitation services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number and distance to closest if not within the community. Calculate per capita as appropriate.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Faith-based organizations</strong></td>
<td>Number by type and approximate number of participants.</td>
<td></td>
</tr>
<tr>
<td>Churches, synagogues, mosques</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Libraries</strong></td>
<td>Number and distance to closest if not within the community.</td>
<td></td>
</tr>
<tr>
<td><strong>Recreation opportunities</strong></td>
<td>Number by type and approximate number of participants.</td>
<td></td>
</tr>
<tr>
<td>Parks</td>
<td></td>
<td></td>
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<tr>
<td>Sports groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports facilities (e.g., bowling alleys, ice rinks)</td>
<td></td>
<td></td>
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<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Civic and fraternal organizations</strong></td>
<td>Number by type, number of members, and frequency of meetings</td>
<td></td>
</tr>
<tr>
<td><strong>Media</strong></td>
<td>Number of each. Indicate if in English or another language. Indicate if accessible by people with visual and/or hearing limitations.</td>
<td></td>
</tr>
<tr>
<td>Newspapers</td>
<td></td>
<td></td>
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<tr>
<td>Radio stations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Television stations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Internet penetration</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Public Meetings</strong></td>
<td>Indicate frequency, accessibility, and attendance.</td>
<td></td>
</tr>
<tr>
<td>Public forums</td>
<td></td>
<td></td>
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<tr>
<td>Governing council meetings</td>
<td></td>
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</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Element</td>
<td>Special Considerations</td>
<td>Findings</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Voting</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Availability of voter registration sites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Availability of polling sites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Registered voters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Voter turnout</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Organized volunteerism</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Number and type of organizations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Participation in organized volunteer activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Philanthropy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Number and type of organizations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Contributions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Crime data</strong></td>
<td>Indicate number and location of crimes by type</td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Considerations**

Data collection will be influenced by your determination of community boundaries. It frequently is easier to amass data for larger and officially-designated entities (for instance, a city versus a neighborhood). Census data are available for relatively small areas (Census tracts), but other data may not be. If you are analyzing a relatively small geographic area, you may have to rely on local data sources (such as local government, newspapers, Chamber of Commerce, and banks).
Tool: Community Conversations

**Brief description of the tool**

Community conversations foster the exchange of information, ideas, and opinions among participants who are assumed to have useful knowledge that can contribute to an understanding of a particular issue. Conversations are designed to assess how people think or feel about a topic. Because participants are interviewed in a group, it is possible to obtain a lot of information at one time. Individual comments often trigger new ideas from other participants including unanticipated information. Questions available as part of the CART Integrated System address various aspects of community resilience, each of the four CART domains (Connection and Caring, Resources, Transformative Potential, and Disaster Management), terrorism preparedness, and public engagement. Refer to Appendix B for these questions.

**Reasons for using the tool**

Community conversations can be meaningful as part of processes to assess needs, identify and solve problems, formulate goals and objectives, plan and design new programs, evaluate existing programs, and suggest or evaluate items for a survey. CART survey and community conversation results can be used to identify community strengths and challenges from the perspective of participants. An initial community conversation and follow-up groups or meetings can lead to strategic planning, the outcome of which might be a new program or sector-specific or community-wide action. The use of results will depend, in part, on community interest, resource constraints, and the ability of leaders to implement a plan of action.

**When to use it**

Community conversations may be conducted at any time in the CART process. They can be useful before you implement other instruments (e.g., to shape specific features associated with your application of an instrument) or after you implement other instruments (e.g., to interpret results). They also are useful as separate tools to gather
specific information from informed individuals. It is recommended, but not essential, that you administer the CART survey with participants before they take part in a community conversation.

**Instructions/Guidelines**

**Step 1: Clarify the purpose of your conversations.** Community conversations should have a purpose which you need to clarify for yourself and your participants. Be sure you know why you are conducting conversations and what you intend to do with the information gathered. Stay focused on your purpose as you develop questions and a structured guide, identify participants, and facilitate and analyze the conversation.

**Step 2: Prepare questions.** Review the available CART questions and conduct background research to augment them if necessary. Select, write, and edit questions to enable you to gather the information you are seeking. Questions should be neutral, specific, open-ended, and clearly worded. Avoid leading questions in which you imply an expected answer within the question.

**Step 3: Create a structured guide.** The discussion should begin with broad questions that get more specific as the session continues, relying on probes rather than leading questions. Create a structured guide to keep the session on track and within time limits (typically 1 to 3 hours). The structured guide should be based on the information to be collected.

**Step 4: Select and recruit participants.** The optimal number of participants is 6 to 12. When there are too few participants, information usually is not as rich or deep. With too many participants, you may find it more difficult to stay within time limits and there is an increased risk that some will not participate. Participants should be selected because they have knowledge about the specific topic or issue to be discussed. Participants typically are similar in some ways though there may be important differences as well. For CART conversations, participants should be recruited within a community or within or among community groups. For example, a conversation might involve representatives of various sectors (e.g., education, emergency management, health, local leadership, or media), organizations, or roles in the community.
Alternatively, members may be selected because they represent a faith-based organization, are employees of a particular business or members of a specific occupation, and so forth. It generally is unwise to recruit individuals at different hierarchical levels unless they are clearly comfortable with each other and can be open and honest.

Recruitment of participants can be through word-of-mouth, printed materials (fliers, news articles, or advertisements), service sites, and/or public lists. Incentives are helpful but depend on budget.

**Step 5: Conduct the conversation.** Community conversations typically take 1 to 3 hours. A conversation commences with introductions (using only first names of participants) and a clear statement of purpose. The facilitator should describe how information will be used and review any confidentiality concerns and requirements. The facilitator also should describe how the group will operate and explain the rules and why they matter. Explain that everyone’s opinions are important – offered by one participant at a time. Be sure participants understand that there are no right or wrong answers.

The facilitator must keep the discussion flowing and on track to prevent loss of valuable time (and therefore information) when discussion falters or deviates from the topic or question being considered. The facilitator should guard against being domineering in this process so that participants do not feel alienated or become reluctant to speak.

Managing group dynamics requires that the facilitator pay attention to, and handle, interaction among group members. For example, the facilitator should carefully ensure that no participant dominates the group or puts down others. In monitoring nonverbal and behavioral content, the facilitator should notice if some are hesitant to participate and watch for signs of discomfort, hostility, embarrassment, and so forth.

The facilitator must stay within the time frame. It is unfair to participants to exceed the time scheduled for the meeting. A facilitator who fails to pace him/herself risks being unable to address all questions and acquire the feedback which is the purpose of the conversation.

Someone from your organization should assist the facilitator by taking notes. This person also can help to monitor activities and keep track of time. You also may want someone to
Step 6: Analyze the results. Immediately after the session, the facilitator and note taker should each record their impressions of:

- central themes
- dissenting and minority themes
- underlying contexts relative to responses
- outstanding or unusual verbal and nonverbal reactions

Themes should be organized in a hierarchy from major to minor. Computer software (e.g., NVivo or EZ-Text) is available to assist in the analysis or the analysis can be conducted manually.

Considerations

Selection of location. People should feel neutral about the location. Transportation and parking must be accessible. The room should be large enough to accommodate the group comfortably. The seating arrangement should permit people to see each other and it should foster interaction. Acoustics should be such that participants can hear each other, people outside the room cannot hear what is being said in the room, and outside noise is not disruptive. Sufficient electrical outlets must be available to operate any equipment (e.g., a coffee pot).

Supplies. Name tags and table tents should indicate first names only. Flip charts may be useful to write down concepts that emerge so that everyone can see them. Markers, masking tape, pencils, and paper also should be available in case they are needed. Use a clock or watch to ensure timely progress through the agenda. Refreshments should be available but should not interfere with the group process.

Selection of facilitator. The quality of the information received in a community conversation is only as good as the skill level of the facilitator. Hence, the facilitator must be trained if he/she is not experienced. Training involves knowledge about group dynamics, how to lead a group, and how to handle multiple types of personalities in a
Facilitators do not need to be professionals. They can be volunteers who are trained or experienced in group facilitation.

**Facilitator techniques.** Some basic techniques can improve the process and the quality of information obtained. Asking general questions of the group rather than addressing questions to specific individuals will help to encourage participation by all. Avoid a prolonged dialogue with one or a few individuals.

Probe as necessary to clarify responses and improve the information provided especially when contradictions exist. Determine if there are actual differences among participants or if an apparent contradiction is a misunderstanding.

Monitoring verbal and nonverbal reactions can help to identify reluctant, shy, frustrated, and angry participants. Try to engage the reluctant or shy participant. Dampen frustrations and hostility to help ensure that these feelings do not spill over to the group. Elicit responses from all participants.

Set limits, if necessary, with individuals who seek to dominate the group, interrupt others, or engage in side-bar conversations. Remind the group of the importance of everyone’s opinions and that there are no right or wrong answers. Tactfully reiterate that everyone needs to participate – one at a time. It is distracting for others when some have conversations among themselves or when everyone tries to talk at once.

Paraphrase, interpret, summarize, solicit feedback, and probe to improve the conversation and help to insure that you understand the responses.

<table>
<thead>
<tr>
<th>Paraphrasing</th>
<th>Making verbal statements that are interchangeable with the participant’s statement.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpreting</td>
<td>Making statements that attempt to capture the underlying feelings and meaning of a verbal message.</td>
</tr>
<tr>
<td>Summarizing</td>
<td>Making statements that synthesize what has been communicated.</td>
</tr>
<tr>
<td><strong>Soliciting</strong></td>
<td>Providing alternative responses that can be effective after summarizing what has already been said such as, <em>What do the rest of you think?</em></td>
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<tr>
<td>---------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Probing</strong></td>
<td>Making statements that draw out a participant, gather additional information related to a response, or clarify or correct misunderstandings. Examples of probing are: <em>Can you tell me more?</em> and <em>Are there other examples?</em></td>
</tr>
</tbody>
</table>

**Participant types.** The facilitator should recognize and be comfortable managing various role types that often are evident in groups. These include, for example:

- The **caregiver** who wants to take care of everyone and does not like any conflicting opinions. This person tries to rescue those who are uncomfortable.
- The **rambler** who goes off topic and never gets to the point.
- The **uncooperative and hostile person** who does not want to be there and lets everyone know it. This type may challenge the facilitator.
- The **superior person** who is judgmental and acts as if he/she is better than other participants. This person may attempt to dominate weaker members of the group.
- The **withdrawn person** who is content to listen only, without contributing.
- The **cooperative person**, who is both a good listener and contributor, is a joy to have in the group.

**Human subjects protections.** You should not need to collect personal health information. If you decide to do so, you will need to work with a recognized institutional review board to ensure that human subjects protections (including consent processes) are in place. When using consent forms, the facilitator should review confidentiality concerns and requirements at the beginning of the session. Every effort should be made to protect participant identities. Only first names should be used in the session. Nonetheless, with community conversations, it is impossible to guarantee confidentiality.
Tool: Neighborhood Infrastructure Maps

Brief description of the tool

Neighborhood infrastructure maps describe the physical infrastructure of a neighborhood, focusing on structures and features that are relevant for disaster prevention, preparedness, response, and recovery.

Reasons for using the tool

Neighborhood infrastructure maps can be used to:

1) Improve your awareness of your neighborhood in terms of physical structures and features
2) Introduce your organization to, and initiate networking with, neighbors (such as households, businesses, and agencies)
3) Complement other assessments of your community

When to use the tool

Neighborhood infrastructure mapping can be used at any time to learn more about your community. It is particularly useful when undertaking a new neighborhood-based campaign as part of introducing your organization to the community, and it can be helpful when orienting new members to your organization and community. Maps should be updated regularly and any time significant changes occur within the community. Repeated neighborhood tours to confirm the accuracy of maps can increase your familiarity with a neighborhood, thus contributing to your preparedness and response capabilities.

What to map

- Homes, businesses, schools, churches, and community and homeowner centers
- Hospitals, clinics, nursing homes, and assisted living facilities
- Fire department, police department, post office, and other government offices
- Communication infrastructure including, for example, radio relay and cell towers and cable and phone lines
✓ Locations where supplies and equipment for disaster response may be available
✓ Utilities (above and in ground) such as natural gas meters, propane tanks, oil tanks, gas lines, power lines, water tanks, irrigation delivery structures, wells, fire hydrants, and street lights
✓ Terrain features such as canals, lakes, mountains, washes, streams, and parks
✓ Transportation infrastructure including, for example, airports; train, bus, and light rail stations; railroad and light rail tracks; and fuel stations
✓ Other relevant structures and features

Instructions

**Step 1: Define the boundaries of your neighborhood.** These may be natural boundaries created by terrain features or traditionally recognized boundaries known to local residents. Officially designated boundaries may be used if official boundaries dictate significantly the flow of resources into the neighborhood. Start with a relatively small geographic area. You can extend your map outward over time. Prepare a grid with defined boundaries. A blank grid is contained in Appendix C.

**Step 2: Walk (or drive) through your neighborhood recording on your grid the names of streets; the location of homes, businesses, and other structures; and significant terrain features.** If possible, note the highest and lowest terrain. Record identifying information for structures such as house and business address numbers. Locate light poles, traffic lights, and stop signs. It would be helpful if you are able to identify GPS coordinates for major sites such as hospitals, schools, fire department, and police department.

**Step 3: Gather information from public utilities.** Inquire about the location of power lines, gas lines, phone lines, cable lines, cell towers, and so forth. Overlay these on your map.

**Step 4: Use overhead images.** View overhead images (e.g., Google Maps or MapQuest) to locate features that are not easily visible from the ground. When doing so, confirm that
the information is current since web maps often are out-of-date. If you are unfamiliar with web mapping programs, see Appendix D for a tutorial.

**Step 5: Have someone else repeat the mapping process.** As part of confirming the accuracy of your work, have someone else from your organization map the neighborhood. Compare and correct both maps.

**Example**

For a simple example illustrating how to construct a map, assume that you are interested in mapping the Southgate-Rippetoe Elementary School and the area to the west of it as highlighted in the following Google map. In reality, you will probably prefer to construct separate maps of the school and the surrounding houses. The school is included here so that you will see some variety within the sample neighborhood.
Prepare a grid with the defined neighborhood boundaries or download a map of the area using a web-based mapping program such as Google Maps (see Appendix D for a tutorial explaining how to use Google Maps). A blank grid is included in Appendix C for those who prefer not to print a web map of the area. If you choose to use the blank grid, note the boundaries of your neighborhood on your grid (NW 5th St on the north, NW 2nd St on the South, N Arnold St on the west, and the Southgate-Rippetoe Elementary School on the east).

The following map of the designated area was downloaded from Google Maps. Notice that streets and buildings are indicated on the map. Print this map as a starting point as you prepare to walk or drive through the neighborhood. If you prefer not to print a web map, use the grid contained in Appendix C on which you have drawn neighborhood boundaries. If you are using the grid, you will need to draw in streets, houses, and other structures similar to those already contained on the web map. You can use the Google Map to help prepare your own map on the grid if you like.
If you are using the web map as a starting point, you will still need to walk or drive through the neighborhood to confirm the accuracy of the information since the web map may be out-of-date.

As you walk or drive through the neighborhood with your printed web map or your prepared grid, confirm and/or record street names, address numbers (e.g., house numbers), and significant features. See What to map above for a list of features to look for in your neighborhood.

The following map, which is incomplete, provides an example of what your map will begin to look like as you progress through the mapping process. You may find it helpful to use abbreviations and symbols for specific features; if you do so, be sure to include a legend with your map.
You can acquire information about the location of power lines, gas lines, cable lines, cell towers, and so forth, from local public utilities companies. These should be added to your map.

Whether or not you are using a web map as your starting point, you will find it informative to use overhead images (such as those available through web maps) to locate features that are not easily visible from the ground. Remember, though, that web maps often are not current.

The following maps are satellite maps of the area mapped above. The first map below shows the area as it appears on the Google Maps website. The second map below has been marked to show the features corresponding to what was mapped above as you walked or drove through the neighborhood. Notice that the pools and sheds are visible on the satellite maps. You probably would not have seen them while walking or driving through the neighborhood. If you did not already know they were there, you would see them on the satellite map. You should confirm their current existence with the residents of the houses at which they are located.
Considerations

If there are significant changes in elevation or significant terrain features within the neighborhood, acquire a topographical map to supplement your work.
Tool: Community Ecological Maps (Eco-Maps)

**Brief description**

The community ecological map is a visual tool for describing the nature and strength of relationships within a community.

**Reasons for using it**

Community ecological maps can be used to:
1) Describe relationships among individuals, groups, and organizations within a community
2) Identify potential concerns regarding your communication and interaction with those individuals, groups, and organizations
3) Develop strategies to reduce tensions and strengthen relationships
4) Identify and develop potentially beneficial partnerships
5) Improve disaster preparedness, response, and recovery

**When to use it**

Use community ecological mapping when you need to build support for your organization or an initiative, feel disconnected from your community, experience conflict with others in the community, or plan to undertake outreach activities.

**Instructions**

**Step 1: Identify the organizations with which you interact.** Consider the frequency with which you interact.

**Step 2: Construct the framework for your community ecological map.** On a sheet of paper (or flip chart), draw a circle in the center that represents your organization. Then draw circles representing agencies, groups, and individuals with whom you currently interact; the location of these other circles is irrelevant. The size of the other circles should reflect the frequency or level of interaction with your organization. A large circle represents extensive interaction and a small circle indicates that little interaction occurs.
Put the name of your organization in the center circle and the names of agencies, groups, and individuals with which you interact in the other circles.

**Step 3: Indicate the strength and nature of your relationships.** The strength of your relationship with each agency, group, or individual is described by connecting lines drawn from the central organization (your organization) to others. A solid line indicates a strong, positive relationship. A dashed line represents a weak, positive relationship. A crossed line indicates a stressful or problematic relationship. You may decide to draw two lines if a relationship changes across issues or concerns and/or if the relationship is positive part of the time and stressful at other times. The figure below is an example of a completed community ecological map. See the template in Appendix C.

![Sample Community Ecological Map](image)
Step 4: Interpret and use the community ecological map to improve your relationships.
Review your map with others in your organization, noting the strength and nature of your relationships. There are a number of issues you might address depending on your goals. Consider, for example:

1) The potential benefits and costs of increasing the frequency of interaction with organizations with which you have little interaction
2) The pros and cons of strengthening weak, positive relationships including what it would take and how your organization would benefit
3) Ways to reduce stress in problematic relationships including whether a different frequency of interaction would help or hinder the relationship
4) What you can learn from your strong, positive relationships to improve other relationships
5) Whether there are agencies, groups, or individuals that are missing from your map that could help to advance your goals
6) Whether new relationships can be established to replace or offset problematic relationships

Considerations
It is important that you make an honest assessment of stressful relationships. Explore the nature, causes, and consequences of any benefits and costs associated with them.
Tool: Stakeholder Analysis

**Brief description**

Stakeholders are individuals, groups, or organizations with an interest in your organization or activities. Stakeholders may be within or outside your organization; they may operate individually or in groups; and they may positively or negatively impact, or be impacted by, your organization or activities. Stakeholder analysis is a technique for identifying and assessing the importance of your stakeholders. The description below describes stakeholder analysis applied to a planned initiative. Stakeholder analysis also can be applied to your organization in general or to a specific policy, program, or objective. (For more information about stakeholder analysis, see, e.g., Brugha R and Varvasovszky Z (2000), Stakeholder analysis: A review, *Health Policy and Planning*, 15(3), 239-246).

**Reasons for using it**

Stakeholder analysis is used to:

1) Identify those who can favorably and unfavorably influence your initiative
2) Consider their influence, positive and negative
3) Develop strategies to garner effective support and limit opposition

The analysis can help you to frame and shape your efforts, anticipate reactions, identify potential conflicts, clarify consequences and side-effects, recognize possible advocates, and gain and maintain support. Involving stakeholders in your initiative can help to create a sense of ownership, build capacity within your community, and foster sustainability.

**When to use it**

Undertake stakeholder analysis early in the planning stages of your initiative.
Instructions

Step 1: Clearly describe the initiative and clarify the purpose of your analysis.
Stakeholder analysis can be used to assess the potential impact of stakeholders on a planned initiative. Colleagues assisting in your stakeholder analysis must agree with the stated purpose of the analysis. Address any questions about your initiative before you progress further.

Step 2: Use the table below as the template to guide your analysis and to record your findings. Make a copy of the stakeholder chart on large paper or white board. Write the name of your planned initiative at the top of the page. See the template in Appendix C.

<table>
<thead>
<tr>
<th>Initiative:</th>
<th>Stakeholder</th>
<th>Power to Adopt</th>
<th>Power to Implement</th>
<th>Awareness</th>
<th>Interest</th>
<th>Attitude</th>
<th>Who Influences</th>
<th>Stakeholder Influences</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.</td>
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<td>3.</td>
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<td>6.</td>
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<td>7.</td>
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<td>8.</td>
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</tr>
</tbody>
</table>

Step 3: Identify stakeholders. Brainstorm among yourselves and/or with others to identify stakeholders with an interest in your initiative. Likely stakeholders in disaster preparedness and response efforts include, for example, families, schools, homeowner associations, local businesses, human service agencies, faith-based organizations, philanthropic foundations, local professional associations, hospitals, government agencies, local emergency managers, and first responders. List subgroups separately if they are likely to have different perspectives, opinions, resources, and influence. Be sure to consider any individuals or groups that may be negatively affected by your initiative.
(such as individuals who may be displaced or forced to evacuate an area). List your stakeholders under the column labeled Stakeholder on your stakeholder chart.

**Step 4: Characterize stakeholder interests (stake) in your initiative.** Describe the specific interests of each stakeholder. Consider benefits, costs, and changes that will result from your initiative. Note that a stakeholder may have more than one interest in your initiative. For each stakeholder, briefly describe its interest(s) under the column labeled Stake on your stakeholder chart.

**Steps 5 and 6: Gauge the power that stakeholders have in the adoption and implementation of your initiative.** Can a particular stakeholder positively or negatively influence the adoption of your initiative? Can the stakeholder help or hinder implementation? Address these questions for each stakeholder and indicate the extent of power using the following scale.

Scale:

- **0** not powerful
- **+** powerful
- **++** very powerful

**Step 7: Determine stakeholder awareness of your initiative.** Indicate the extent to which stakeholders know about your initiative. For each stakeholder, indicate stakeholder awareness of your initiative using the following scale.

Scale:

- **0** unaware of initiative
- **+** somewhat aware of initiative
- **++** very aware of initiative

**Step 8: Determine stakeholder interest in your initiative.** Consider the viewpoint of each stakeholder in characterizing its interest. Use the following scale when recording stakeholder interest in your initiative.
Step 9: Determine stakeholder attitude toward your initiative. Consider the viewpoint of each stakeholder in characterizing its attitude. Use the following scale when recording stakeholder attitude toward your initiative.

Scale:
-- very disinterested
- disinterested
0 neutral
+ interested
++ very interested

Steps 10 and 11: Determine who influences whom. Figure out who influences each stakeholder and record this information in the appropriate column on your stakeholder chart. Consider who is influenced by each stakeholder and record on your stakeholder chart.

Step 12: Develop strategies to help you to accomplish your initiative. Strategies may be designed to increase awareness, reduce opposition, garner support, and motivate stakeholders to assist you. Focus primarily on stakeholders with influence (see Power to Adopt and Power to Implement in the stakeholder chart). For each of these stakeholders, make efforts to increase awareness of, and interest in, your initiative among those who are unaware or uninterested. Your highest priority should be stakeholders with significant power and significant interest. For those with a positive attitude, provide information so they can advocate on your behalf and consider recruiting them into a leadership position within your organization. Try to convert or distract those with a negative attitude. Review carefully who influences whom and provide sufficient information to stakeholders who are interested and influential so they can promote your cause.
Considerations

Stakeholders. Your list of potential stakeholders could be extensive. Focus on the stakeholders of highest priority, typically those with power to advance or impede your work and those with an interest in it. Be sure to include those with power even if they are not currently interested in your work.

It is important to confirm that stakeholders are appropriately described in your stakeholder chart. You often can do this by engaging the stakeholder in conversation about your planned initiative. Identify the appropriate contact person for stakeholder organizations.

Consider stakeholder objectives, values, interests, attitudes, and motivations in characterizing their interest in, and attitude toward, your planned initiative. Think about how your initiative will affect each stakeholder. What changes will stakeholders have to make because of the initiative? Could your initiative create problems for your stakeholders?

Consider how important each stakeholder’s interests are to the success of your initiative. What roles might stakeholders play in the success of your initiative? What is the likelihood that stakeholders will play these roles?

What are the likelihood and potential consequences of opposition from your stakeholders?

Think about what you can do to get stakeholder support and reduce opposition. How might you approach each stakeholder? What kind of information will they need? How important is it to involve stakeholders in the planning process? Develop strategies for obtaining support and reducing obstacles.

Power, interest, and attitude. It may be helpful to create a power/interest/attitude grid. Create a two-dimensional grid with power on the horizontal axis and interest on the vertical axis. Map stakeholders in accordance with their power and interest. Capture attitude by using different colors (e.g., red for negative, black for neutral, and green for
positive attitudes). This may help you to see more clearly the potential impact of stakeholders and reveal gaps in your support or areas needing attention.

You may want to assign stakeholders to categories in accordance with power, interest, and attitude. Category names might be, for example, Champions or Advocates (for those with significant power, much interest, and positive attitude), Friends (for those with little power, much interest, and positive attitude), and Saboteurs or Detractors (for those with significant power, much interest, and negative attitude). Or you can use descriptors such as Animated (for those with much interest), Dormant or Apathetic (for those with no interest), and Inert (for those with no power).

**Application.** If you think your stakeholders are unaware of your organization or to understand the potential impact of stakeholders on your organization in general, you may want to do a stakeholder analysis of your organization before analyzing a specific initiative. In doing so, you would be seeking to identify and understand your stakeholders; characterize their specific awareness of, and interest in, your organization; determine how they can affect your organizations for better or worse; and describe relationships with respect to patterns of influence. After undertaking this organizational stakeholder analysis, you may decide it is important to increase awareness of the organization before undertaking your planned initiative.
Tool: SWOT Analysis

**Brief description**

Analysis of Strengths, Weaknesses, Opportunities, and Threats (SWOT) is a strategic planning activity for assessing the strengths, weaknesses, opportunities, and threats associated with an objective. The tool can generate information for analyzing your current situation that can help you to develop strategies to use your strengths effectively, overcome your weaknesses, pursue appropriate opportunities, and reduce threats. As with other CART tools, it is essential that you have a clear objective. (For more information about SWOT analysis, see, e.g., Pickton DW and Wright S (1998), What’s swot in strategic analysis?, *Strategic Change*, 7, 101-109.)

**Terminology**

Strengths and weaknesses are internal factors; opportunities and threats are external. Strengths are positive attributes of your organization or community that are helpful in achieving an objective. Weaknesses are negative attributes of your organization or community that interfere with accomplishing the objective. Opportunities are positive external conditions that can help you to achieve your objective. Threats are external conditions that potentially jeopardize your objective.

**Reasons for using it**

SWOT analysis provides information that can help you to match your resources and capabilities with the environment in which you operate. The analysis is useful in formulating and selecting strategies that will maximize and effectively utilize your strengths, minimize and overcome weaknesses, uncover and exploit opportunities, and identify and safeguard against threats.

**When to use it**

Undertake SWOT analysis prior to pursuing an objective to determine the feasibility of the objective. If an objective is not reasonably attainable, consider alternatives. Also use
SWOT analysis during a project to identify changes in your situation that might affect your success. Be flexible and adapt as appropriate when you become aware of such changes. Undertake a SWOT analysis upon completion of the project to see how the project may have affected your situation and to uncover new realities that require attention. Routine SWOT analysis can help you to capitalize on opportunities and protect against threats.

**Instructions**

**Step 1: List the strengths of your organization or community with respect to your objective.** Strengths are current resources and capabilities that you can call upon to accomplish your objective. They may include, for example, individuals with specific skills, existing processes, information, ideas, values and attitudes, positive morale, location, partners, structure, and technologies. It is in your interest to maintain, build, and leverage your strengths.

**Step 2: List the weaknesses of your organization or community with respect to your objective.** Weaknesses limit your success or hinder your operation. As areas of your operation that need improvement, weaknesses may be reflected as a lack of resources and skills needed to accomplish your objective. Weaknesses may include, for example, costs, liabilities, location, inefficiencies, low morale, and limited participation. When feasible, weaknesses should be corrected, reduced, or eliminated.

**Step 3: List the opportunities available to your organization or community with respect to your objective.** Opportunities are favorable circumstances (external to your organization or community) that create the potential for progress or advancement. They may pertain directly to your organization or community, or they may be part of a more advantageous environment. Opportunities may derive from, for example, changes in policies, programs, rules and regulations, personnel, funding, and technologies. Opportunities may be time limited. They should be optimized.

**Step 4: List the threats that your organization or community faces with respect to your objective.** Threats represent potential peril or problems. They may pertain directly to your organization or community, or they may be part of a dangerous or unfavorable environment. Threats may exist with any probability, may be imminent or in the distant
future, and may be of varying magnitude. Threats may arise from, for example, political, legal, economic, social, natural, or technological forces. When feasible, threats should be minimized, countered, and thwarted.

**Step 5: Create a SWOT matrix.** List your strengths, weaknesses, opportunities, and threats in a SWOT matrix (see below) so that you can see them at a glance. Ideally, you would like to transform your weaknesses into strengths and your threats into opportunities. See the template in Appendix C.

<table>
<thead>
<tr>
<th>Helpful / Favorable / Positive</th>
<th>Harmful / Unfavorable / Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal</strong></td>
<td></td>
</tr>
<tr>
<td>Strengths</td>
<td>Maintain, Enhance, Leverage</td>
</tr>
<tr>
<td>Weaknesses</td>
<td>Correct, Reduce, Eliminate</td>
</tr>
<tr>
<td><strong>External</strong></td>
<td></td>
</tr>
<tr>
<td>Opportunities</td>
<td>Optimize</td>
</tr>
<tr>
<td>Threats</td>
<td>Minimize, Counter, Thwart</td>
</tr>
</tbody>
</table>

**Step 6: Identify your most important strengths, weaknesses, opportunities, and threats.** In preparation for creating strategies to accomplish your objective, focus first on those strengths, weaknesses, opportunities, and threats that are most important in terms of your objective. As time permits, you may want to consider secondary strengths, weaknesses, opportunities, and threats. Consider initially how you can correct the most harmful weaknesses, prepare for the most significant threats, and take advantage of the best opportunities to advance your objective. Think about how you can use your strengths to ameliorate your weaknesses and limit your threats.

**Step 7: Create a strategies matrix.** Strategies in the matrix below combine strengths, weaknesses, opportunities, and threats. S-O strategies use internal strengths to take advantage of external opportunities. Begin to develop these strategies by linking specific strengths to each of the important opportunities you decide to exercise. W-O strategies seek to improve internal weaknesses by taking advantage of external opportunities, or they may help you to remediate your weaknesses in order to take advantage of important opportunities. Begin to develop these strategies by linking weaknesses with important opportunities. S-T strategies use internal strengths to avoid or limit the impact of external threats. Begin to develop these strategies by linking specific strengths to each of the important threats you decide to tackle. W-T strategies use defensive tactics to reduce
internal weaknesses and avoid external threats. Begin to develop these strategies by matching weaknesses to threats so you can see your vulnerabilities more clearly. Prioritize your strategies based on the importance and urgency of issues. Ultimately, you would like to maximize strengths and minimize weaknesses so that you can take advantage of opportunities and alleviate threats. See the template in Appendix C.

<table>
<thead>
<tr>
<th></th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opportunities</strong></td>
<td>S-O Strategies</td>
<td>W-O Strategies</td>
</tr>
<tr>
<td><strong>Threats</strong></td>
<td>S-T Strategies</td>
<td>W-T Strategies</td>
</tr>
</tbody>
</table>

**Example**

For a simple example illustrating how to create strategies, assume that you are an organized volunteer response team in a community that is threatened annually by floods. Your objective is to increase all-hazards neighborhood preparedness. Your most important strengths are effective communication and engagement regarding flood-related issues, along with a core group of volunteers with experience in flood preparedness and response. Your primary weaknesses are lack of experience dealing with hazards other than flooding, complacency about all-hazards preparedness due to success in handling floods, and lack of procedures for using volunteers in other than flood-related activities. Your community faces potential natural, technological, and human-caused threats other than flooding. A neighboring state recently experienced a major earthquake which has raised awareness of potential disasters among members of your community. You consider this increased awareness an opportunity to engage those community members in all-hazards preparedness activities. One S-O strategy is to use your established communication network to connect with neighbors, capitalizing on the increased awareness to engage community members in all-hazards disaster preparedness for themselves and their families.

Members of your community regularly volunteer for flood preparedness and response activities for which they have considerable experience. These community members will likely volunteer spontaneously in the event of other types of disasters as well, but you anticipate being ill equipped to handle them
which is a weakness. One W-O strategy is to use the increased awareness of other disasters to develop procedures for effectively using spontaneous volunteer responders and to work with local emergency management officials to create expertise in operating a volunteer reception center which can serve as an entry point for volunteers and for agencies needing volunteer assistance. An S-T strategy might be to build on your successful flood management activities by undertaking a post-event analysis of your most recent flood experience to identify lessons applicable to other threats. Recognizing problems with community complacency and your organization’s lack of experience with disasters other than floods, you develop a W-T strategy in which you undertake neighborhood assessment activities using one or more CART tools to help you to identify and address local vulnerabilities so that you can become prepared for the variety of threats that your community faces. This defensive strategy should improve your knowledge of your community and also will hopefully increase awareness of your organization and preparedness among your neighbors.

**Considerations**

**Quality of Information.** Your analysis will only be as good as the information upon which it is based. Be sure participants contributing to the analysis:

- are well acquainted with your organization, community, and the environment in which you operate
- are objective and realistic in their assessments
- provide specific information.

If possible, ask a variety of knowledgeable individuals to contribute information.

**Objective.** Note that SWOT analysis is situation-specific. For example, a strength with respect to one objective may be a weakness when considering a different objective and vice versa. Similarly, an apparent opportunity may not be worth exercising if it does not contribute to the successful completion of your objectives.
Tool: Capacity and Vulnerability Assessment

**Brief description**

The capacity and vulnerability assessment tool is a framework for analyzing the strengths and weaknesses of individuals and groups within your community. Using it, you can generate information that fosters strengths-based, developmental community action to enhance strengths and diminish vulnerabilities over time. (For more information about capacity and vulnerability assessments, see, e.g., Anderson MB and Woodrow PJ (1998), *Rising from the Ashes: Development Strategies in Times of Disaster*, Boulder, CO: Lynne Rienner Publishers, Inc.)

**Terminology**

Capacities are existing strengths in individuals and groups that develop over time and help to determine people’s coping ability and resilience during, and in the aftermath of, crises. Vulnerabilities are long-term factors that limit the coping ability and resilience of individuals, making them more susceptible to crises. While many capacities and vulnerabilities are disaster-specific, others may be pertinent across a range of hazards.

**Reasons for using it**

Capacities and vulnerabilities help to determine the differential impact of a disaster on individuals and groups within a community. Acquiring and sharing knowledge of capacities and vulnerabilities within a population is a first step in helping a community to use its strengths to mitigate its challenges, thereby potentially reducing the severity of a crisis and enhancing community development.

**When to use it**

Capacity and vulnerability assessment is especially useful when groups within a community may be impacted differently depending on, for example, socio-economic status, health, ethnicity, or location. The assessment can be used at any phase of
emergency management. Ideally, it is undertaken prior to a disaster as part of prevention and preparedness efforts. If not, or additionally, the assessment can contribute significantly to the design and implementation of response and recovery programs.

**Instructions**

**Step 1:** Identify the hazard or category of hazards that will be the subject of your analysis. Attempting to take an all-hazards approach may affect your identification and interpretation of capacities and vulnerabilities.

**Step 2:** Review the template below showing three categories of capacities and vulnerabilities. Capacities and vulnerabilities may be physical and material, social and organizational, or motivational and attitudinal. Notice in the table below that you will be addressing two questions for each of these categories, the first dealing with vulnerabilities and the second dealing with capacities. See the template in Appendix C.

<table>
<thead>
<tr>
<th>Potential Hazard:</th>
<th>Vulnerabilities</th>
<th>Capacities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Physical and Material**

- What are the physical and material limitations of your community?
- What resources are available to address these limitations?

**Social and Organizational**

- What social and organizational weaknesses exist in your community?
- What strengths potentially offset these weaknesses?

**Motivational and Attitudinal**

- What attitudes create challenges for your community?
- What motivations can be tapped to mitigate these attitudes and challenges?

**Step 3:** Identify physical and material vulnerabilities and capacities. For the hazard you are addressing, list the vulnerabilities tied to physical and material realities of your community. These may be aspects of the natural environment, material resources, finance and credit, employment opportunities, and human resources that are particularly susceptible to damage from the hazard. Then list any physical and material capacities that could help to reduce these vulnerabilities including:
aspects of the natural environment such as advantageous features of the land, climate, and geography

material resources such as water and food supplies and other basic necessities; housing; machinery, tools, and equipment; the built infrastructure; and mechanisms for transportation and communication

financial resources such as savings and access to credit

employment opportunities

human resources such as knowledge, skills, and health status

**Step 4: Identify social and organizational vulnerabilities and capacities.** For the hazard you are addressing, list vulnerabilities associated with formal and informal social and organizational characteristics of your community. Identify any groups or areas of your community that are especially fragile. Then list social and organizational capacities that could mitigate these weaknesses. Social and organizational elements that comprise the social fabric of your community may include:

- structures such as family relationships and dynamics as well as economic, legal, political, social, and religious organizations and institutions
- social capital including connections and meaningful interactions among individuals and groups within the community
- formal and informal leadership

**Step 5: Identify motivational and attitudinal vulnerabilities and capacities.** For the hazard you are addressing, list vulnerabilities related to motivation and attitudes that describe your community or major elements of the community. Consider especially motivations and attitudes associated with the ability to cope, create change, and deal with circumstances. Include cultural and psychological factors based on religion, history, and expectations about emergency response. Fatalism, defeatism, denial, and passivity may be associated with vulnerability while hope, a sense of purpose, the perception that community members are treated fairly, and feelings of empowerment are likely to contribute to capacity. A strong sense of community, participation, shared values, and mutual caring also contribute to community capacity.
**Considerations**

If there are marked differences among individuals and groups within your community related to an important demographic, you can improve your analysis by categorizing individuals or groups in accordance with these differences. For example, you may want to consider socio-economic status, ethnicity, age, literacy, or mobility. Your capacity/vulnerability table would look like the following if you separate in accordance with low, medium, and high socio-economic status:

<table>
<thead>
<tr>
<th>Potential Hazard:</th>
<th>Vulnerabilities</th>
<th>Capacities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
</tr>
</tbody>
</table>

- **Physical and Material**
- **Social and Organizational**
- **Motivational and Attitudinal**
Appendix A: Survey Instruments

CART Survey Instrument® ..........................................................................................................................................A2

Expanded Core Community Resilience Items® ..................................................................................................A6

Revised CART Survey Instrument: CART II® .................................................................................................A7
Communities Advancing Resilience Toolkit (CART) Survey©
Submission of this survey indicates that you consent to participate in the survey.

Core Community Resilience Items

The following statements are possible descriptions of your community. Please circle one response for each statement.

<table>
<thead>
<tr>
<th>Response Options:</th>
<th>1 Strongly Disagree</th>
<th>2 Disagree</th>
<th>3 Neither Disagree Nor Agree</th>
<th>4 Agree</th>
<th>5 Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. People in my community feel like they belong to the community.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. People in my community are committed to the well-being of the community.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. People in my community have hope about the future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. People in my community help each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. My community treats people fairly no matter what their background is.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. My community has the resources it needs to take care of community problems (resources include money, information, technology, tools, raw materials, and services).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. My community has effective leaders.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. People in my community are able to get the services they need.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. People in my community know where to go to get things done.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. My community works with organizations and agencies outside the community to get things done.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. People in my community communicate with leaders who can help improve the community.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. People in my community are aware of community issues that they might address together.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. People in my community discuss issues so they can improve the community.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. People in my community work together to improve the community.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. My community looks at its successes and failures so it can learn from the past.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. My community develops skills and finds resources to solve its problems and reach its goals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. My community has priorities and sets goals for the future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. My community tries to prevent disasters.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. My community actively prepares for future disasters.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. My community can provide emergency services during a disaster.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. My community has services and programs to help people after a disaster.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

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Optional Items: Communication, Information, and Trust

The following statements are possible descriptions of you and your relationship to your community. Please circle one response for each statement.

Response Options: 1 Strongly Disagree  2 Disagree  3 Neither Disagree Nor Agree  4 Agree  5 Strongly Agree

1. My community keeps people informed (via television, radio, newspaper, Internet, phone, neighbors, etc.) about issues that are relevant to them. 1 2 3 4 5

2. If a disaster occurs, my community provides information about what to do. 1 2 3 4 5

3. I get information/communication through my community to help with my home and work life. 1 2 3 4 5

4. People in my community trust public officials. 1 2 3 4 5

Optional Items: Personal Relationship to Community

The following statements are possible descriptions of you and your relationship to your community. Please circle one response for each statement.

Response Options: 1 Strongly Disagree  2 Disagree  3 Neither Disagree Nor Agree  4 Agree  5 Strongly Agree

1. I feel like I belong to my community. 1 2 3 4 5

2. I have hope about the future. 1 2 3 4 5

3. I live in good housing. 1 2 3 4 5

4. I can get the services I need. 1 2 3 4 5

5. I work with people in my community to solve our problems. 1 2 3 4 5

6. My family and I have a disaster plan. 1 2 3 4 5

7. I have friends in my community. 1 2 3 4 5

8. I would get involved in trying to improve my community. 1 2 3 4 5

9. I would like to become a leader in my community. 1 2 3 4 5

Optional Items: Faith-Based Community Renewal

The following statements are possible descriptions of your community. Please circle one response for each statement.

Response Options: 1 Strongly Disagree  2 Disagree  3 Neither Disagree Nor Agree  4 Agree  5 Strongly Agree

1. My community is a safe place to live and work. 1 2 3 4 5

2. Good housing is available for people who live in my community. 1 2 3 4 5

3. Necessary health care services are available to people who live in my community. 1 2 3 4 5

4. Good educational opportunities are available to people who live in my community. 1 2 3 4 5

5. Good work opportunities are available to people who live in my community. 1 2 3 4 5

6. People in my community have friendships with their neighbors. 1 2 3 4 5

7. Leadership opportunities are available to people who live in my community. 1 2 3 4 5
Optional Items: Community Emergency Response Teams (CERTs)

Please answer the following questions about your disaster experience and involvement in a CERT program.

1. Have you ever personally experienced a disaster? (If you have experienced more than one disaster, consider the one that has had the greatest impact on you personally.)
   - No
   - Yes, natural disaster
   - Yes, technological disaster
   - Yes, human-caused disaster

2. Have you ever responded to a disaster? (If you have responded to more than one disaster, consider the one that was most recent.)
   - No
   - Yes, as a volunteer responder
   - Yes, as a professional responder
   - Yes, other (please specify): ________________________________

3. How long has it been since you completed CERT training? _________

4. How many clock hours of supplemental education for CERTs have you attended? ________

5. Are you currently an active CERT member? If yes, where is the CERT based?
   - No
   - Yes, in my neighborhood
   - Yes, at my workplace
   - Yes, in my neighborhood and at my workplace
   - Yes, elsewhere (please specify): ________________________________

6. If there were a disaster in your community, would you be interested in being deployed as a CERT member?
   - No
   - Yes

7. Are you interested in being deployed outside your community to serve as a CERT member?  
   - No
   - Yes

8. Have you used your CERT training?  
   - No
   - Yes

Optional Items: Other

Please answer the following questions.

1. How many adults currently live in your home? ___________

2. How many children currently live in your home and what are their ages? __________, ________________

3. How many of the adults living in your home are older adults (65 years of age or older)? ________________

4. Are you currently employed? Which of the following best describes you?
   - I am not currently employed and I am not looking for a job
   - I am not currently employed but I am looking for a job
   - I am working part time
   - I am working full time
   - I am not any of these. I am (please specify): ________________________________

5. Other than you, how many people in your household are employed? ______

6. Have you ever had a personal emergency or crisis while living in your community?  
   - No
   - Yes
   (For example, you might have had a major illness, been fired from a job, had a house fire, been the victim of a crime, experienced the death of a family member or neighbor. Has anything like this ever happened to you while living here?) <<If yes, continue to question 7. If no, go to question 8.>>

7. Please think of the most significant emergency or crisis you have experienced while living in this community. Who helped you?  (Check all that apply.)
   - no one
   - family member
   - friends
   - someone else from the community
   - faith-based organization
   - a local agency or organization
   - co-workers
   - other (please specify): ________________________________

8. What is the source of your greatest connection to your community?  (Check only one response.)
   - civic club
   - faith-based organization
   - family
   - friends
   - military
   - school
   - work
   - other (please specify): ________________________________
Demographics

Please answer the following questions.

1. How long have you lived in this community? ______________________

2. What is your sex? □ Male □ Female

3. What is your current marital status?
   □ Married □ Separated □ Divorced □ Widowed □ Never Married
   □ Other (please specify): __________________________________________

4. What is your age? ___________

5. What is your race or ethnic identification? Check the one with which you most identify:
   □ American Indian / Alaska Native □ Asian / Asian American
   □ Black / African American / Afro-Caribbean □ Hispanic / Latino
   □ Native Hawaiian / Other Pacific Islander □ White / Caucasian, not of Hispanic origin
   □ Other (please specify): __________________________________________
Communities Advancing Resilience Toolkit (CART) Survey

Expanded Core Community Resilience Items

The following statements are possible descriptions of your community. Please circle one response for each statement.

**Response Options:**
- 1. Strongly Disagree
- 2. Disagree
- 3. Neither Disagree Nor Agree
- 4. Agree
- 5. Strongly Agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. People in this community feel like they belong to the community.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2. People in this community are committed to the well-being of the community.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. People in this community have hope about the future.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. People in this community help each other.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. This community treats people fairly no matter what their background is.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6. This community has the resources it needs to take care of community problems (resources include money, information, technology, tools, raw materials, and services).</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7. This community has effective leaders.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8. People in this community are able to get the services they need.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>9. People in this community know where to go to get things done.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>10. This community works with organizations and agencies outside the community to get things done.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>11. People in this community communicate with leaders who can help improve the community.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>12. People in this community work together to improve the community.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>13. This community looks at its successes and failures so it can learn from the past.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>14. This community develops skills and finds resources to solve its problems and reach its goals.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>15. This community has priorities and sets goals for the future.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>16. This community has mechanisms for routinely providing accurate information to residents about local issues.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>17. This community holds meetings so residents can voice their views and needs.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>18. This community has a person(s) who is trusted to deliver accurate information to its residents in time of need or crisis.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>19. People in this community trust the local news media to deliver accurate information.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>20. This community has a mechanism for providing accurate information to residents during emergencies.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>21. People in this community support programs for children and families.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>22. People in this community trust public officials.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>23. This community tries to prevent disasters.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>24. This community actively prepares for future disasters.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>25. This community can provide emergency services during a disaster.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>26. This community has services and programs to help people after a disaster.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

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Communities Advancing Resilience Toolkit (CART) Survey: CART II®

Submission of this survey indicates that you consent to participate in the survey.

Revised Core Community Resilience Items

The following statements are possible descriptions of your community. Please circle one response for each statement.

<table>
<thead>
<tr>
<th>Response Options:</th>
<th>1 Strongly Disagree</th>
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<tr>
<td>21. My community keeps people informed (for example, via television, radio, newspaper, Internet, phone, neighbors) about issues that are relevant to them.</td>
<td>1     2     3     4     5</td>
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<tr>
<td>22. If a disaster occurs, my community provides information about what to do.</td>
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Optional Items: Personal Relationship to Community

The following statements are possible descriptions of you and your relationship to your community. Please circle one response for each statement.

Response Options: 1 Strongly Disagree  2 Disagree  3 Neither Disagree Nor Agree  4 Agree  5 Strongly Agree

<table>
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<tr>
<th>Statement</th>
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<th>4</th>
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<tr>
<td>1. I feel like I belong to my community.</td>
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<td>3. I live in good housing.</td>
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<td>9. I would like to become a leader in my community.</td>
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Optional Items: Faith-Based Community Renewal

The following statements are possible descriptions of you and your relationship to your community. Please circle one response for each statement.

Response Options: 1 Strongly Disagree  2 Disagree  3 Neither Disagree Nor Agree  4 Agree  5 Strongly Agree

<table>
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<td>1. My community is a safe place to live and work.</td>
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<td>5</td>
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<td>4. Good educational opportunities are available to people who live in my</td>
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<td>5</td>
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<td>5. Good work opportunities are available to people who live in my</td>
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Optional Items: Community Emergency Response Teams (CERTs)

Please answer the following questions about your disaster experience and involvement in a CERT program.

1. Have you ever personally experienced a disaster? (If you have experienced more than one disaster, consider the one that has had the greatest impact on you personally.)
   - No
   - Yes, natural disaster
   - Yes, technological disaster
   - Yes, human-caused disaster

2. Have you ever responded to a disaster? (If you have responded to more than one disaster, consider the one that was most recent.)
   - No
   - Yes, as a volunteer responder
   - Yes, as a professional responder
   - Yes, other (please specify): ____________________________

3. How long has it been since you completed CERT training? __________

4. How many clock hours of supplemental education for CERTs have you attended? __________
5. Are you currently an active CERT member? If yes, where is the CERT based?
   □ No       □ Yes, in my neighborhood       □ Yes, at my workplace
   □ Yes, in my neighborhood and at my workplace
   □ Yes, elsewhere (please specify): ________________________________

6. If there were a disaster in your community, would you be interested in being deployed as a CERT member?
   □ No       □ Yes

7. Are you interested in being deployed outside your community to serve as a CERT member?  □ No □ Yes

8. Have you used your CERT training?  □ No □ Yes

Optional Items: Other

Please answer the following questions.

1. How many adults currently live in your home? _________

2. How many children currently live in your home and what are their ages? __________, ________________

3. How many of the adults living in your home are older adults (65 years of age or older)? ______________

4. Are you currently employed? Which of the following best describes you?
   □ I am not currently employed and I am not looking for a job
   □ I am not currently employed but I am looking for a job
   □ I am working part time
   □ I am working full time
   □ I am not any of these. I am (please specify): __________________________________________

5. Other than you, how many people in your household are employed? ______

6. Have you ever had a personal emergency or crisis while living in your community?  □ No □ Yes
   (For example, you might have had a major illness, been fired from a job, had a house fire, been the victim of a crime, experienced the death of a family member or neighbor. Has anything like this ever happened to you while living here?) <<If yes, continue to question 7. If no, go to question 8.>>

7. Please think of the most significant emergency or crisis you have experienced while living in this community. Who helped you? (Check all that apply.)
   □ no one          □ family member        □ friends         □ someone else from the community
   □ faith-based organization       □ a local agency or organization       □ co-workers
   □ other (please specify): ________________________________

8. What is the source of your greatest connection to your community? (Check only one response.)
   □ civic club      □ faith-based organization      □ family      □ friends      □ military        □ school       □ work
   □ other (please specify): ________________________________

Demographics

Please answer the following questions.

1. How long have you lived in this community? ______________________

2. What is your sex?       □ Male       □ Female

3. What is your current marital status?
   □ Married      □ Separated        □ Divorced      □ Widowed          □ Never Married
   □ Other (please specify): __________________________________________________________________

4. What is your age? ________
5. What is your race or ethnic identification? Check the one with which you most identify:

- American Indian / Alaska Native
- Asian / Asian American
- Black / African American / Afro-Caribbean
- Hispanic / Latino
- Native Hawaiian / Other Pacific Islander
- White / Caucasian, not of Hispanic origin
- Other (please specify): ________________________________
Appendix B: Sample Questions for Key Informant Interviews and Community Conversations

General Questions on Community Resilience ........................................................................ B2

Questions on Connection and Caring .................................................................................. B4

Questions on Resources ......................................................................................................... B6

Questions on Transformative Potential ................................................................................ B8

Questions on Disaster Management ...................................................................................... B10

Questions on Terrorism Preparedness .................................................................................. B12

Questions on Public Engagement .......................................................................................... B14
General Questions on Community Resilience

Comments to facilitators are in brackets {}.

1. We are interested in communities. What comes to mind when you think of a community?
   ● What about your community? *Settle on a general understanding of community for the session.*

2. What threatens your community and its members?
   ● What types of disaster is your community likely to experience?
   ● Would people in your community know what to do in a disaster?
   ● Have you thought about terrorism? What type of terrorism is most likely to occur in your community? Do people in your community know about it? Would they be interested in learning about it?
   ● How likely are people in your community to notice and call attention to something out of the ordinary?

3. We are interested in your thoughts about connectedness in your community.
   ● Tell me about how connected community members are with the community. Please share a few examples of connectedness.
   ● Are there members or groups within the community who may feel left out?
   ● What could be done to help them to feel more connected?

4. Do members of your community have hope about the future?
   ● If so, what is the source of this hope?
   ● If not, why are community members not hopeful about the future?
   ● What evidence is there of hopefulness or lack thereof?
   ● Would the type of disaster (e.g., man-made versus natural) affect hope?

5. Does your community help people in need?
   ● Are community members’ concerns being *heard* by community leaders? Why or why not?
   ● If not, what could be done to get the attention of community leaders?
   ● Are the concerns of community members being *addressed* by community leaders? Why or why not?
   ● If not, how might community leaders be encouraged to address these concerns?

6. I would like to ask some questions about resources. These could be natural resources, physical infrastructure, tools and machinery, the workforce, leadership, and productive social connections. What resources are available within your community for disaster/terrorism readiness, response, and recovery?
   ● Are they adequate?

7. What resources would improve the ability of your community to address disaster/terrorism readiness, response, and recovery?
   ● How could your community acquire or develop these resources?
   ● Would your community support any of these measures to acquire/develop resources?
   ● What could be done to get your community to support these measures?

8. Communication is a major issue in addressing disasters. Do members of your community communicate effectively with each other?
   ● How do members of your community communicate with respect to disasters/terrorism?
   ● Is this communication effective?
   ● How could this communication be improved?

9. What does your community do to prepare for disasters/terrorism?
   ● Are these activities adequate?
• How might disaster/terrorism preparedness be improved?
• What would be required to make the recommended improvements?

10. Would your community respond differently to a terrorist act than a natural disaster or accident?
• If yes, what would those differences be? Why do the differences occur?

11. What information is available in your community that would be useful in developing the community’s ability to adapt to, and learn from, crises?
• How is this information obtained? How might this information be used? Is it adequate?
• What additional information would be helpful? What would it take to acquire the information?

12. What opportunities exist to help people to develop skills that would improve your community’s disaster management?
• Do community members take advantage of these opportunities? Why or why not?
• How could you involve individuals or groups who are not taking advantage of opportunities to develop skills that would improve your community’s disaster management?
• Are individuals or groups deliberately excluded from these opportunities? If so, who? Why?
• How could you include these individuals or groups? What would have to happen to involve these individuals or groups?
• What could be done to create opportunities in your community that help people to develop skills that would improve your community’s disaster management?
Questions on Connection and Caring

Comments to facilitators are in brackets {}.

1. We are interested in communities. What comes to mind when you think of a community?
   - What about your community? \{Settle on a general understanding of community for the session.\}

2. What factors contribute to the long term health and vitality of a community?
   - Why/how are these factors important? \{Probe for characteristics related to connectedness and caring such as a sense of belonging, commitment to community, hope about the future, participation, and demonstration of caring.\}

3. Do members of your community share similar values with each other?
   - If yes, what are some of these values?
   - Is there major disagreement about important values? If so, which values? What evidence is there of disagreement?
   - Could/should efforts be made to bring people together around these values? If so, what could be done?
   - How does sharing of values contribute to the long term health and vitality of a community?

4. We are interested in your thoughts about connectedness in your community.
   - Tell me about how connected community members are with the community. Please share a few examples of connectedness.
   - Are there members or groups within the community who may feel left out?
   - What could be done to help them to feel more connected?

5. Are members of your community committed to the well-being of the community?
   - How is this commitment expressed?
   - Are there individuals or groups who do not feel a commitment to the community? Do you know why?
   - What could be done to increase their feeling of commitment?
   - How does commitment to the well-being of a community contribute to the long term health and vitality of the community?

6. Do members of your community have hope about the future?
   - If so, what is the source of this hope? If not, why are community members not hopeful about the future?
   - What evidence is there of hopefulness or lack thereof?
   - How does hope about the future contribute to the long term health and vitality of a community?

7. Let us move on to participation. Are there opportunities for children and families to learn about and participate in disaster readiness, response, and recovery?
   - Describe their participation.
   - How do they find out about opportunities to participate?
   - Are there members or groups who do not participate? Do you know why?
   - Is it possible to engage them? How?

8. Does your community help people in need?
   - What evidence is there to support your impressions?
   - Is there help for people during and after a disaster? \{Probe for informal as well as formal sources of help.\}
   - Are there individuals or groups who do not receive help? What evidence is there to support your impressions?
   - What could/should be done to increase assistance to these individuals or groups?
9. Does your community treat people fairly?
   - What evidence is there to support your impressions?
   - If people are not treated fairly, what are the consequences of a lack of fairness? What, if anything, could/should be done to encourage the fair treatment of everyone?
   - Does fair treatment affect people’s sense of community? How?
Questions on Resources

Comments to facilitators are in brackets {}.

1. We are interested in communities. What comes to mind when you think of a community?
   • What about your community? *(Settle on a general understanding of community for the session.)*

2. Let us talk about resources. These could be natural resources, physical infrastructure, tools and machinery, the workforce and leadership, and productive social connections. Do you think resources in your community are adequate for disaster readiness, response, and recovery?
   • How well could your community’s resources withstand the stress of a disaster without loss of function?

3. What resources would improve the ability of your community to address disaster readiness, response, and recovery?
   • How could your community acquire or develop these resources?
   • Would your community support any of these measures to acquire/develop resources?
   • What could be done to get your community to support these measures?

4. Are roles and responsibilities for disaster management clearly defined in your community?
   • Please share some examples.
   • To what extent is there overlap and/or redundancy in roles and responsibilities? Is this helpful or problematic?
   • What, if anything, could/should be done to clarify roles and responsibilities for disaster management?

5. Does your community have effective leaders?
   • Are they accessible to members of your community? *(Probe: Are they accessible to all members of your community?)*
   • If not, whose concerns are ignored or disregarded? What could/should be done to change this situation given your community’s resources? *(Probe: If current resources are not available, what could/should the community do to acquire needed resources to improve the effectiveness of community leaders?)*
   • If so, what evidence is there to support your impressions?

6. Are members of your community able to get the services they need? Please share some examples.
   • What services are lacking?
   • Are there individuals or groups who are unable to get services that are generally available to others in your community? Who are these individuals or groups? Why are they unable to get these services? What could/should be done to change this situation?
   • Are there individuals or groups who are unable to get services that they really need which are not generally available in your community? Who are these individuals or groups? What unavailable services do they need? What could/should be done to change this situation?

7. Are disaster response and recovery services available in your community?
   • Are they available to all members of your community?
   • If not, what individuals or groups are not served? Why? What could/should be done to ensure that these individuals receive services?
   • Are there deficiencies in your community’s disaster response and recovery services? If so, what are they?
   • How could your community improve response and recovery services given your community’s resources? *(Probe: If current resources are not available, what could/should the community do to acquire needed resources for disaster response and recovery?)*
8. Do members of your community know where to go to get things done?
   - How do they identify the person, office, or organization that can best address their concerns?
   - Are these persons, offices, or organizations responsive to all community members?
   - If not, what concerns are not being addressed? What could/should be done to change this situation given your community's resources? (Probe: If current resources are not available, what could/should the community do to acquire needed resources?)
   - If so, what evidence is there to support your impression?

9. Communication is a major issue in addressing disasters. Do members of your community communicate effectively with each other?
   - How do members of your community communicate with respect to disasters? (Probe for communication before, during, and after disasters.)
   - Is this communication effective? (Probe: Does the communication go both ways?)
   - How could this communication be improved?
Questions on Transformative Potential

Comments to facilitators are in brackets {}.

1. We are interested in communities. What comes to mind when you think of a community?
   - What about your community? *Settle on a general understanding of community for the session.*

2. Does your community collect information about its history, status, and/or progress?
   - What kind of information?
   - How is this information gathered?
   - Who has access to this information?
   - How is this information used?
   - If your community does not collect information about its history, status, and/or progress, do you think it should? What kind of information could/should be collected? Why is it not collected? What could/should you do to encourage the collection of information?

3. Does your community have or collect information that would improve its ability to adapt to and learn from crises?
   - If so, what type of information?
   - How is this information collected?
   - Who has access to this information?
   - How is this information used?
   - If your community does not have or collect information to help it adapt to and learn from crises, do you think it should? What type of information could/should be collected? Why is this information not collected? What could/should be done to encourage the collection of such information?

4. What have you learned from past community crises that might help you to respond to and recover from future community crises?
   - Have others in your community also learned from these crises? *Probe: have most others learned?*
   - How can this knowledge be communicated to others in the community so that there is widespread benefit?

5. How does your community establish goals and priorities?
   - Who generally makes the final decisions? Who else is involved?
   - Are you encouraged to participate?
   - Are individuals or groups left out of the process? If so, who?
   - Do you know why individuals or groups are not participating?
   - Does your community want specific individuals or groups to be involved in establishing goals and priorities?
   - If so, who? What could your community do to involve these individuals or groups?

6. Are members of your community aware of community issues they might address together?
   - If not, what could/should be done to increase awareness of community issues?
   - Do community members come together to address community issues?
     - If not, what could/should be done to bring them together?
     - If yes, who is/is not involved, how do they convene, and what issues do they address? *Probe for individuals who are left out – why are they left out, how could/should they become involved, etc.*
     - If community members come together to address community issues, are they generally successful? How do you determine success? Why are they or are they not successful?
     - What benefits arise from the process itself (whether or not a specific issue is resolved)? That is, what benefits arise from community members coming together to address community issues?
7. Are there opportunities for community members to participate in problem solving with respect to community issues? *(Focus on problem-solving activities rather than kinds of activities that merely involve community members.)*
   - What are some of these opportunities?
   - Who actually participates?
   - Are individuals or groups left out of community problem solving?
   - Should these individuals or groups be encouraged to participate in community problem solving?
   - If so, what could be done to involve them?

8. Describe opportunities that exist to help people to develop skills that would improve crisis response in your community.
   - Are individuals or groups excluded from these opportunities?
   - If so, why?
   - What could/should be done to include these individuals or groups?
Questions on Disaster Management

Comments to facilitators are in brackets {}.

1. We are interested in communities. What comes to mind when you think of a community?
   - What about your community? *(Settle on a general understanding of community for the session.)*

2. What do you consider to be a community disaster?
   - Are people in your community interested in learning about disasters? Would they participate in activities designed to increase awareness about disasters?
   - If people in your community are not interested in learning about disasters, how could you get them interested?
   - Are people in your community interested in learning about terrorism? Would they participate in activities designed to increase awareness about terrorism?
   - If people in your community are not interested in learning about terrorism, how could you get them interested?

3. Has your community experienced a disaster in recent years?
   - If so, describe the most recent disaster. *(Probe: Was it the result of natural, technological, or human causes? If human caused, was it deliberate? When did it occur?)*
   - What type of damage was sustained? How significant was the damage? *(Note: Damage may be to community infrastructure, to other resources, or to humans (physical and/or psychological). Probe for type and significance of damage as appropriate for the group.)*
   - Was the response to the disaster adequate? What problems arose? How were they addressed?
   - Has your community recovered from the disaster? What, if any, problems remain?

4. What type of disasters is your community likely to experience? *(Probe: What do you see as a threat to your community now and in the near future?)*
   - Would people in your community know what to do in a disaster?
   - Have you thought about terrorism? What type of terrorism is most likely to be perpetrated against your community? Do people in your community know about it? Would they be interested in learning about it?
   - How likely are people in your community to notice and call attention to something out of the ordinary?

5. Does your community have an official disaster management program?
   - If so, who runs it?
   - Is the program evaluated? If so, who is involved in these evaluations?
   - Could/should others be involved? If so, how might their involvement be encouraged?
   - What changes to your community’s disaster management program have been made based on program evaluations?

6. What does your community do to prevent disasters/terrorism?
   - Would people in your community know who to contact if they suspect terrorist activity?
   - Who in your community is involved in activities to prevent disasters/terrorism?
   - Are individuals or groups left out? Could/should they be involved? If so, how?

7. What does your community do to prepare for disasters/terrorism?
   - Who is involved in these activities? Are individuals or groups left out? Could/should they be involved? If so, how?
   - Are there plans for high risk populations (those with special needs, those who are medically fragile, children, etc.)?
   - Are activities to prepare for disasters/terrorism adequate?
8. How might preparedness be improved? What would be required to make the recommended improvements?

8. What does your community do to reduce the effects of disasters/terrorism?
   - Who in your community is involved in activities to reduce the effects of disasters/terrorism?
   - Are individuals or groups left out? Could/should they be involved? If so, how?

9. Is your community currently doing anything to improve its response to disasters/terrorism?
   - Who is served? Are individuals or groups neglected? If so, why?
   - Are additional improvements necessary?
   - Would these changes address the needs of under-served individuals or groups?
   - If not, how could under-served individuals or groups be better served?
   - What would be required to make the recommended improvements?

10. How does your community support recovery from disasters/terrorism?
    - Are you part of a support or recovery group?
    - Are disaster/terrorism recovery efforts adequate?
    - Who is served? Are individuals or groups neglected? If so, why?
    - How might recovery be improved?
    - Would these changes address the needs of under-served individuals or groups?
    - If not, how could under-served individuals or groups be better served?
    - What would be required to make the recommended improvements?

11. Do members of your community trust authorities who make disaster management decisions?
    {Probe: Do members of your community know who these authorities are? Do they know how to reach them?}
    - Why do/do not community members trust these authorities?
    - Will members of your community follow official disaster management directives such as mandatory evacuation?
    - If not, what could/should be done to increase compliance with directives?
Questions on Terrorism Preparedness

Comments to facilitators are in brackets {}.

1. What do you think of when someone mentions terrorism?
   - Are people in your community interested in learning about terrorism?
   - Would they participate in activities to increase awareness about terrorism?
   - If people in your community are not interested in learning about terrorism, what could be done to interest them?

2. Has your local community experienced a terrorist attack? *(The focus should be on a geographically defined area such as a city or neighborhood.)*
   - If so, describe the most recent attack. When did it occur? What type of damage was sustained? How significant was the damage?
   - Was the response adequate? What problems arose? How were they addressed?
   - Has your community recovered from the incident? What, if any, problems remain?
   - Does your community receive special funding from federal or state homeland security for preparedness? If yes, what kind of funding?

3. Thinking about your community, what type of terrorism concerns you the most? *(Address the following questions for the type(s) of attack that are of greatest concern to the group.)*
   - What is the likelihood of such an attack?
   - Do people in your community know about it? Would they be interested in learning about it?
   - Would people in your community know what to do in the event of such an attack?

4. What does your community do to prevent terrorism?
   - Who is involved in these activities? Are individuals or groups left out? Could/should they be involved? If so, how?
   - Are activities to prevent terrorism adequate?
   - How might terrorism prevention be improved? What would be required to make the recommended improvements?
   - How likely are people in your community to notice and call attention to something out of the ordinary? Would people in your community know who to contact if they suspect terrorist activity?
   - How could members of your community learn to be attentive to potential terrorism?

5. What is your community doing to prepare for terrorism?
   - Who is involved in these activities? Are individuals or groups left out? Could/should they be involved? If so, how?
   - Are there plans for high risk populations (e.g., those with special needs, those who are medically fragile, and children)?
   - Are activities to prepare for terrorism adequate?
   - How might terrorism preparedness be improved? What would be required to make the recommended improvements?

6. What does your community do to reduce the potential effects of terrorism?
   - Are some individuals or groups less involved than others? Could/should they be involved? If so, how?
7. What is your community doing to establish terrorism **response** capability?
   - Who will be served? Will individuals or groups be neglected? If so, why?
   - Are improvements necessary? If so, what are they?
   - Would these changes address the needs of under-served individuals or groups?
   - If not, how could under-served individuals or groups be better served?
   - What would be required to make the recommended improvements?

8. What is your community doing to establish terrorism **recovery** capability?
   - Who will be served? Will individuals or groups be neglected? If so, why?
   - How might recovery capacity be improved?
   - Would these changes address the needs of under-served individuals or groups?
   - If not, how could under-served individuals or groups be better served?
   - What would be required to make the recommended improvements?
Questions on Public Engagement

Comments to facilitators are in brackets {}.

1. As you know, we are interested in public involvement in building community resilience to terrorism and disasters. What roles are appropriate for the general population? If it is helpful, think about volunteer roles associated with disaster prevention, preparedness, response, and recovery. {If they are not identified, inquire specifically about the following: helping individuals and communities prevent disasters; individual and community disaster preparedness; disaster response; short- and long-term recovery from disasters; assessing community resilience to disasters; helping individuals and communities develop resilience to disasters.}

2. What types of activities are appropriate for each role?

3. What kind of preparation is needed to enable community members to perform the identified roles/activities?
   - What kind of experience do people need to perform these roles/activities?
   - What kind of training do people need to perform these roles/activities?

4. Are there barriers that interfere with involving the public in building community resilience to terrorism and disasters? Again, if it is helpful, think in terms of disaster prevention, preparedness, response, and recovery.
   - What are the barriers? Focus on barriers that limit your ability to get community members involved. {If they are not discussed, probe for apathy, denial, fear. For example, it may be that community members are apathetic when it comes to disaster preparedness. Do you think this is the case? Are there other barriers?}

5. In general, how can community members be engaged in building community resilience to terrorism and disasters? Focus on what can be done to get community members engaged.
   - What should be the goals with respect to building community resilience to terrorism and disasters?
   - Which of these goals are of the highest priority?
   - Is the involvement of specific groups more important than others? If so, why? If so, how does this affect your prioritization?
   - What strategies can be used to engage community members (or members of a specific group) in reaching each specific goal? {Focus on the highest priorities first for the following.}
   - What resources will be needed?

6. We have talked about roles and activities that might be appropriate for the general public in building community resilience to terrorism and disasters. We have discussed preparation for, and some barriers to, their involvement and ways to engage them. Now as a final step, let us consider strategies that the general public can use to build community resilience to terrorism and disasters. These will probably be related to the roles and activities we have already identified. {Refer to the identified items.}
   - What strategies can be used to build community resilience to terrorism and disasters?
   - What are the barriers to the implementation of these strategies by the general public?
   - What resources will be needed for each strategy?
   - Do we need to do anything specific to engage community members in these activities? That is, do we need to do anything in addition to general strategies for engaging community members? Please share some examples.
Appendix C: Templates

Data Collection Framework .............................................................. C2

Neighborhood Infrastructure Map ..................................................... C6

Community Ecological Map ............................................................... C7

Stakeholder Chart ............................................................................. C8

SWOT Matrix .................................................................................... C9

SWOT Strategies Matrix .................................................................... C10

Capacity and Vulnerability Matrix ..................................................... C11
### Data Collection Framework

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<tr>
<th>Data Element</th>
<th>Special Considerations</th>
<th>Findings</th>
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<tbody>
<tr>
<td><strong>Demographic data</strong></td>
<td>Consider geographic size and population density. Consider recent trends.</td>
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<td>• Sex</td>
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<td>• Race and ethnicity</td>
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<td><strong>Household data</strong></td>
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<td>• Vehicles available/operational</td>
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<td>• Phones by type (landline, cell)</td>
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<td>• Heating fuel by type (e.g., electricity, coal, wood)</td>
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<td>• Cooling system by type (e.g., air conditioner, evaporative cooling, fan)</td>
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<td><strong>Housing data</strong></td>
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<td>• Multi-unit developments</td>
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<td>• Homeowner associations</td>
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<td>• Length of home ownership</td>
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<td><strong>Education</strong></td>
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<td>• Schools</td>
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<td>Include public, private, and charter schools.</td>
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<td>• Colleges and universities</td>
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<td>Indicate any specialty education institutions.</td>
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<td>• Vocational/technical schools</td>
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<td>• Apprentice and internship opportunities</td>
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<td>• High school equivalency and adult</td>
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<td>Data Element</td>
<td>Special Considerations</td>
<td>Findings</td>
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<td>● Job training organizations (e.g., Job Corps, Goodwill job training)</td>
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<td>● Other</td>
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<td><strong>Business, occupational, and economic data</strong></td>
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<td>Include number by type. Highlight crisis-relevant businesses such as hardware stores and lumber suppliers.</td>
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<td>● Major and minor industries by type</td>
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<td>● Major and minor businesses by type</td>
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<td>● Employment agencies</td>
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<td>● Shopping malls</td>
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<td>● Hotels and motels</td>
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<td>● Restaurants</td>
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<td>● Professional associations</td>
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<td>● Other</td>
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<td><strong>Transportation data</strong></td>
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<td>For bus and train stations and airports, indicate distance to closest sites.</td>
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<td>● Bus stations</td>
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<td>● Train stations</td>
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<td>● Tunnels</td>
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<td><strong>Health and human services</strong></td>
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<td>● Nursing homes</td>
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<td>● Assisted living facilities</td>
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<td>● Social service providers by type</td>
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<tr>
<td>● Physicians</td>
<td></td>
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<tr>
<td>● Mental health service providers</td>
<td></td>
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<tr>
<td>● Support groups</td>
<td></td>
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</tr>
<tr>
<td>Data Element</td>
<td>Special Considerations</td>
<td>Findings</td>
</tr>
<tr>
<td>---------------------------------</td>
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</tr>
<tr>
<td>• Food banks</td>
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<tr>
<td>• Existing shelters</td>
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<tr>
<td>• Contingent shelters</td>
<td></td>
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<tr>
<td>• Sanitation services</td>
<td></td>
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<tr>
<td>• Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Faith-based organizations</strong></td>
<td>Number by type and approximate number of participants.</td>
<td></td>
</tr>
<tr>
<td>• Churches, synagogues, mosques</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Libraries</strong></td>
<td>Number and distance to closest if not within the community.</td>
<td></td>
</tr>
<tr>
<td><strong>Recreation opportunities</strong></td>
<td>Number by type and approximate number of participants.</td>
<td></td>
</tr>
<tr>
<td>• Parks</td>
<td></td>
<td></td>
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<tr>
<td>• Sports groups</td>
<td></td>
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<tr>
<td>• Sports facilities (e.g., bowling alleys, ice rinks)</td>
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<tr>
<td>• Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Civic and fraternal organizations</strong></td>
<td>Number by type, number of members, and frequency of meetings</td>
<td></td>
</tr>
<tr>
<td><strong>Media</strong></td>
<td>Number of each. Indicate if in English or another language. Indicate if accessible by people with visual and/or hearing limitations.</td>
<td></td>
</tr>
<tr>
<td>• Newspapers</td>
<td></td>
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<tr>
<td>• Radio stations</td>
<td></td>
<td></td>
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<tr>
<td>• Television stations</td>
<td></td>
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<tr>
<td>• Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Internet penetration</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Public Meetings</strong></td>
<td>Indicate frequency, accessibility, and attendance.</td>
<td></td>
</tr>
<tr>
<td>• Public forums</td>
<td></td>
<td></td>
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<tr>
<td>• Governing council meetings</td>
<td></td>
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<tr>
<td>• Other</td>
<td></td>
<td></td>
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<tr>
<td><strong>Voting</strong></td>
<td></td>
<td></td>
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<tr>
<td>• Availability of voter registration sites</td>
<td></td>
<td></td>
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<tr>
<td>• Availability of polling sites</td>
<td></td>
<td></td>
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<tr>
<td>• Registered voters</td>
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<tr>
<td>• Voter turnout</td>
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<tr>
<td>• Other</td>
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<tr>
<td>Data Element</td>
<td>Special Considerations</td>
<td>Findings</td>
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<tr>
<td><strong>Organized volunteerism</strong></td>
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<tr>
<td>• Number and type of organizations</td>
<td></td>
<td></td>
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<tr>
<td>• Participation in organized volunteer activities</td>
<td></td>
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<tr>
<td>• Other</td>
<td></td>
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<tr>
<td><strong>Philanthropy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Number and type of organizations</td>
<td></td>
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<tr>
<td>• Contributions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other</td>
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</tr>
<tr>
<td><strong>Crime data</strong></td>
<td>Indicate number and location of crimes by type</td>
<td></td>
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<tr>
<td><strong>Other</strong></td>
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</tbody>
</table>
Neighborhood Infrastructure Map

Mark the boundaries of the neighborhood you are mapping on the grid below. These boundaries should serve as a realistic outline of the geographical area. Indicate the approximate scale. Include a legend if you are using abbreviations.
Community Ecological Map

Put the name of your organization in the large center circle. Draw circles representing agencies, groups, and individuals with whom you currently interact. The size of the other circles should reflect the frequency or level of interaction with your organization. The strength of your relationship with each agency, group, or individual is described by connecting lines drawn from your organization to others.

Legend
Strong Relationship: __________________________
Weak Relationship: __________________________
Stressful Relationship: ++++++++++++++++++++++++
## Stakeholder Chart

**Initiative:** ________________________________________________________________

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Stake</th>
<th>Power to Adopt 0 to ++</th>
<th>Power to Implement 0 to ++</th>
<th>Awareness 0 to ++</th>
<th>Interest -- to ++</th>
<th>Attitude -- to ++</th>
<th>Who Influences Stakeholder</th>
<th>Stakeholder Influences</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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</tbody>
</table>
### SWOT Matrix

<table>
<thead>
<tr>
<th>Helpful / Favorable / Positive</th>
<th>Harmful / Unfavorable / Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal</strong></td>
<td></td>
</tr>
<tr>
<td><strong>External</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Strengths</strong></td>
<td><strong>Weaknesses</strong></td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td><strong>Threats</strong></td>
</tr>
</tbody>
</table>
## SWOT Strategies Matrix

<table>
<thead>
<tr>
<th></th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opportunities</strong></td>
<td>S-O Strategies</td>
<td>W-O Strategies</td>
</tr>
<tr>
<td><strong>Threats</strong></td>
<td>S-T Strategies</td>
<td>W-T Strategies</td>
</tr>
</tbody>
</table>
## Capacity and Vulnerability Matrix

<table>
<thead>
<tr>
<th>Potential Hazard: ___________________________</th>
<th>Vulnerabilities</th>
<th>Capacities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical and Material</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social and Organizational</td>
<td></td>
<td></td>
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<tr>
<td>Motivational and Attitudinal</td>
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<td></td>
</tr>
</tbody>
</table>
Appendix D: Google Maps Tutorial

Prepared by: Montgomery ML and Pfefferbaum RL
Web Mapping Programs

There are several web mapping programs available that allow you to view actual neighborhoods, including Google Maps, Bing Maps, and MapQuest. These mapping programs are similar in that you are able focus in on neighborhood areas; move up and down streets; see satellite street level views of neighborhoods, structures, and the surrounding areas; obtain directions; and search for nearby facilities such as schools, churches, and shopping centers. One of the most popular mapping programs is Google Maps. This basic tutorial will walk you through the steps to access map and satellite views of a desired location.

Accessing Maps

To access maps, open your Internet browser (for example, Internet Explorer or Mozilla Firefox). Note: Depending on your Internet connection, loading and refreshing the maps may take some time, so please be patient!

In the address line, type: http://www.maps.google.com

Type in the desired location (city, state, or street address) and press “enter” on your keyboard or mouse-click on magnifying glass.

Mouse-click once on the gray arrow in the left screen pane to close the pane and increase the map to full page view. (The left screen pane is for obtaining written directions to a given location.)
Navigating Maps

Use the map movement controls in the upper left hand corner of the map to move in different directions.

You also can mouse-click once on the map and hold down your primary mouse button to move the desired map section(s) into view using the “grab hand” icon which will appear on the map.

To focus on a specific neighborhood or area, use the sliding size meter on the left side of the map.

Click on the plus symbol (+) to zoom in on a specific area or the minus symbol (−) to zoom out to larger area. You also can mouse-click on the slider and move it up and down to increase or decrease the zoom factor.
Accessing Overhead Satellite Images

The default view is the Map view. To access overhead satellite views of actual neighborhood structures and the surrounding areas, toggle the Maps/Satellite icon. The icon will indicate Map when you are in the satellite view (see below); it indicates Satellite when you are in map view.

Printing and Manipulating Map Images

- For Microsoft Windows personal computer users, you can utilize the “print screen” function to cut-and-paste your maps into third-party programs, such as a word processor, presentation, or other graphic program, for image manipulation or printing purposes (see below for a sample list of such programs).

"Print screen" means to copy an active window or document into your computer’s internal clipboard, where it can be inserted into a third-party image editing/printing program. Directions are summarized below for the Microsoft Windows operating system.

  – Pressing the `Alt` key in combination with the `Prt Scn` key (usually located somewhere on the top right of your keyboard) will capture the currently selected window (your map).

  – After pressing the keys you will not see anything, but the captured screen image is copied to your computer’s internal clipboard.

  – Open a new document in your chosen third-party imaging editing/printing program.

  – “Paste” the acquired image from your computer’s clipboard into the new document by using your keyboard to press the `Ctrl` key in combination with the `V` key.

- Each third-party image editing and printing program offers different methods for manipulating your map images and printing depending upon your needs and level of
experience. Examples of some popular third-party image editing/printing computer programs are listed below.

Adobe Acrobat  Microsoft PowerPoint  
Adobe Illustrator  Microsoft Paint  
Adobe Photoshop  Microsoft Publisher  
Microsoft Excel  Microsoft Word

Google Maps Attribution

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If you are not using the text provided directly on Google Maps imagery, the text of your attribution must include the name “Google” and the relevant data provider(s), such as “Map data: Google, Bluesky.” You may customize the style and placement of the attribution text, but the text must be legible to the average viewer or reader. For more attribution information, please visit:  
http://www.google.com/permissions/geoguidelines/attr-guide.html

Further Information for Using Google Maps

To learn more about Google Maps features, tips, printing, and troubleshooting, please visit:  
http://support.google.com/maps/.