# Map Your Future Toolkit

Community Resilience Planning

**Bay Localize** 

# Map Your Future Toolkit Bay Localize, 2015

The Map Your Future Toolkit was created by Bay Localize with People Organized to Demand Economic and Environmental Rights (PODER) and Youth United for Community Action (YUCA), in partnership with staff from the Cities of San Francisco, East Palo Alto, San Mateo County, and San Francisco City College. The text was written by Kirsten Schwind in collaboration with Corrine Van Hook and Colin Miller.

The research that provided the basis for this publication was supported by funding under an award to the Metropolitan Transportation Commission (MTC) from the U.S. Department of Housing and Urban Development. The substance and findings of the work are dedicated to the public. The author and publisher are solely responsible for the accuracy of the statements and interpretations contained in this publication. Such interpretations do not necessarily reflect the views of the federal government, MTC, or local government partners. For more information on the project, please go to <a href="https://www.baylocalize.org">www.baylocalize.org</a>.

Nonprofit community groups may use this Toolkit free of charge. We appreciate your stories of how it has been helpful to you, as well as feedback. For-profit and academic users, please contact Bay Localize to discuss terms of use.

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Bay Localize is a project of the Earth Island Institute

## Map Your Future Toolkit

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### Map Your Future Community Planning Roadmap

The future of your community is in your hands. The Map Your Future Toolkit helps your group create a vision for how you want your neighborhood to be, and how to make that vision a reality. It provides the information needed for community groups to develop effective proposals to build local resilience.

Communities can face many challenges, and also hold wonderful strengths. Building community resilience is a process of investing in the existing strengths in order to address the challenges. The goal is ensure *all* residents are safe in homes and healthy in their neighborhoods, even in tough times.

#### What is Map Your Future?

Map Your Future is a program for community groups to improve their communities through building resilience. The Toolkit has a focus on preparing for natural disasters and the impacts of climate change. The approach is based on **asset-based community development**; in other words, building on your strengths.

The first step in creating change is envisioning what you want to see happen. The Map Your Future Toolkit helps you:

- 1. Survey community members about challenges they face and solutions they support
- 2. Create maps to support existing strengths in your community, and places where more could be
- 3. Work with city planners to make your vision a reality
- 4. Explore paths for your own future creating a resilient community

This Toolkit contains everything you need to get started: instructions, tips, a community survey, and community mapping lists, and a project roadmap.

#### Map Your Future 10 Steps to Community-Led Planning

If you would like to implement a Map Your Future planning process, we recommend you take these steps, in the order that makes sense for you.

- 1. **Read over the Toolkit.** This will give you an overall sense of what you can do with this project.
- 2. Create Your Team. Form a working relationship between one or more community groups and local city, county, or other agency planners. All groups bring unique strengths. Look for partners that will bring the community knowledge and technical and regulatory knowledge to get things done, as well as the funding to do it (local community foundations may be good partners). One way to do this is create a project advisory committee of community leaders, agency staff, and other key partners. Get your advisory group together in person to introduce the project, and take some social time with fun mixer activities to help members get to know each other.
- 3. **Establish Your Goals.** Decide together in your group why you want to implement the project, and what goals you want to achieve. You could incorporate this process into the training workshop described below. Have clear project goals that all partners agree on as important priorities for them will help keep your team motivated throughout the project. As part of your goal setting, you may choose to take a holistic approach and develop a resilience plan covering all the topics in this toolkit, or focus on one or two issues that are of great importance for your community now.
- 4. Train Your Team. Plan a training workshop for your group. What information does your team need to know to start working on the project? This may include reviewing some history of previous community efforts in your area, background on how challenges such as climate change or other important issues impact your community, or training for how different members of your team can work smoothly together across race and class. Create clear outcomes for your training, then plan the day's activities around it. See our sample workshop curriculum for ideas, and then adapt it for your needs. Consider asking steering committee members to help present parts of the training to honor their experience.
- 5. **Survey Your Community.** Begin your project by asking community members about their priorities, concerns, and ideas for building resilience. Adapt the Community Survey for your needs, and test your final version with small sample of the people you'd like to reach. Does it flow well and give you the information you need? Decide how you will reach the residents you most want to speak with. Is it easiest to go door to door, or survey residents at a community meeting

place, event, or local business? In our pilot, one team had great success surveying residents at a neighborhood laundromat, because patrons there had plenty of time to answer questions. Others surveyed attendees at a community meeting, or went door-to-door in pairs.

- 6. Gather Data For Your Maps. We use mapping as a process of both documenting the strengths and treasures that already exist in your community ... and also envisioning what you would <u>like to see</u> exist, and where it could be located. Is there a certain street that could really use a safer bike path? How would you ideally like to see that empty lot used? Could the community center also serve as a place for restaurants to bring uneaten food to be picked up by those who need it, or as a cooling center on hot days? Are there places where planting more trees could help reduce flooding during storms? Would the corner where youth hang out be a good place to locate a bike repair shop focused on youth job training and clean transportation? The mapping process can capture all of this.
  - You can begin the mapping process at the same time you are doing community surveys, or wait until you have finished your surveys to use the results to shape what data you prioritize mapping. See the *Introduction* to *Community Asset Mapping* section for more details.
  - For plotting your data on any electronic map, it's useful to record the Geographic Positioning System (GPS) coordinates of the location, as well as a street corner or other landmark as backup data. The *Mapping Instructions* section below explains how to do this using a smartphone. Before you collect your data, make sure you know what system you'll use to make your maps, so you get all the information you need. You can also add geographic information gathered from your surveys into your maps. We recommend entering your mapping data into a spreadsheet that can easily be imported into your mapping program.
- 7. **Create Your Maps**. Maps can be a great way to visually tell the story of what you want to see, and integrate the information you've gathered with other data to create a clear picture of what needs to happen. You can simply mark your findings on a paper map, though we recommend using an electronic map for ease of sharing and analysis. It is helpful to recruit a partner who is comfortable using computer mapping systems, for instance Google Maps (easier to use) or Geographic Information Systems (GIS).

- GIS is takes time to learn how to use, but has more capabilities to
  integrate your data with other data sets. For example, you can combine
  your data with publicly available maps of flood zones, demographic
  information from the census, or public health data to tell a more
  complete story of challenges and solutions. GIS is a standard skillset for
  urban planning, and exposure to it can be great career training for youth
  and other job seekers.
- City planners or local college with a GIS instructor and computer lab may be able to provide GIS access and training (these are good people to invite to join your project team). In the project pilot, instructors from a local community college volunteered their time to teach the participating youth groups enough GIS skills to create maps with their data.
- Either way, you will load your spreadsheet of mapping data into a mapping program, and format your maps to tell your story. Note the mapping system here offers a way to choose to share only some of your data publicly on your map, and keep sensitive information more private.
- 8. Analyze and Present Your Findings. Look carefully at your information. What responses came up most? What are the major trends you saw in your community surveys and mapping? What areas of your map have the most potential for positive action? What specific ideas for change came up? How does this information shape how you'd like to reach your program goals? Create a summary of your answers, and share your survey finding, maps, and analysis with your project advisory team and wider community for feedback and discussion. Project advisors may offer valuable new ways of analyzing your data, or ideas for how to move forward on achieving your goals. Use this discussion to begin formulating your recommendations for action, and to recruit advisors to work with you on developing specific recommendations in their areas of expertise. We recommend you also take this opportunity to thank your volunteers and celebrate what you've accomplished so far.
- 9. Develop Your Recommendations for Action. Based on your project team's shared understanding of your findings, decide which actions will be most strategic to meet your goals. You may start with a long list of solutions you'd like to see. Keep in mind that it's easier for a group to get one or two things accomplished at once instead of a long list. Which solutions are of highest priority to you? What would be the most strategic way to accomplish them?

- Involve your advisors and key community leaders to help you think of practical ways to move your actions forward, and any pitfalls to avoid, to make sure your plan is solid.
- Consider the questions of which key actors you need to involve, any laws you may need to follow (or work to change), where funding will come from, and whether you can integrate your actions into ongoing processes such as general plan updates or hazard mitigation plans that your city may already be required to do.
- 10. Implement Your Action Plan and Map Your Future. Congratulations on coming up with a well-researched action plan! As you work to get your action steps implemented, use your maps and survey results to tell the story of why your action steps are important and strategic. Keep in mind that positive change can take time, and that a dedicated team of people working for it is how it happens. This is how you map your community's future.

#### Map Your Own Future

In the process of mapping your community's future, take a moment to consider how much you can learn. How will members of your team leverage this in their own futures? This is especially an important question for youth, for whom early formative experiences shape career choices. If your group includes youth or other job seekers, host discussions with your advisors on how to build on this experience to advance their careers. New experiences and partnerships may result in great fodder for updating resumes and references, developing joint career workshops or internships, or creating paid jobs for community members to implement the program.

### How Map Your Future Builds Community Resilience

Resilience is a popular term with an ambiguous meaning; it can mean very different things to different people. Psychologists use the concept of individual resilience, the ability to get through personal hardship. Families and households can practice resilience by helping each other get through hard times.

What makes an entire community resilient? We think it's three elements:

- 1. Safe and Stable Homes
- 2. Healthy and Connected Neighborhoods
- 3. Community Systems to that Guarantee Human Rights

This section explains these elements, and how the Map Your Future Community Resilience Survey and Mapping List can be used to build resilience in your community.

#### Safe and Stable Homes

What would it be life to not have a home? Around 22 million people worldwide were displaced from their in 2013 by disasters sparked largely by earthquakes or climate and weather-related events. More than 80% of these people were displaced from unusually strong hurricanes or typhoons in Asia. The global risk of displacement is estimated to have more than doubled in four decades, in large part due to climate change.<sup>1</sup>

Slower-moving disasters can also displace residents from their home. Economic inequality can drive up rents in cities beyond the budget of most working people. Landlords may try to force out rent controlled tenants by refusing to maintain properties. If a family finally leaves a difficult rental situation, they may not be able to find a new home in the same city that they can afford. Residents may also be displaced by domestic violence, when one or more members of the household flees another, often with no clear place to go.

In all but extreme cases, keeping people in their homes during either slow or fast-moving disasters increases community resilience by keeping the fabric of a

<sup>&</sup>lt;sup>1</sup> Norwegian Refugee Council and International Displacement Monitoring Center. 2014. *Global Estimates* 2014 People Displaced by Disasters.

http://reliefweb.int/sites/reliefweb.int/files/resources/201409-global-estimates.pdf

community intact, decreasing stress on emergency or social services, and preventing economic disruption. Local businesses keep their workers and their customers. Neighborhoods keep their experienced leaders and long-time connectors, which is critical for the next element of resilience, healthy and connected communities.

Safe and stable homes are places where each resident feels safe from displacement. Creating and stable homes can include structural upgrades to ensure the home can withstand earthquakes or strong storms, enforcing rent control and tenant protections to guarantee the human right to housing, and programs to prevent domestic violence.

As it is difficult to identify all the elements of a safe and stable home just from looking at it from the outside during your mapping, the Community Survey element of this toolkit focuses on identifying potential forces for displacement in your neighborhood by interviewing community members themselves.

#### Healthy and Connected Neighborhoods

If there is a major natural disaster in community, it could take up to several days for first responders to reach you. Your neighbors are the people who are mostly likely to help you out first. That's easily to do if neighbors already know and trust each other, especially if they know special ways in which each other may need help. Here are a couple of examples:

Linda is a single mom with a little boy in fourth grade, Jerome. Linda's neighbor Michelle, who works from home, occasionally looks after Jermone when Linda is delayed getting home from her job in the next city. When a major storm closed the roads and Linda couldn't make it back home at all that night, Jermone already knew he could go to Michelle's house to stay as long as he needed. Linda felt secure in the knowledge Jerome would be safe there.

Mr. Rodriguez is an elderly widower with health problems which prevent him from getting out of the house very often. His younger neighbors Juan and Gloria occasionally chat with him when they walk by his porch where he likes to sit. On an especially hot day, Juan and Gloria didn't see Mr. Rodriguez outside and decided to knock on his door to make sure he was OK. When he didn't respond, they got worried and looked up his phone number on a neighborhood list. Mr. Rodriguez answered the phone weakly and said the heat was making

him feel very sick and confused, and asked them to get help. Juan and Gloria were able to call 911 and get an ambulance in time to treat him for heat stroke. They saved his life.

Shen and George organize an annual cultural festival in their neighborhood that helps neighbors get to know each other. After a major earthquake struck, the neighbors felt comfortable knocking on each others' doors to check if they were all right and offer basic first aid, because they had already met at the festival. The neighbors organized to offer temporary shelter to those whose homes were seriously damaged, and help them rebuild. No one was displaced from the neighborhood from the earthquake.

Michelle, Juan, Gloria, Shen, and George are valuable members of their community because they connect their neighborhoods. If they were displaced, the neighborhood would be less resilient.

In the Map your Future training, participants form small groups and create skits about how neighbors might be able to help each other in difficult situations. This is especially important for people who may be more vulnerable in emergencies, including the very young and old, single parents, non-English speakers, people with serious health conditions, people with fewer economic resources (for instance, no vehicle to evacuate or money to pay a cab), and people of color who may not receive equal treatment from first responders. The Map Your Future Community Resilience Survey helps identify how neighbors connect with each other.

Resilient neighborhoods are also places that support living healthy lifestyles. This includes clean air that's healthy to breathe; safe streets where all residents feel comfortable walking, biking, or using a wheelchair; parks where residents can exercise and play. These are physical parts of community resilience that can be mapped and envisioned in the Map Your Future planning process.

## Community Systems that Guarantee Human Rights

Step outside your door and find a plant -- anything from a blooming garden to a weed growing through the pavement. How does it live? It needs food from the soil, energy from the sun, and water. Human beings are much the same. If you walk into most modern kitchens, you'll find water in the tap, food in the fridge (hopefully), and energy when you turn on the stove. How did it get there? If you live in a very rural area off the

grid, you probably know exactly where it came from: you drilled a well, plucked food from the garden, and built a fire. If you live in a city, it's more complicated. Water may be piped from reservoirs, food trucked into stores, and electricity shipped over wires from many miles away. As long as it works, we often don't think about the systems in place to meet our basic needs.

In difficult situations, these systems to meet your basic needs may fail. If the electricity goes out in a storm, stores close down and you can't go buy food (or use a credit card card to buy it with). If a water main breaks, you can't get water from the tap.

Truly resilient communities guarantee that you can meet your basic needs even in difficult situations. These may be sudden emergencies, such as an earthquake or hurricane, or slow emergencies such as unemployment and growing financial hardship, or a severe chronic illness.

The need for governments to meet the basic human needs of their residents is actually written into the United Nations Declaration of Human Rights:

Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.<sup>2</sup>

Even in very wealthy countries such as the United States, in practice these promises of human rights are not always delivered upon even in day-to-day circumstances. In a major natural disaster, it becomes even harder to guarantee these human rights.

Resilient communities have strong systems in place to meet human rights for all their residents every day. They also have back-up systems for when primary systems are disrupted. These systems include ways to make sure everyone in a community can get:

- Food
- Water
- Energy

<sup>&</sup>lt;sup>2</sup> Universal Declaration of Human Rights, Article 25. http://www.un.org/en/documents/udhr/index.shtml#a25

- Transportation
- Housing
- Jobs and Income
- Social Support

One of the challenges of climate change is that it can dramatically disrupt the natural systems we rely on to guarantee human rights, especially water and food. Floods, droughts, and shifting weather patterns make it more difficult to grow crops. Droughts raise water prices. Resilient communities also make the most efficient use of natural resources, for example by reducing water waste and getting uneaten food to those who need it instead of throwing it away.

The Map Your Future Mapping List leads participants through identifying places in the community that help meet these human rights, or could be used to do so more efficiently and equitably.

#### Asset Mapping and Building Resilience

Mapping community treasures, also known as assets, in your neighborhood is a way to identify existing strengths that can be built on and expanded. It is also about imagining your community as you want it to be. All positive change begins with creating the vision of what you want. In other words, we must first be able to imagine what we want to see in our community, before we can create it.

#### Assets can be:

**People:** For example, experienced gardeners, nurses/doctors/curander@s, mechanics, babysitters, anyone who can share time or a skill with neighbors.

**Groups:** For example, children's playgroups, clubs, mutual aid cooperatives, or more formal community organizations; any group that brings people together.

**Institutions:** For example, schools, libraries, places of worship, government agencies, social service agencies.

**Physical things:** These include both infrastructure made by people (bridges, roads, buildings, dams, swimming pools), and natural features (creeks, lakes, mountains, trees, gardens, shorelines, empty lots).

The Map Your Future project helps you map assets that already exist, places where they could exist in the future, and think about how to make that happen. The purpose is to create recommendations to improve your community, based both on what already exists and what <u>could</u> be created. This is not an exact or scientific survey, and many of the questions are relative, based on the vision of the mapper. It's OK if different people map assets differently. Having teams of people map assets helps overcome individual bias.

#### What Information Should Community Groups Share?

In an ideal world, all community assets could be shared publicly so that they may be celebrated and receive the respect, support, and investment they deserve. In reality, some communities have suffered a painful history of having their assets appropriated or shut down by others.

Before you begin to collect information within your community, consider what information you want to make public and what sensitive information you may want to keep secure within your group. This may include obvious examples such as personal information of people who are key community assets. It may also include less obvious examples, such as important informal gathering places that may not be built to code and could be shut down if publicized, or sites for cultural ceremonies where curious outsiders could be disruptive. You may wish to consult with experienced community elders about this question.

Use your judgement based on your situation. Be prepared to explain to community members you speak with what information will be made public and what information will not. Ask permission before mapping any asset that is currently "under the radar screen" or not completely public, as there may be a reason for that. Clearly indicate in your spreadsheets which data should not be shared, so it can be filtered out and saved in a separate file before results are made public. Alternatively, you may wish to record sensitive information in a separate spreadsheet altogether to keep it more secure.

## Adapting and Using the Community Resilience Survey

The Map Your Future Community Resilience Survey works hand-in-hand with the Mapping List to help you identify sources of resilience in your community, as well as threats to it. It is especially designed to help you understand the first two elements of community resilience in your neighborhood described in the previous section: Safe and Secure Homes and Healthy and Connected Communities. The survey is important because these are element of community resilience that you can only really learn about by talking with residents.

#### **Customizing the Survey Questions**

Before you start using the survey, take some time to customize it to best serve your needs and address the issues most important to you.

We recommend keeping your survey as short as possible, to make it easy for respondents to finish it. Prepare your questions carefully so that you get the information you need, and that the information you gather is easy for you to use afterward in meeting your goals. Too much information can be difficult to make sense of. Try to ask for only the information you need, in the format you need it in.

First, think about your top priorities and research goals for this survey.

#### Ask your group:

- 1. What do we ultimately want to achieve with this project?
- 2. What information is most important to achieve that goal?
- 3. What question(s) will most directly provide that information?

Research what essential information is already available, so you can focus on gathering information that is not available from other sources.

Then use as few questions as possible that will most directly provide the information that will meet your goals. If you are editing or writing additional questions, use simple and clear language in short sentences. Try several drafts with a variety of questions, then whittle them down to the most effective ones.

Often it is simple and useful to get responses to a list of possibilities, leaving an option at the end to write in other responses not listed. See the examples below.

After you have drafted your questions, test them out on some neighborhood residents and ask for their feedback. Is the wording clear and easy to understand? Are the questions easy to answer? Most importantly, is your group getting the information you need to act on? Make any necessary edits and keep testing until you are confident you have effective questions.

Think about how you whom you most need to talk with to get the information you want. Does this include long-time residents, and/or recent arrivals? People of different backgrounds? Single moms? Older residents? Community leaders? Make a plan to be able to speak with them. Are you likely to find them at a community meeting? A local business or gathering spot? Or at home? Customize your approach to your audience. You can use the survey to conduct interviews neighbor interview, or have participants fill it out themselves.

#### **Example of Project Goals and Customized Survey Questions**

Youth United for Community Action (YUCA) has set organizational goals of addressing flooding in East Palo Alto and maintaining affordable residential rental housing.

1. With this project, YUCA wants to create community-based policy recommendations to the city that will:

Flooding: Maintain community safety from flooding in a local creek and sea level rise on its shoreline

Housing affordability: Strengthen its rent stabilization program

## 2. <u>Information YUCA needs to meet these goals is:</u>

Flooding: How residents think homes should be protected from flooding Housing affordability: Are current rent stabilization laws working for renters, and if not how renters think they can work more effectively

YUCA can also use existing public information from floodplain maps, online real estate statistics on average annual residential rent increases in their area, housing data from the city planning department, and data from other sources.

#### 3. Questions that might directly provide the information needed:

## Flooding

YUCA is beginning its work on flooding, and may like to get initial ideas of what ideas residents have, and approaches they support. YUCA may consider replacing question #12 on the existing survey with a more specific question about flooding:

11. Below are some proposals for how East Palo Alto could address flooding, both from the creek and from sea level rise at the shoreline.

How much would you support each proposal?

## Check one box per line:

	Support	Nuetral	Don't support	Don't know
Educate residents about risks from flooding				
Educate residents about what to do in case of floods				
Protect all buildings from flooding, no matter where they are located				
Remove some buildings that are likely to flood, and protect the others				
Improve wetlands to reduce severity of floods on shoreline				
Improve storm drainage in East Palo Alto so storms result in less flood damage				
Improve storm drainage upstream to reduce flooding in creek				
Other ideas:				

## Housing affordability

Housing is an issue YUCA has worked on for years, and based on this experience they may have some ideas for recommendations that they'd like to test for community support. These questions first determine if the respondent is in the target audience for

these questions (renters), if renters are aware of existing city rent protections, if and how they have experienced violations of these protections, and what proposals they think would be effective for keeping housing affordable. YUCA may consider adding this as a special section at the end of the survey.

13. Are you a renter? YES NO

If NO, skip to next page. If YES, you are a renter:

- 14. Are you aware of the city's rent stabilization program? YES NO
- 15. As a renter, have you experienced any of the following? (insert potential violations of rental protections)

	YES	NO
More than one rent increase per year		
Annual rent increases of more than %		
Eviction notices		
Poor maintenance		
Any other problems with landlord:		

16. How effective do you think the following efforts would be to keep housing in East Palo Alto affordable? (insert potential recommendations)

Check one box per line:

	Very effectiv e	May be effectiv e	Not effectiv e	Don't know
Educating renters about rent stabilization in English				
Educating renters about rent stabilization in other languages Which?				
Educating landlords about rent stabilization				
Stronger enforcement of the rent stabilization ordinance If so, how?				

Changing the rent stabilization ordinance If so, how?		
Other ideas:		

#### Survey Tips

Always be clear with your interviewees on the purpose of your survey and your project, and how their information will or will not be shared publicly. Bring brochures or flyers about your project with contact information that you can leave with them if they want to know more.

Be safe and work in pairs when interviewing. It's a good idea to have at least one member of the pair be familiar with the streets or area you are working in. All interview teams should let a team coordinator know where they are going and what time they plan to return, and ideally carry a fully charged cell phone in case they need to contact someone. Stay aware of your surroundings. It is a good idea to work outside during daylight hours, and to only enter houses where you already know the occupants well to avoid potentially unsafe situations. If someone you approach seems unfriendly or indicates they do not want to participate, politely and quickly move on. On the other hand, conducting interviews can be a great way to get to know friendly people in your neighborhood, and build connections and resilience yourself.

## **Community Resilience Survey**

Hello, we are volunteers with	Our program builds the
leadership of our community to be active decision m	nakers in what happens in our
neighborhoods.	

We're working to create an interactive map of local treasures that make our neighborhoods strong, and ways we can make it better.

Our goal is to help make sure neighbors know each other, enjoy our neighborhood, and work together to keep local residents safe in their homes.

Some of the issues in our community we're looking at include:

- Affordability
- Safety
- Earthquakes
- Extreme weather and local impacts of climate change

These survey results will be shared publicly as we form recommendations to make our neighborhood better for working families.

We don't ask for any personal information that could identify you in the main part of this survey. At the end you have the option to share contact information with us, if you would like to get involved with our efforts. We will not share personal contact information beyond our organization. You don't have to share any personal information with us -- this is your choice at the end.

Thank you for taking the survey.

1. What neighborhood do you live in? What is the nearest cross-street to your home?	
2. How many years have you lived in this neighborhood?	
3. How do you generally identify yourself?	
Mark all that apply:	Х
African American/African descent	
Asian/Pacific Islander	
Latino	
Native American	
Middle Eastern	
White	
Other:	
I'd rather not answer this question	
4. Do any of the statements below describe <u>you or someone you live with</u> ?  Include family you live with and/or housemates.	
Mark all that apply:	Х
Five years old or younger	
65 years old or older	
Has difficulty getting around (for example, difficulty walking)	

Five years old or younger	
65 years old or older	
Has difficulty getting around (for example, difficulty walking)	
Needs electricity for health reasons (refrigeration of medicine, medical machines)	
May not understand emergency information in English. Primary language?	
Job requires working outside in all kinds of weather. If yes, what work?	
Has asthma or conditions that make it hard to breathe	
Has other serious health conditions	
Caretaker for someone with serious health conditions (at home or elsewhere)	
Money is tight, does not always cover basic needs (housing, food, utilities, health)	
In case of an emergency, may have difficulty finding transportation	
None of the above	

. What are your three favorite places to go in your neighborhood?	
1.	
2.	
3.	
ES NO	
. How do you meet and interact with people in your neighborhood?	
Mark all that apply, and tell us more.	Х
Neighbors introduce themselves	
At a neighborhood business or gathering spot. If so, where?	
Block parties or neighborhood get-togethers. If so, which?	
Community organizations. If so, which?	
Church or a faith organization. If so, which?	
Through a local school. If so, which?	
Through work. If so, what workplace?	
Through music, arts, and culture. If so, what?	
Through email or web site. If so, which?	
Other ways?	
I don't really know people in my neighborhood	
Do you feel comfortable reaching out to your neighbors if you need something they controvide?  [ES NO  DOPTIONAL: What do you think would help people in your neighborhood get to know each other and feel comfortable helping each other when needed?	

10. Think about the building where you live.	Are any of the following a concern for you?
Note: this is a national survey. Not all option	s may apply to your neighborhood.

12. OPTIONAL: Do you have any recommendations for how the city / community could address your	Mark all that apply	X
Danger from flooding (near ocean, bay, river/creek, levees, bad storm drains, etc.)  Uncomfortably hot  Uncomfortably cold  Dangerous in major storms. How?	Difficulty paying (circle all that apply): rent mortgage property taxes utilities	
Uncomfortably hot  Uncomfortably cold  Dangerous in major storms. How?	Eviction threats	
Uncomfortably cold  Dangerous in major storms. How?  Dangerous in major earthquakes  Fire danger (from electrical wiring, overcrowding or in rural areas, wildfires)  Air is difficult to breathe, dirty, or polluted  Infestations of pests (rodents, insects)  Faulty plumbing  Neighborhood safety  Any other concerns:	Danger from flooding (near ocean, bay, river/creek, levees, bad storm drains, etc.)	
Dangerous in major storms. How?  Dangerous in major earthquakes  Fire danger (from electrical wiring, overcrowding or in rural areas, wildfires)  Air is difficult to breathe, dirty, or polluted  Infestations of pests (rodents, insects)  Faulty plumbing  Neighborhood safety  Any other concerns:	Uncomfortably hot	
Dangerous in major earthquakes  Fire danger (from electrical wiring, overcrowding or in rural areas, wildfires)  Air is difficult to breathe, dirty, or polluted  Infestations of pests (rodents, insects)  Faulty plumbing  Neighborhood safety  Any other concerns:	Uncomfortably cold	
Fire danger (from electrical wiring, overcrowding or in rural areas, wildfires)  Air is difficult to breathe, dirty, or polluted  Infestations of pests (rodents, insects)  Faulty plumbing  Neighborhood safety  Any other concerns:	Dangerous in major storms. How?	
Air is difficult to breathe, dirty, or polluted  Infestations of pests (rodents, insects)  Faulty plumbing  Neighborhood safety  Any other concerns:	Dangerous in major earthquakes	
Infestations of pests (rodents, insects)  Faulty plumbing  Neighborhood safety  Any other concerns:	Fire danger (from electrical wiring, overcrowding or in rural areas, wildfires)	
Faulty plumbing  Neighborhood safety  Any other concerns:	Air is difficult to breathe, dirty, or polluted	
Neighborhood safety  Any other concerns:	Infestations of pests (rodents, insects)	
	Faulty plumbing	
11. Which of the above is the biggest concern for you?	Neighborhood safety	
12. OPTIONAL: Do you have any recommendations for how the city / community could address your	Any other concerns:	
	2. OPTIONAL: Do you have any recommendations for how the city / community could address	your

<sup>\*</sup>This question can be replaced by more specific questions tailored to your organization

## 13. Can you think of any specific <u>places</u> in your neighborhood where you'd like to see the following improvements happen:

	If yes describe where, using streets, corners or landmarks (for example "parking lot across from movie theater on 2nd St")
More trees planted	
Community gardens planted	
Paved areas turned into green space	
Places to get free food if needed	
Food waste reduced	
Places to go for help when having a hard time	
Places to go when it's uncomfortably hot	
Affordable housing created	
Public transit improved (how?)	
Walk and bikeways improved (how?)	
Saving, capturing, or re-using water	
Saving electricity	
Generating renewable electricity	
Jobs and businesses created	
Safe and enjoyable places for residents to go	

## Thank you so much for taking this community survey!

OPTIONAL
----------

If it is OK to follow up with you about your a	answers, or if you	ı would like to stay ir	n touch with us	about this
work, please let us know the best way to re	each you:			

Name:	
Contact information (phone and/or email):	

## **Mapping Instructions**

The Map Your Future Mapping process is a powerful way to see your built environment in new ways. How could that garbage-strewn empty lot be used to fulfill a community need? How could a recognized asset, such as a park or a community center, fulfill even more functions? It can also help you showcase wonderful assets in your community that deserve more recognition, supporting, and funding.

First, go over the Mapping List. This is a list of assets that may be part of community systems to meet the following basic needs and human rights:

- Food
- Water
- Energy
- Transportation
- Housing
- Jobs and Income
- Social Support

You can also map potential assets that you wish to see in a certain location. For example, an empty lot is full of possibility for what it could be, and could have many potential codes assigned to it.

You can also use multiple codes to map an existing asset (use one line for each code in your data sheet). For example a community center could be a safe place for kids, youth and seniors to congregate, as well as a cultural resource and a location of a community garden. It could also potentially be used as a place where restaurants and caterers could bring uneaten food to be picked up by those who need it.

To make data collection easy, there are short codes assigned to each asset. As you map, you'll record your name, location, mapping code, and notes on why you chose that code.

## 10 Steps for Community Mapping

- 1. Define what will be mapped, based on your group's interests.
  - Which blocks or geographic areas will you focus on? Try starting out with a relatively small area, then expand if you like.
  - Will you focus on public places, businesses, or private properties as well?

- Will you map all the community systems on the mapping list, or focus on certain systems?
- 2. Get ready to go map your community! For safety, form teams of at least two people. All teams should have at least one device with the capacity to find your exact position as GPS coordinates (usually a smartphone or GPS device). They should also have the contact number for the project leader saved in case of questions or emergencies. See *Survey Tips* in the Survey Instructions section for more safety guidelines.
- 3. Divide up the streets of the mapping area, and assign streets to mapping teams.
- 4. Get ready to record your findings. Create a spreadsheet to record your data (see the Sample Data Sheet). You may consider a shared spreadsheet program such as Google Docs, especially one that can be accessed from a smartphone so that mappers can put input their data online as they go.

#### There are three ways you can record your findings:

- A) Using a paper Data Sheet, then type entries into a data sheet back in the office.
  - 1. At each location, have a group member read you the GPS coordinates, and write them in
  - 2. In the notes section, write more information on the <u>location</u> (eg street address, business, place name) and <u>why you are mapping it</u> (for example, "empty lot good place for garden"), and anything else you think we need to know
  - 3. Back at the office, copy your information onto your data sheet
- B) If someone on your team has an iPhone, get GPS coordinates and enter data into a data sheet online.

#### To get GPS coordinates on an iPhone

You can use your iPhone's built in <u>GPS</u> to display the latitude and longitude coordinates of your current location. Follow these steps to find your location coordinates in degrees, minutes and seconds:

- Make sure that Location <u>Services</u> is ON. Navigate to Settings -> Location Services -> ON
- 2. In the list of apps under Location Services, make sure Compass is ON
- Press the Home button to exit Settings

- 5. Your current GPS coordinates are displayed at the bottom of the screen.
- C) If someone on your team has an Android smartphone, download and use the MYF Mapper App, which automatically finds GPS coordinates and enters data to the mapping program (easiest option!).

To download MYF Mapper App for Android phones

- 1. Contact Bay Localize staff (<a href="mailto:nacrp@climateinnovation.net">nacrp@climateinnovation.net</a>) and request that the app be sent to an email account you can access on your phone
- 2. Enable GPS on your cell phone in "Settings"
- 3. Download the app from your email (you may need to click on attachment multiple times)
- 4. If warning appears, click "Security"
- 5. Under "Security > Device Administration", click on "Allow installation of Apps other than Play Store"
- 6. Allow installation of app by clicking "Next" and then "Install"
- 7. Enter your name
- 8. Enter mapping asset code
- 9. Enter field notes
- 10. Click "set location"
- 11. Place cursor after the GPS coordinates and click "Done" on your on-screen keyboard
- 12. Click "Submit"
- 13. If you have multiple gmail accounts, select which one you want to use
- 14. Click "OK" to managing fusion tables (this is the place the data is stored to be made into maps)

In case there is an error in accessing or reading your GPS coordinates (neither smart phones nor GPS devices are always completely accurate), be sure to record back up information about your location in the notes. This could be a street address, street corner, or your position relative to a common landmark.

- 5. Walk your assigned streets slowly, and look around carefully. What assets from your mapping list do you see? What ones could exist here? Use your imagination and record as many assets as you can.
- 6. Ask people you meet for more information (for example, ask restaurant owners if they would be open to donating unused food at the end of the day). Use the Community

Survey to interview neighborhood leaders and other residents to gather more in-depth perspectives.

- 7. Update and double check your data sheets as you go. Spot check the accuracy of your GPS coordinates by entering them into an online mapping program such as Google Maps, to ensure they indicate the correct location. If the GPS point is inaccurate, look up the correct points for the street address or landmark mentioned in the notes.
- 8. Finalize your data. Add any geographic data collected in your Community Survey, especially from Question 12. You can integrate this data into your mapping data sheet by:
  - Assigning each asset the appropriate code from the mapping list
  - Identifying the GPS coordinate of the location mentioned on in an online mapping program such as Google Maps
  - Entering it into your mapping data sheet

At this point, if there is information in your data sheet that your organization would like to keep private and not share publicly, but sure to filter it out and save it as a different file. You can add that file's information to your internal versions of your maps, and not add it to the public ones.

Make sure your data is clean, meaning just the information you need is entered in the cells where it is supposed to be, with nothing extra. This will make it easier to upload the data files into the mapping program without errors.

- 9. Create your maps. Work with the mapping experts on your team to upload your online data sheet to your mapping program, create your maps, and create titles and legends so others can understand it.
- 10. Analyze what you found, in both your maps and surveys. Discuss these questions:
  - What trends do you see?
  - What valuable assets (treasures) already exist?
  - Can these assets be expanded and replicated throughout the neighborhood? What would that take?
  - What potential future assets did you find?
  - What would it take to make them into real community assets?

## Map Your Future Mapping List

- **Odd** numbers are for assets that <u>already</u> exist, **even** numbers for assets <u>you'd</u> <u>like to see</u> exist.
- In each section two numbers are left open to allow groups to <u>add assets you would like to map</u>.
- Some assets you may want to keep <u>private</u> within your organization only, for example the home addresses of elders who are cultural resources. **Note these with an \* after the code**, e.g. \$17\*. Before you upload your data to electronic maps, save these data points to a separate file for your use only.

	Food Systems: Increase access to healthy, affordable food, avoid waste, care for soil, people & wildlife
F1	<b>Existing</b> community gardens or farms growing food or medicine, especially in ways that are good for the earth
F2	Places where you would like to see community gardens or farms planted to grow food or medicine
F3	Existing fruit or nut trees
F4	Places where you would like to see fruit or nut trees planted
F5	Existing stores/places where affordable, healthy food is sold
F6	Stores/places where you would like to see affordable, healthy food sold
F7	Existing places where people can get free healthy food if they need it
F8	Places where you would like to see people get free healthy food if they need it
F9	<b>Existing</b> places where healthy, uneaten <u>food is not wasted</u> , <u>but made available to eat</u> (e.g. restaurants, stores, event locations with catering, gardens / farms / fruit trees that can be gleaned)
F10	Places where you would like to see healthy, uneaten food made available to eat
F11	Existing places where food waste that can't be eaten is composted
F12	Places where you would like to see food waste that can't be eaten be composted
F13	Existing places where community food supplies for emergencies is stored
F14	Places where you would like to see community food supplies for emergencies stored
F15	Existing people or organizations working on improving food systems
F16	Places where you would like to see people or organizations work on improving food systems

F17	
F18	
	Water Systems: Conserve, store, and reuse water; prevent flooding; improve habitat
W1	<b>Existing</b> places where there are systems for <u>water conservation</u> , <u>capture</u> , <u>or reuse</u> (e.g. low flow toilets, rainwater barrels or tanks, greywater systems, recycled water used on fields) <i>Note which</i> .
W2	Places where you would like to see water conservation, capture, or reuse
W3	Existing places where community emergency water supplies are stored
W4	Places where you would like to see community emergency water supplies stored
W5	<b>Existing</b> places where <u>water systems use natural solutions</u> to protect nature and people (e.g. rain gardens, trees, and wetlands prevent flooding; or native plant gardens that need less watering)
W6	Places where you would like to see water systems use natural solutions to protect nature and people
W7	<b>Existing</b> places where <u>water infrastructure</u> protects nature and people (e.g, levees and/or restored wetlands or marshlands protecting waterfront communities)
W8	Places where you would like to see water infrastructure better protect nature and people (e.g. where levees or pipes need maintenance, restored wetlands or marshlands that need to be built)
W9	Existing people or organizations working on improving water systems
W10	Places where you would like to see people or organizations work on improving water systems
W11	
W12	
	Energy Systems: use less energy, produce more local renewable energy
E1	<b>Existing</b> places where <u>clean energy is being produced</u> (solar photovoltaic, solar thermal, wind turbines, micro-hydro systems in rivers or creeks, geothermal, etc.)
E2	Places where you would like to see clean energy be produced (e.g. rooftops and degraded brownfields for solar photovoltaic or solar thermal, windy places for wind turbines, creeks or rivers for micro-hydro)
E3	<b>Existing</b> places where <u>energy is being saved</u> in innovative ways, and/or where people can learn how to save energy (E.g, energy efficiency / conservation)

E4	Places <b>where you would like to see</b> energy saved in innovative ways, and/or where people can learn how to save energy (e.g. schools, community centers, libraries, health centers, etc.)
E5	<b>Existing</b> places where people can <u>train for clean energy jobs</u> (e.g. energy efficiency upgrades, solar installation, heating and cooling systems, green jobs training centers)
E6	Places <b>where you would like to see</b> people be able to train for clean energy jobs (e.g. schools, job training centers, community colleges)
E7	Existing places where clean energy is being used to power transportation
E8	Places where you would like to see clean energy used to power transportation (e.g, cable cars, buses)
E9	Existing people or organizations working on improving energy systems
E10	Places where you would like to see people or organizations work on improving energy systems
E11	
E12	
	Transportation Systems: fewer cars, ensure everyone can get around
T1	Existing transit stations/stops (e.g. bus, shuttle, train, ferry, etc) that serve your community well
T2	Places where you would like to see transit stations/stops that serve your community better (including wheelchair users, night workers, non-drivers, or who are young, elderly, blind, deaf)
Т3	Existing places where walking is a safe and pleasant way to get around
T4	Places where you would like to see walking be safer and more pleasant (e.g. better sidewalks, crosswalks, lighting, public safety, wheelchair access, shade trades, paths, public art)
T5	<b>Existing</b> places that help make <u>biking</u> be a safe and accessible way to get around (e.g. bike lanes, paths, parking, shops, repair stations, bike cooperatives, etc.)
Т6	Places where you would like to see biking be made safer and more accessible
Т7	<b>Existing</b> places where people <u>share rides or access to cars</u> (e.g. car shares, casual or organized carpools, organized ride sharing)
Т8	Places where you would like to see people share rides or access to cars (e.g schools, workplaces, popular destinations, etc.)
Т9	Existing places that could provide emergency evacuation transportation for many people
T10	Places where you would like to see people have better access to emergency evacuation

T12	Places where you would like to see people or organizations work on improving transportation systems
T13	
T14	
	Housing Systems: ensure everyone has a safe, healthy home
H1	Existing places where quality housing is relatively affordable
H2	Places <b>where you would like to see</b> more quality, affordable housing created (through new buildings, transforming existing buildings, or policy changes) <b>OR</b> places where people have been displaced from their homes
H3	<b>Existing</b> housing you would like to see be made <u>safer or healthier</u> (based on threats in your community: e.g. earthquakes, overcrowding, fires, floods, air pollution, infestations, etc.)
H4	Places where you would like to see housing be made safer or healthier
H5	<b>Existing</b> places that are examples of <u>affordable housing solutions</u> (e.g. co-housing, housing cooperatives, community land trusts, ecological building, etc)
H6	Places where you would like to see creative affordable housing solutions established
H7	<b>Existing</b> places where people can go if they need <u>emergency housing</u> (e.g. shelters, churches, single room occupancy (SRO's), hotels, public buildings, community networks offering housing)
H8	Places <b>where you would like to see</b> people be able to go if they need emergency housing (e.g. for homelessness, domestic violence shelters, and for natural disasters)
H9	Existing people or organizations working on improving access to housing
H10	Places where you would like to see people or organizations work on access to housing
H11	
H12	
	Jobs and Economic Systems: livable incomes, dignified work, sustainable & equitable economy
J1	<b>Existing</b> places where people can get job training and placement (e.g. union halls, day labor centers, job training or placement centers)
J2	Places where you would like to see people get job training and placement

J3	<b>Existing</b> places that make a point to <u>hire local residents</u> and/or residents with barriers to employment (e.g, youth, formerly incarcerated, elderly, etc)
J4	Places <b>that you would like to see</b> employ more local residents and/or residents with barriers to employment (e.g, youth, formerly incarcerated, elderly, etc)
J5	<b>Existing</b> places that help residents <u>start or grow a business</u> (including cooperatives), e.g. places that offer business plan training or affordable rent to local businesses
J6	Places you would like to see help residents start or grow a business (including cooperatives)
J7	Existing places that help people save money or offer accessible community banking services
J8	Places that you would like to see help people save money or offer accessible community banking services
J9	<b>Existing</b> places where people can <u>avoid buying or throwing out things</u> : sell, donate, share, borrow, lend, repair, refurbish, recycle, or exchange instead (e.g. repair shops, libraries, thrift shops, barter fairs, clothing swaps, places that sell or donate refurbished goods, recycling centers, etc.)
J10	Places where you would like to see people be able to sell, donate, share, borrow, lend, repair, or exchange their things
J11	Existing places where people can share their time and resources (e.g, mutual aid groups)
J12	Places where you would like to see people can share their time and resources
J13	Existing people or organizations working on dignified jobs and sustainable, equitable economies
J14	Places where you would like to see people or organizations work on dignified jobs and sustainable, equitable economies
J15	
J16	
	Social Systems: connecting and supporting the community
S1	<b>Existing</b> places where anyone can go when they they are having a hard time (e.g. social services, spiritual support, counseling, support groups, economic & social safety net services)
S2	Places you would like see anyone be able to go when they are having a hard time
S3	<b>Existing</b> places where anyone can go when they need physical or psychiatric care (e.g. free/accessible community clinics, counseling, other health services)
S4	Places you would like see anyone be able to go when they need physical or psychiatric care
S5	Existing places where anyone can go when they need protection (e.g. from domestic violence)
S6	Places you would like to see anyone be able to go when when they need protection

S7	Existing places where anyone can go to school or learn
S8	Places you would like see anyone be able to go to school or learn
S9	Existing places where anyone can exercise or play
S10	Places you would like to see anyone be able to exercise or play
S11	Existing places where anyone can engage in meaningful cultural practices
S12	Places you would like to see anyone be able to engage in meaningful cultural practices
S13	Existing places anyone can go to connect with nature (e.g. parks, gardens, open space)
S14	Places you would like to see anyone be able to connect with nature
S15	Existing safe and enjoyable places specifically for children, for teens, or for seniors (specify)
S16	Places <b>you would like to see</b> be safe and enjoyable locations specifically for children, for teens, or for seniors (specify which), e.g. safe from violence, racial profiling, air pollution, influence of drugs or alcohol (e.g. dangerous or noisy bars, liquor stores)
S17	Existing places where public money has been invested (e.g. public spending, or tax breaks)
S18	Places <b>you would like to see public money invested</b> (e.g. social services that have suffered funding cuts, or great community projects that could be scaled up)
S19	Existing people or organizations that work on improving social or cultural support networks
S20	Places you would like to see work on improving social or cultural support networks

# Sample Mapping Data Sheet

Date	Name	Code	GPS Coordinates	Notes on location and code
1/15//15	Kirsten	W2	37.80466 -122.27208	Plants in Oakland's Frank Ogawa Plaza could be watered with recycled water

#### Sample Agenda for Half-Day Map Your Future Launch Workshop

This fun and interactive sample workshop is designed to introduce adults and/or youth ages 14 or older to the Map Your Future project. Please adapt it to best fit your group. We estimate this workshop takes about four to five hours for a group of about 15, depending on the level of detail in your final discussion. You may skip some of the introductory activities if your group already knows each other well, however they are very useful if you are bringing new groups together that have not worked together before.

Note that if you intend to bring together participants across race and class, consider adding some training elements that address the dynamics of white and other privilege. We recommend The Catalyst Project's resources for thoughful training activities on this topic: <a href="http://collectiveliberation.org/wp-content/uploads/2012/06/catalyzing%20liberation%20toolkit.pdf">http://collectiveliberation.org/wp-content/uploads/2012/06/catalyzing%20liberation%20toolkit.pdf</a>

#### Outcomes

- 1. Participants meet and feel comfortable working together
- 2. Participants are comfortable with and can describe in their own words the following concepts:
  - What is causing climate change, and its impacts in your community
  - Community resilience
  - Community resilience assets, and how to map them in your own communities
  - What the Map Your Future project is, what you will do with it

Time	Agenda Item	Materials
10 mins	Sign in, name tags, get snacks, settle in, announce location of bathrooms	Sign-in sheets, name tags, markers, snacks, singing bowl
5 mins	Gather and quick name introductions Ball-Pass Game: When the ball is tossed to you, give your name, any affiliation, and your favorite food	Big soft blow-up ball
5 mins	Group Introductions  If there are different groups in the room, spokespeople introduce them to whole group (1-2 mins/group)	
15 mins	Pair share between groups Find someone you don't know from a different group. Answer get to know you questions, each sharing for two minutes before switching off.	Pair share questions on flip chart page
10 mins	Introduction to workshop: why are we here? Go over purpose of workshop, quick overview of agenda. Go over any group agreements (for example, listen respectfully to others).	Workshop Agenda Flip Chart Page

35 mins	Climate Change Introduction and Discussion Body as metaphor for climate change: Ask participants to stand up. Announce that they are representing the earth, basking in the light of the sun at the perfect temperature. Ask them to do some jumping jacks. This represents all the energy humans are using on the earth driving cars, flying airplanes, and operating power plants. Ask the participants to put on a jacket. This represents the layers of greenhouse gases covering the earth, emitted from burning fossil fuels. It makes the earth warmer. Ask participants to do more jumping jacks, then add another warm article of clothing. How do you feel? This is like humans continuing to burn fossil fuels, even though we feel the planet heating up.  Discussion Questions: What does climate change mean to you? What is really causing it? What are some of its impacts, both globally and in your community? Who is most impacted, both globally and in your community? Why?  Have flip chart paper ready to record responses.  *If there are other hazards your group would like to focus on, add them to this discussion*	Extra jackets, hats, scarfs  Flip chart paper, markers  Flip chart with vulnerability factors written out: Income Age Race Location (e.g. on floodplains) Health Status Ability to Speak English Type of Housing Type of Job (working outdoors, e.g. farm or construction workers)  For lists of local climate impacts, download Bay Localize's Risk and Opportunity
		Assessment in the Community Resilience Toolkit 2.0 at www.baylocalize.org
10	10 min stretch / bathroom break	
mins	Facilitators set up tables with maps	

30	Manning Local Impacts	
mins	Mapping Local Impacts Break out into small groups, and each group gathers around a map. Give each group several post-it notes. Ask participants to examine their map. Where is each impact likely to be felt most in each neighborhood? In other words, who is most vulnerable to it? For example, people living near a creek may be most vulnerable to flooding during heavy storms, and residents in poorly-ventilated apartment blocks may be more vulnerable to high heat. Lower income residents may be more vulnerable to rises in water rates during droughts. School kids downwind of industrial sites may be more vulnerable to asthma attacks during high heat days.	Large printed maps of your neighborhood (about 1 map for every 4-5 participants). Planning maps are idea, street maps can be used. Post-it notes Pens
	Each group works together to place their post-it notes on their maps where their communities are most at risk from local climate impacts. Groups then share their maps with each other.	
15 mins	Introduction to Resilience Bring participants back together into a large group. Ask participants to think quietly for a moment of about a time they were in a difficult situation. How did they handle it? Ask, what does resilience mean to you? How were you resilient?	Flip chart paper, pens Flip chart page with types of assets written up
	Share the three elements of community resilience from How Map Your Future Builds Community Resilience section of this Toolkit. Do they make sense to the group? How do they relate to the local climate impacts or other hazards you just mapped? Also introduce the group to the idea of community treasures, or assets, as building blocks of resilience.	
15 mins	Prepare Resilience Story Skits Have participants count off into groups of 2 or 3 (depending on the size of your group). Ask them to think about the local hazard risks they just mapped, and choose one specific impact to focus on. Who is most vulnerable? In what sort of situation would they be at most risk? In that situation, how could a neighbor help them out?	Costume elements/props
	Ask each small group to come up with a simple 1-3 minute skit illustrating a story about a community member in danger from the hazard you chose, and a	

	neighbor who helped them, using specific community assets (including themselves). Provide a box of fun simple costume props for the actors to choose from to help bring their characters to life (eg hats, scarves, costume jewelry, wigs, hand tools, raincoats, small tree branches, etc).  Share the examples listed in the <i>How Map Your Future Builds Community Resilience</i> section of this Toolkit to give the groups some ideas.	
30 mins	Skits and Discussion Groups perform skits. Initiate wild applause from the audience for each skit. After each skit, ask the audience, how was resilience built in this situation? What community treasures or assets were used?	
10 mins	10 minute break	
30-60 mins	Introduction to Resilience Asset Mapping Ask participants to go back to the map they worked on earlier. Give each group several post-it notes of a different color. On each post-it notes, ask them to write an example of a community asset that is being used or could be used to build resilience to the impacts they mapped earlier. Place the post it where that asset is located (more or less)  Groups share updated maps with each other.  Discussion: If you are aware of previous useful asset mapping projects in your community, invite someone who was involved to come share a bit about the project (allow more time for this). Alternatively, introduce and discuss previous community efforts related to what you want to do, and what you can learn from them.	Maps used previously  Post it notes (different color than the first time)
20 mins- 1 hour	Map Your Future Project Bring group back together. Ask, what were the most interesting things about the workshop so far? Do you want to do more of this sort of work? Give an overview of what your group's plan are so far for implementing the Map Your Future program, and get feedback and buy-in  You may want to discuss - Project goals	What is Map Your Future? Flip chart page Scope of Work & Timeline Poster

	<ul> <li>Project timeline</li> <li>Potential partners</li> <li>Next steps/what we need to move forward</li> <li>Project roles and responsibilities</li> </ul>	
5 mins	Fill out workshop evaluation forms A simple workshop evaluation form may consist of a table, with each element of the workshop listed down one side. Along the top list options for rating that part of the workshop, e.g. Very useful, Useful, OK, Not Useful, Not Relevant.	Simple workshop evaluation forms
15 mins	Close with a team bonding moment of your choice Clean up	
	Share a meal or plan an after party to get to know each other better!	

### Sample Agenda for Full-Day Survey and Mapping Workshop

This fun and interactive sample workshop is designed to introduce adults and/or youth ages 14 or older to the details of data collection for the Map Your Future project. It is intended for participants who are already familiar with the basic concepts of the program presenting in the launch workshop. Please adapt it to best fit your group. Allow a full day for this workshop, at least 8 hours. Especially if you are working with youth, be aware of energy levels and be prepared to add quick active games as needed to raise the energy of the group.

This workshop should be given once the group (or a subcommittee) has already:

- 1. Decided on the goals for the project, what information needs to be gathered in your survey and mapping to meet these goals, and what technology will be used.
- Set up and tested the mapping apps and data sheets you will use, and created clear instructions (adapted from the Mapping Instructions section). The trainers should practice downloading and using the technology to ensure they can clearly explain how to use it.
- 3. The Community Resilience Survey is fully adapted to your needs and ready to be used.

Provide all these materials in the participants' binders, so they can find what they need when out gathering data in the community.

#### **Outcomes**

- 1. Participants can describe systems that create opportunities and conditions for our communities to thrive and be healthy, given their lived experience
- 2. Participants are ready to hit the streets to do interviews, mapping, and record data

Time	Agenda Item	Materials
10	Participants Arrive	Name tags and
mins	Sign in, get snacks and hot drinks, settle in	sign-in sheets (if
	Announce where bathrooms are located	needed)
	Participants can look over binders with workshop	
	materials. If you are working with youth, invite them to decorate and personalize their binders as they wish	Coffee and/or tea
	(provide appropriate art supplies).	Snacks
		Binders with workshop materials/art supplies

10-30 mins	Introductions Participants circle up, share their names, why they are here, and how this work connects to what's important to them. Freel free to play an active icebreaker game of your choice to get participants moving and having fun.	
10 mins	Review workshop agenda and outcomes Go over your purpose for the workshop, and the day's agenda. Answer any questions. If needed, review any group agreements, e.g. listen respectfully to others.	Workshop Agenda Poster
40-60 mins	Introduction to Community Systems This section is based on the discussion of "Community Systems that Guarantee Human Rights" section of the chapter How Map Your Future Builds Community Resilience of this Toolkit. Facilitators should review it carefully.  Take your group outside to where plants (of any kind, including weeds) are growing. If your space or weather makes this impossible, bring a potted plant to the training.	Access to a growing plants, and a kitchen or sink  Maps of your watershed or water system  Photos of nearest power plants
	Optional: If you have a group for which a spiritual element is appropriate, this is a good moment to bring that in. For culturally homogeneous group with a certain practice of honoring the earth and/or elements, begin this section of the workshop referencing that. For example, one of our pilot groups of majority Native American and Latino youth began with honoring the elements represented in the medicine wheel. For a spiritually mixed group, a very simple thank you for the ground, sun, and rain for making plants and food grow is a nice touch. Be careful to avoid cultural appropriation by representing other cultures, or making others feel uncomfortable by imposing spiritual beliefs.	Photos of farms that supply your community Information on environmental impacts of these
	Ask participants what it takes for these plants to grow, and how they get it. Mention that plants harness the sun's energy to grow, and transform that energy into food for people, giving us energy to live. Discuss briefly the similarities to what people need to grow.  Then bring your group back inside, preferably to a kitchen space, or at least a sink. Remind the group of peoples'	

	need for water and food to grow. Turn on a faucet magic, there's water! Open the fridge magic, there's food from the store! Flick on a light switch magic, there's energy and light!  Ask, where does this water, food, and energy really come from? Begin a discussion of your community's systems for providing the human rights of food, water, energy. Invite participants to share what they know. You may want to share maps of your watershed or water system, photos of the nearest power plant, and photos of farms that provide food found in your local stores (both industrial and sustainable). What is the ecological impact of these systems?	
10 mins	10 minute break	
40-60 mins	Participants sit at a large table, or shared tables, with drawing paper and pens/pencils. Ask them to imagine how a community meets its needs/human rights. Go over the complete list.  Have each participate draw a town in which each human right is met through its community systems. Include as much detail as possible. Try to minimize the environmental impact of your systems.  After about 10 minutes of drawing, get into pairs to discuss your drawings and see if you've missed anything.  Present your drawing to the group (or have partners present each others').  Ask the group what were the most interesting system design ideas that came up. Facilitators add anything that hasn't been covered yet about how food, water, energy, housing, transportation, economic, and social systems work.	Paper for drawing  Colored pens and pencils, enough for everyone to share  Write up on white board or flip chart paper human needs/rights: where residents live, work, go to school, get food, water, electricity, how they get around, where they hang out, and take care of kids, older and sick people
20 mins	How Maps Tell Stories and Shape Communities Research and share 1-2 examples (positive, negative, or complicated) of how maps have shaped the story of your community. Is there a history of redlining in your	1-2 examples of how maps have shaped your community's story

	neighborhoods, leading to housing discrimination? Have developers used maps to envision the future they want to see? Have community groups used maps to help win improvements? How were these maps used to tell a story?	
15 mins	Introduction to Smartphone Mapping Technology If needed, take advantage of your lunch break to get participants to download any apps they may need on smartphones for the afternoon mapping session. Briefly introduce what they will need, and how to download it, so they can do this during the lunch break.  Not all participants need a smartphone. As they will work in pairs, if about half the group has one that is fine.	Binders with technology download intructions  Participants' smartphones  Extra phone chargers  Wireless internet passwords as needed
60 mins	Break for lunch Schedule your lunch break for whenever makes sense for your day.  Keep lunch simple and on site, so that participants can easily download the mapping apps they need without going anywhere.	Lunch on-site  Participants' smartphones  Extra phone chargers  Wireless internet passwords as needed
50 mins	Mapping List Jeopardy Game Introduce participants to the Mapping List (which can seem a bit overwhelming at first) with a fun and interactive game that helps them dive right in.  Review your project's groals, and the information you need to achieve them. Introduce the Mapping List in the binders as a way to help identify and map community treasures and assets, in order to meet your goals. If you have decided to focus on just a subsection of the mapping list, just work from that section in the game.  1. Give a quick overview of the sections, and patterns	Binders with Mapping List  Flip chart paper, chalkboard, or whiteboard to keep score  Markers  Optional: game rules written out

- in how the Mapping List is laid out. Emphasize that it include both things that exist, and things we are envisioning in our perfect community.
- 2. Divide into pairs, give your team a name, write up on white board for scorekeeping
- 3. Explain how to play jeopardy: facilitator gives answer, participants respond with the question. In this case, the facilitator names a community asset, and participants respond with a Mapping List code that could describe it. Responses should include the name of section, code number, and description. For example, "Farmers' Market" could elicit the response, "Food, F5, place where healthy food is sold." This team would win a point.
- 4. Of course, there is more than one good answer. Keep eliciting responses until the group cannot come up with any more.
- 5. Teams may challenge each others' responses, if they seem off base. Facilitator is judge. If the challenging team makes a successful case, they win the point.
- 6. Ask if any questions -- everything clear? Try a practice round before officially starting the game.
- 7. Start easy by going through each section at a time (e.g. food, water, etc). Give participants time to read the section, encourage them to ask questions about words or concepts that need clarification, then give the game question for that section.
- 8. Once you've gone through all the sections, start a Double Jeopardy round, allowing participants to offer codes from any of the categories.

List of Jeopardy prompts, e.g:

- Community center
- Empty lot
- Food bank
- Walk/bike path
- Restaurant
- Bus stop
- Junior high school
- Empty storefront
- Shoreline of a local body of water
- Liquor store
- Empty warehouse
- Large parking lot
- Large store
- Cultural arts group
- Health clinic

### 20 min Review Mapping Instructions

Have participants form pairs. If you are using smartphones, ensure participants that do not have one are paired with those who do, so each pair has one. Double check that everyone has the apps they need downloaded and ready to go.

Introduce the idea of GPS coordinates as a way to pinpoint your location. Go over the instructions for gathering GPS coordinates and recording data, based on the technology your group has decided to use.

Have the participants practice by mapping the

Mapping Instructions in binders

Smart phones

	coordinates where you are now, and assigning it a code in the data sheet.	
10 min	10 minute break	
30-60	Practice Mapping the Neighborhood	Walking route
mins	Have participants bring their binders and smartphones out to the street to practice mapping. Facilitators should plan a short, safe, and interesting walking loop from the	Binders
	training site.	Smart phones
	Assign each pair to cover 1-2 asset categories.	Pens as needed
	Walk together slowly down the block, allowing pairs to stop and map along the way. Encourage pairs to practice mapping anything they see, and map at least one asset per block (you can filter out this practice data later if you like). Remind them they can map assets they would like to see as well as those that exist. At the end of each block, have each pair share the asset they mapped. Cross any streets safely together as a group, and return to your training site.	
10 min	10 Minute Break	
30 mins	Introduction to the Community Resilience Survey Again, review your project goals. Introduce the survey as another tool to gather different information you need to reach your goals.  Go over the survey together as a group, and clarify any terms and answer questions as needed.	Community Surveys in binder
	Divide the group into pairs, and practice interviewing each other. Each member of the pair should have a chance to interview the other.	
	Discuss as needed in the larger group. Did any questions or difficulties come up? Talk through them together.	

30-60 mins	Review Next Steps for Gathering Data Discuss your plan for gathering data. Do you have a timeline you need to follow? How many surveys would you like to complete? How will you find your target audience?  Schedule times for pairs to walk the streets in your neighborhood to do mapping.  Do you feel confident that you have the skills needed to	Next Steps written up on flip chart Markers to add additional notes
5 mins	begin data collection? Is follow-up training needed?  Fill out workshop evaluation forms  A simple workshop evaluation form may consist of a table, with each element of the workshop listed down one side.  Along the top list options for rating that part of the workshop, e.g. Very useful, Useful, OK, Not Useful, Not Relevant.  Close with a team bonding moment of your choice	Simple workshop evaluation forms
mins	Clean up	

## Appendix

Results of pilot projects (maps and recommendations)