

**Preparing Cities for Climate Change:  
An International Comparative Assessment of Urban Adaptation Planning  
MIT-ICLEI Climate Adaptation Survey Instrument**

**JoAnn Carmin**

Department of Urban Studies and Planning  
Massachusetts Institute of Technology

September 2009

Suggested Citation:

Carmin, JoAnn. 2009. "Preparing Cities for Climate Change: An International Comparative Assessment of Urban Adaptation Planning. MIT-ICLEI Climate Adaptation Survey Instrument." Cambridge, MA: MIT Department of Urban Studies and Planning. 13 pp. Link: <http://dspace.mit.edu/handle/1721.1/89476>



## MIT- ICLEI Climate Adaptation Survey

Welcome to the MIT- ICLEI Climate Adaptation Survey!

We have invited communities like yours – those that are members of ICLEI, affiliates of ICLEI networks, or active in an ICLEI or ICLEI-related program – to participate in a survey about urban climate adaptation. By adaptation, we are referring to any activity you are pursuing to address the impacts climate change could have on your community. We know that not every community receiving this questionnaire is pursuing climate adaptation at this time. Whether or not you are engaged in any type of climate adaptation activity, your responses are important. The results of this survey will help us learn why some communities are initiating climate adaptation initiatives and others are not, the successes communities have achieved, challenges you are encountering, and the resources and support you need to prepare for the impacts of climate change.

The questionnaire is divided into 6 sections and contains a total of 40 questions. Although we are able to determine whether you have completed the survey, the name of your community is not linked in any way to your responses. In addition, all of your answers will be kept confidential and will be aggregated with the responses of other communities. Therefore, when we report the findings from the survey there will be no way to identify your community from any of the others. While you should feel free to skip questions you prefer not to answer, we hope that you will complete the entire questionnaire.

The survey is funded by the United States National Science Foundation and is being conducted by Professor JoAnn Carmin from the Department of Urban Studies and Planning at the Massachusetts Institute of Technology (MIT) in cooperation with ICLEI-Local Governments for Sustainability.

The results of this research will be used to inform ICLEI's adaptation programs. In addition, the results will be disseminated in a report to the practitioner, policy, and donor communities. Since this will be the first global study of climate adaptation initiatives and challenges to conform to rigorous social science methodology, the results will be an influential basis for policy decisions as well as provide new insights about the types of resources and support communities need to prepare for the impacts of climate change.

If you participate in the survey, we will send you a summary of the results when they are available. In the meantime, if you have questions, you can contact us by email at [adaptationsurvey@mit.edu](mailto:adaptationsurvey@mit.edu).

**Thank you for participating in the climate adaptation survey!**

## I. Climate Change Risk and Vulnerability

1. Please indicate whether you have noted or experienced any of the following changes in your community in the past five years, as compared to general trends and historical conditions (check all that apply):

- |   |   |
|---|---|
| <input type="checkbox"/> a. Increased frequency of natural disasters  | <input type="checkbox"/> k. Higher temperatures than usual        |
| <input type="checkbox"/> b. Increased damage to local government property and assets as a result of natural disasters | <input type="checkbox"/> l. Longer periods of intense hot weather |
| <input type="checkbox"/> c. More deaths from natural disasters  | <input type="checkbox"/> m. Lower temperatures than usual         |
| <input type="checkbox"/> d. Less precipitation  | <input type="checkbox"/> n. More precipitation                    |
| <input type="checkbox"/> e. Water shortages   | <input type="checkbox"/> o. Increased frequency of storms         |
| <input type="checkbox"/> f. Longer periods of drought   | <input type="checkbox"/> p. Increased intensity of storms         |
| <input type="checkbox"/> g. Inland flooding   | <input type="checkbox"/> q. Increased coastal erosion             |
| <input type="checkbox"/> h. Coastal flooding  | <input type="checkbox"/> r. Sea level rise                        |
| <input type="checkbox"/> i. Increase in landslides  | <input type="checkbox"/> s. Increase in storm surges              |
| <input type="checkbox"/> j. Increased magnitude and frequency of wind speed   | <input type="checkbox"/> t. Emergence of new diseases             |
|   | <input type="checkbox"/> u. Increased rural to urban migration    |
|   | <input type="checkbox"/> v. Changes in local flora and fauna      |

## II. Climate Risk and Vulnerability Assessments

2. Which one of the following best describes climate risk and/or vulnerability assessments in your community?

- a. We completed an assessment (Go to Question 3)
- b. We are presently conducting an assessment (Go to Question 4)
- c. We are planning to conduct an assessment (Go to Question 7)
- d. We have not conducted and have no plans to conduct an assessment (Go to Question 7)

3. Based on the assessments you have conducted, which of the following are issues you need to address as a consequence of climate change? (check all that apply)

- |   |  |
|---|--|
| <input type="checkbox"/> a. Coastal erosion                 | <input type="checkbox"/> o. Housing insecurity                                   |
| <input type="checkbox"/> b. Heat island effect              | <input type="checkbox"/> p. Housing safety                                       |
| <input type="checkbox"/> c. Stormwater runoff               | <input type="checkbox"/> q. Degradation of historic or cultural monuments        |
| <input type="checkbox"/> e. Drought                         | <input type="checkbox"/> r. Illness among vulnerable populations                 |
| <input type="checkbox"/> f. Saline intrusion                | <input type="checkbox"/> s. Changes in electricity demand                        |
| <input type="checkbox"/> g. Disruptions in service delivery | <input type="checkbox"/> t. Exposure to elements among vulnerable populations    |
| <input type="checkbox"/> h. Storm surges                    | <input type="checkbox"/> u. Loss of natural systems                              |
| <input type="checkbox"/> i. Changing disease vectors        | <input type="checkbox"/> v. Loss of tourism                                      |
| <input type="checkbox"/> j. Solid waste management          | <input type="checkbox"/> w. Disruptions to transportation systems                |
| <input type="checkbox"/> k. Storm water management          | <input type="checkbox"/> x. None, we do not expect any effects of climate change |
| <input type="checkbox"/> l. Loss of jobs                    |  |
| <input type="checkbox"/> m. Loss of economic revenue        |  |
| <input type="checkbox"/> n. Human migration                 |  |

**4. Which one of the following best describes the range of climate impacts you addressed or are addressing in your climate risk or vulnerability assessment?**

- a. Detailed analysis of all potential climate impacts in your community
- b. Detailed analysis of one or a limited number of impacts in your community
- c. Summary overview of all potential climate impacts in your community
- d. Summary overview of one or a limited number of impacts in your community

**5. Which one of the following best describes the group or individual who led or is leading your risk or vulnerability assessment?**

- a. Consultants
- b. Local government staff
- c. Researchers in universities
- d. Researchers in think tanks or institutes
- e. State and regional agency representatives
- f. Development agencies (e.g. DANIDA, DFID, USAID)
- g. Multilateral development banks (e.g., World Bank, ADB)
- h. United Nations (e.g. UN-HABITAT, UNEP, UNDP)
- i. Private foundations
- j. International nongovernmental organizations
- k. National nongovernmental organizations
- l. Community-based organizations
- m. Local residents

**6. For each of the following groups and organizations, please indicate if they actively worked on or are assisting in conducting the assessment:**

	Yes	No
a. Consultants	<input type="checkbox"/>	<input type="checkbox"/>
b. Local government staff	<input type="checkbox"/>	<input type="checkbox"/>
c. Researchers in universities	<input type="checkbox"/>	<input type="checkbox"/>
d. Researchers in think tanks or institutes	<input type="checkbox"/>	<input type="checkbox"/>
e. State and regional agency representatives	<input type="checkbox"/>	<input type="checkbox"/>
f. Development agencies (e.g. DANIDA, DFID, USAID)	<input type="checkbox"/>	<input type="checkbox"/>
g. Multilateral development banks (e.g., World Bank, ADB)	<input type="checkbox"/>	<input type="checkbox"/>
h. United Nations (e.g. UN-HABITAT, UNEP, UNDP)	<input type="checkbox"/>	<input type="checkbox"/>
i. Private foundations	<input type="checkbox"/>	<input type="checkbox"/>
j. International nongovernmental organizations	<input type="checkbox"/>	<input type="checkbox"/>
k. National nongovernmental organizations	<input type="checkbox"/>	<input type="checkbox"/>
l. Community-based organizations	<input type="checkbox"/>	<input type="checkbox"/>
m. Local residents	<input type="checkbox"/>	<input type="checkbox"/>

### III. Planning for Climate Change

7. Have you completed or are you working on some form of climate adaptation planning? (answer 'yes' even if you are in the earliest phases of planning or action, such as having informal discussions and meetings)

Yes (Go to Question 8)

No (Go to Question 18)

8. In what year did you first initiate climate adaptation planning activities?

9. From the list below, rank up to three items that reflect the main motivations that led you to initiate adaptation planning:

	First	Second	Third
a. Gain a competitive advantage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Enhance the visibility of our community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Demonstrate global leadership	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Demonstrate regional leadership	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Demonstrate national leadership	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Create stronger ties to national government	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Advance economic development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Address inequities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Support the agenda of the department leading the process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Keep up with peer communities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Be prepared for the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Promote urban development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Reduce impacts from natural hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Secure municipal services for the longer term	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Demonstrate that we are a caring government	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Help achieve local government goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q. Support departmental activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r. Address the needs of the poor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s. Advance community livability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t. Attract funding to pursue community priorities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
u. Attract funding to pursue climate mitigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Which one of the following best describes the current status of adaptation planning in your community?

- a. Gathering information about adaptation planning
- b. Assessing adaptation options
- c. Holding informal discussions about adaptation, but not taken any action
- d. Forming a committee to assess the potential for adaptation
- e. Researching climate change science
- f. Holding preliminary meetings to initiate the planning process
- g. Conducting risk and/or vulnerability assessment
- h. Initiated planning
- i. Drafting plan or strategy
- j. Accepted plan or strategy
- k. Implementing strategy or plan

**11. Which of the following best describes the approach you are taking or expect to take toward plan development? (check all that apply)**

- a. Develop a strategic (general) climate adaptation plan
- b. Develop a detailed adaptation plan
- c. Develop sector plans for adaptation
- d. Integrate adaptation into existing community plan
- e. Integrate adaptation into existing sector plans

**12. Which of the following activities have you done as part of your adaptation planning process? (check all that apply)**

- |  |   |
|--|---|
| <input type="checkbox"/> a. Held public meeting(s)                                       | <input type="checkbox"/> h. Formed commission                         |
| <input type="checkbox"/> b. Created inventory of current adaptation initiatives          | <input type="checkbox"/> i. Reviewed progress                         |
| <input type="checkbox"/> c. Created a task force   | <input type="checkbox"/> j. Wrote grant proposals                     |
| <input type="checkbox"/> d. Met with local government departments                        | <input type="checkbox"/> k. Formed partnerships with other cities     |
| <input type="checkbox"/> e. Met with national government agencies                        | <input type="checkbox"/> l. Formed partnerships with business         |
| <input type="checkbox"/> f. Searched the web or literature for information on adaptation | <input type="checkbox"/> m. Formed partnerships with community groups |
| <input type="checkbox"/> g. Formed advisory group  | <input type="checkbox"/> n. Formed partnerships with NGOs             |
|  | <input type="checkbox"/> o. Set priority areas for adaptation         |

**13. For each of the following groups, indicate whether they have been involved in any way in the adaptation planning process (check all that apply):**

- |  |  |
|--|--|
| <input type="checkbox"/> a. Local government elected officials | <input type="checkbox"/> l. National NGOs  |
| <input type="checkbox"/> b. Local government departments       | <input type="checkbox"/> m. International NGOs                                     |
| <input type="checkbox"/> c. National government agencies       | <input type="checkbox"/> n. Private foundations                                    |
| <input type="checkbox"/> d. State or regional government       | <input type="checkbox"/> o. Development agencies (e.g. DANIDA, DFID, USAID)        |
| <input type="checkbox"/> e. University researchers             | <input type="checkbox"/> p. Multilateral development banks (e.g., World Bank, ADB) |
| <input type="checkbox"/> f. Research institutes                | <input type="checkbox"/> q. United Nations (e.g. UN-HABITAT, UNEP, UNDP)           |
| <input type="checkbox"/> g. Private consultants                | <input type="checkbox"/> r. Public/ Local residents                                |
| <input type="checkbox"/> h. Community groups                   |  |
| <input type="checkbox"/> i. Local NGOs                         |  |
| <input type="checkbox"/> j. Business or industry associations  |  |
| <input type="checkbox"/> k. Private firms and corporations     |  |

**14. Which one of the following reflects the extent to which national government agencies support you in your adaptation planning and implementation efforts?**

- a. Strongly support       b. Slightly support       c. Do not support       d. Do not know

15. Which one of the following best describes the position title or affiliation of the person or department taking the lead on adaptation planning in your local government? (select one)

- a. Mayor
- b. Deputy Mayor
- c. City or town manager
- d. City or town council member
- e. Environmental department representative
- f. Planning department representative
- g. Public health department representative
- h. Emergency management representative
- i. Public works department representative
- j. Nonprofit
- k. No one
- l. Other (Please describe)

16. On a scale of 0-4, where 4 represents a great deal and 0 represents not at all, please indicate the extent to which you rely on each of the following groups and organizations for information and guidance with your climate adaptation planning activities:

	Not at all					Greatly
	0	1	2	3	4	
a. Networks with other communities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. Professional associations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. Professional colleagues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d. Development agencies (e.g., DANIDA, DFID, USAID)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e. Multilateral development banks (e.g., World Bank, ADB)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
f. United Nations programs (e.g., UN-HABITAT, UNEP, UNDP)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
g. International NGOs (e.g., ICLEI)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
h. National government agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
i. Regional or state agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
j. Local government departments or agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
k. Universities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
l. Research institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
m. Local consultants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
n. International consultants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
o. Local nonprofits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
p. Local citizens groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

17. For each of the following, please indicate the extent to which the source of information is influential in advancing your adaptation planning. Indicate 4 if the source is highly influential and 0 if it is not at all influential. Please indicate N/A if the source is not available.

	Not influential			Highly influential			N/A
	0	1	2	3	4		
a. Internet websites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Webinars	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. International conferences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. National conferences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. National associations for cities and local governments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Professional associations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Peer-reviewed literature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. NGO reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Professional reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Government reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### IV. Support for and Influences on Adaptation Planning

18. Has your national government developed an adaptation plan?

- Yes (Go to Question 19)     No (Go to Question 20)     Don't know (Go to Question 20)

19. Has the national plan been adopted?

- Yes     No

20. Are there any national government policies or regulations that require you to pursue adaptation planning or integrate climate considerations in your planning or ongoing activities?

- Yes     No

21. How would you rate the commitment of each of the following to adaptation planning at this point in time?

a. Local elected officials

- Very High     High     Moderate     Low     Very Low

b. Local government departments

- Very High     High     Moderate     Low     Very Low

22. Has your local government initiated either of the following?

a. Climate adaptation demonstration or pilot projects

- Yes     No

b. Community-based adaptation

- Yes     No



**23. Does your local government participate in any climate mitigation programs developed or managed by external organizations (e.g., ICLEI)?**

Yes       No

**24. Does your local government participate in any climate adaptation programs developed or managed by external organizations (e.g., ACCCRN, UN-HABITAT – CCI, World Bank, ICLEI)?**

Yes       No

**25. Have you received funding from any of the following sources for planning, programs, or projects specifically designated to promote or support adaptation?**

	Yes	No
a. National government	<input type="checkbox"/>	<input type="checkbox"/>
b. International sources	<input type="checkbox"/>	<input type="checkbox"/>
c. Sub-national sources	<input type="checkbox"/>	<input type="checkbox"/>
d. Official development assistance	<input type="checkbox"/>	<input type="checkbox"/>
e. Development agencies (e.g. DANIDA, DFID, USAID, CIDA)	<input type="checkbox"/>	<input type="checkbox"/>
f. Multilateral development banks (e.g. World Bank, ADB)	<input type="checkbox"/>	<input type="checkbox"/>
g. United Nations (e.g. UN-HABITAT, UNEP, UNDP)	<input type="checkbox"/>	<input type="checkbox"/>
h. Private foundations	<input type="checkbox"/>	<input type="checkbox"/>
i. Nonprofit organizations	<input type="checkbox"/>	<input type="checkbox"/>
j. Research institutes	<input type="checkbox"/>	<input type="checkbox"/>
k. Other (Please describe)	<input type="checkbox"/>	<input type="checkbox"/>

**26. To the best of your knowledge, have one or more government employees or elected officials from your local government attended any of the following in the last three years?**

	Yes	No	Don't know
a. UNFCCC sponsored events (e.g., COP)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. International climate adaptation conferences, other than UNFCCC events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Regional climate adaptation conferences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. National climate adaptation workshops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Sector-based adaptation training seminars or workshops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. General climate adaptation meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Other (Please describe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**27. Have any local residents made requests or placed pressure on elected officials or government departments to initiate adaptation planning?**

Yes       No       Don't know

**28. Have any local community organizations made requests or placed pressure on elected officials or government departments to initiate adaptation planning?**

Yes       No       Don't know

**29. Does your local government have a dedicated climate branch or office?**

Yes (Go to Question 30)       No (Go to Question 31)

**30. Where is the climate branch or office situated?**

- a. Environmental department
- b. Mayor's office
- c. City or town manager's office
- d. Planning office
- e. Other (Please describe)

**31. Does your local government have one or more full-time staff members who work solely on climate issues (adaptation, mitigation, or both)?**

- Yes
- No

**32. Based on your experience and knowledge, from the options listed below (1-6), please assign the number that best describes the group's general or overall activities related to climate adaptation:**

1. They are working on their own climate adaptation initiatives
2. They are cooperating with local government
3. They are advocating that local government pursue adaptation
4. They are not taking any action related to climate adaptation
5. This type of organization is not present in our community
6. I do not know
7. Other

- a. Environmental NGOs
- b. Humanitarian NGOs
- c. Development NGOs
- d. Local residents
- e. Community groups

**V. Challenges and Benefits**

**33. Please rate the degree to which each of the following is a challenge your local government has faced when trying to address or promote climate adaptation in your community (0 is not a challenge and 4 is major challenge; please select N/A if it is not an applicable issue):**

a. Getting people to understand the nature of the problem	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
b. Obtaining accurate scientific data	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
c. Obtaining sufficient scientific data	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
d. Securing funding for adaptation	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
e. Learning how to conduct a risk or vulnerability assessment	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
f. Getting information about how to plan for climate impacts	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
g. Learning from other communities working on adaptation	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A

h. Mainstreaming adaptation into existing work	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
i. Generating interest in adaptation among political decision-makers	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
j. Generating interest in adaptation among local government staff	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
k. Generating interest in adaptation among business	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
l. Allocating the staff time to work on adaptation	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
m. Reallocating existing resources to work on adaptation	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
n. Connecting to the international community	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
o. Communicating the need for climate adaptation to elected officials	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
p. Gaining commitment to adaptation from political decision-makers	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
q. Gaining commitment to adaptation from local government staff	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
r. Communicating the need for climate adaptation to the public	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
s. Generating interest among local residents to work on adaptation initiatives	<input type="checkbox"/> 0 No challenge	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4 Major challenge	<input type="checkbox"/> N/A
t. Other (Please describe)						

**34. Based on your experience, to what extent do you believe national government agencies generally understand the realities local governments face when it comes to preparing for the impacts of climate change (select one):**

- Fully understand
- Somewhat understand
- Do not understand

**35. For each item, please indicate the extent to which you agree that pursuing climate adaptation would have the following impact on your community. Indicate 5 if you strongly agree and 1 if you strongly disagree:**

	Strongly Agree	4	3	2	Strongly Disagree
	5	4	3	2	1
a. Provide a competitive advantage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Draw attention away from more critical issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Enhance the visibility of your community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Facilitate coordination among departments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Demonstrate global leadership	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly Agree				Strongly Disagree
	5	4	3	2	1
f. Demonstrate regional leadership	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Demonstrate national leadership	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Create stronger ties to national government	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Advance economic development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Take resources away from more pressing issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Advance environmental justice concerns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Support the agenda of department leading the process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Ensure you keep up with peer cities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Help you be prepared for the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Create conflict among departments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Promote urban development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q. Reduce impacts from natural hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r. Secure service provision for the longer term	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s. Demonstrate that you are a caring government	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t. Help achieve local government goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
u. Undermine the agenda of elected officials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v. Support departmental activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
w. Improve health conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
x. Address the needs of the poor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
y. Advance community livability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
z. Attract funding to pursue community priorities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
aa. Attract funding to pursue climate mitigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## VI. Location Characteristics

36. From the options below, indicate the top three priorities for your local government in rank order. Put a check in the column marked 1 to indicate the top priority, 2 for the second ranked priority and 3 for the third ranked priority.

	1	2	3
a. Attract business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Promote sustainability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Reduce poverty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Ensure environmental quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create jobs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Mitigate greenhouse gas emissions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Reduce impacts of disasters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Improve healthcare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Upgrade slums	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Provide housing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Prepare for disasters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Increase social services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Promote equity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Reduce violence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Relocate informal settlers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Reduce crime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q. Improve community services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r. Provide better access to municipal services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

s. Enhance educational systems

**37. To which of the following networks does your local government belong or affiliate? (check all that apply)**

- a. ICLEI
- b. C-40
- c. UCLG
- d. National networks for local government
- e. Regional networks for local governments
- f. Regional environmental networks
- g. International environmental networks
- h. Domestic networks or associations for local governments
- i. No affiliated with any networks
- j. Other networks (Please describe)

**38. Has your local government hosted any of the following in the past three years? (check all that apply)**

- a. International conferences or special events that focused on climate change or climate adaptation
- b. Regional conferences or special events that focused on climate change or climate adaptation
- c. International expositions (non-climate)
- d. International sporting events

**39. Which of the following describe the geographic features of your community? (check all that apply)**

- |                                      |                                       |
|--------------------------------------|---------------------------------------|
| <input type="checkbox"/> a. Coastal  | <input type="checkbox"/> d. Delta     |
| <input type="checkbox"/> b. Mountain | <input type="checkbox"/> e. Lowlands  |
| <input type="checkbox"/> c. Plains   | <input type="checkbox"/> f. Highlands |

**40. Which one of the following best describes the administrative structure of your local government? (select one)**

- |                                    |  |
|------------------------------------|--|
| <input type="checkbox"/> a. Metro  | <input type="checkbox"/> e. Village              |
| <input type="checkbox"/> b. City   | <input type="checkbox"/> f. Borough              |
| <input type="checkbox"/> c. Town   | <input type="checkbox"/> g. Indigenous or Tribal |
| <input type="checkbox"/> d. County |  |