

VULNERABILITY ASSESSMENT TOOLKIT



AN INTRODUCTION TO THE ICLEI USA VULNERABILITY
ASSESSMENT TOOLKIT

**ICLEI – Local Governments
for Sustainability USA**

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CREDITS & ACKNOWLEDGMENTS

ACKNOWLEDGMENTS

The initial draft of the Race to Resilience Toolkit was compiled for the Ulster County Department of the Environment by Bard College graduate students as coursework as part of the Bard Center for Environmental Policy (spring 2022). Bard College students Frances Duncan, Marly Mendard, Patricia Hanna, and Subash Pandey contributed invaluable research and writing to the first version of this toolkit.

The current version of the toolkit was adapted, expanded, and edited by Angelica Greco and Kale Roberts with support from Anne Marie Cleary Rauker and Anna Tiajoloff, all of ICLEI – Local Governments for Sustainability USA. A special thanks to Europa McGovern, Ulster County Sustainability Coordinator.

This toolkit was informed by ICLEI USA's experience working with local governments in resilience; hundreds of technical support hours; and numerous climate action plans, climate risk and vulnerability assessments, adaptation plans, and sustainability plans, including those created by Blacksburg, VA, and the Metropolitan Mayors Caucus for the Chicago Region, along with many others.

ABOUT ICLEI – LOCAL GOVERNMENTS FOR SUSTAINABILITY USA

ICLEI is the first and largest global network of local and regional governments devoted to solving the world's most intractable sustainability challenges. ICLEI USA's standards, tools, and programs credibly, transparently, and robustly reduce greenhouse gas emissions, improve lives and livelihoods and protect natural resources in the U.S. communities we serve. Through a data-driven approach and focus on just and equitable communities, ICLEI USA and our network partners are working to keep 1.5 °C alive.



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ICLEI created the Vulnerability Assessment Toolkit to guide and support US cities, towns, and counties in creating Climate Risk and Vulnerability Assessments (CRVAs) as part of their commitment to the Cities Race to Resilience initiative. CRVAs are a critical foundational step in every community's journey toward climate change adaptation and community resilience.

Broadly, the CRVA process involves three overarching steps...

- 1** Identify climate-related hazards that the community is exposed to now and will be exposed to in the future.
- 2** Assess potential impacts on individuals, communities, and community systems that are vulnerable to the identified hazards.
- 3** Identify and define factors within the community that support or challenge local capacity to adapt to the impacts of climate change.

This toolkit guides you through the research, analysis, and equitable stakeholder engagement required to complete each of these steps. To make the process easier, this toolkit also includes multiple templates that you are encouraged to use, adapt, and share (see ICLEI's use policy below).

TOOLKIT CONTENTS

Guide to the Toolkit Contents

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Template

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“Meeting in a Box” stakeholder engagement materials

Climate Risk and Vulnerability Assessment Template T

A CRVA report template with boilerplate language. Your community can fill in this template during and after the assessment process and submit the completed report through the [CDP-ICLEI Track](#).

Survey Outline T

A fillable template for an online survey that allows respondents to weigh in on potential impacts and adaptive capacity. Survey findings can be incorporated into the risk matrices included in the CRVA template.

Meeting in a Box Resources

List of Workshop Activities M

A document providing detailed instructions for the three workshop activities outlined in this toolkit.

Meeting Agendas and Instructions for Facilitators M T

An agenda for facilitators to guide participants through a series of workshops to conduct a CRVA. This agenda is divided into a suggested 3-meeting series. Timing suggestions are provided for each workshop segment to help facilitators keep the meeting duration at around 90 minutes.

Meeting in a Box Slide Deck M T

A slide deck for facilitators to project during each workshop. Transitions between meetings are marked on the slide deck. Facilitators may also use this slide deck as a tool to keep track of decisions and findings throughout the workshop series by typing directly onto the slides.

My Map Instructions M

Instructions for Google's My Maps tool, which allows users to easily create customized maps for use during the community asset mapping workshop activity.

Sign-In Sheet M T

A printable form for participants to sign in to each workshop. This sign-in sheet contains a column for participant names, contact information, and organization or affiliation.

Exit Survey/Feedback Form M

Three short surveys to be printed and distributed at the end of each workshop to all participants. There is a separate survey for each workshop within this document. Meeting facilitators should collect surveys and use feedback to improve future workshops; elicited insights should be incorporated into the CRVA process and report.

Facilitator Reflection M

A series of prompts for facilitators to reflect on after workshops to improve future meetings, increase equity and participation, and inform next steps.

Best Practices for Stakeholder Engagement M

A checklist for equitable stakeholder engagement. Facilitators should review this resource as they begin planning the stakeholder engagement process. This resource will help facilitators think about key stakeholder groups who should be at the table to ensure a community-driven assessment process.

Reporting Resources

Reporting Guidance

An overview and tips on reporting specific to the Race to Resilience.

Reporting Checklist

A list of all questions that are relevant to the Race to Resilience by module with checkboxes to track answers to these questions.

2022 Cities Questionnaire

Introduction to the CDP-ICLEI Track and a list of all questions (downloaded from [CDP](#)).

Connection to Other Frameworks

An overview of CDP-ICLEI Track questions that are relevant to other initiatives, including the Race to Resilience (downloaded from [CDP](#)).

Further Reference

Compendium of Top Resources

A list of resources on CRVAs and equitable climate action planning.

Funding Resilience with Federal Programs

A short list of federal program opportunities that fund resilience-related activities.

Sample Adaptation Strategies Memo

A sample memo that outlines recommended adaptation strategies for a community in Upstate New York.

DEFINITIONS

Term	Definition	Source
Adaptation:	The process of adjusting to new climate conditions in order to reduce risks to people and community assets.	Adapted from the US Climate Resilience Toolkit Glossary .
Adaptive capacity:	The ability of people, systems, or community assets to adjust to a hazard, take advantage of new opportunities, or cope with change.	Adapted from the US Climate Resilience Toolkit Glossary .
Climate Risk and Vulnerability Assessment (CRVA):	A qualitative and/or quantitative assessment of the degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. CRVAs often evaluate exposure, sensitivity, and adaptive capacity, and provide rankings of the seriousness of various climate risks.	Adapted from the Fourth National Climate Assessment and CDP Cities 2018 Guidance
Community assets:	The places, services, infrastructure, ecosystems, institutions, and other resources that a community believes are important to protect. In other words, community assets are the tangible and intangible things that people and communities value.	Adapted from the US Climate Resilience Toolkit Glossary .



Community systems:	Refer to the built, natural, and human networks that provide or support important services or activities within a community or region.	Adapted from Climate Impacts Group
Environmental justice:	The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.	EPA
Exposure:	The presence of people, assets, and ecosystems in places where they could be adversely affected by hazards.	US Climate Resilience Toolkit Glossary
Hazard:	An event or trend that may cause injury, illness, or death to people or damage to community assets. In this document, the term “hazard” primarily refers to climate-related physical events or trends.	Adapted from the US Climate Resilience Toolkit Glossary and the IPCC Annex II Glossary
Impacts:	Consequences or outcomes, which can be positive or negative. In this document, the term “impacts” primarily refers to the impacts of climate-related hazards on people and community assets (see “hazard”). In this document, potential impact is a function of sensitivity and exposure.	Adapted from the US Climate Resilience Toolkit Glossary and the IPCC Annex II Glossary



Projections:	Potential future climate conditions calculated by computer-based models of the Earth system. Projections are based on sets of assumptions about the future (scenarios) that may or may not be realized.	<u>US Climate Resilience Toolkit Glossary</u>
Resilience:	The ability of people, systems, or community assets exposed to a hazard to resist, absorb, accommodate, adapt to, transform and recover from the hazards' impacts.* *Resilience has many different-and sometimes conflicting-interpretations. The term is used in numerous fields, including ecology, engineering, climate science, and disaster risk management; its definition varies both across and within communities of practitioners. The definition put forward here aligns with how the term is used in this document, yet it is important to note that it is only one of many accepted definitions of resilience. See ASAP's Statement on the Use of the Term and Concept of Resilience for more.	Adapted from <u>UNDRR Terminology</u> and the <u>ASAP Professional Guidance Resources Glossary</u>



Risk:	The potential for negative consequences where something of value is at stake. In the context of the assessment of climate impacts, the term risk is often used to refer to the potential for adverse consequences of a climate-related hazard. Risk can be assessed by multiplying the probability of a hazard by the magnitude of the negative consequence or loss.	<u>US Climate Resilience Toolkit Glossary</u>
Sensitivity:	The degree to which people, systems, or community assets are or might be affected by hazards.	Adapted from the <u>US Climate Resilience Toolkit Glossary</u> .
Vulnerability:	The propensity or predisposition to be adversely affected by hazards. Vulnerability encompasses exposure, sensitivity, and adaptive capacity.	Adapted from the <u>US Climate Resilience Toolkit Glossary</u> .



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