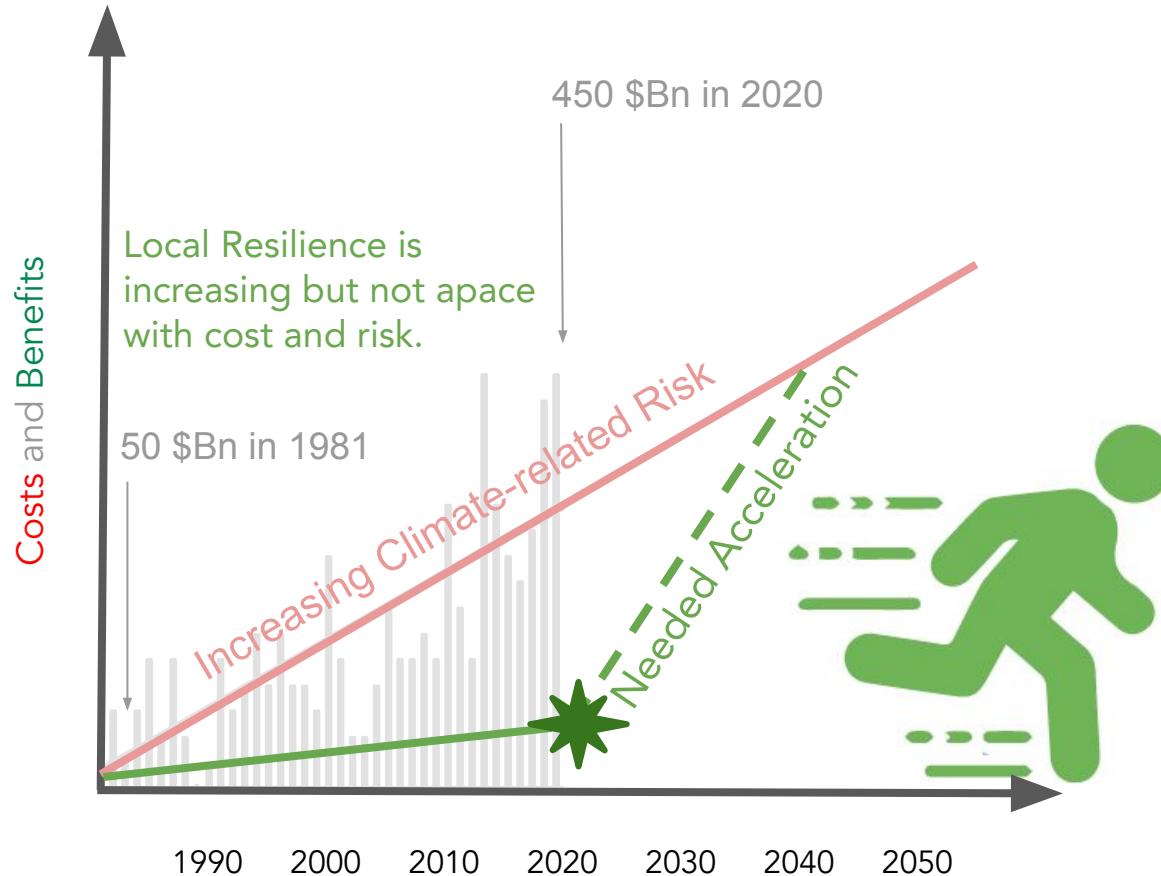


When will Resilience Building Catch Up with Climate Change?



From "In Harm's Way..." by John Cleveland and Peter Plastrik, 2021



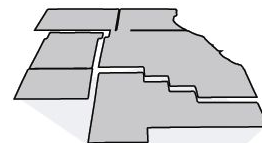
ACCELERATE EQUITY-CENTERED CLIMATE ACTION



◆ INDIVIDUAL



◆ MUNICIPAL



◆ REGIONAL



◆ STATE



◆ FEDERAL

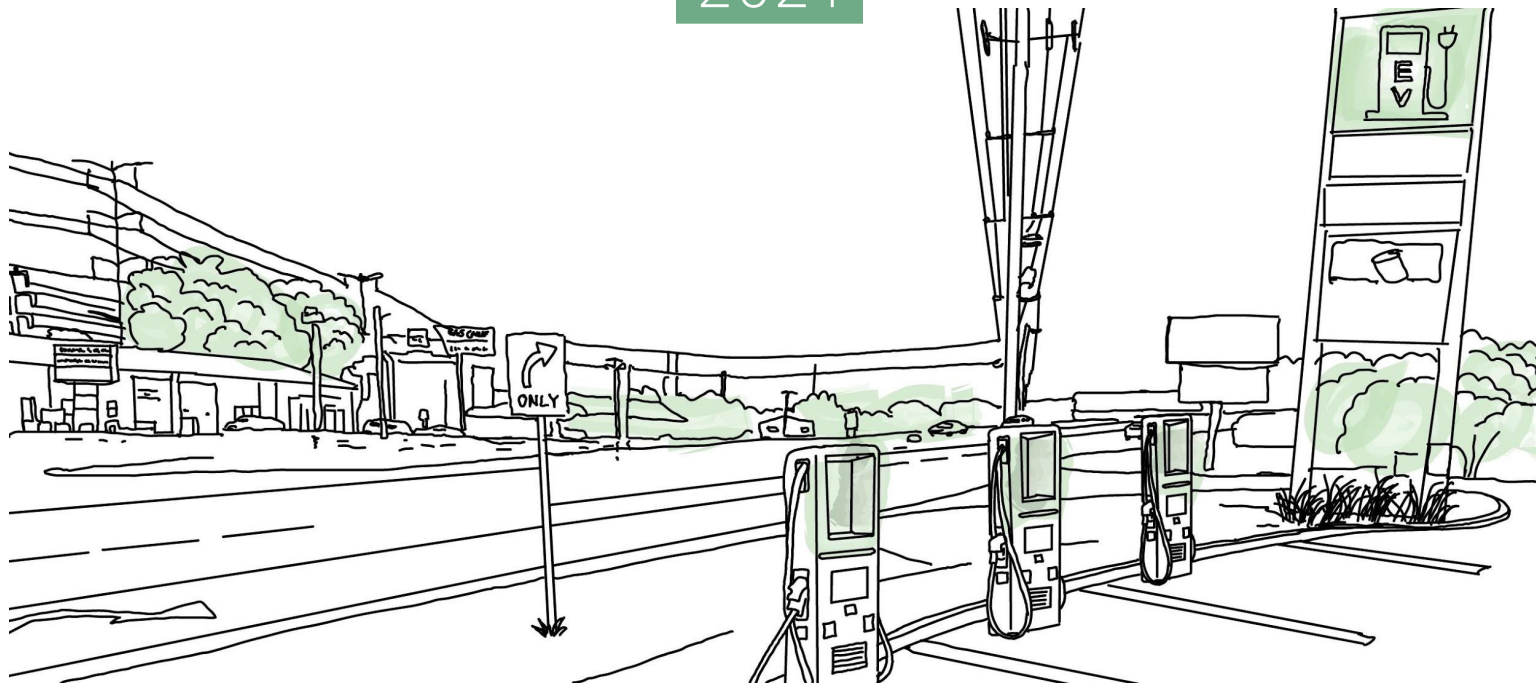
CLIMATE ACTION PLAN
FOR THE CHICAGO REGION

2021



BUILDING RESILIENCE

2021





What is Resilience?

The ability of the natural, human, built or economic system to recover from and withstand impacts from *hazards*

Quality of life,
safety, health
opportunity

Business as Usual

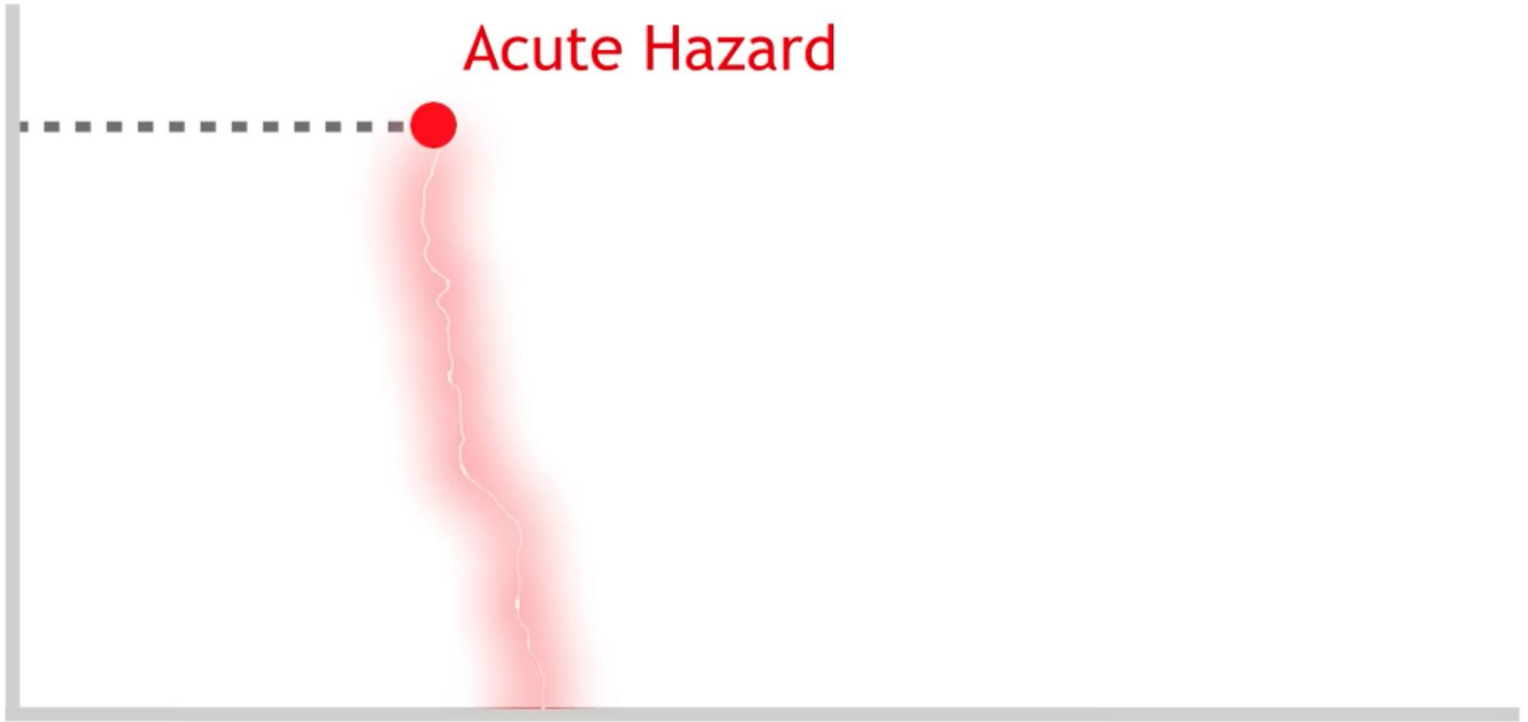
Time



Quality of life,
safety, health
opportunity

Acute Hazard

Time



Quality of life,
safety, health
opportunity



Time

Recovery

Quality of life,
safety, health
opportunity

Business as Usual

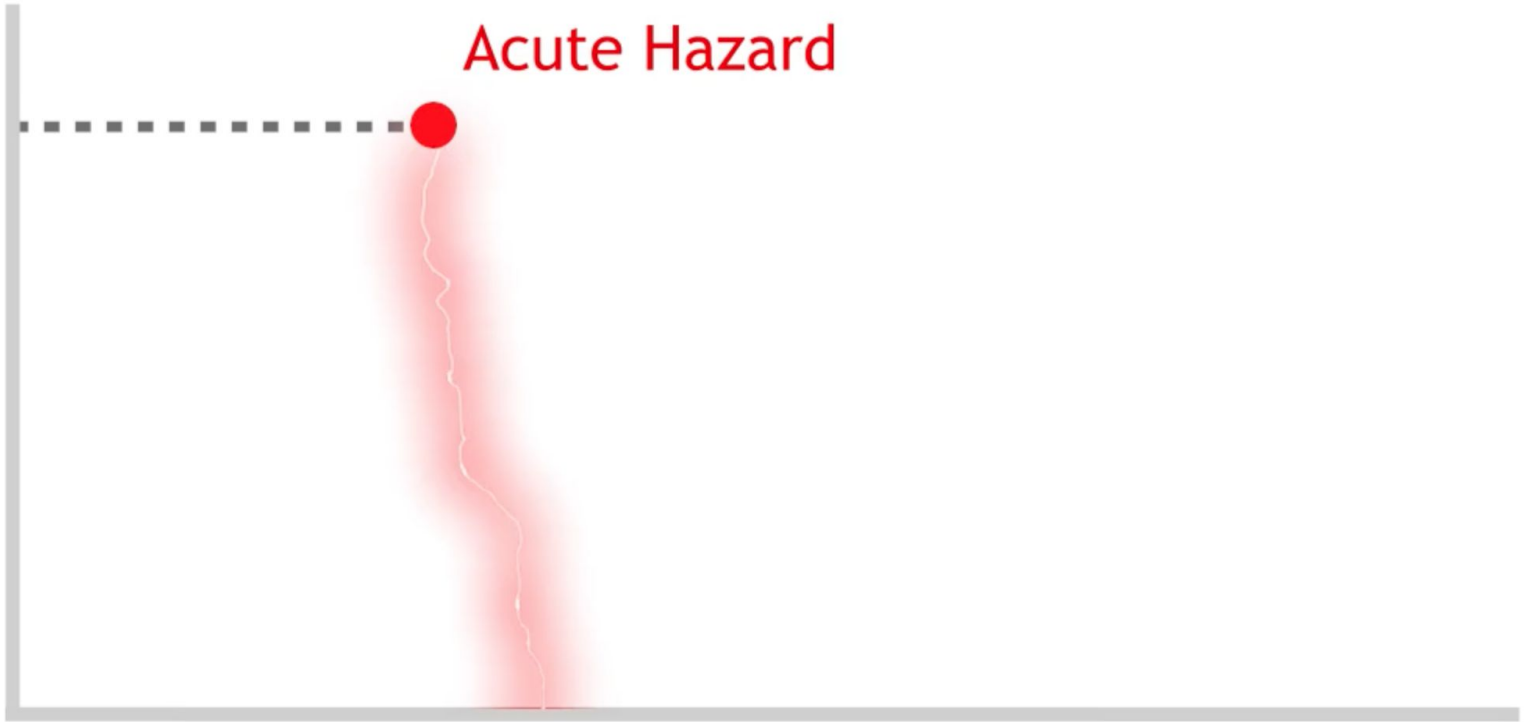
Time



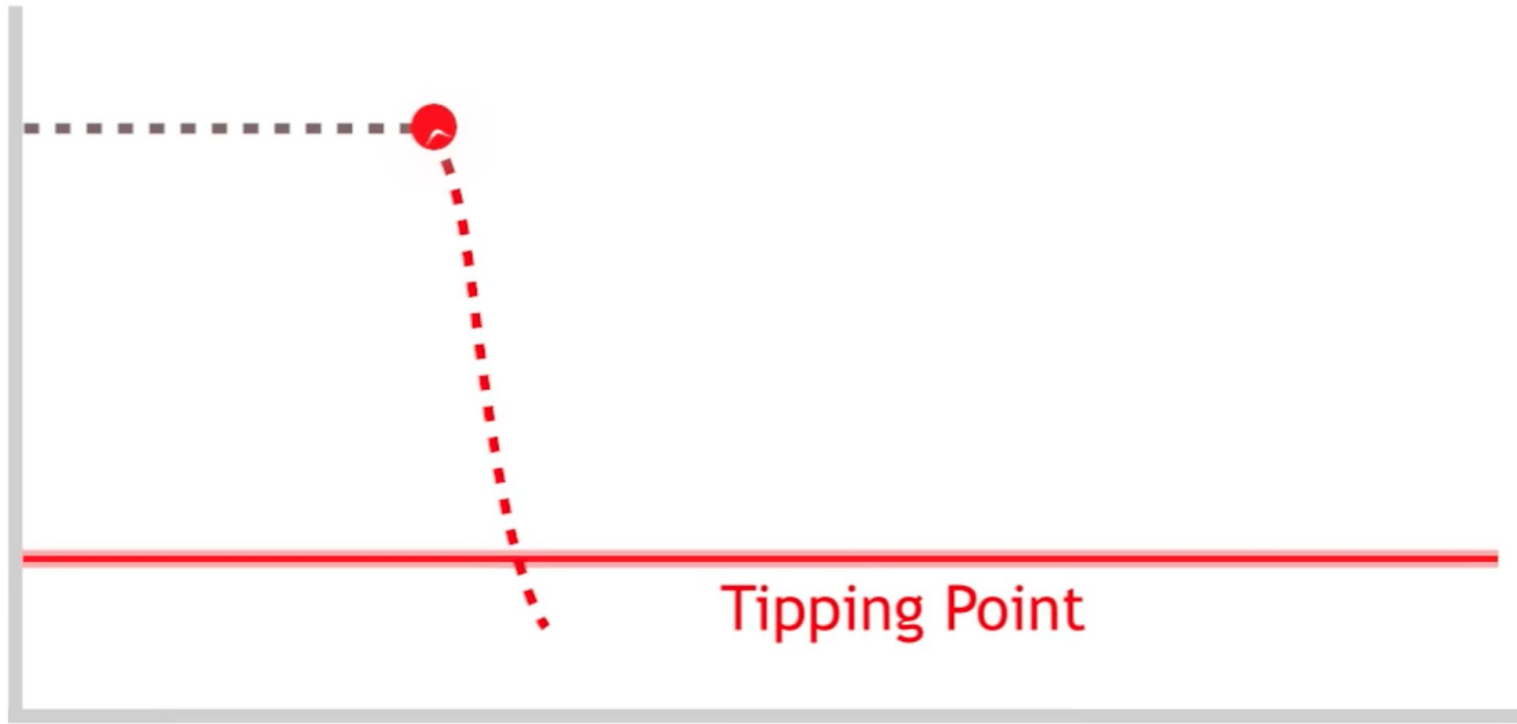
Quality of life,
safety, health
opportunity

Acute Hazard

Time



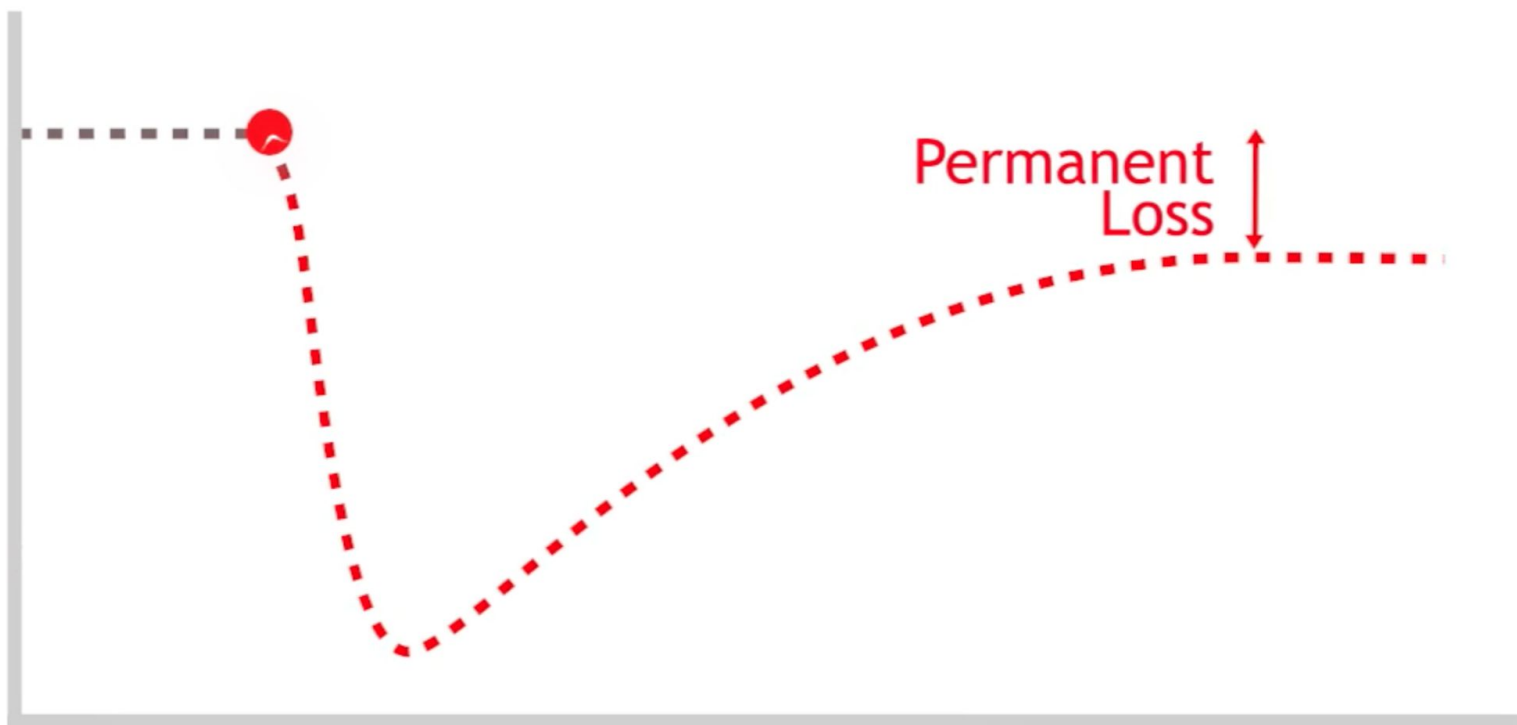
Quality of life,
safety, health
opportunity



Tipping Point

Time

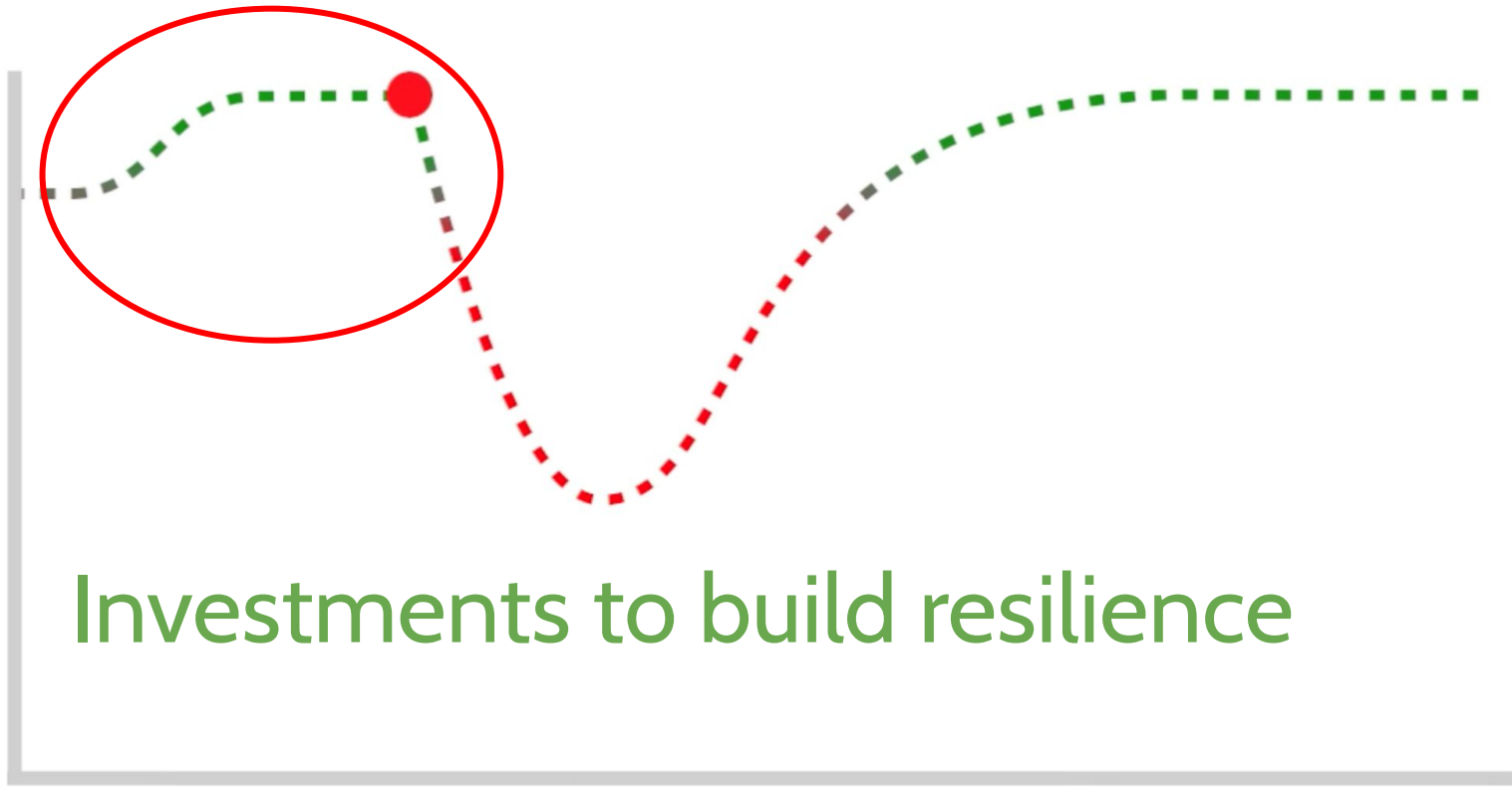
Quality of life,
safety, health
opportunity



Permanent
Loss

Time

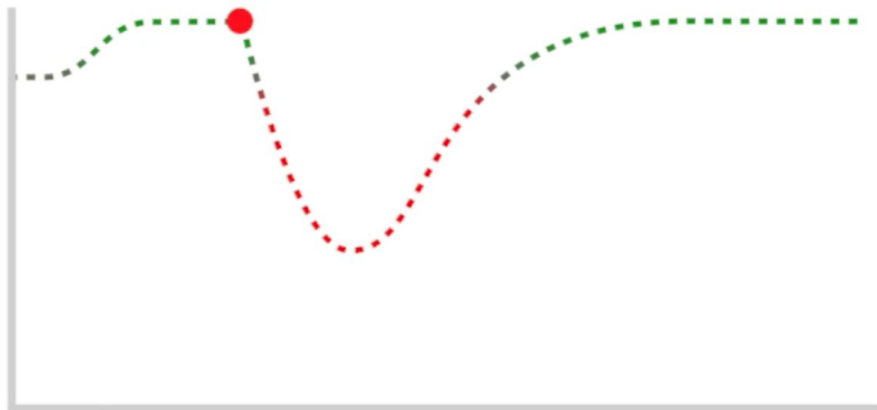
Quality of life,
safety, health
opportunity



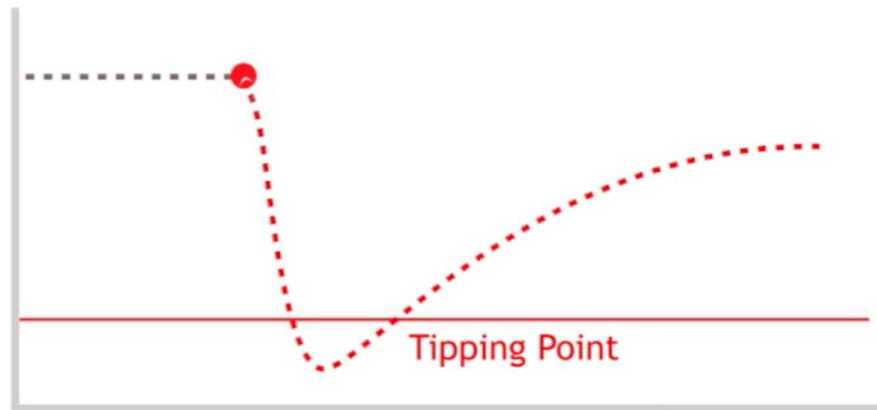
Investments to build resilience

Time

More Resilient



Less Resilient








Climate resilience complements planning

Non-climate stressors affect community resilience and will be incorporated throughout.

Building resilience means smart investing, not getting a “thicker skin” or “toughing it out.”



Chicago region non-climate stressors (from CMAP)

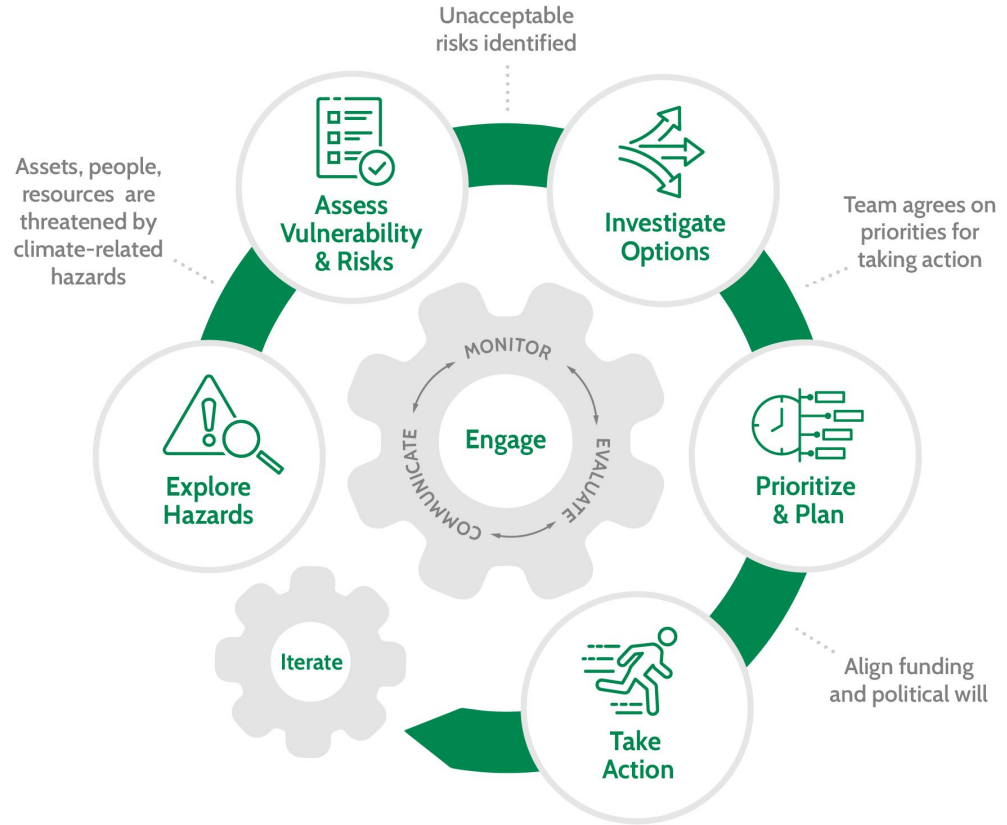
- Gross regional product > population growth
- Racial & economic disparities
- Decreased revenue for government
- Aging infrastructure
- Aging population
-  infrastructure,  sprawl,  open space



A successful climate plan will:

- Support adaptation strategies within existing plans
- Improve coordination (local, regional, state, federal)
 - prioritization
 - funding
 - measuring
 - improving
- Build capacity to address climate challenges
- Enhance governance

STEPS TO RESILIENCE



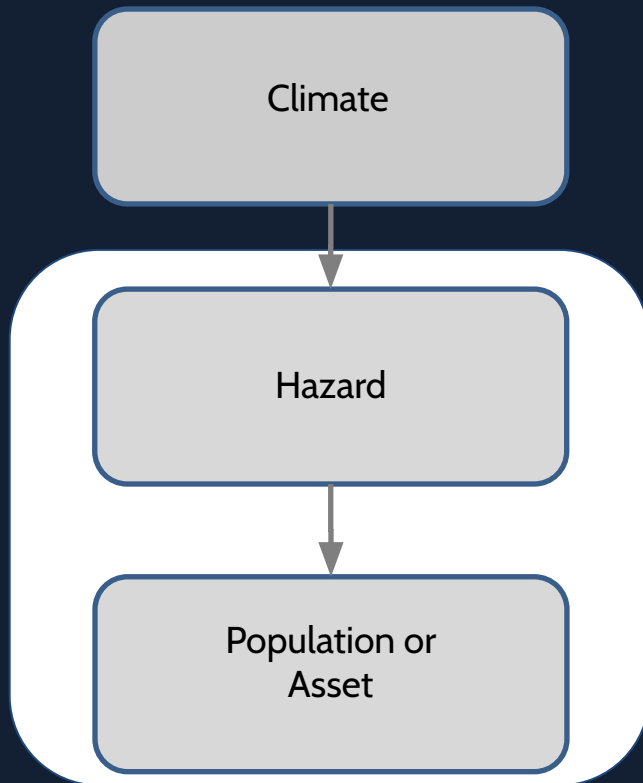


Understand how climate variability and change might threaten things you value

- 1 Explore Hazards ←
- 2 Assess Vulnerability & Risks
- 3 Investigate Options
- 4 Prioritize & Plan
- 5 Take Action



Impacts involve both a hazard and an asset





Days/year temperature > 95°F (Geneva)



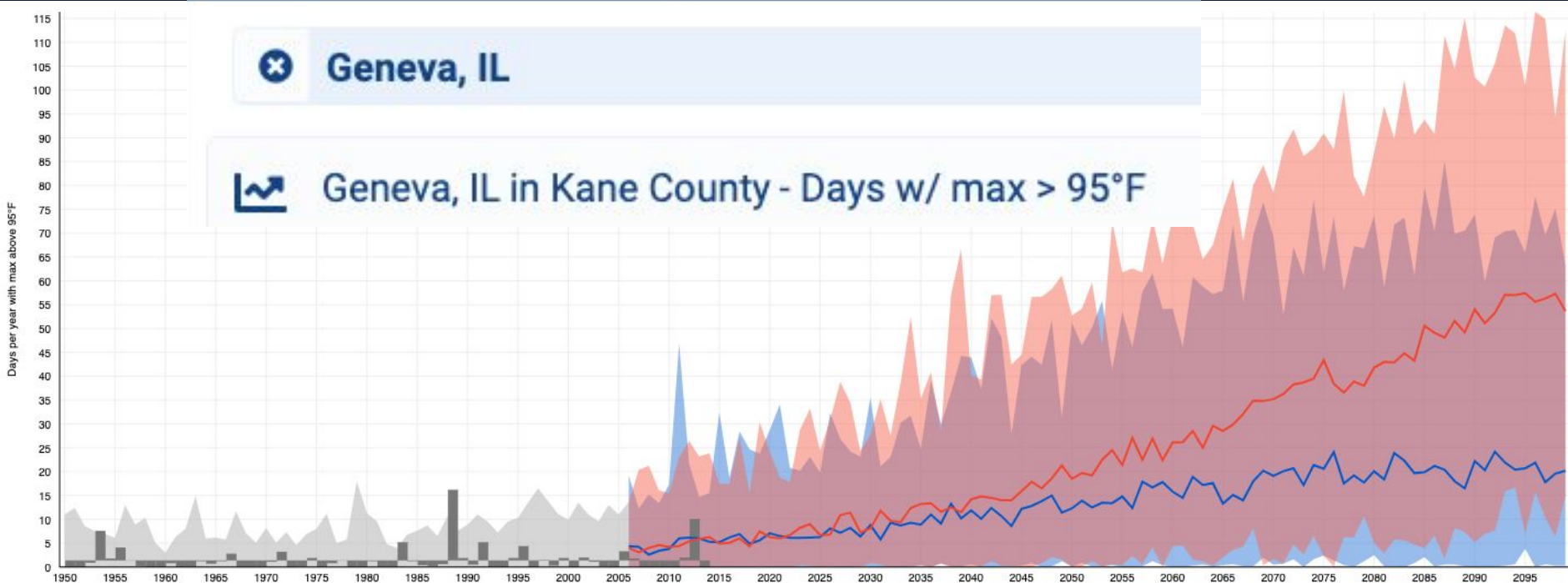
The Climate Explorer



Geneva, IL



Geneva, IL in Kane County - Days w/ max > 95°F











Hazards

- Events or chronic disruptions that negatively impact community assets (people, infrastructure, services, resources)
- Frequency or severity subject to change due to *climate* or *non-climate* stressors
- Assessment of stressors and hazards must match in scale
- *Spatial data* may support assessment of *risk* and *opportunity*.



FLOODING AND HOMES



FLOODING AND TRANSPORTATION



STORMWATER AND INFRASTRUCTURE



HEAT AND HEALTH



AIR QUALITY, FLOODING AND PUBLIC HEALTH



DROUGHT AND WATER SUPPLY



Can you accept the
vulnerability and risk to your
assets?

1 Explore Hazards

2 Assess Vulnerability & Risks



3 Investigate Options

4 Prioritize & Plan

5 Take Action



Same exposure
different vulnerability





Address risks with strategies
that stakeholders support

- 1 Explore Hazards
- 2 Assess Vulnerability & Risks
- 3 Investigate Options
- 4 Prioritize & Plan
- 5 Take Action




ADAPTATION OBJECTIVES

1. Engage & educate the community about climate resilience & adaptation.
2. Incorporate equity & inclusion into climate adaptation efforts.
3. Collaborate & build capacity for a more resilient community.
4. Enact plans & policies focused on adaptation & resilience.
5. Adapt operations and investments for future climate conditions.



ENGAGE AND EDUCATE THE COMMUNITY ABOUT CLIMATE RESILIENCE AND ADAPTATION

Strategy	Municipal Role	Cost	Effort Required
Engage the community about services that support health and wellness	 ENCOURAGE	\$	Med
Encourage families to prepare an emergency response plan		¢	Med
Foster community spirit to recover, adapt and "bounce forward" from disaster		¢	Med-High



Developing options linked to impacts

- Loss avoidance - investing now to better withstand and quickly recover from disruptions caused by current (and future) hazards
- Regional options often consider three linked questions
 - Where do I live?
 - Where do I work?
 - How do I get between the two?
- Are you looking to invest in
 - Assets directly controlled by local governments?
 - All assets that make the Chicago region a great place to live and work?



Options lie within your sphere of influence

REDUCE EXPOSURE



BUILD ADAPTIVE CAPACITY



REDUCE SENSITIVITY



IMPROVE RESPONSE AND RECOVERY





Improved park access ✕

This aerial rendering shows a city street scene. On the left is a modern building with a large glass front and a sign that says 'COFFEE'. In front of it is a blue-paved plaza with red and pink furniture. To the right of the plaza is a green park area with trees and people walking. A dark blue banner with white text is overlaid on the park area. Below the park is a street with several white cars and two white trucks. Another dark blue banner with white text is overlaid on the street. At the bottom of the image, there is a sidewalk with people walking and a dark blue banner with white text. The entire scene is rendered in a clean, modern style with bright colors.

✕ Improved stormwater management

✕ Expanded tree canopy to lower temperatures



Compile a plan to
implement prioritized
solutions

- 1 Explore Hazards
- 2 Assess Vulnerability & Risks
- 3 Investigate Options
- 4 Prioritize & Plan
- 5 Take Action





Align with existing recommendations

Community





Align with existing recommendations

Community

Prosperity





Align with existing recommendations

Community

Prosperity

Environment





Align with existing recommendations

Community

Prosperity

Environment

Governance





Align with existing recommendations

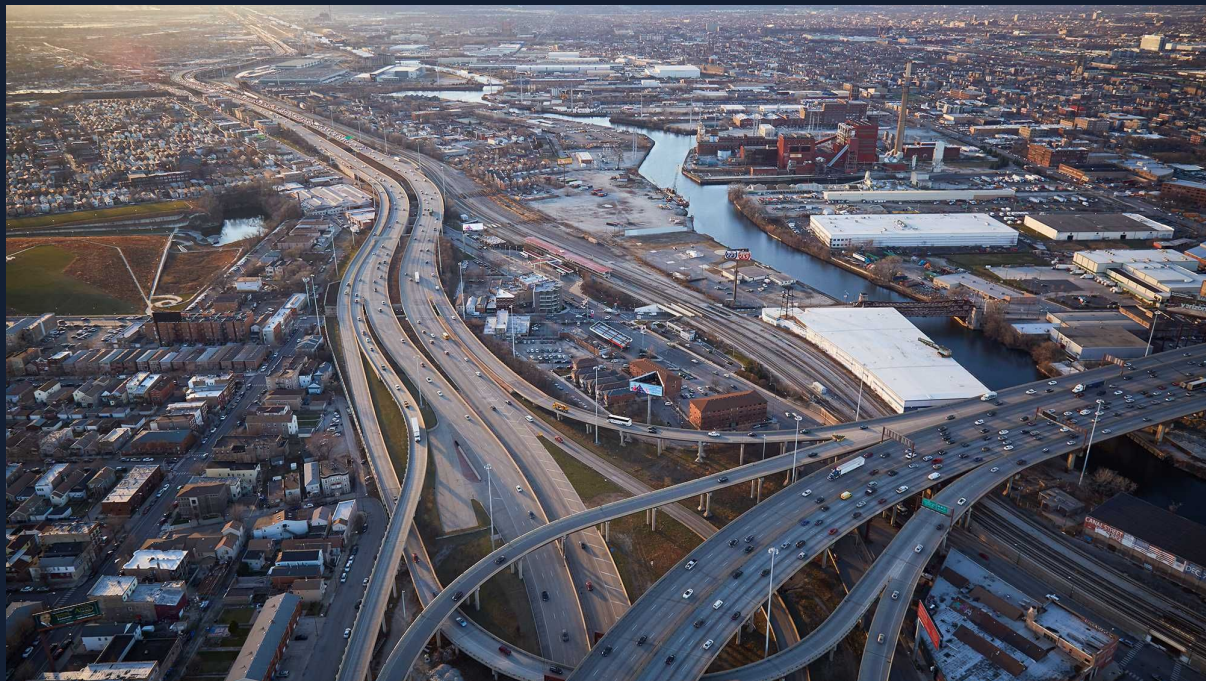
Community

Prosperity

Environment

Governance

Mobility





Prioritize based on stakeholder metrics (Use of a “traffic light” visualization)

	Increased climate resilience	Environment	Community and Prosperity	Governance and Finance
Option 1	●	● ●	● ●	●
Option 2	●	●	● ●	● ●
Option 3	●	●	●	●
Option 4	●	●	●	●
Option 4 <i>with</i> Option 3	●	●	●	●



Implement, monitor, share
your story, iterate

- 1 Explore Hazards
- 2 Assess Vulnerability & Risks
- 3 Investigate Options
- 4 Prioritize & Plan
- 5 Take Action



CLIMATE ADAPTATION GOAL

Persistent, equitable climate adaptation

INTERIM TARGETS

2030 Climate-resilient
governance

2040 Resilience across
jurisdictions

2050 Cohesive, resilient
communities



