

ALBANY COUNTY

CLIMATE RESILIENCY PLAN

Virtual Public Meeting // Meeting #1

November 16, 2021



Daniel P. McCoy
Albany County Executive



**Department
of State**

Meeting Overview

01 Project overview

02 Climate resilience in Albany County

03 Interactive exercise

04 Next steps

01

PROJECT OVERVIEW

Purpose

Project team

Scope

Schedule

Project Purpose

The Albany County Climate Resiliency Plan aims to **improve the ability of municipalities and other private and public stakeholders to prepare for, adapt to, and minimize impacts from flooding, severe weather events, and other climate stressors.**

»» CLIMATE CHANGE IS HAPPENING IN ALBANY COUNTY.

Temperatures are warming.

+0.22

°F / decade between 1901 and 2012

Precipitation is increasing.

+0.90

inches / decade between 1901 and 2012

data are from New York State ClimAID, 2014 Supplement, Updated Climate Projections Report

01 PROJECT OVERVIEW

Climate Change is a Global Issue

GLOBAL

IPCC Report (2021)

NEW YORK STATE

Climate Leadership and Community Protection Act (2019)

Community Risk and Resilience Act (2014)

ClimAID (2011 and 2014 update)

ALBANY COUNTY

Clean Energy Community Designation (2017)

Climate Smart Communities (2009)



Climate Change is a Local Issue



»»» Flooding in Downtown Albany (June 2021)



»»» Nor'easter Aftermath Guilderland (Dec. 2020)



»»» Storm Damage in the City of Albany (Aug. 2021)



»»» Hurricane Irene, Colonie (Aug. 2011)



»»» Hurricane Irene, Berne (Aug. 2011)

A Proactive Approach

consider a range of future
CLIMATE STRESSORS

- Sea Level Rise
- Extreme Precipitation
- Coastal Storms
- Extreme Temperature
- Heat Waves
- Drought



understand their affects on
ALBANY COUNTY

- Economic systems
- Infrastructure
- Health/social services
- Natural/cultural resources
- Housing
- Vulnerable populations



identify resiliency
PROJECTS

- Capital improvements
- Community planning
- Capacity building
- Recovery & response
- Policies
- Laws / regulations

→ some of the biggest challenges will be the **frequency, duration, and intensity** of these events, as well as the **overlap of multiple extreme events**

The Project Team

Albany County

Manage & guide project

- Identify key stakeholders
- Support public engagement
- Review project deliverables
- Facilitate plan implementation

NYS Dept. of State

Funding agency

- Advisory role
- Technical support
- Ensure alignment with state priorities
- Assist with the identification of funding opportunities
- Review and approve project deliverables

Consultant Team

Provide technical support

- Develop tools to support project
- Provide subject-matter expertise
- Produce all project deliverables
- Facilitate and conduct community engagement

→ with a lot of support from... **Technical Advisory Committee**

Municipal Working Group

Stakeholders

Public (you all!)

Building a Climate Resiliency Plan

create a
**COUNTY
PROFILE**
to lay the
foundation for
the plan



establish a
**COUNTY
RESILIENCE
VISION**
to guide the
planning process



develop an
**ASSET
INVENTORY**
of resources
essential to the
County's function
and identify



conduct a
**RISK
ASSESSMENT**
to identify
vulnerable
assets, with a
focus on flood
risks



identify
**PROJECTS &
STRATEGIES**
to increase
community
resiliency to
climate change

*We'll be seeking
your input on this
topic tonight*

Public Input is Critical to the Plan

Technical Advisory Committee

Municipal Working Group

Stakeholder Meetings

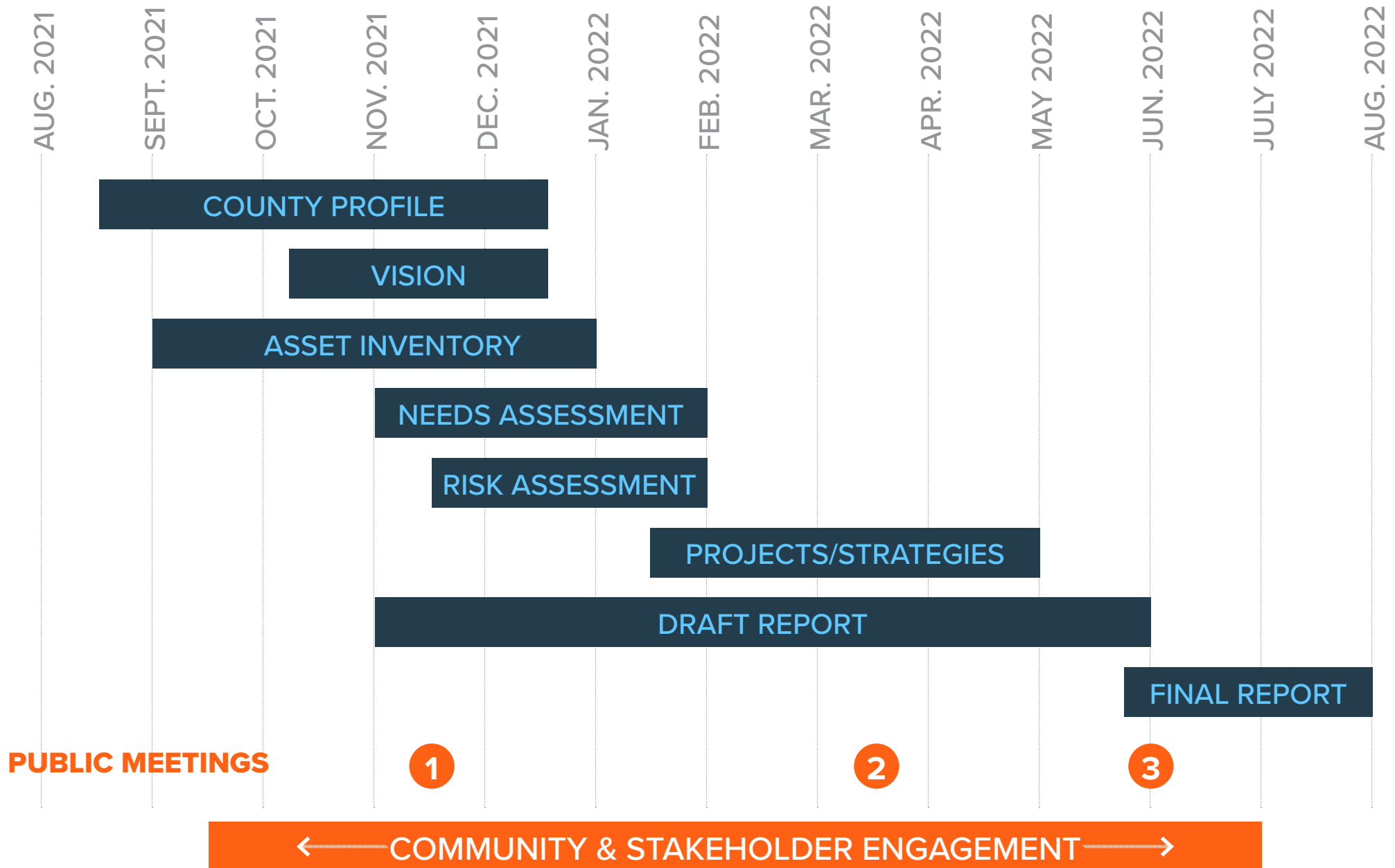
Public Events / Community Workshops

Project Webpage on County Website



»» www.albanycounty.com/climateresiliency

Project Schedule



Part of a Larger Initiative

»»»» In 2018, five counties were awarded funds to develop countywide resiliency plans to integrate the principles of Smart Growth and climate resiliency:

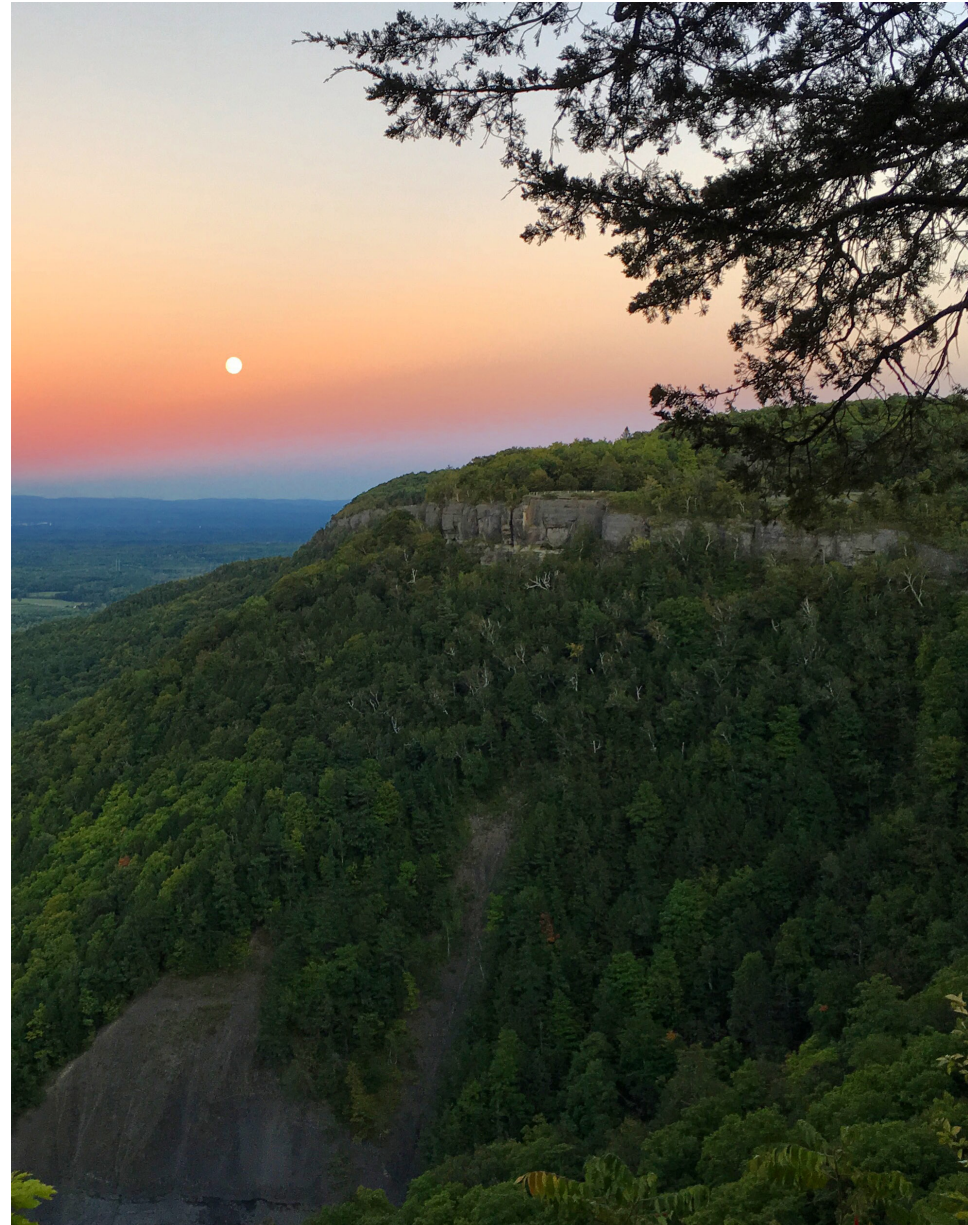
Albany County

Genesee County

Orange County

Sullivan County

Tompkins County



02

CLIMATE RESILIENCE IN ALBANY COUNTY

Defining resilience

Resilience of what and to what

Potential approaches to climate resilience

What is Resilience?

to “jump back” or “rebound”

derived from the Latin word “resiliere”

the capacity of a social-ecological system to absorb or withstand disturbances and other stressors and still maintain its basic structure and function

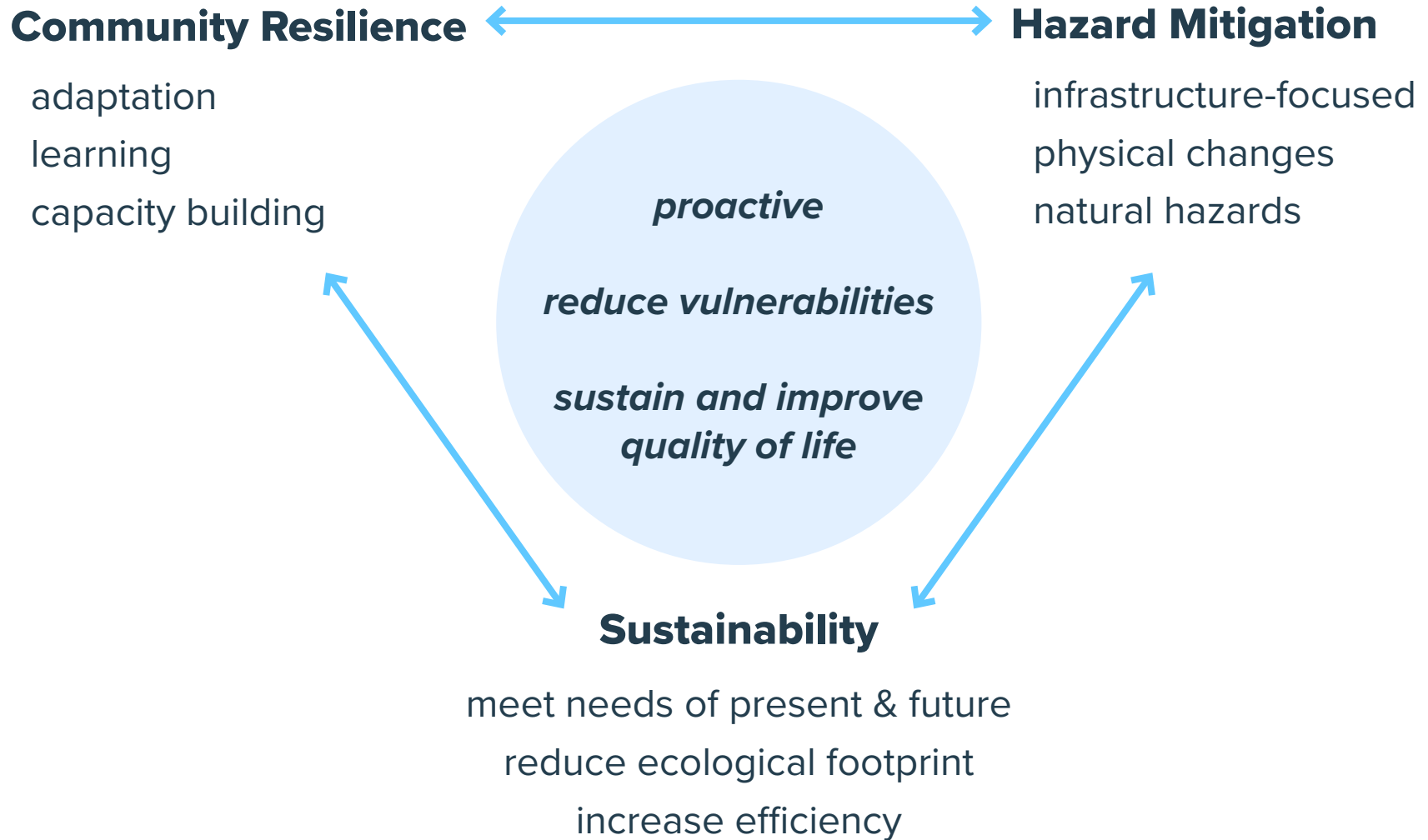
Holling 1973, Gunderson & Holling 2002, Walker et al. 2004

a measure of how well people and societies can adapt to a new reality and capitalize on the new possibilities offered

Paton 2006, 2008



Inter-Related Concepts



Defining Resilience for this Project

RESILIENCE OF

the systems & communities
that define Albany County

RESILIENCE TO

climate change stressors:

- sea level rise
- extreme precipitation
- coastal storms
- extreme temperatures
- heat waves
- drought



Benefits of Climate Resilience

- Reduced vulnerability to natural disturbances
- Increased capacity to learn from, anticipate, and adapt to change
- Greater capacity to provide goods, services, and support systems
- **Enhanced quality of life for all residents**

qualities of a **RESILIENT WORLD**

Diversity

Ecological variability

Modularity

Manage slow variables
& feedbacks

Social capital

Innovation

Redundancy

Ecosystem services

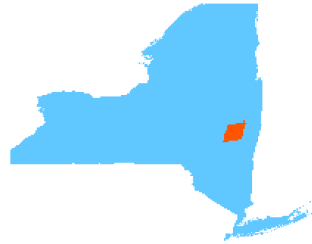
Walker & Salt (2006)

Social Systems Impact Resilience

United States



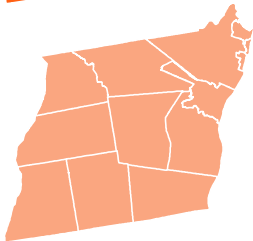
New York State



Albany County



Municipalities



Landowners

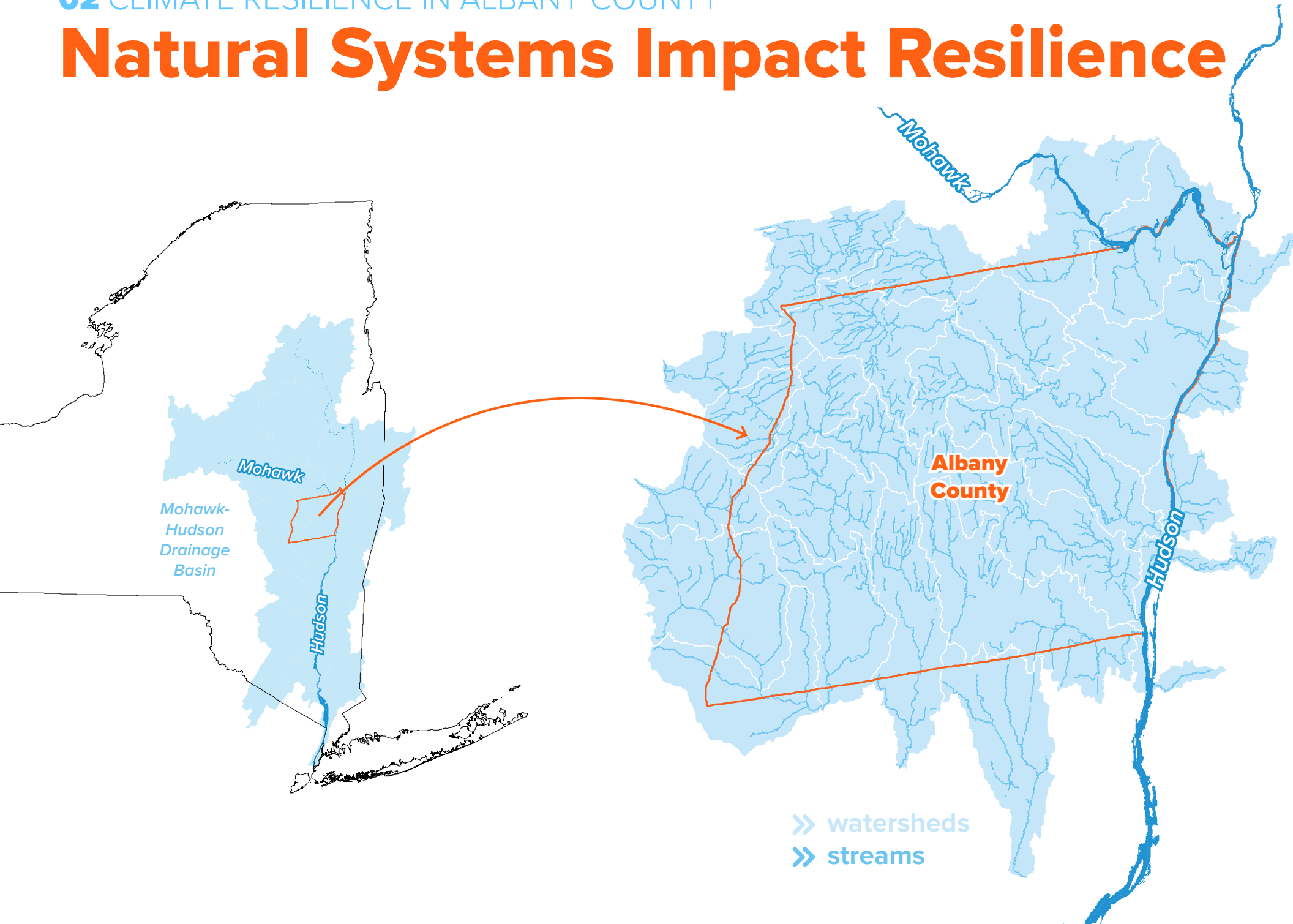


Laws, regulations,
policies

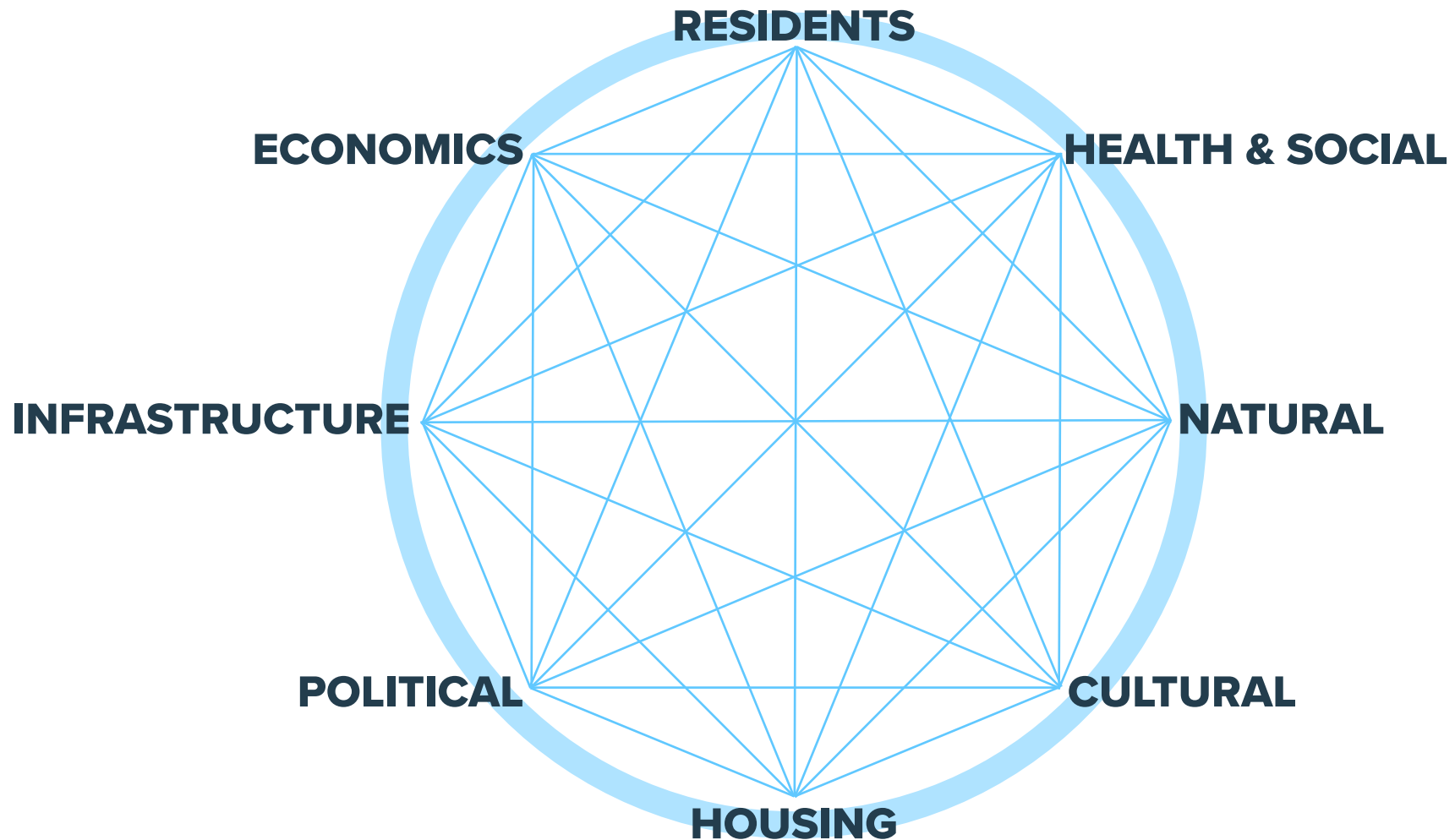
Study area

Land use, land
management

Natural Systems Impact Resilience



The County Consists of Diverse, Interconnected Systems



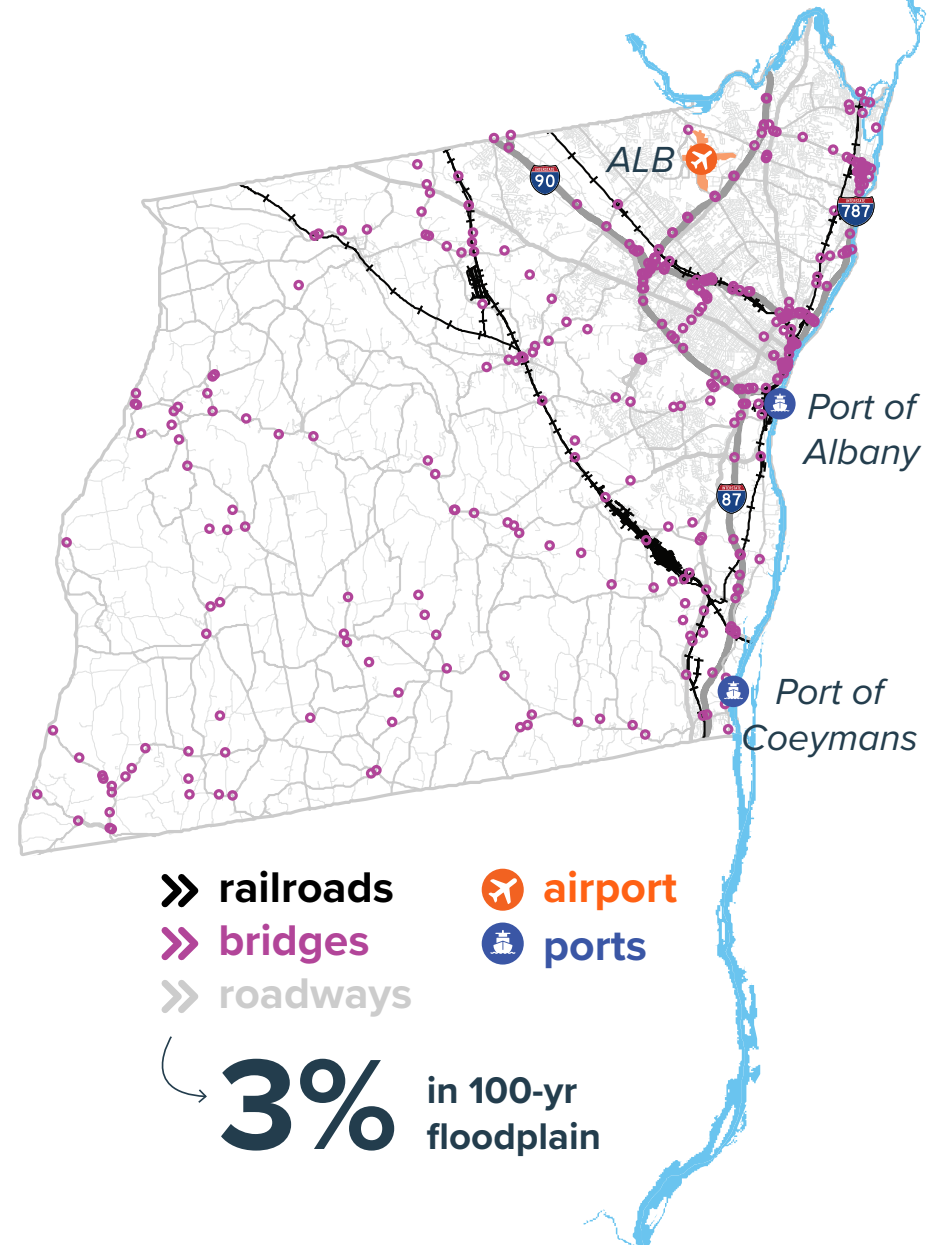
Infrastructure Systems Support Mobility & Deliver Critical Services

RESILIENCE OF

transportation networks, energy supply and distribution, water supply and treatment, telecommunications

POTENTIAL CLIMATE IMPACTS

- sea level rise will affect bridge clearances and put coastal infrastructure at risk
- storm events and flooding will disrupt services and access



Economic Systems Support a High Quality of Life

RESILIENCE OF

downtowns, businesses, supply chains, workforce

POTENTIAL CLIMATE IMPACTS

- resilience of global economic systems will have local impact
- extreme weather events may cause physical damage and/or disrupt services and access



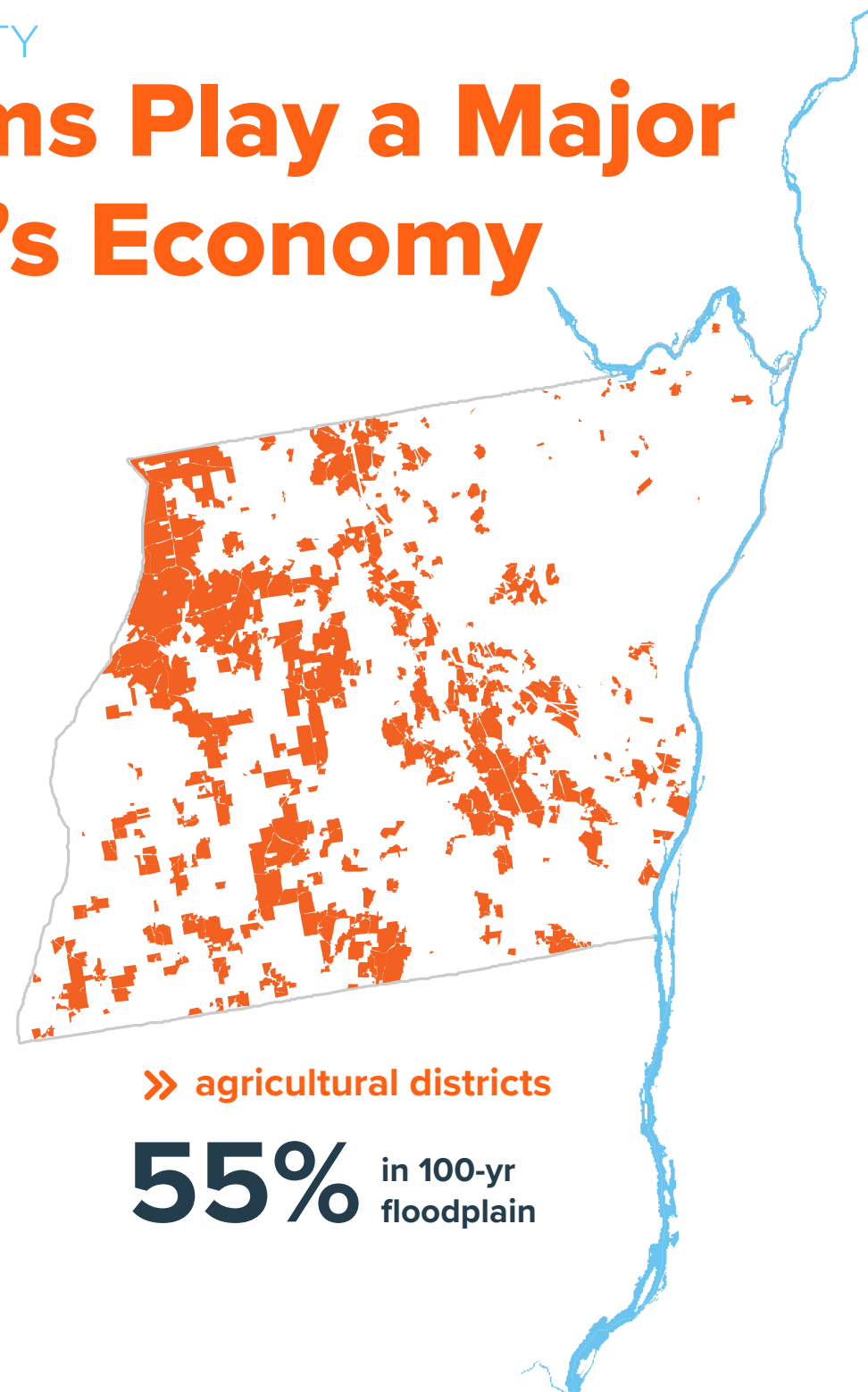
Agricultural Systems Play a Major Role in the County's Economy

RESILIENCE OF

agriculture

POTENTIAL CLIMATE IMPACTS

- heat waves will stress livestock and crops causing shifts in quality, output, and economic sustainability
- higher volumes of runoff will require infrastructure upgrades
- temperature increases will intensify pest and disease pressures



Ecological Systems Help Mitigate Climate Change

RESILIENCE OF

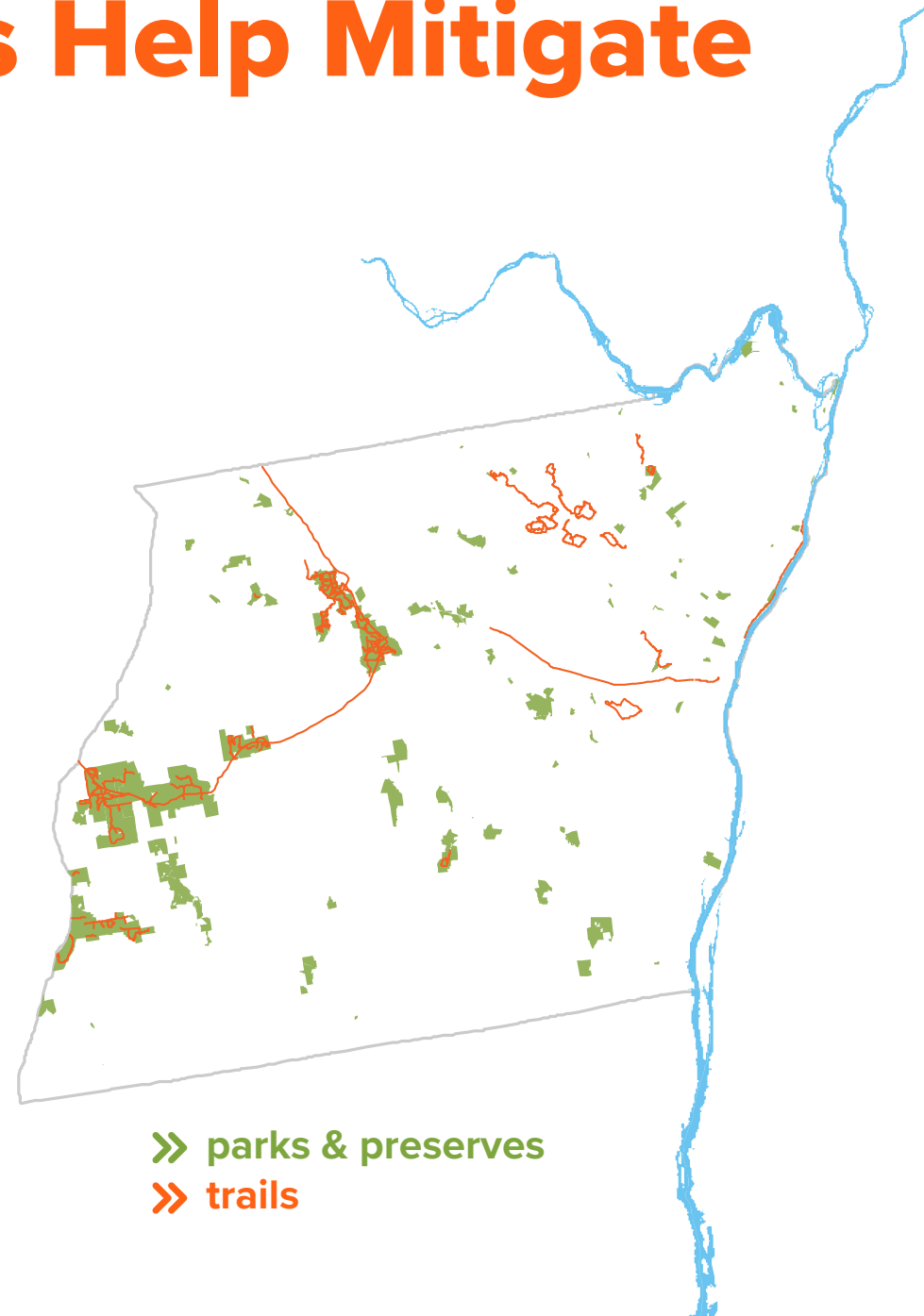
ecosystems, wildlife, nature preserves

POTENTIAL CLIMATE IMPACTS

- shifts in species distributions
- introduction of new pests and invasive species

POTENTIAL BENEFITS

- carbon sequestration
- flood storage
- ecosystem services



Health & Social Services Play a Critical Role in Recovery

RESILIENCE OF

schools, medical facilities, libraries, fire, emergency response, police, and other community services

POTENTIAL CLIMATE IMPACTS

- extreme weather events can disrupt access, deployment, and quality of response services
- increased GHG emissions will negatively impact air quality and public health



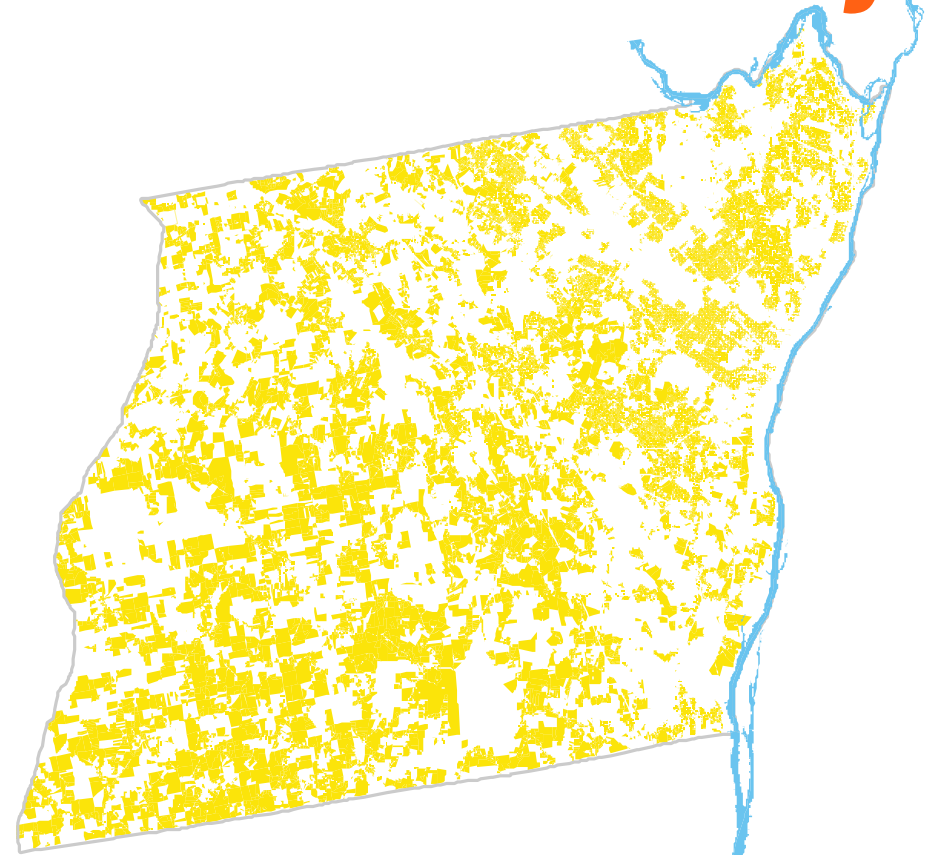
Residential uses are the predominant land use in the County

RESILIENCE OF

housing stock

POTENTIAL CLIMATE IMPACTS

- loss of property and life due to extreme weather events
- displacement and housing instability due to damage and cost of repairs
- exposure to hazardous materials



» residential parcels

19% in 100-yr
floodplain

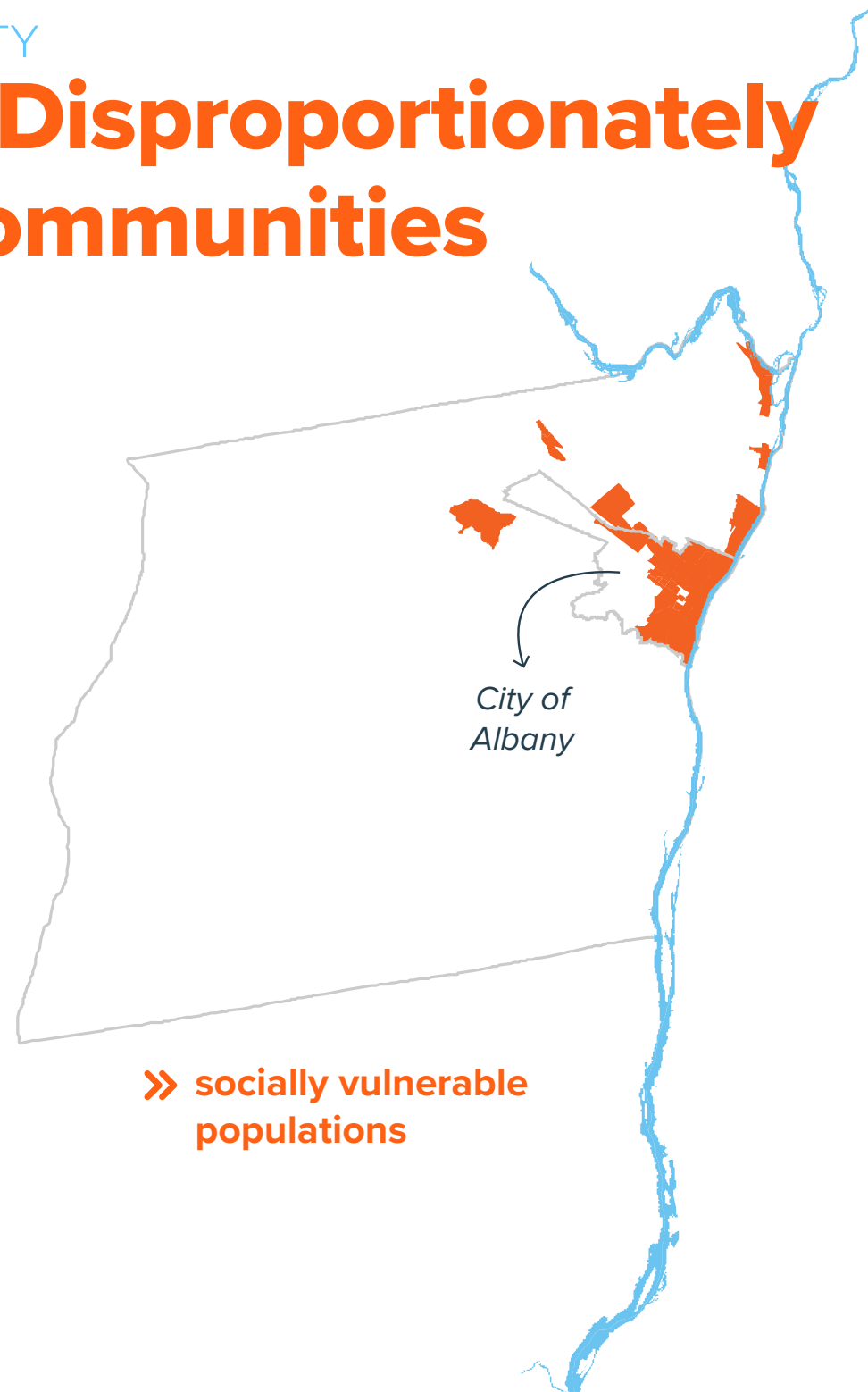
Climate Change Will Disproportionately Impact Vulnerable Communities

RESILIENCE OF

socially vulnerable communities

POTENTIAL CLIMATE IMPACTS

- heat waves compounded in urban areas due to heat island effect
- disproportionate loss of property and life and displacement as a result of extreme weather events



Climate Resiliency Projects

ADAPTATION

focuses on addressing and adapting to the impacts of climate change, such as severe storms and flooding

MITIGATION

tackles the cause of climate change by reducing greenhouse gas emissions



Climate Resiliency Project Types

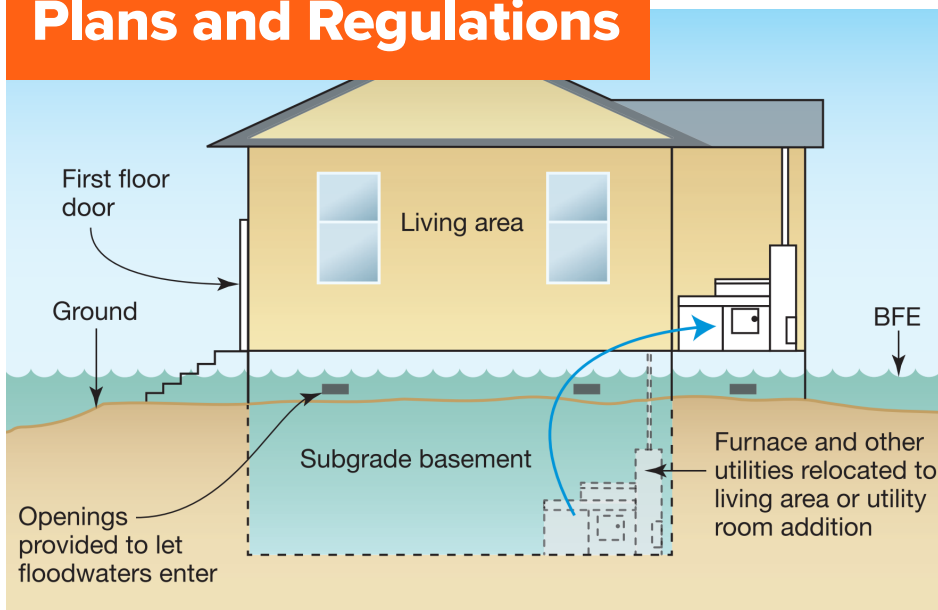
Infrastructure Projects



Natural Systems Protection



Plans and Regulations



Capacity Building



03

INTERACTIVE EXERCISE

Developing a climate resilience vision

03 INTERACTIVE EXERCISE

Visioning

»»»» To develop a positive, compelling, community-driven vision for Albany County's future



GROUP ACTIVITY!

Please grab your smart phone or open another window in your web browser and go to:

www.menti.com

Then, enter the code:

2299 2735



»»» **Carey Institute for Global Good, Rensselaerville**
(credit: D. Fernandez)

04

NEXT STEPS

Project milestones

Community engagement

04 NEXT STEPS

Short-Term Actions

DECEMBER 2021

County profile drafted

NOVEMBER - JANUARY 2022

Continue building asset inventory

DECEMBER 2021 - FEBRUARY 2022

Risk assessment

Needs/opportunities assessment

Initial project identification



04 NEXT STEPS

Continued Community Engagement

OCTOBER - DECEMBER 2021

Stakeholder interviews

SPRING 2022

Public events to review
identified projects and
provide feedback



THANK YOU!

www.albanycounty.com/climateresiliency



Daniel P. McCoy
Albany County Executive



NEW YORK
STATE OF
OPPORTUNITY.

**Department
of State**