

# RESILIENT TOMPKINS COUNTY

**Thank you for joining us!**

**The virtual meeting will begin shortly.**

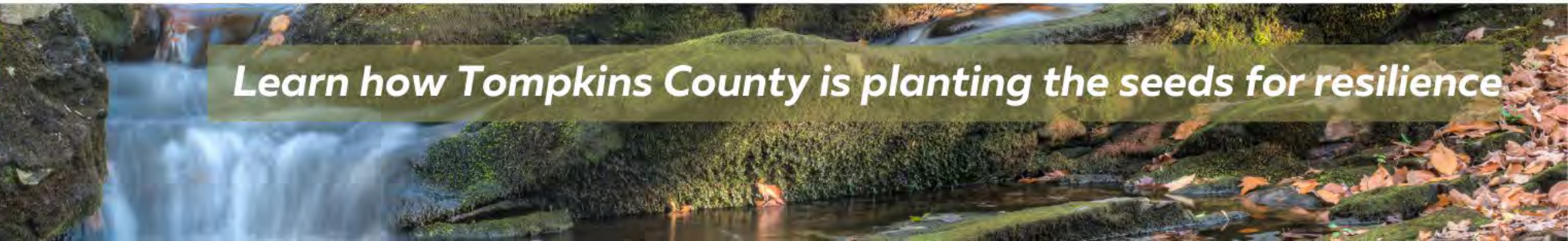


# RESILIENT TOMPKINS COUNTY

## Welcome Virtual Meeting May 18, 2022



*Learn how Tompkins County is planting the seeds for resilience*





# Introductions



**SCOTT DOYLE, AICP**  
Tompkins County Department  
of Planning and Sustainability



**CYNTHIA ADDONIZIO-BIANCO**  
Presenter



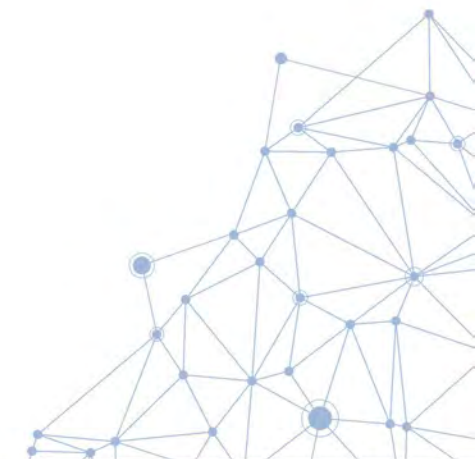
**SUSAN COHEN**  
Facilitator



**ERIK GENGA**  
Presenter



**LISA DANNER**  
Presenter





# Meeting Overview

## Presentation

During the presentation, please ask questions in the chat.

## Questions

After the presentation, the speakers will respond to questions asked in the chat.



## Join the Conversation!

Use the chat function to ask questions and make comments as we go!





# Meeting Overview

- If you get disconnected or the meeting abruptly ends, be patient and re-join using the same Zoom link you were provided in registration.
- We're recording this presentation and will post it to our website.
- Comments and questions will be included in the meeting summary that will be added to the website.

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CountyNY.gov

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## Planning - Climate Adaptation

### Climate Adaptation

Contents [Plans and Studies](#)

The [Adaptation Chapter](#) (1.89 MB) of the Tompkins County Comprehensive Plan states that Tompkins County should be a place where the entire community is prepared for the economic, environmental, and social impacts of climate change.

It is the policy of Tompkins County to:

- Maintain floodways and limit development within floodplains to reduce damages from floods
- Improve connectivity of open space to prevent fragmentation of ecosystems and isolation of plant and wildlife populations
- Promote adaptation measures that lessen climate impacts on the local economy
- Encourage actions that protect vulnerable populations from the impacts of climate change
- Prepare for community recovery in the event of disaster

<https://www.TompkinsCountyNY.gov/Planning/Climate-Adaptation>



# Agenda: What we're here to share today

- **Overview**
- **Q & A**
- **Next Steps**



# New York State Supported Planning Effort



## Department of State

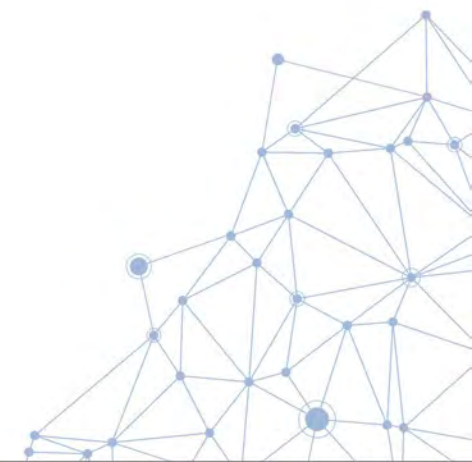
*The Resiliency and Recovery Plan was prepared with funding provided by the New York State Department of State under Title 3 of the Environmental Protection Fund.*





# Resiliency and Recovery Plan Overview

- Why?
- Overview
- Schedule
- Overview of Tasks/Outcomes
  - Hazard Mitigation Plan Update
  - Flooding and Related Impacts
  - Drought and Related Impacts
  - Community Economic Recovery
- Questions
- Next Steps

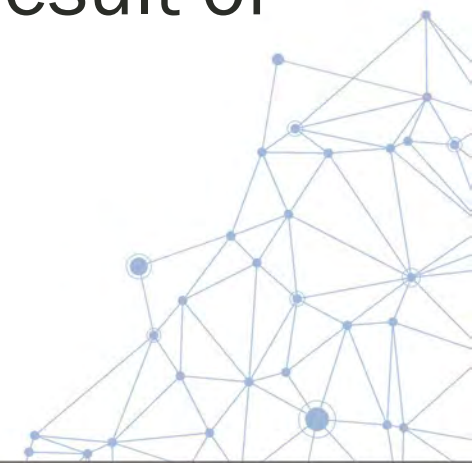






# Resiliency and Recovery Plan: Mission Statement

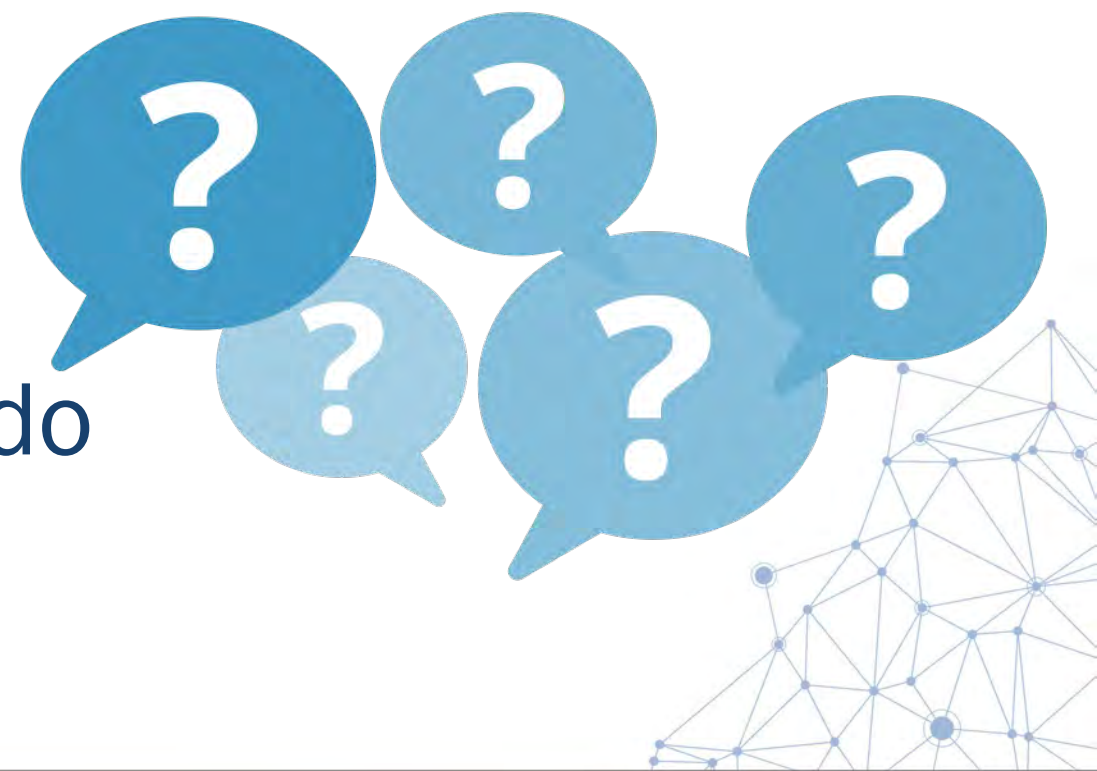
The mission of the plan is to develop a pathway, using an integrated and comprehensive approach, to **increase capacity for all individuals, communities, municipalities, institutions, businesses and systems within the County**, to adapt and thrive in the face of **chronic stresses** and **acute shocks** as a result of natural hazard events in Tompkins County.



# Survey Question

## What major disaster events have you experienced?

- Flooding
- Severe Winter Storm
- Severe Windstorm/ Tornado





# Why? Reduce Post-Disaster Business Failures

Failure Rates of Businesses Impacted by Natural Disasters		
IMMEDIATE	ONE YEAR LATER	THREE YEARS LATER
40%	25%	75%
Of small businesses will not reopen	More small businesses will close	Of businesses without a continuity plan will fail

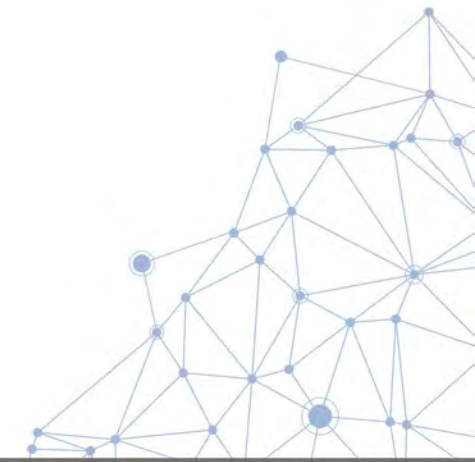
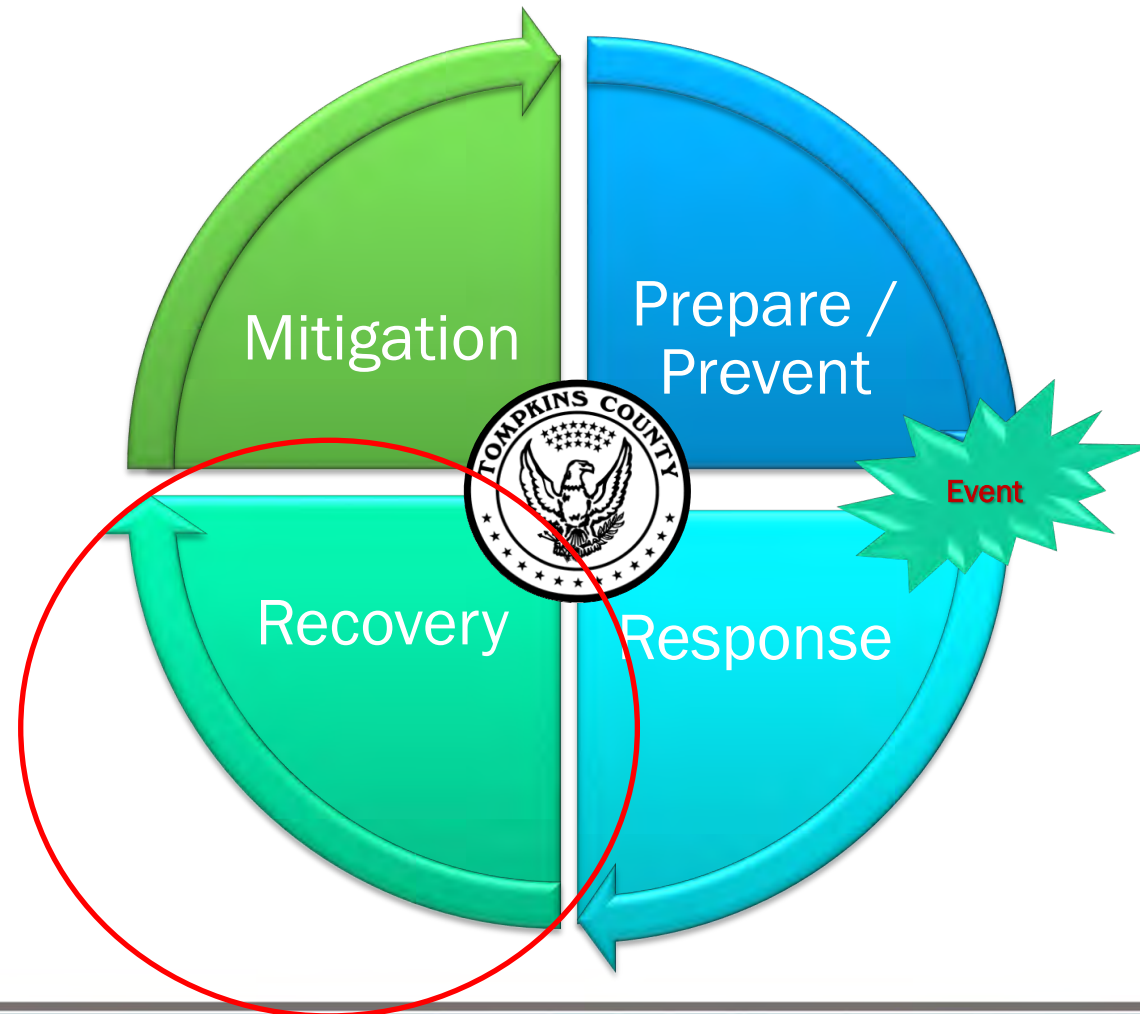
Source: Ready Business: Inland Flooding Toolkit, [www.ready.gov](http://www.ready.gov)

“Each year disasters such as floods, hurricanes, tornadoes, and wildfires force thousands of businesses to close. But even more common events, such as building fires, cause the same result. Our research shows at least 25 percent of those businesses that close following events such as these do not reopen. Many that do struggle to stay in business.”

Source: Insurance Institute for Business & Home Safety 2007



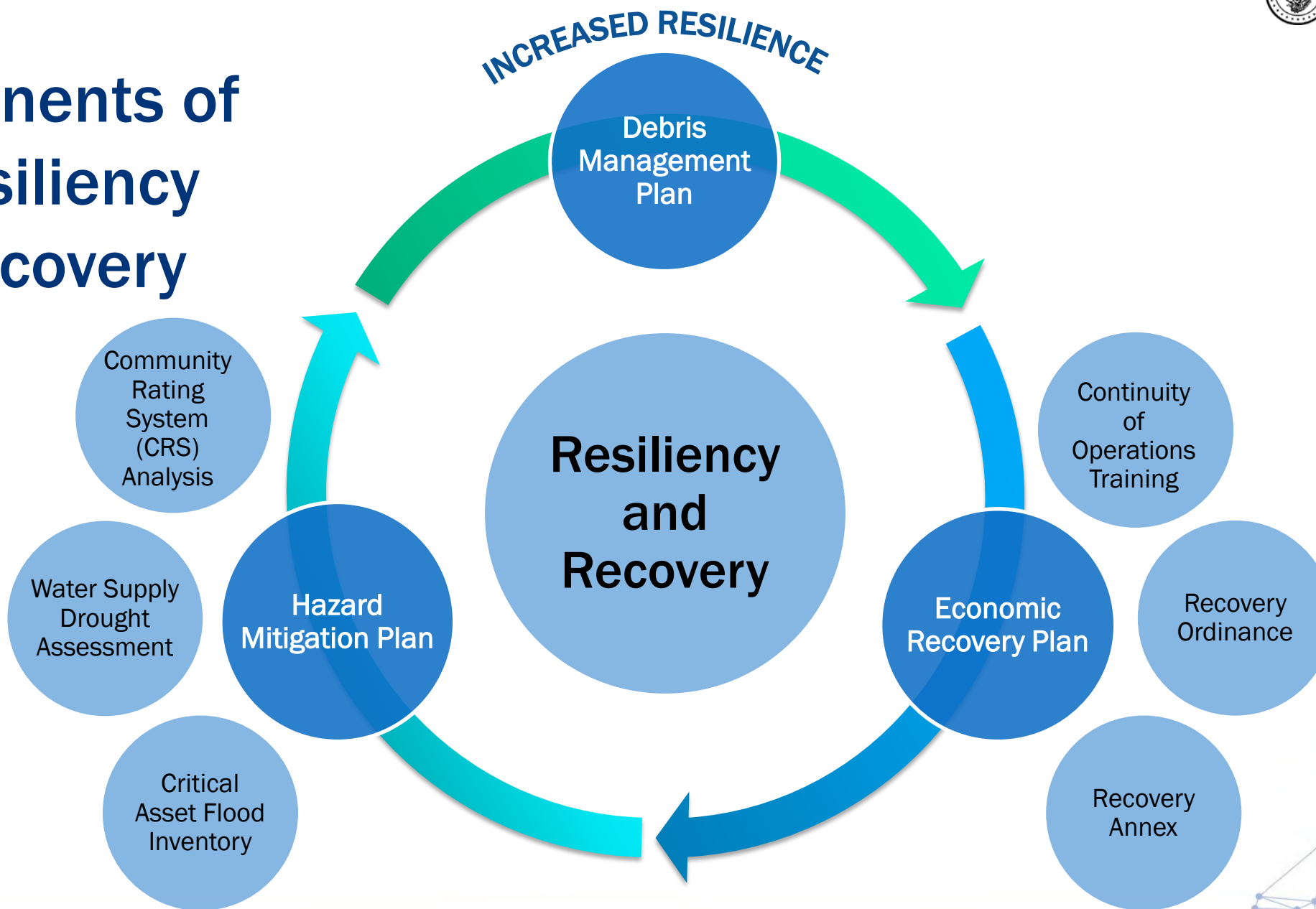
# What? Integrate Resilience into the Phases of Emergency Management

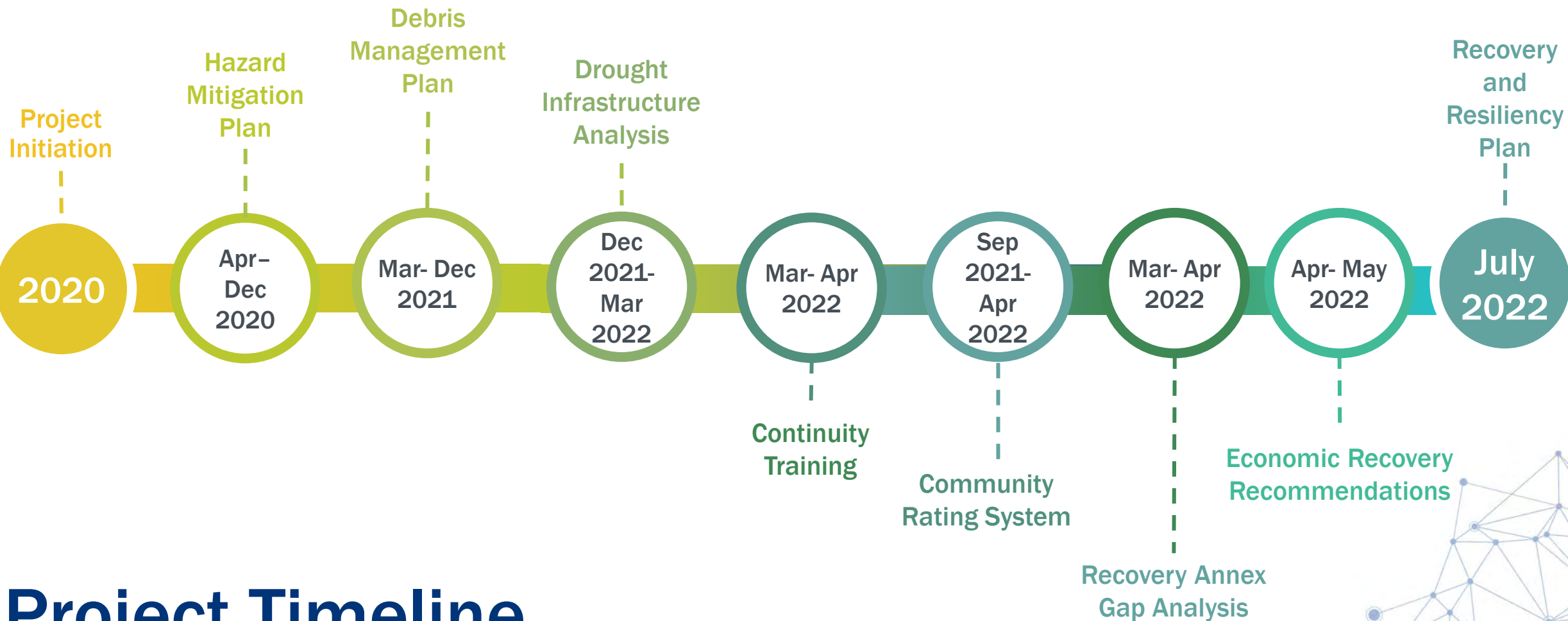




# How?

## Components of the Resiliency and Recovery Plan





# Project Timeline



# Survey Question

## Which impacts of disaster events have you experienced?

- Power Outages
- Road closures resulting in inability to go to work/school





# Resiliency Plan Components

- I. Hazard Mitigation Plan
- II. Water Supply Drought Assessment
- III. Inventory of Critical Assets related to Floodplains and Mitigation Resources
- IV. Debris Management Plan
- V. Local Government Community Rating System (CRS) Floodplain Management Assessment
- VI. Economic Recovery Planning Resource
- VII. Continuity of Operations Tools and Trainings

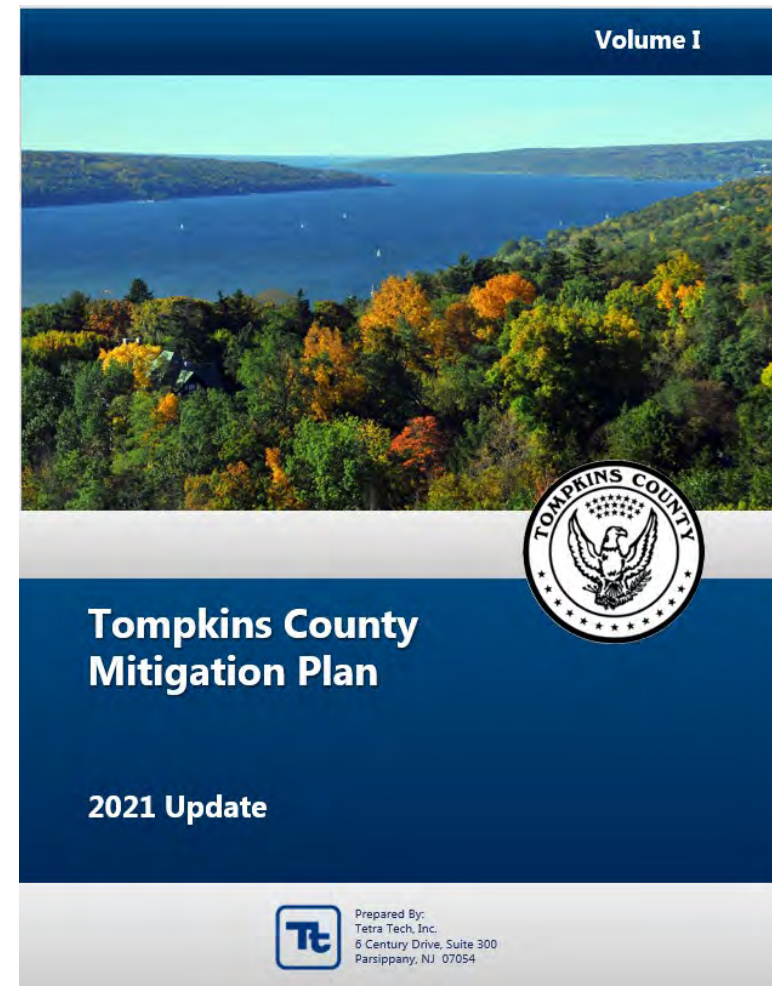
*Will collectively help reduce the impacts of natural disaster events on the residents and economy and assist in recovery.*





# I. Hazard Mitigation Plan (HMP) Update Component

- Identify and invest in measures to minimize impacts from disasters prior to hazard events
- Communities that adopt are eligible for FEMA mitigation funding
- Recommendations from the HMP are being implemented as part of the Resiliency and Recovery Plan



# HMP Update: Hazards Of Concern



Drought - including wildfire



Disease Outbreak



Extreme Temperatures



Flood – including riverine/flash, ice jam, dam failure, and ground failure due to flooding



Harmful Algal Bloom



Invasive Species



Severe Storm – hail, wind, lightning, thunderstorms, tornadoes, hurricanes/tropical storms



Severe Winter Storm – heavy snow, blizzards, sleet, freezing rain, ice storms, and Nor'easters

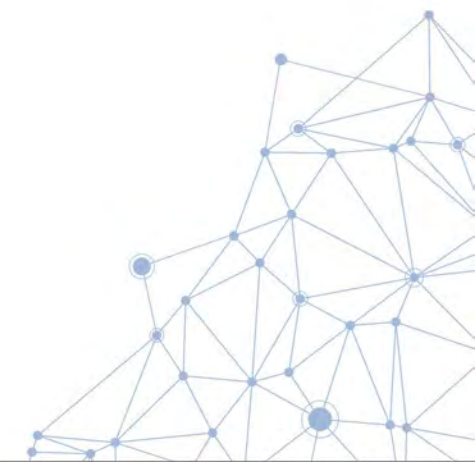


# Summary of Mitigation Strategy

Number of Mitigation Actions by Jurisdiction	
Caroline, Town of	10
Cayuga Heights, Village of	5
Danby, Town of	9
Dryden, Town of	6
Dryden, Village of	3
Enfield, Town of	10
Freeville, Village of	4
Groton, Town of	5
Groton, Village of	5
Ithaca, City of	8
Ithaca, Town of	18
Lansing, Town of	7
Lansing, Village of	3
Newfield, Town of	5
Trumansburg, Village of	6
Ulysses, Town of	5
Tompkins County (county-level)	20
Grand Total	129

## Types of Projects

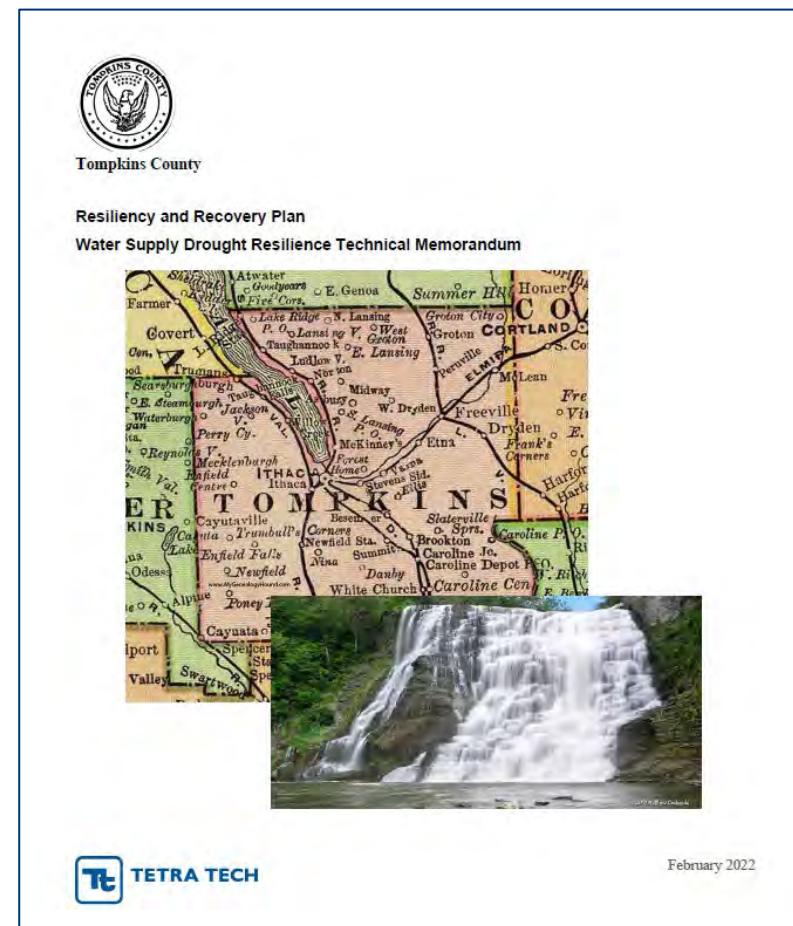
- Planning
- Stormwater
- Stream Restoration
- Property Flood Mitigation
- Utility Interruption
- Generators
- Water Supply
- Green Infrastructure
- Living Snow Fences
- Emergency Services
- Tree Maintenance
- Ground Failure



# II. Water Supply Drought Assessment

## Purpose

- Analyze the redundancy of the countywide water systems to drought events
- Recommend actions to build community resiliency







# Key Drought Assessment Recommendations

- Establish a regional water provider consortium
  - City, Cornell, Bolton Point, County Environmental Health / Planning
  - Early success!
- Create updated interagency agreements
- Identify funding mechanisms for interconnection infrastructure improvements
- Increase monitoring of groundwater in active supply wells for drought information
- Implement regional water conservation program



# III. Inventory of Critical Assets & Floodplains

## Purpose

- Clearly map where community critical assets are based in relation to Special Flood Hazard Areas
- Provide more information on what can be done to reduce flood risk to those assets

Asset Types in Floodplain		
Fire Station	Communications - Building	Oil Facility
Education - Primary	Potable Water Tower	Library
Post Office	Electrical Substation	Wastewater Treatment Facility
Medical Office	Utility	Electrical Power Grid
Education - Higher	Police Station	Communications Radio Station
Potable Water Tank	Municipal Hall	Communications - Cell Tower
Natural Gas Facility	Communications - Tower	DPW
Government	Fire/EMS	Communications - Operations Center
Electrical Power Grid	Wastewater Pump Station	Day Care
Dams		



# Resources for Critical Assets in Floodplains

- To provide a toolkit of mitigation techniques to reduce future flood damages



Source: FEMA Design Guide (2007)

Example of Utility Floodproofing  
(Elevation and Door Dam)



# IV. Debris Management Plan

## Purpose

- To create a plan to effectively manage debris throughout the county following a natural hazard event disaster
- Key component to be eligible to receive FEMA reimbursement







# Key Debris Management Plan Aspects & Recommendations

- Likely scenario for need to activate plan
  - 1 % Annual Chance Flood Event
    - Construction & Demolition debris, mixed debris, vegetative debris
- Pre-Event Recommendations
  - Formalize debris management roles
  - Review and prepare debris management contracts
  - Establish debris reserve fund
  - Further analyze potential temporary debris management sites



# V. Local Government & Flood Management through FEMA's Community Rating System (CRS)

## Purpose

- Develop a tool to help assess the potential and impacts for a Tompkins County community to participate in the CRS
- Develop added resource of floodplain recommendations for Tompkins County communities where CRS may not be appropriate
- Provide a toolkit of best floodplain management practices



OMB No. 1660-0022  
Expires: March 31, 2020

National Flood Insurance Program  
Community Rating System

## Coordinator's Manual

FIA-15/2017





# Key Community Rating System (CRS) Assessment Findings

- Town of Lansing volunteered time for assessment
- Town currently has 34 flood insurance policies in force
  - Average premium is \$1,271
- \$466,000 in losses have been paid from insurance to date
- Town could qualify for CRS Classification 8 or 9
  - Resulting annual 5% reduction in flood insurance premium
  - \$64-94/year to each policy holder
  - Estimated that to operate a CRS program – approx. 5 hours per week
  - Outside of CRS there are many flood risk reduction actions



# Community Floodplain Management Recommendations

Require freeboard for new or reno homes

Require floodproofing for non-residential building

Variances to align with floodplain regulations

Maintain flood map accuracy

Implement back up documentation system

Use digital media to engage public on flood issues

Address any development that could increase flood risk

Enforce and re-evaluate ordinances

Avoid development in the floodplain

Document as-built elevation certificates



# Survey Question

**What is your biggest concern related to thriving after a disaster event?**

- Loss of electricity
- Loss of water/utilities
- Interruptions in communications

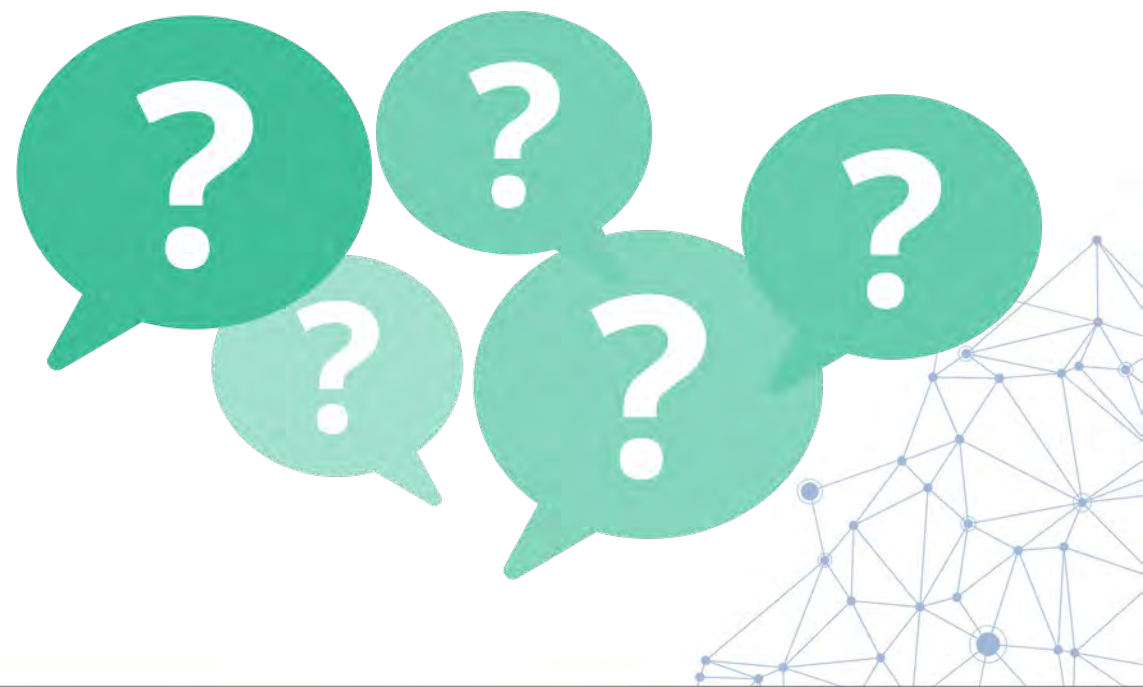




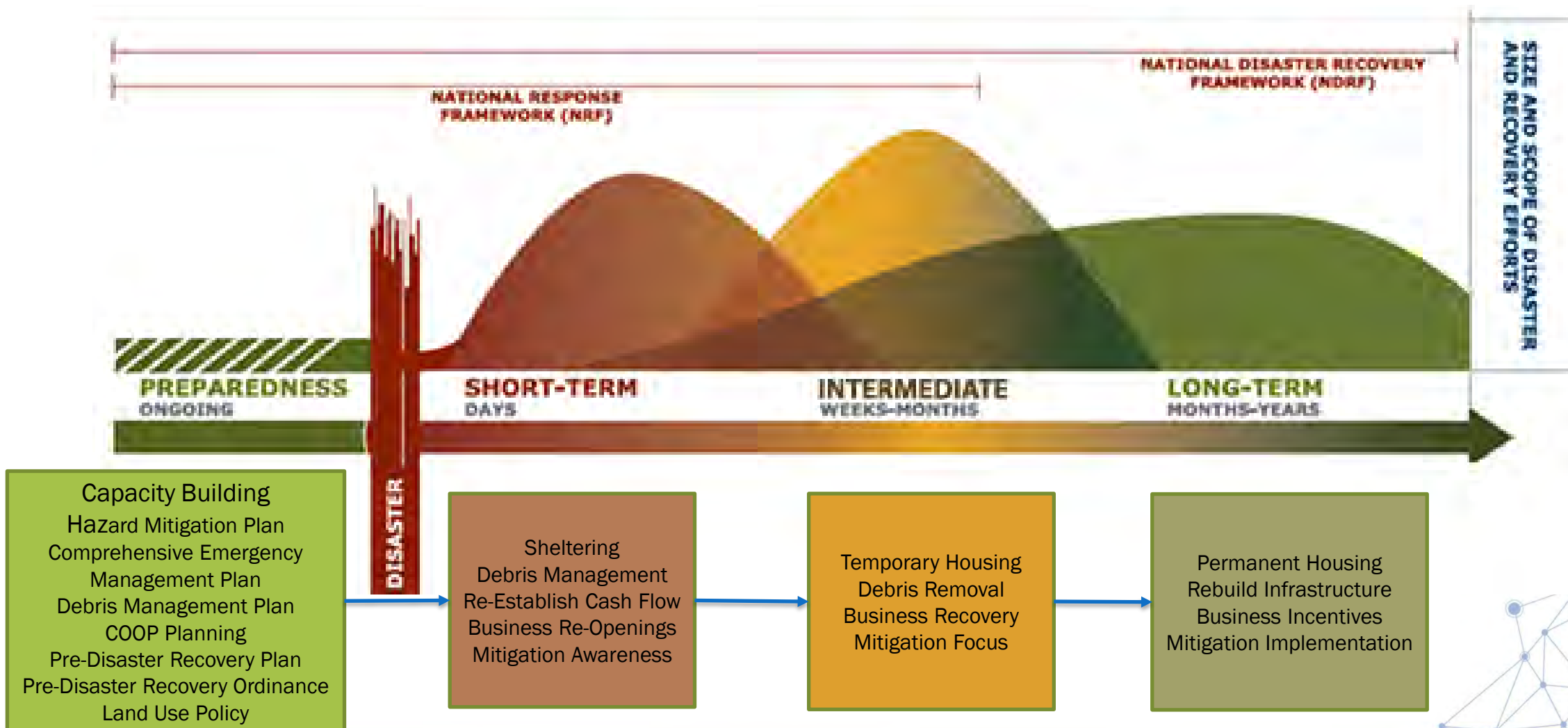
# Survey Question

**What programs, projects, or support would you like to see implemented in the community to increase post disaster resilience?**

- Underground power lines
- Community education
- Timely real time information
- Connecting residents with community organizations



# Recovery Continuum Transitions





# Recovery Continuum Transitions Recommendations

To implement a smooth transition from Response to Recovery

- Update Comprehensive Emergency Management Plan
- Update Recovery Annex
- Identify staff, roles, and timeframes
- Incorporate mitigation into reconstruction activities

*The transition from response to recovery operations is a gradual process that consists of actions dictated by the specific impacts and circumstances of the event as well as all plans working together in one cohesive thought which is to get all communities to reach their recovery end-state.*





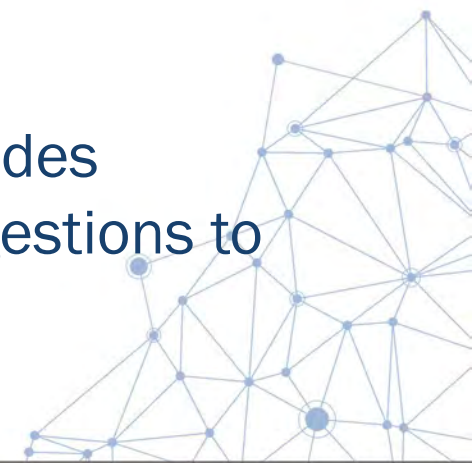
# Community Economic Recovery Plan Component

## • Purpose

- To review the County recovery annex and identify the critical gaps in community economic recovery support between the time of disaster initiation and long-term community economic recovery
- To recommend a framework by which the County can fully develop an Economic Recovery Plan.

## • Connection to Resiliency

- Each component in the plan which makes recommendations or provides guidance on econ. recovery activities will also include resiliency suggestions to increase future efficiencies and help mitigate economic impacts.



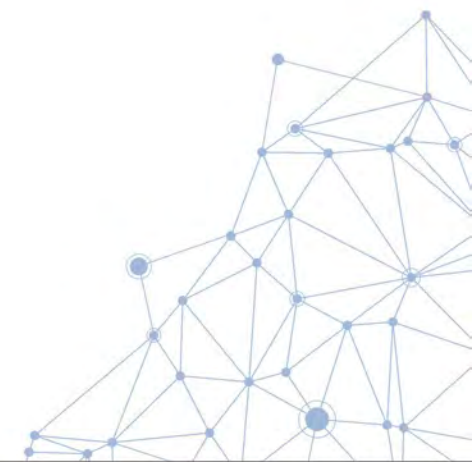
# Community Economic Recovery Plan Component

- **What It Is**

- General guide for:
  - Establishing economic recovery team and establishing responsibilities
  - Identification of economic impacts based on disaster type
  - Identification of secondary or indirect economic impacts
- Recommendations on how to identify and prioritize recovery activities

- **What It Is Not**

- A disaster specific economic recovery guide
- Step-by-step manual for economic recovery

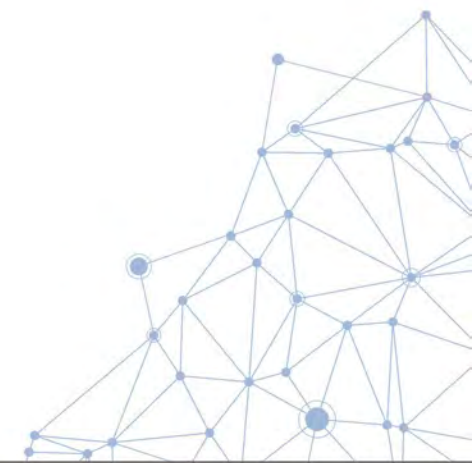






# Community Economic Recovery Plan Key Recommendations

- Ensure planning consistency and incorporation of recovery information
- Define what “economic recovery” means for the county
- Identify county’s roles and responsibilities in recovery
- Identify recovery staff positions
- Develop an Economic Recovery Team and office
- Identify potential impacts based on disaster
- Identify economic assets and vulnerabilities
- Establish process to identify and record economic impacts
- Identify recovery activities





# Community Economic Recovery Plan

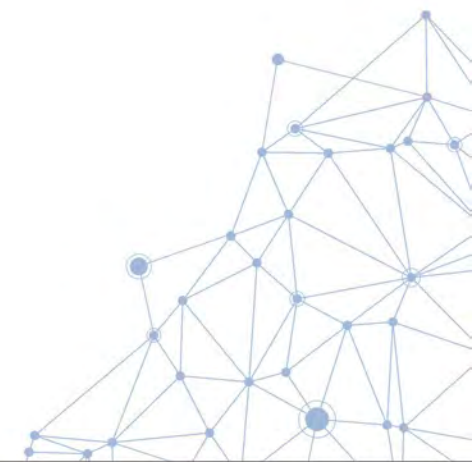
## Recovery Categories

Economic Recovery Categories	Continuum Timeframe		
	Short	Intermediate	Long
Utilities (Power and Water)	X		
Broadband and Internet	X		
Accessibility	X	X	
Customers	X	X	X
Labor Force	X	X	X
Facility Improvements	X	X	
Financial Recovery		X	X
Mitigation Focus		X	X

# Continuity of Operations Tools/Trainings

## Purpose

- Ensure that an organization's essential functions can continue to be carried out after an emergency
- Provide ongoing resources for local governments and businesses to build capacity
- Minimize disruptions to residents and customers
- Reduce time to recover and 'back to normal'

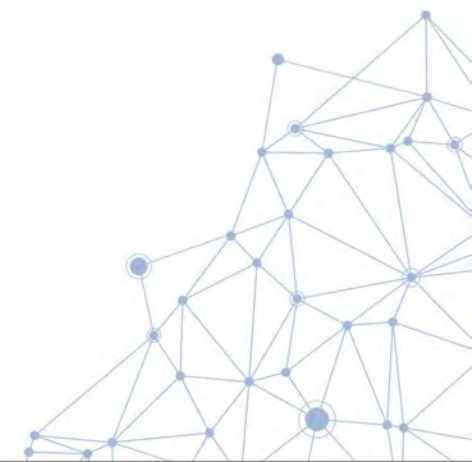




# Continuity of Operations Tools/Trainings

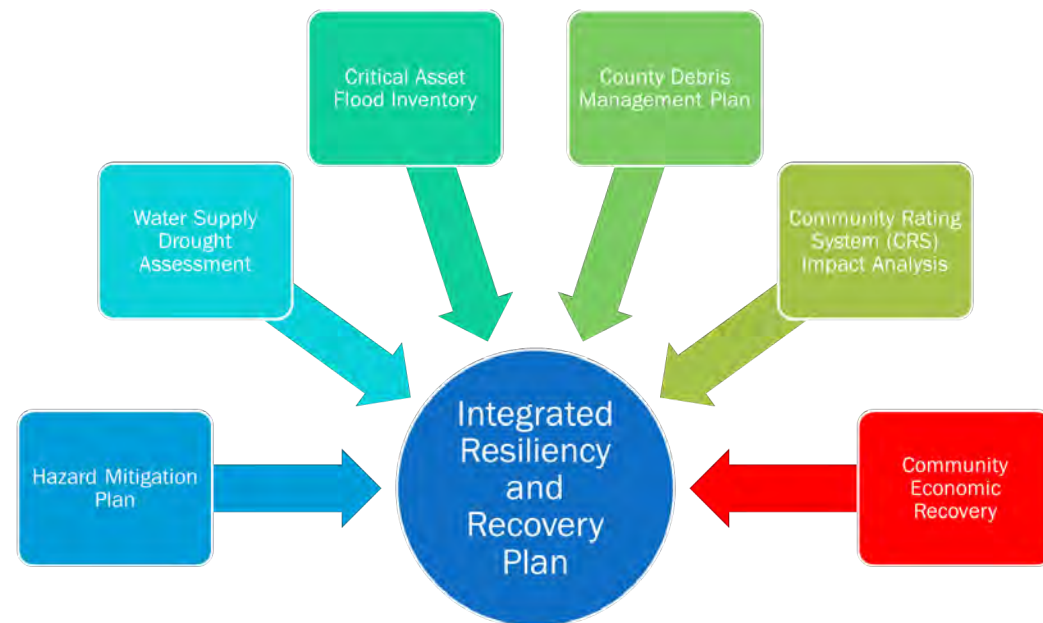
## Key Recommendations

- Establish continuity programs/plans
- Train personnel on continuity principles
- Develop “Go-Kits”
- Identify and implement agreements for alternate locations
- Periodically review and update continuity plans
- Review and update agreements



# Next Steps

- Online, interactive StoryMap to enhance outreach
- Ongoing Public Engagement



This Resiliency and Recovery Plan includes the following components:

- Tompkins County Hazard Mitigation Plan: 2021 Update ([details below](#))
- [Water Supply Drought Resilience Technical Memorandum](#)
- Critical Assets Floodplain Inventory
- [Debris Management Plan](#)
- [Community Rating System Baseline Assessment and Potential Impact Report \(Town of Lansing\)](#)
- [Recommended Floodplain Practices for Tompkins County Communities](#)
- Economic Recovery Planning Resource
- Local Government Continuity of Operations Plan (COOP) Training
  - [Video Presentation](#) (YouTube)
  - [Presentation Slides](#)
  - [Local Government COOP Template](#)
- Business COOP Training
  - [Presentation Slides](#)
  - [Business COOP Template](#)
  - [Video Presentation](#) (YouTube)





# Q & A



# Stay Engaged

- Review plan documents on website:  
<https://www.TompkinsCountyNY.gov/Planning/Climate-Adaptation>
- Have we missed anything? Share your thoughts:
  - E-mail: [Planning@tompkins-co.org](mailto:Planning@tompkins-co.org)
  - Phone: 607-274-5560
- Share this presentation: A recording of today's presentation will be available on website.





## Tompkins County Project Contact

Darby Kiley

Associate Planner

(607) 274-5560 | [dkiley@tom-pkins-co.org](mailto:dkiley@tom-pkins-co.org)

## Tetra Tech Project Contacts

Cynthia Addonizio-Bianco, AICP, PP, CFM, LEED BD+C

(973) 630-8044 | [cynthia.bianco@tetratech.com](mailto:cynthia.bianco@tetratech.com)

Tony Subbio, CEM, CFM, PMP,

(717) 839-5654 | [tony.subbio@tetratech.com](mailto:tony.subbio@tetratech.com)

Erik Genga

267-575-0704 | [erik.genga@tetratech.com](mailto:erik.genga@tetratech.com)



**Thank  
You!**