Before we begin…
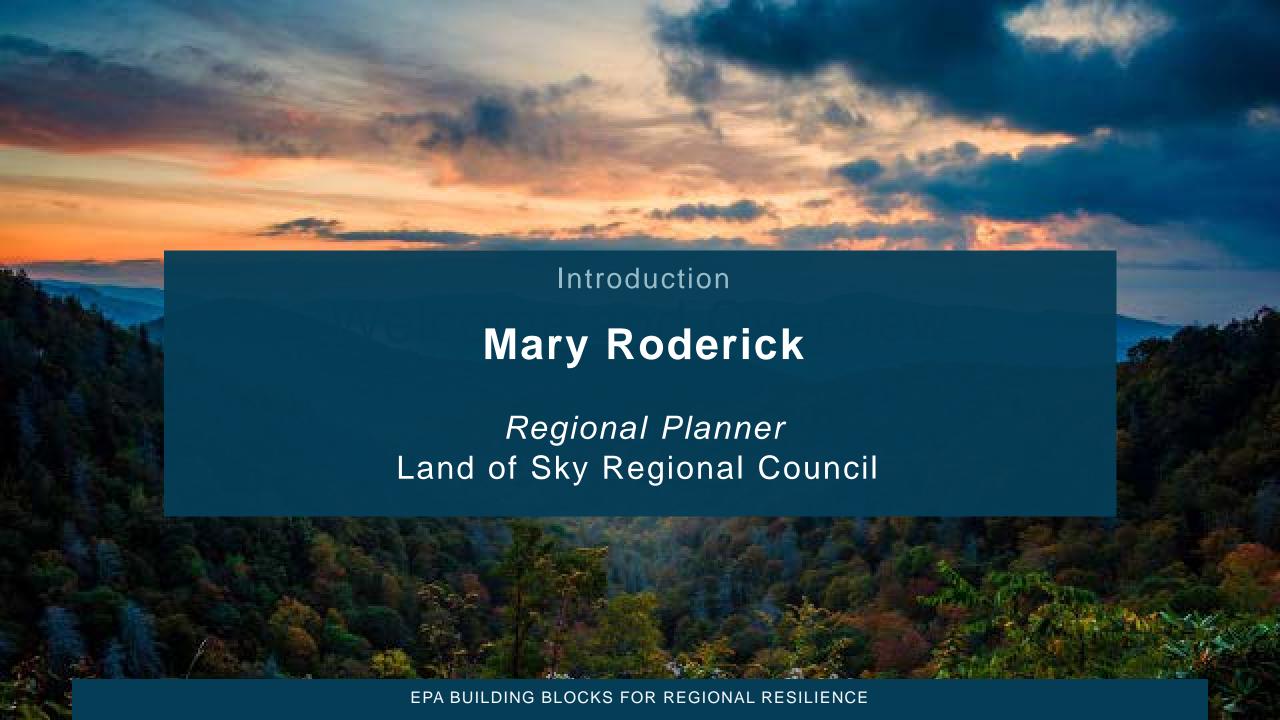
- Welcome! Please take a moment to introduce yourself in the chat function.

- This workshop will be recorded.

- Your microphones are muted to start. This helps us to limit background noise.

- If you have any technical questions, please chat Alisa Goren or email her at **alisa@brsinc.com.**

EPA BUILDING BLOCKS FOR REGIONAL RESILIENCE

WELCOME

Workshop #1

OPENING REMARKS

Erica Anderson

Economic and Community Development Director
Land of Sky Regional Council

Introduction

Mary Roderick

Regional Planner
Land of Sky Regional Council

Timeline

NEMAC+FernLeaf

LAND OF SKY
REGIONAL COUNCIL

2017-2018 Phase 1
Economic Resilience
Exposure Analysis
12 Asset Class/Threat Pairs

2020 Phase 3
Residential & Flooding, Wildfire, Landslide
Vulnerability & Risk Assessment

Next Steps
Advisory Board,
Engagement & Outreach Plan

2019 Phase 2
Commercial & Flooding **Vulnerability
& Risk** Assessment
+ AccelAdapt

2020 BB2R Workshop
Essential Services/Facilities, Critical Infrastructure
Rapid Risk Assessment, Implementation Plans

Key Terms

Exposure   people and assets in harm's way

Vulnerability   susceptibility to harm, determined by potential impact and adaptive capacity

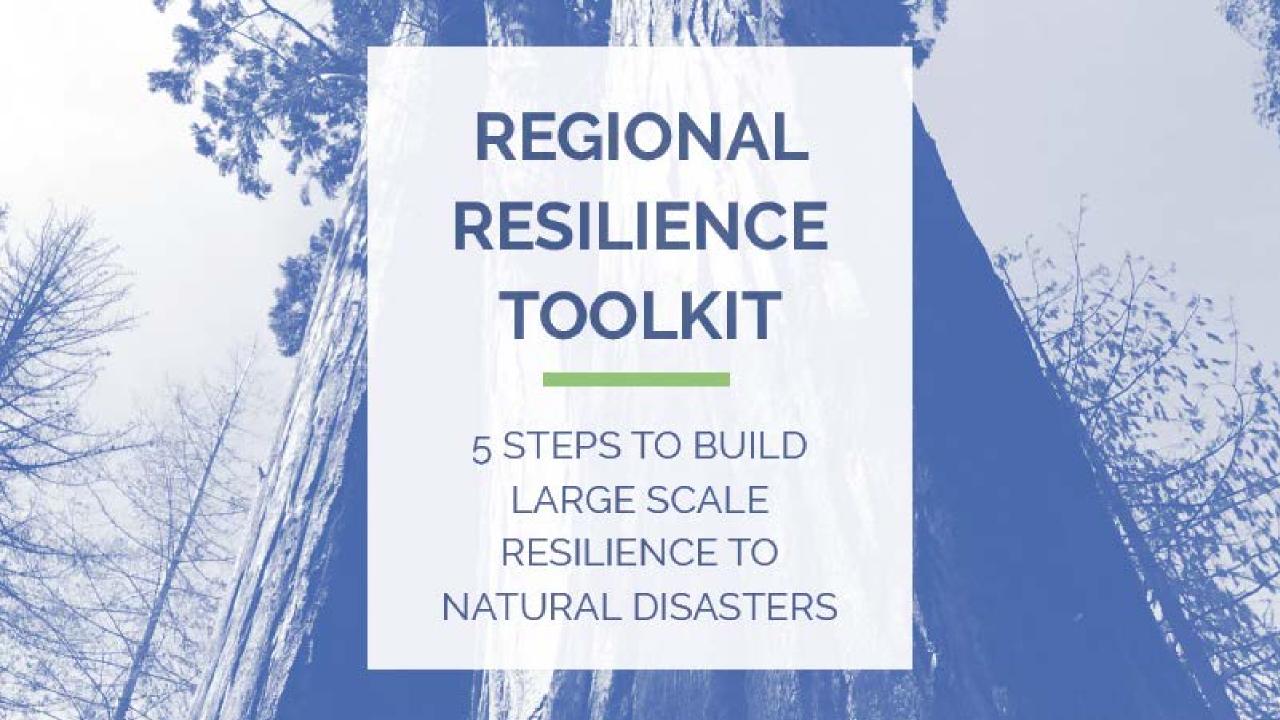**Risk**   the likelihood and consequence of vulnerability

Key Concept

"Resilience is about **building the capacity of the community**, at various scales, to **prepare** for, **withstand, recover,** and **maintain its identity** in the face of actual or anticipated **hazard** occurrences, allowing for continuity of community and quick recovery if a **disaster** occurs."
                    - Regional Resilience Toolkit

Regional Resilience Toolkit

Abby Hall

Senior Advisor on Local and Regional Planning
Office of Community Revitalization
U.S. Environmental Protection Agency

REGIONAL RESILIENCE TOOLKIT

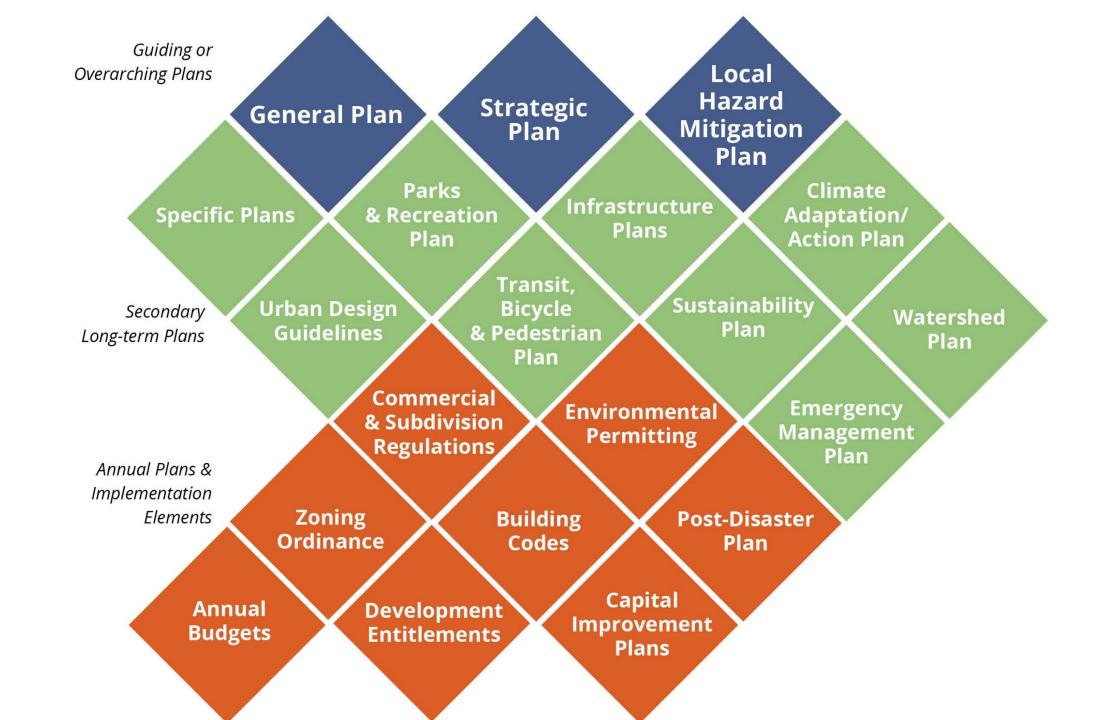5 STEPS TO BUILD LARGE SCALE RESILIENCE TO NATURAL DISASTERS

Quick Overview of the Toolkit

- Regional scale is key. Works across multiple communities over a large geographic region

- Recognizes local authority for implementing plans and spending funds

- Addresses different hazards

- Applies to different assets

- Aligns with different plan requirements
  - FEMA Local Hazard Mitigation Plan requirements

Toolkit is online at
www.epa.gov/smartgrowth/regional-resilience-toolkit

Guiding or Overarching Plans

- General Plan
- Strategic Plan
- Local Hazard Mitigation Plan

Secondary Long-term Plans

- Specific Plans
- Parks & Recreation Plan
- Infrastructure Plans
- Climate Adaptation/Action Plan
- Urban Design Guidelines
- Transit, Bicycle & Pedestrian Plan
- Sustainability Plan
- Watershed Plan

Annual Plans & Implementation Elements

- Commercial & Subdivision Regulations
- Environmental Permitting
- Emergency Management Plan
- Zoning Ordinance
- Building Codes
- Post-Disaster Plan
- Annual Budgets
- Development Entitlements
- Capital Improvement Plans

Goals of the Toolkit

- Emphasize the need for action, not process, to move the needle on resilience-building (including a whole step on funding).

- Integrate various plan requirements or efforts into a single process to bring partners to the same table and create a common action plan.

- Coordinates local action to amplify disaster resilience within a regional context.

ENGAGE
1

ASSESS
2

ACT
3

FUND
4

MEASURE
5

Agenda and Expected Outcomes
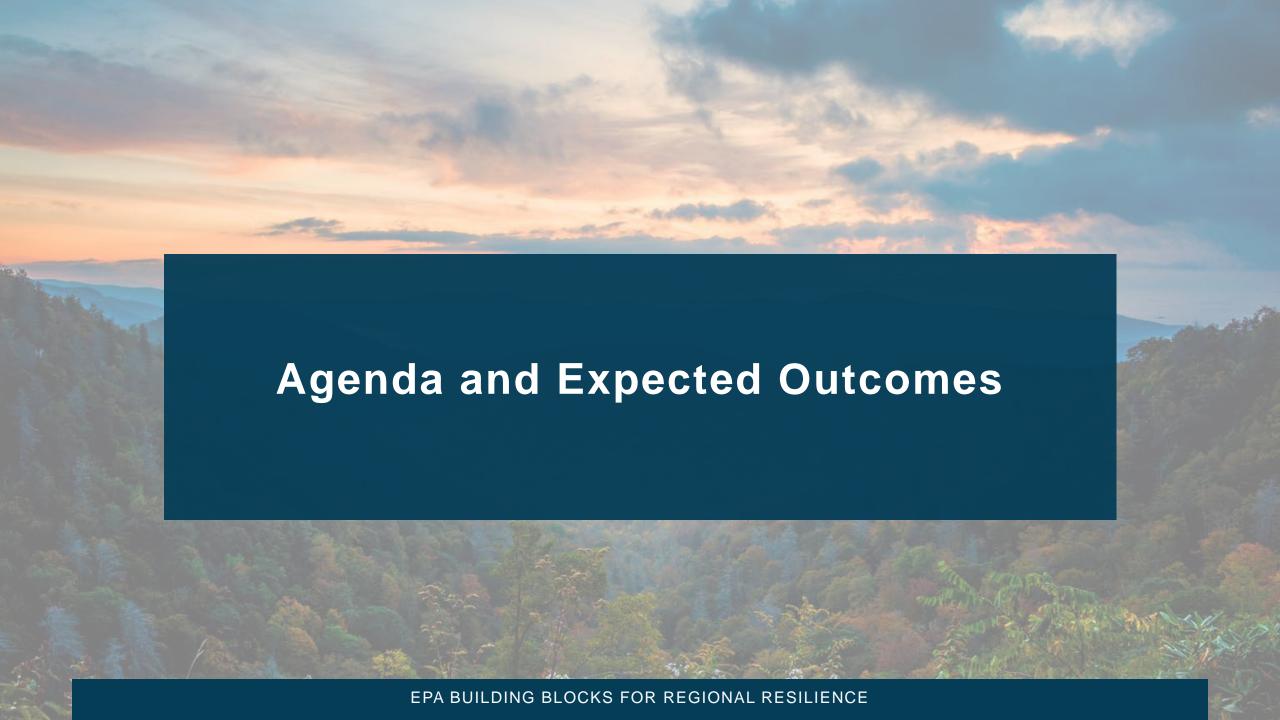
Workshop Series Agenda

- **Workshop #1**
  - Welcome, Overview, Opening Remarks
  - Intro to EPA's Regional Resilience Toolkit
  - Risks to Our Region
  - What Does Resilience Look Like?
  - Success Stories from Our Region
  - Wrap Up, Homework and Next Steps
- **Workshop #2**
  - Vulnerability Assessment/Scoping
  - Small Group Activity - Rapid Vulnerability Assessment
  - Report Out on Vulnerability Assessment
  - Wrap Up, Homework and Next Steps
- **Workshop #3**
  - Report Out on Problem Statement
  - Small Group Activity – Implementing the Plan
  - Report Out on Implementing the Plan
  - Making the Case for Resilience
  - Final Wrap Up and Next Steps

Workshop Agenda

TOPICS FOR TODAY

- Welcome and Overview

- Opening Remarks by Erica Anderson, LOSRC

- Risks to the Region - FernLeaf

- What Does Resilience Look Like in Land of Sky Region?
    - Desired Outcomes
    - Review of Pre-workshop Presentation

- Success Stories from the Region: Asheville and Buncombe/Madison Regional HMP

- Wrap-up and Next Steps

EXPECTED OUTCOMES FOR WORKSHOPS

Shared Understanding

A shared understanding of regional, local and parcel level exposure, vulnerability and risk for three major hazards: flooding, wildfire and landslide.

Asset Prioritization

A regional inventory of essential services, critical facilities and infrastructure that need to be prioritized for resilience-building investments.

Actions

Specific recommendations on tangible mitigation and adaptation actions the region can take in both the near and long-term for 5 prioritized assets.

Vulnerable Populations

Insight into specific risks these pose for vulnerable populations

AccelAdapt

Understanding value of AccelAdapt

Implementation Tools

Identification of key planning mechanisms, funding sources and partners to implement specific priority adaptation/resilience objectives.

EPA BUILDING BLOCKS FOR REGIONAL RESILIENCE

Chat Question:

If you could go on vacation like it's 2019, where would you be travelling?

Enter your answer into the chat box.

RISKS TO THE REGION

Jim Fox and Matt Hutchins

NEMAC+FernLeaf

Risks to the Region Using AccelAdapt

Building Blocks Workshop Presentation

September 16, 2020

Regional Resilience Assessment Timeline

Phase 1 Kickoff

Core team assembled

Oct 2017

June 2018

Phase 1 Complete

Exposure to initial asset-threat pairs

Phase 2 Kickoff

Expanded exposure, AccelAdapt tool

June 2019

Nov 2019

Phase 2 Complete

Vulnerability and Risk Assessment for asset-threat pair

Phase 3 Underway

Expanded Assessment AccelAdapt tool

Nov 2020

The challenge our cities and regions face

URBAN GROWTH

BILLION DOLLAR DISASTERS

RISKIER INVESTMENTS

-$ SHORTFALL (FEDERAL)

-$ SHORTFALL (INSURERS)

What is resilience?

Less Resilient

More Resilient

Tipping Point

M.E. Hynes, B. Ross and CARRI (2008); White et al. (2015)

Steps to Resilience

Step One Goal:

Understand how climate change and variability might threaten things you value

Residents & Residential Property
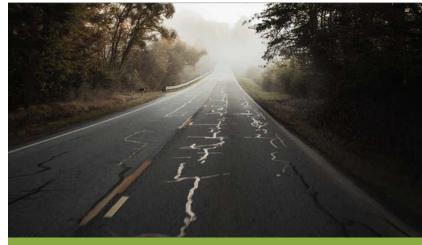
Commercial Property

Government-Owned and Critical Facilities
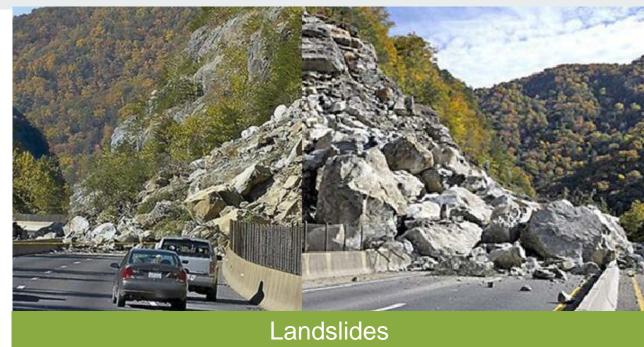
Natural Property

Roads & mobility

Flooding

Landslides

Wildfire

Population Growth and Development

Commuting Miles and Time

Affordable Housing

Evolving Energy Reality

Heavy Precipitation Events

Drought

Temperature Variability

Guiding Questions

1 Will any threats impact things I care about (assets)?

2 What are our key assets, and how do we characterize them?

3 How can we measure assets in a data-informed process?

Climate Stressors

Non-Climate Stressors

Threats & Hazards

Impact

Assets
(People and Infrastructure)

Threats

Flooding (FEMA)

Landslides (NCDEQ)

Wildfire (SGSF)
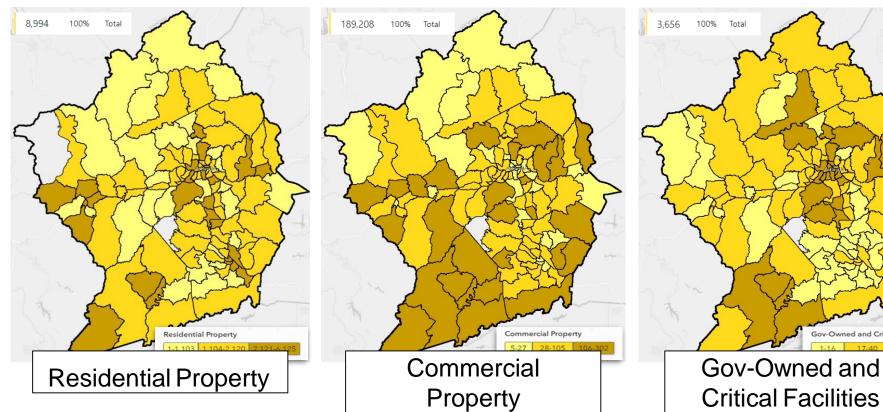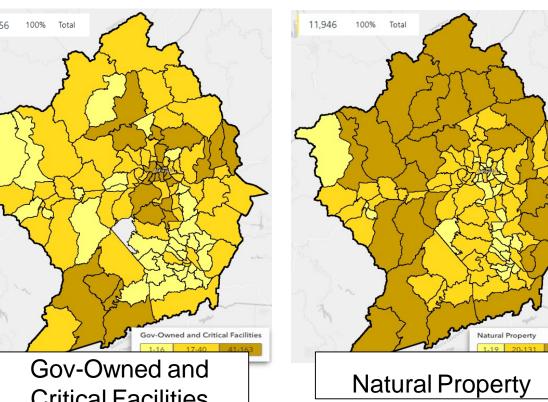
Assets

Based on County parcel data throughout the region

Residential Property

Commercial Property

Gov-Owned and Critical Facilities

Natural Property

Poll Question:

Which additional hazard would you prioritize for resilience planning?

Please select your top three.

- Dam and levee failure
- Drought
- Hazardous materials incident
- Heat waves/extreme heat
- Severe thunderstorms
- Tornado
- Winter storms
- Other (Enter into chat box)

Step Two Goal:

Decide if you can accept the vulnerability and risk to your assets

Same exposure—different vulnerability

Assessment Factors
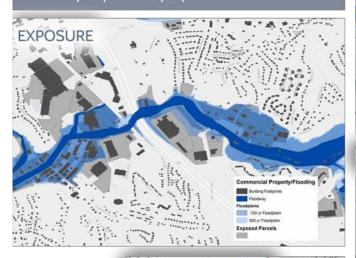
Flooding Example:

- ✓ Criticality of buildings in floodplain
- ✓ Floodplain development BFE requirements
- ✓ Likelihood of flooding (e.g., 100-year vs. 500-year flood risk)
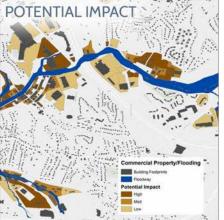
AccelAdapt™
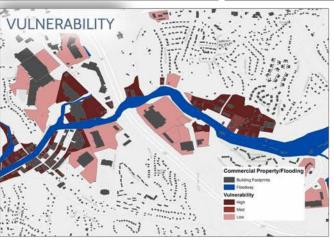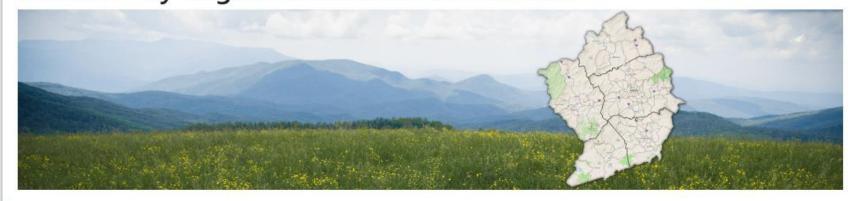
Overview with region-wide analytics

Land Of Sky Region Resilience Assessment
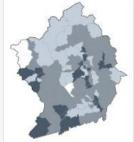
Most Affected Asset / Threat Pairs

Commercial Property & FEMA Floodplain Flooding	Residential Property & FEMA Floodplain Flooding	Gov-Owned and Critical Facilities & FEMA Floodplain Flooding	Commercial Property & Wildfire	Residential Property & Wildfire	Gov-Owned and Critical Facilities & Landslide
1,224	**13,432**	**706**	**7,592**	**182,138**	**663**
13.61% $888.8M	7.1% $4.8B	19.31% $1.49B	84.41% $8.06B	96.26% $44.11B	18.13% $1.04B
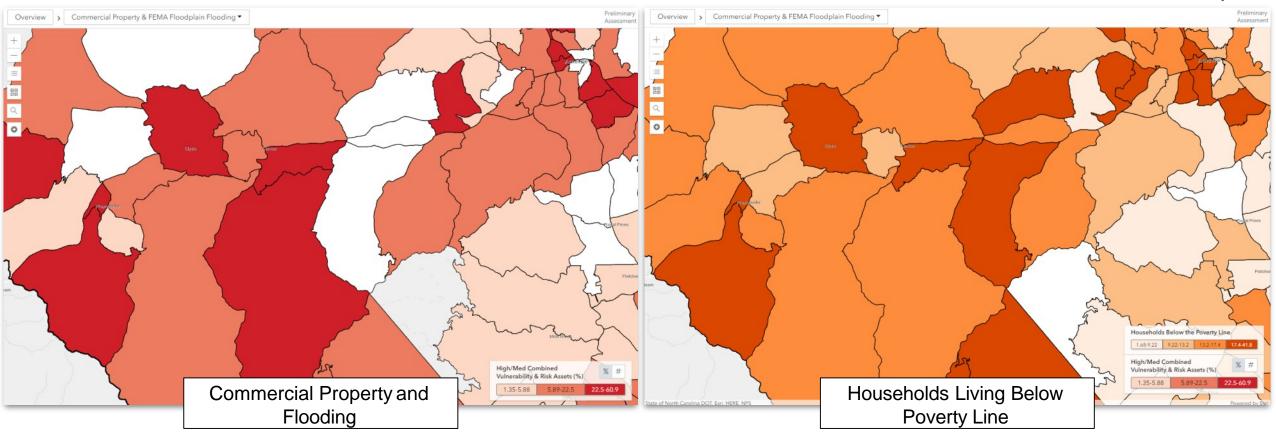
AccelAdapt

Neighborhood-level summaries and socioeconomic metrics

Commercial Property and Flooding

Households Living Below Poverty Line

AccelAdapt

Parcel-level information
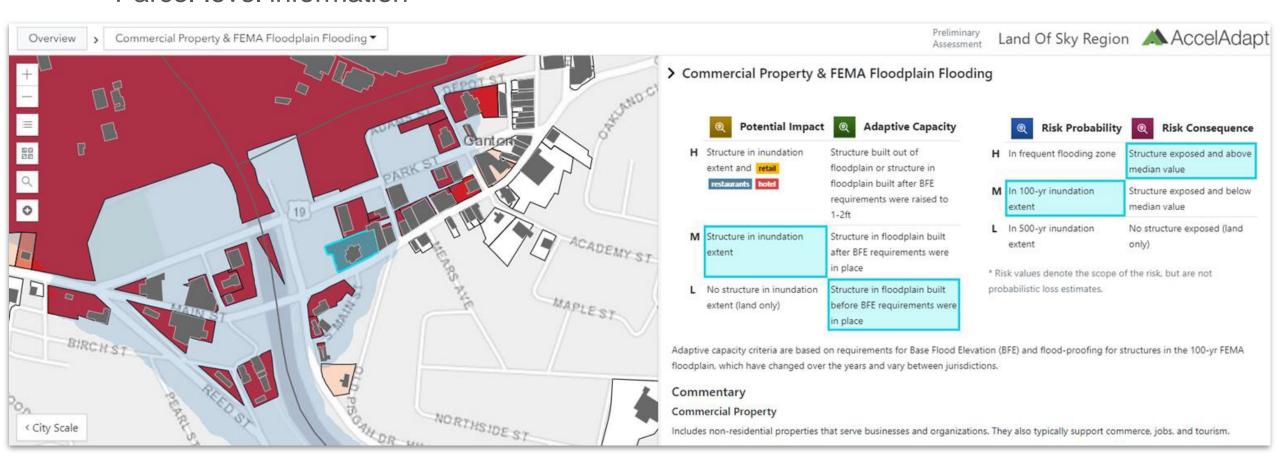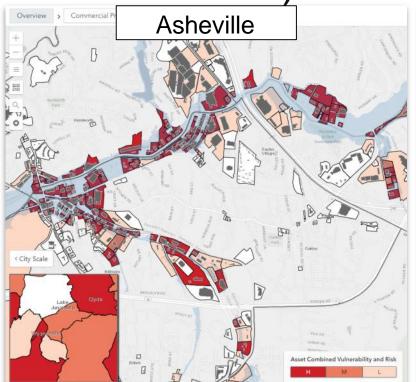
Table Summaries (Regional, County, Sub-County)
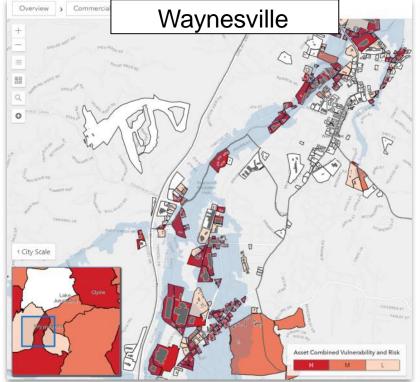
Theme/Asset	Total Asset	Flooding	Wildfire	Landslides
Property				
Commercial	8,999	1,360 (15%)	7,598 (84%)	915 (10%)
Residential	189,442	5,519 (3%)	7,878 (4%)	5,596 (3%)
Gov-owned & Critical Facilities	3,661	710 (19%)	3,262 (89%)	650 (18%)
Natural	11,985	2,255 (19%)	11,298 (94%)	2,926 (24%)
People & Socioeconomics				
Overall SVI (CDC)	Sub-regional areas with the highest overall social vulnerability include Brevard, Waynesville/Clyde, Asheville, Leicester, Hot Springs, Swannanoa/Black Mountain, Hendersonville/Flat Rock, and Northeast Henderson/Fruitland areas			
Public Housing	102	6 (6%)	5 (5%)	3 (3%)

Swannanoa, Black Mountain Area Report

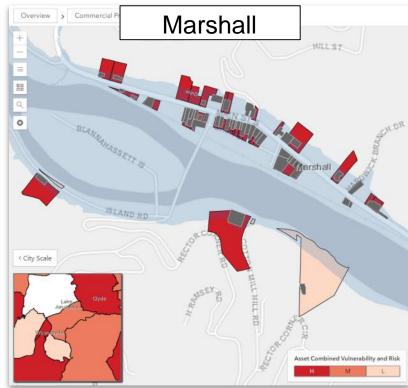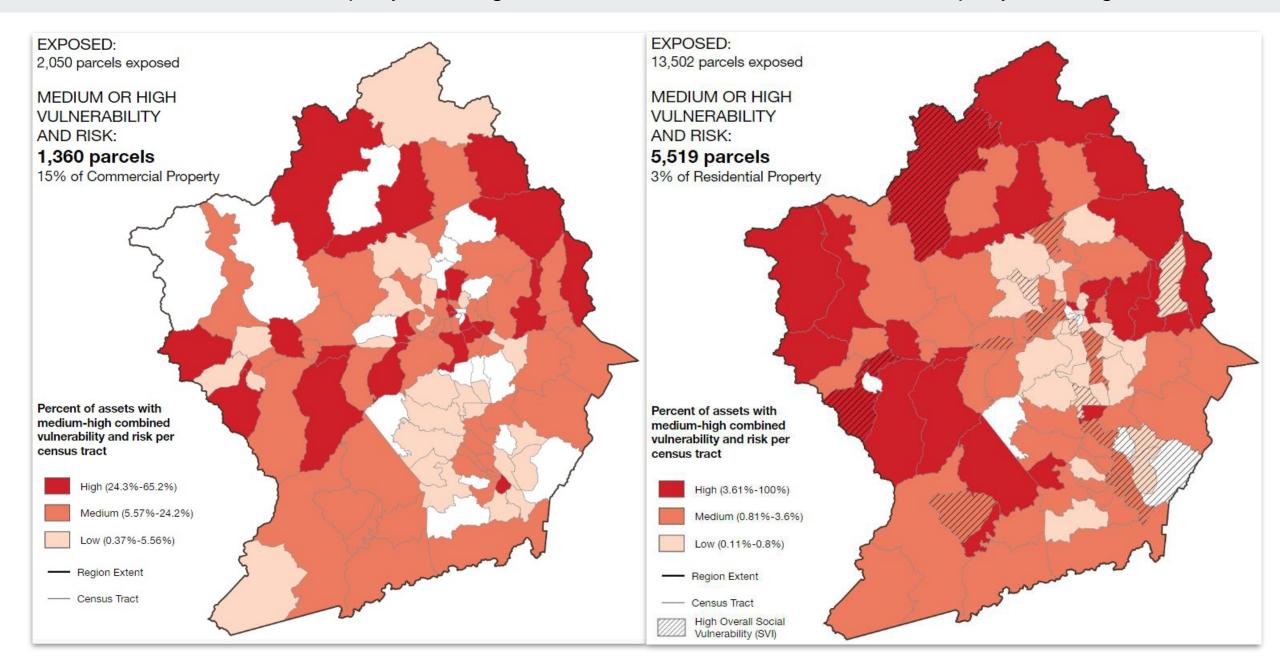| Swannanoa, Black Mountain Theme / Asset	Asset Total [% of region]	FEMA Floodplain Flooding	Wildfire	Landslide
Property & Public Services				
Commercial	433 [5%]	83 (19%)	424 (98%)	60 (14%)
Residential	8,323 [4%]	330 (4%)	112 (1%)	795 (10%)
Gov-owned & Critical Facilities	295 [8%]	77 (26%)	294 (100%)	116 (39%)
Natural Property	430 [4%]	57 (13%)	383 (89%)	278 (65%)

Key Findings: Flooding

1. Certain commercial corridors in the region are more vulnerable than others.
    a. Biltmore Village/Tunnel Rd and Downtown Waynesville account for 26% of the region's overall vulnerability to commercial property.
2. Many smaller communities have high proportions of vulnerable assets
    a. Example: Marshall, Hot Springs
3. Some residential areas and communities are disproportionately vulnerable.
    a. Haywood County has the highest total number (2,143) and percentage (8%) of properties that are highly vulnerable.
    b. 8 of the 26 most vulnerable census tract areas coincide with the highest overall social vulnerability.

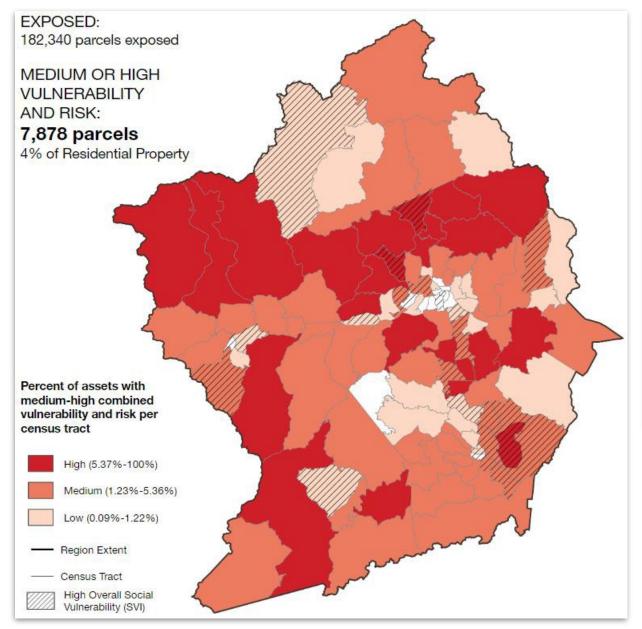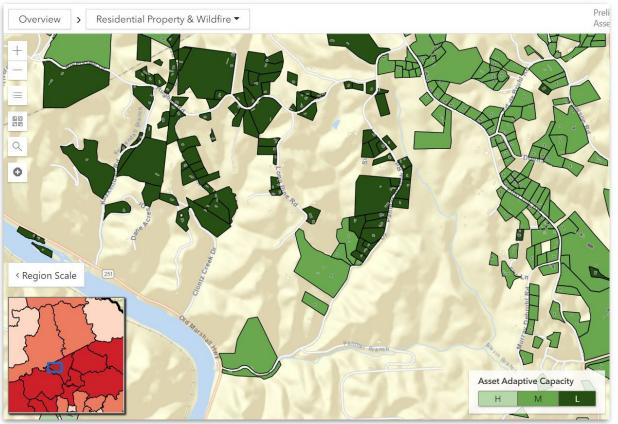# Key Findings: Flooding (Example Commercial Corridors)

Asheville

Waynesville

Marshall

Commercial Property/Flooding

Residential Property/Flooding

Commercial Property/Flooding

EXPOSED:
2,050 parcels exposed

MEDIUM OR HIGH
VULNERABILITY
AND RISK:
1,360 parcels
15% of Commercial Property

Percent of assets with
medium-high combined
vulnerability and risk per
census tract

High (24.3%-65.2%)

Medium (5.57%-24.2%)

Low (0.37%-5.56%)

Region Extent

Census Tract

Residential Property/Flooding

EXPOSED:
13,502 parcels exposed

MEDIUM OR HIGH
VULNERABILITY
AND RISK:
5,519 parcels
3% of Residential Property

Percent of assets with
medium-high combined
vulnerability and risk per
census tract

High (3.61%-100%)

Medium (0.81%-3.6%)

Low (0.11%-0.8%)

Region Extent

Census Tract

High Overall Social
Vulnerability (SVI)

Key Findings: Wildfire

1. About 4% of all residential properties in the region are highly vulnerable and at risk to wildfire. Percentages vulnerable and at risk are generally higher in areas of the region with more wildland urban interface.
2. About 4% of the residential properties exposed to wildfire are outside of an 8-minute emergency response drive time from the nearest fire station.
3. Buncombe County has the highest percentage of residential properties vulnerable and at risk to wildfire.
4. A few areas with the highest vulnerability and risk to wildfire have high overall social vulnerability. Most of these areas are in the North Buncombe/Leicester and Northeast Henderson/Fruitland areas.

Residential Property/Wildfire

EXPOSED:
182,340 parcels exposed

MEDIUM OR HIGH
VULNERABILITY
AND RISK:
7,878 parcels
4% of Residential Property

Percent of assets with
medium-high combined
vulnerability and risk per
census tract

High (5.37%-100%)

Medium (1.23%-5.36%)

Low (0.09%-1.22%)

Region Extent

Census Tract

High Overall Social
Vulnerability (SVI)

Overview > Residential Property & Wildfire ▾

Region Scale

Asset Adaptive Capacity
H   M   L

Properties outside 5 and 8-minute response times

Key Findings: Landslides

1. About 4% of residential properties across both Buncombe and Henderson counties are als[o]
   at risk to landslides.
2. Of the residential properties exposed to landslides:
   a. 26% were constructed before steep slope requirements were in place and have structures within debris flow
   b. 67% were constructed before steep slope ordinances in place but have structures outside of potential
      debris flow pathways.
3. A relatively high percentage of residential properties in the Swannanoa/Black Mountain are[a]
   medium to high vulnerability and risk to landslides.
   Other areas, including Southeast and Northeast Buncombe, Northeast Henderson, and Lei
   have high percentages of vulnerability and risk.
4. Fewer areas most vulnerable and at risk to landslides coincide with high social vulnerability

EXPOSED:
17,242 parcels exposed

MEDIUM OR HIGH
VULNERABILITY
AND RISK:
5,596 parcels
4% of Residential Property

Percent of assets with
medium-high combined
vulnerability and risk per
census tract

- High (5.91%-23.4%)
- Medium (1.14%-5.9%)
- Low (0.07%-1.13%)
- Region Extent
- Census Tract
- High Overall Social Vulnerability (SVI)

Overview > Residential Property & Landslide ▼

Asset Adaptive Capacity H M L

Properties with buildings constructed before steep slope ordinance (dark green)

Informing Regional Resilience

1. The assessments highlight the importance of considering multiple threats
2. A regional approach is important because people rely on assets and services across jurisdictions
   a. An impact to one community can be an impact to the entire region
3. Regional partnerships are critical for building resilience. Many efforts and activities are already doing this:
   a. Regional Hazard Mitigation Plan
   b. Emergency Management
4. Building resilience involves a holistic approach to planning*
   a. Governance
   b. Infrastructure
   c. Land Use
   d. Outreach
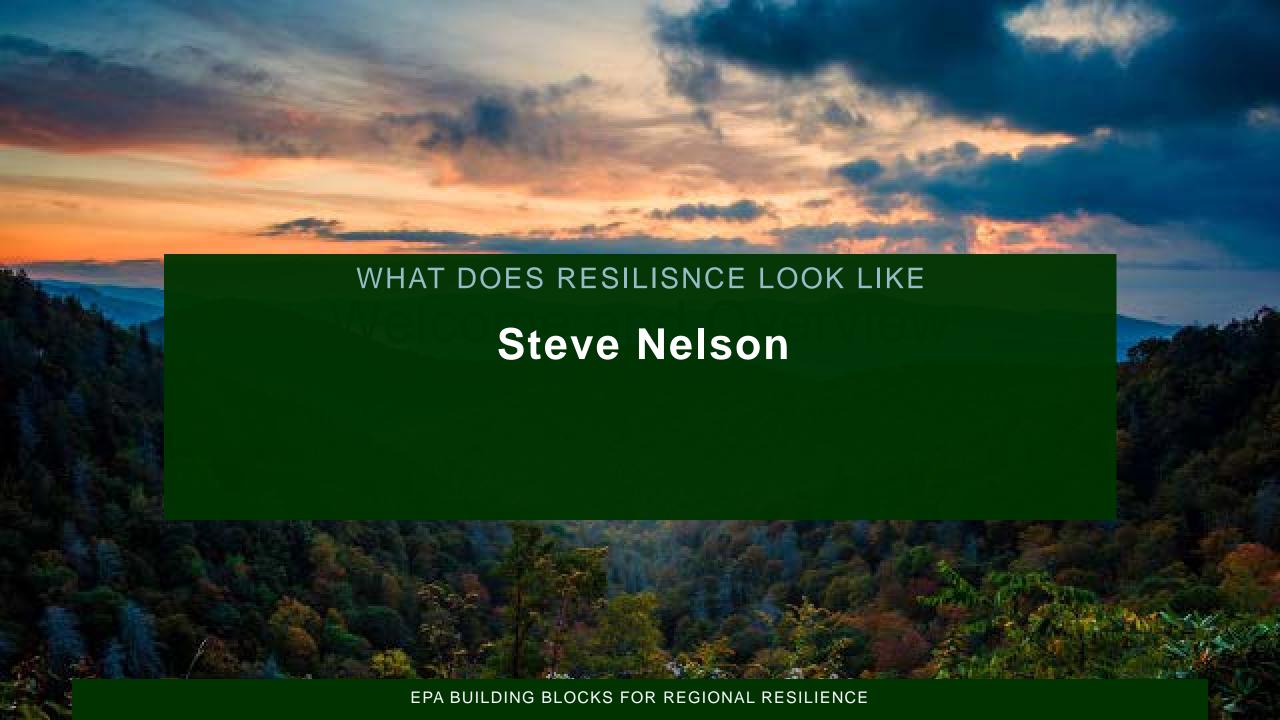
1. Explore Threats
2. Assess Vulnerability & Risks
3. Investigate Options
4. Prioritize & Plan
5. Take Action

THANK YOU!

Matt Hutchins (mhutchins@nemacfernleaf.com)
Jim Fox (jfox@nemacfernleaf.edu)

WHAT DOES RESILISNCE LOOK LIKE

Steve Nelson

EPA BUILDING BLOCKS FOR REGIONAL RESILIENCE
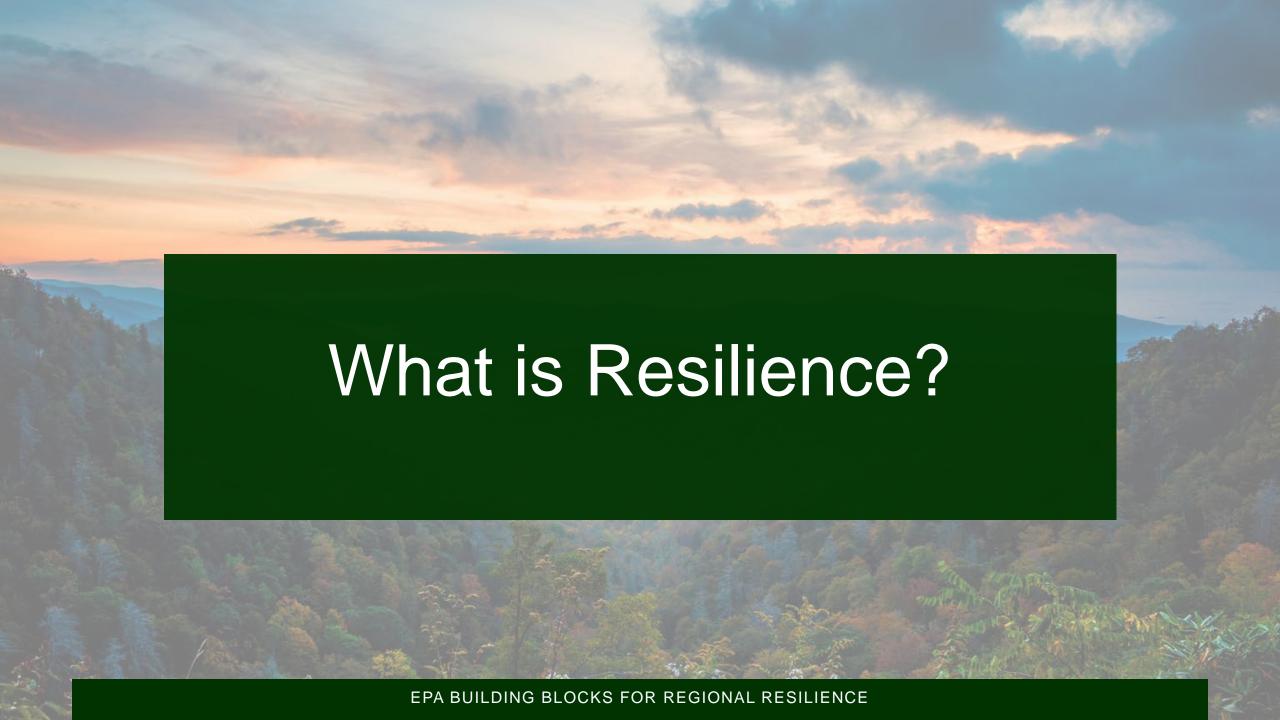
Overview of Homework

- Workshop Goals

- What is Resilience?

- Policy Context

- Working with Partners

- Outcomes

Workshop Goals

1. Reduce vulnerability and risk.

2. Continue development of the regional resilience assessment (RRA).

3. Determine clear steps toward region-wide action to reduce risks from flooding, wildfires and landslides for priority assets.

4. Build resilience into current and future regional plans, with an emphasis on economic development and transportation assets.

5. Be proactive and approach resiliency through a positive lens of opportunities.

What is Resilience?

Resilience involves three considerations:

Building resilience to **current climate** variability or past hazard events

Building resilience to recently observed **changing trends** in climate threats and non-climate stressors

Building resilience to **future** projected changes in climate threats and non-climate stressors

Land of Sky Region
Economic Resilience Exposure Analysis
Phase I Report

June 2018

LAND OF SKY
REGIONAL COUNCIL

ECONOMIC
DEVELOPMENT
COALITION
Asheville-Buncombe County

UNC ASHEVILLE
NEMAC
NATIONAL ENVIRONMENTAL
MODELING AND ANALYSIS CENTER

ECONOMIC RESILIENCE EXPOSURE ANALYSIS PHASE I REPORT:

Resilience is defined as the capacity of a community, business, or natural system to prevent, withstand, respond to, and recover from a disruption.

STOCKHOLM RESILIENCE CENTRE:

Resilience is "the capacity of a system….to deal with change and continue to develop. It is about how humans and nature can use shocks and disturbances like a financial crisis or natural hazards to spur renewal and innovative thinking."

NATURAL HAZARD RESILIENCE GUIDEBOOK:

Resilience is being able to "bounce forward, not back."

Policy Context

State Policy Context

State Policy Context

Executive Order 80

- NC Climate Risk Assessment and Resilience Plan
- NC Climate Change Intergency Council

Enhanced Hazard Mitigation Plan

NC Office of Recovery and Resiliency (NCORR)

NC Chief Resilience Officer

ChrisRiefPhotography.com

North Carolina Climate Risk Assessment and Resilience Plan

Principles

- Act quickly and decisively to reduce the most harmful impacts of climate change—flooding, drought, landslides, and wildfires

- Act thoughtfully and collaboratively to develop equitable solutions

- Invest in safe, affordable, and connected communities

- Strengthen regional economies

- Support healthy communities, local identity, and recreational access to nature

- Implement Best Practices
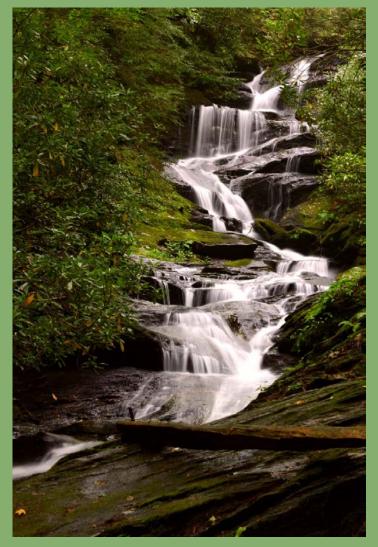
North Carolina Climate Change Interagency Council

- Recommend goals and actions to meaningfully address climate change
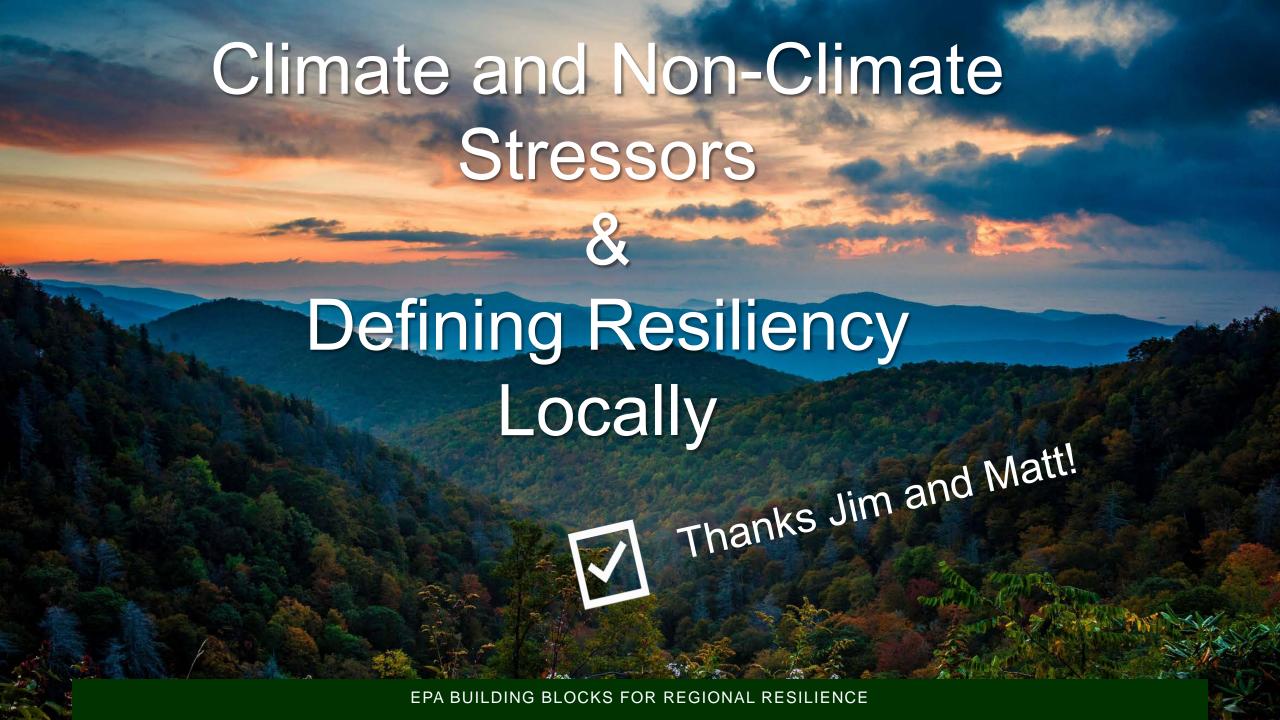
- Develop, implement, and evaluate programs and activities that support statewide climate mitigation and adaptation practices

Regional and Local Policy Context

- South Mountains HMP
- Smoky Mountains Regional HMP
- LOSRC CEDS
- French Broad River MPO MTP
- Asheville Resilience Assessment
- Buncombe /Madison Regional HMP

Local and Regional Plans

Climate and Non-Climate Stressors
&
Defining Resiliency Locally

Thanks Jim and Matt!
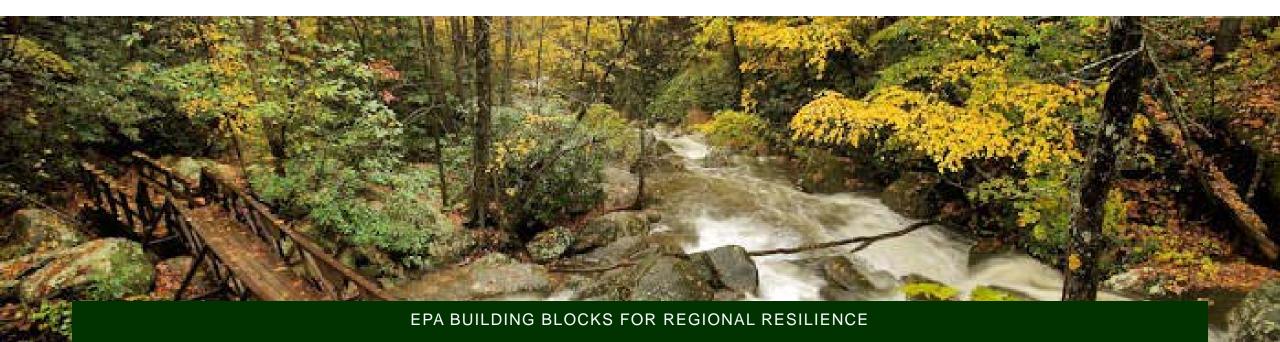
Chat Question:

What plan, policy or specific project that you are working on now relates to resilience?

Enter your answer into the chat box.

Working with Partners

Working with Partners

PARTNERSHIPS HAPPEN AT MANY LEVELS

- Within an agency/organization
- With decision makers, in and out of the agency
- With involved stakeholders
- With the community as a whole

THROUGHOUT THIS PROCESS, PARTICIPANTS SHOULD

- Identify these different groups of people
- Understand their role in the process
- Prioritize the engagement needed for a successful process

Non-Governmental Groups

Business Groups

Community-Based Organizations

City and County Departments
- Emergency Services
- Planning
- Public Works
- Transportation and more...

Community Members

Health & Safety

Local & Regional Agencies

Working with Partners

IDENTIFYING STAKEHOLDERS FOR LAND OF SKY REGION, NC

Broad Community Engagement

Community-wide: workshops, open houses, online engagement, city-wide communications, website, mailings, text campaigns, and general outreach.

Targeted Community Outreach

Go to the community, including underrepresented communities: farmer's markets, local events, coffees shops, faith-based, school, & sports events, etc.

TARGETED STAKEHOLDERS

Project Team

Staff, consultants, and other technical experts who will participate on a regular basis.

Leadership & Decision-Makers

Engage decision-makers at all government levels to ensure buy-in and support of plan to implement.

Special Interest Groups

Involve cohorts of special interest groups through small meetings to better understand needs and insights.

Underrepresented Groups

Use focused efforts to reach out to and listen to under-represented audiences that are particularly vulnerable.

Advisory Group

A committed group of community and technical stake-holders who will work on the project for the duration.

Working with Partners

WHO

Identify stakeholders who should be involved, including the broader public and groups who are often underrepresented and hard to reach. Engage a broad range of stakeholders with the necessary expertise, values, and viewpoints at each stage of assessment and implementation.

WHAT

Identify what each stakeholder or stakeholder group's role is in the resilience building process, in implementing strategies, and within the community.
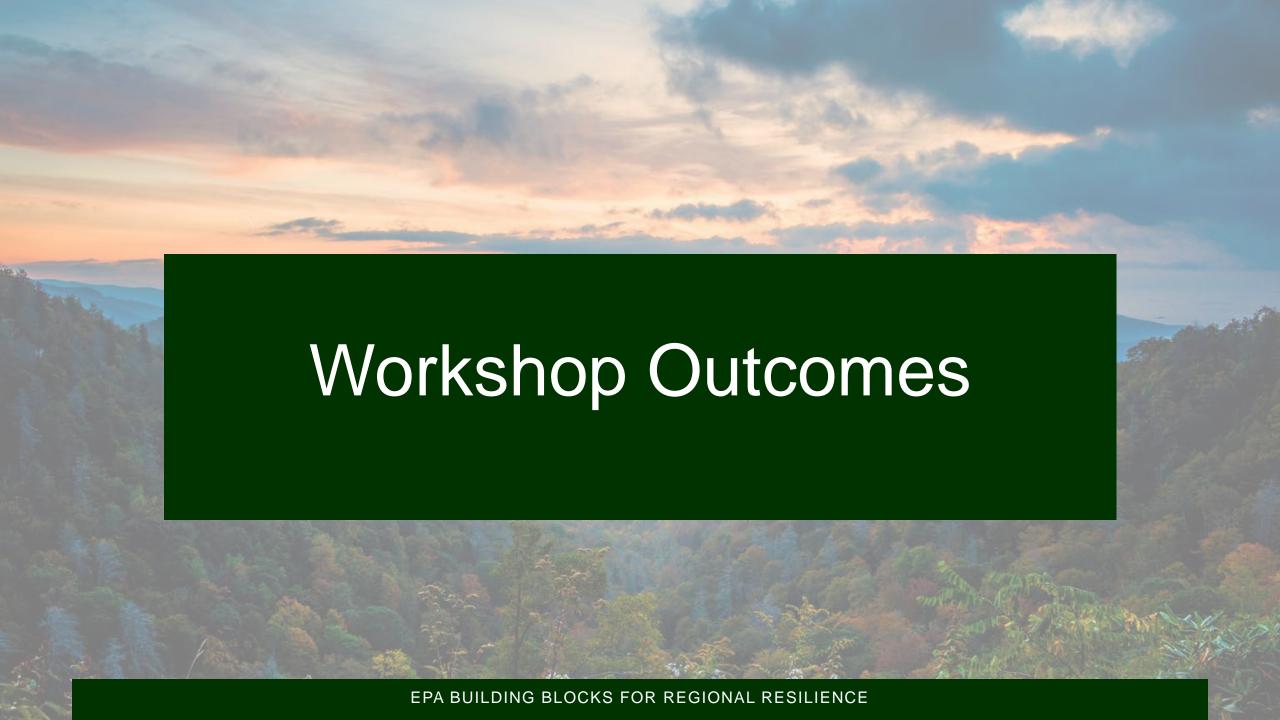
WHEN

For identified stakeholders, determine the level of input and outreach that is appropriate and necessary based on their desired level of engagement and planning role. Align stakeholder expectations with the planning requirements, budget and resources available.

HOW

Finally, determine the best approaches to engaging and reaching the stake- holders. Certain processes, and certain stakeholders may prefer a traditional formal outreach approach while others prefer digital tools, videos, short interactions, or other mechanisms.

Workshop Outcomes

EXPECTED OUTCOMES FOR WORKSHOPS

Shared Understanding

A shared understanding of regional, local and parcel level exposure, vulnerability and risk for three major hazards: flooding, wildfire and landslide.

Asset Prioritization

A regional inventory of essential services, critical facilities and infrastructure that need to be prioritized for resilience-building investments.

Actions

Specific recommendations on tangible mitigation and adaptation actions the region can take in both the near and long-term for 5 prioritized assets.

Vulnerable Populations

Insight into specific risks these pose for vulnerable populations

AccelAdapt

Understanding value of AccelAdapt

Implementation Tools

Identification of key planning mechanisms, funding sources and partners to implement specific priority adaptation/resilience objectives.

SUCCESS STORIES FROM THE REGION

Amber Weaver, City of Asheville

Nathan Slaughter, ESP Associates

Land of Sky Building Blocks Workshop

Success Stories from the Region

September 23, 2020

Amber Weaver
Sustainability Officer
Office of Sustainability

THE **CITY** OF **ASHEVILLE**
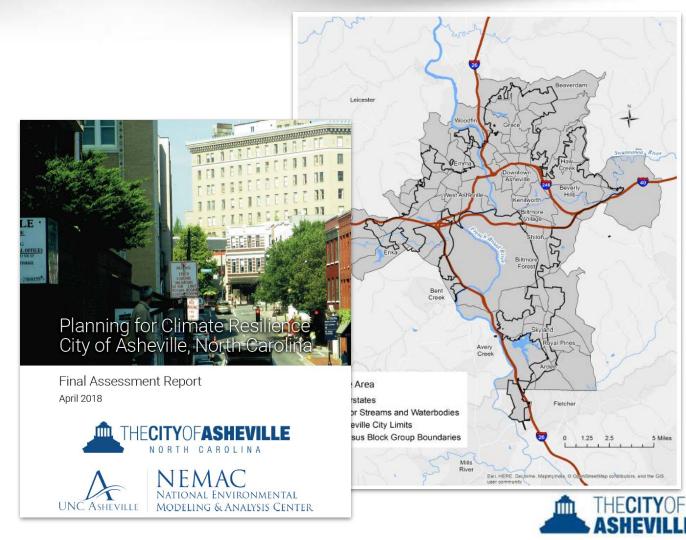
Planning for Climate Resilience
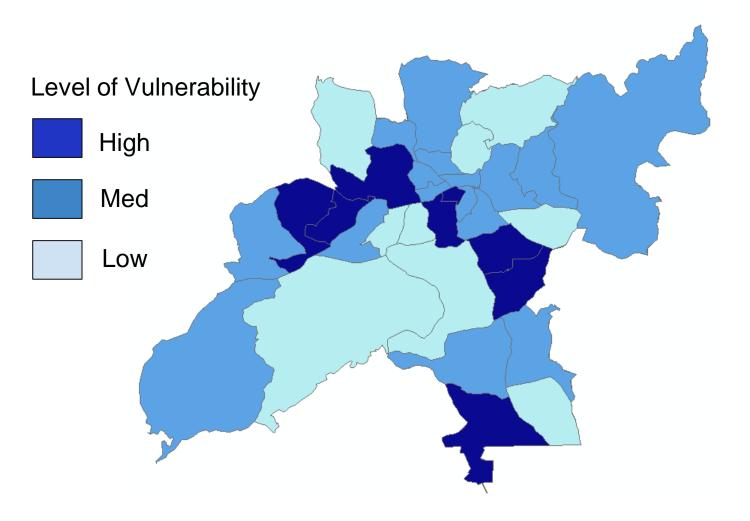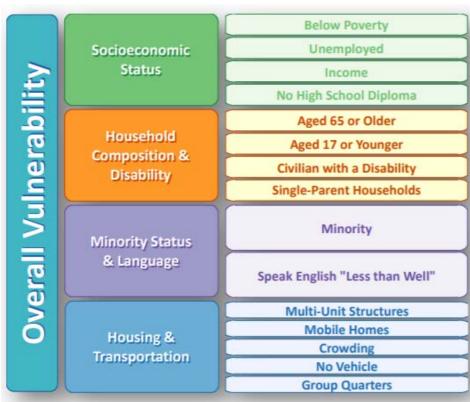
Social Vulnerability by Census Tract

Level of Vulnerability

■ High
■ Med
□ Low

Overall Vulnerability

Socioeconomic Status
- Below Poverty
- Unemployed
- Income
- No High School Diploma

Household Composition & Disability
- Aged 65 or Older
- Aged 17 or Younger
- Civilian with a Disability
- Single-Parent Households

Minority Status & Language
- Minority
- Speak English "Less than Well"

Housing & Transportation
- Multi-Unit Structures
- Mobile Homes
- Crowding
- No Vehicle
- Group Quarters

https://svi.cdc.gov/Documents/Data/2016_SVI_Data/SVI2016Documentation.pdf
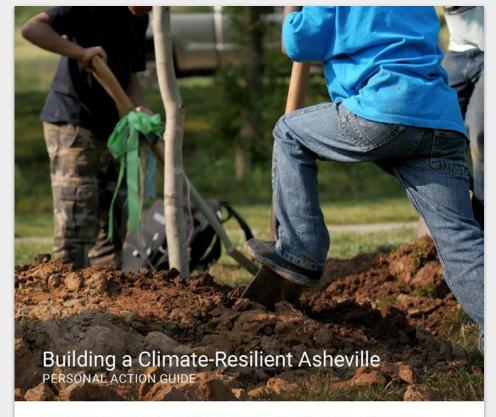
Two Areas of Focus for Public Communication

Awareness

Preparedness

- Raise level of understanding about threats in the community
    - Community-wide (i.e., key services)
    - Personal (where I live, where I work, how I get between the two)
- Enable personal responsibility and community cohesion

- Equipping people that may be affected with tools to minimize losses
- Minimize exposure
- Strategies and actions that build adaptive capacity

Climate Resilience Resource Guide

Building a Climate-Resilient Asheville
PERSONAL ACTION GUIDE

Asheville has a history of climate-related impacts—major floods in 1916 and 2004, landslides, nuisance flooding, wildfires, and the record drought of 2007–2008, to name a few.

Asheville is also facing other stressors, like pressures from population growth, increasing demand for city services, economic changes, land use issues, and the desire to preserve a sense of place.

Over the past two years, city staff have been evaluating our vulnerability and risk to impacts from extreme weather events and are implementing projects to build resilience.

This guide provides strategies to help you become more resilient to extreme weather impacts.

THE CITY OF ASHEVILLE
NORTH CAROLINA

Find out how you, your business, and your neighborhood can help build a more resilient Asheville ››

Climate Resilience Resource Guide
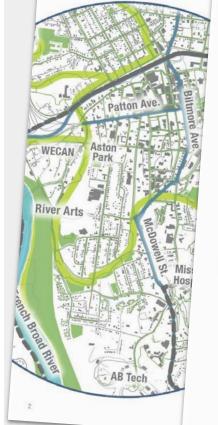
Includes region-based discussions of specific climate threats for:

- Central Asheville
- North Asheville
- East Asheville
- South Asheville
- West Asheville

Climate Resilience Resource Guide

Includes suggested strategies and actions that residents and businesses can take to build resilience to:

- Extreme Heat
- Flooding (major)
- Flooding (minor)
- Landslides
- Wildfire

Climate Resilience Resource Guide

Includes Resource page for additional information and Strategies Quick Reference guide.

Nathan Slaughter
ESP Associates

EPA BUILDING BLOCKS FOR REGIONAL RESILIENCE

Exploring the Connections Between Hazard Mitigation and Resilience

- Every community already has a FEMA-required Hazard Mitigation Plan in Place – must be updated every 5 years

- Provide a very good starting point when considering resilience
  - Includes a Risk Assessment, Capability Assessment and Mitigation Strategy

- Mitigation addresses what steps can be taken to reduce community vulnerability to hazards before the next hazard event occurs

- Mitigation Actions are directly tied to increasing community resilience

Regional Mitigation and Resilience Success Stories
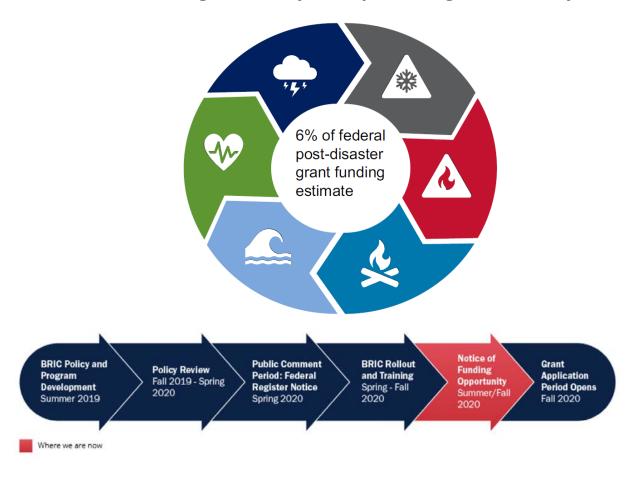
1. City of Asheville integration of Resilience Planning, Comprehensive Planning and Hazard Mitigation Planning
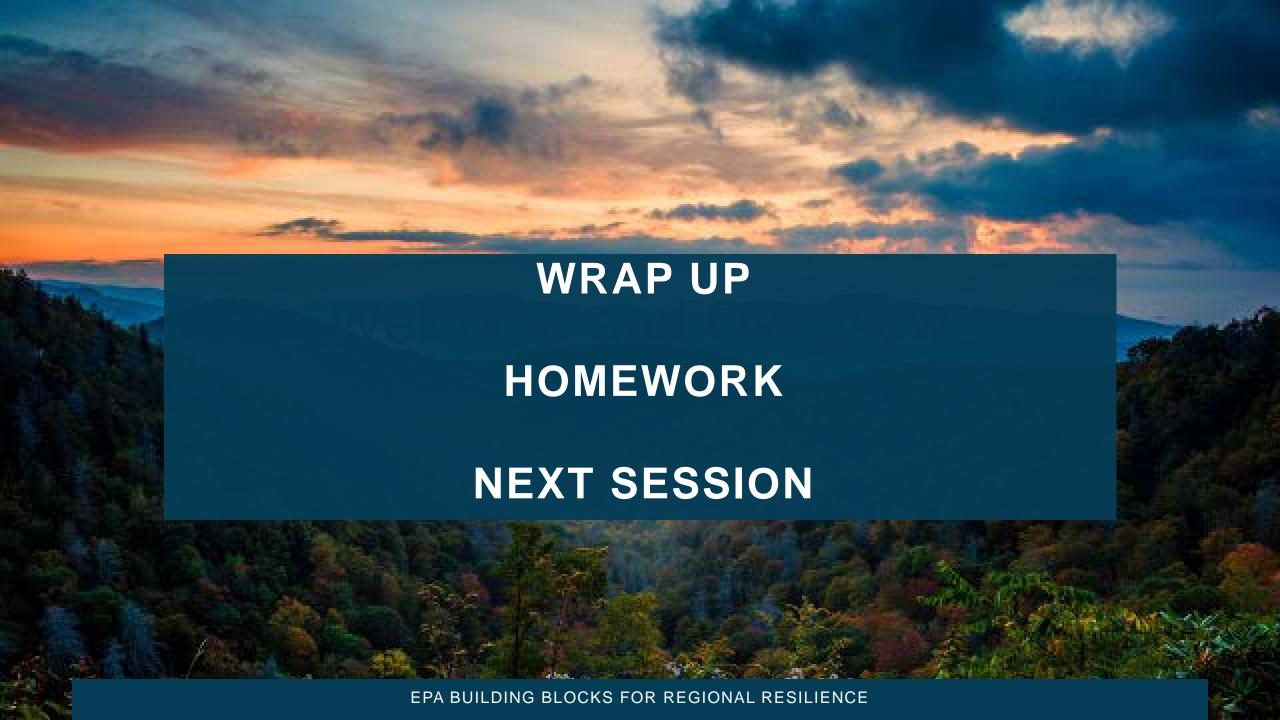
2. Madison County being one of the first to use FEMA mitigation funding for landslide mitigation and resilience.

FEMA's BRIC Program

- New FEMA grant program for funding mitigation and resilience projects

- Pre-disaster funding

- https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities
(Just Google FEMA BRIC)

The BRIC program guiding principles are **supporting communities through capability- and capacity-building; encouraging and enabling innovation; promoting partnerships; enabling large projects; maintaining flexibility; and providing consistency.**

6% of federal post-disaster grant funding estimate

| BRIC Policy and Program Development Summer 2019 | Policy Review Fall 2019 - Spring 2020 | Public Comment Period: Federal Register Notice Spring 2020 | BRIC Rollout and Training Spring - Fall 2020 | Notice of Funding Opportunity Summer/Fall 2020 | Grant Application Period Opens Fall 2020 |

▮ Where we are now

WRAP UP

HOMEWORK

NEXT SESSION

Wrap-up + Next Steps

WORKSHOP #2 AGENDA

- Vulnerability Assessment/Scoping

- Small Group Activity - Rapid Vulnerability Assessment

- Report Out on Vulnerability Assessment

- Wrap Up, Homework and Next Steps

Wrap-up + Next Steps

WORKSHOP #2

- Fill out a short survey to rank top 5 community asset priorities.

- Visit the workshop website for more read-ahead materials.

- All workshop materials are available on the website.

brsinc.com/landofsky

Wrap-up + Next Steps
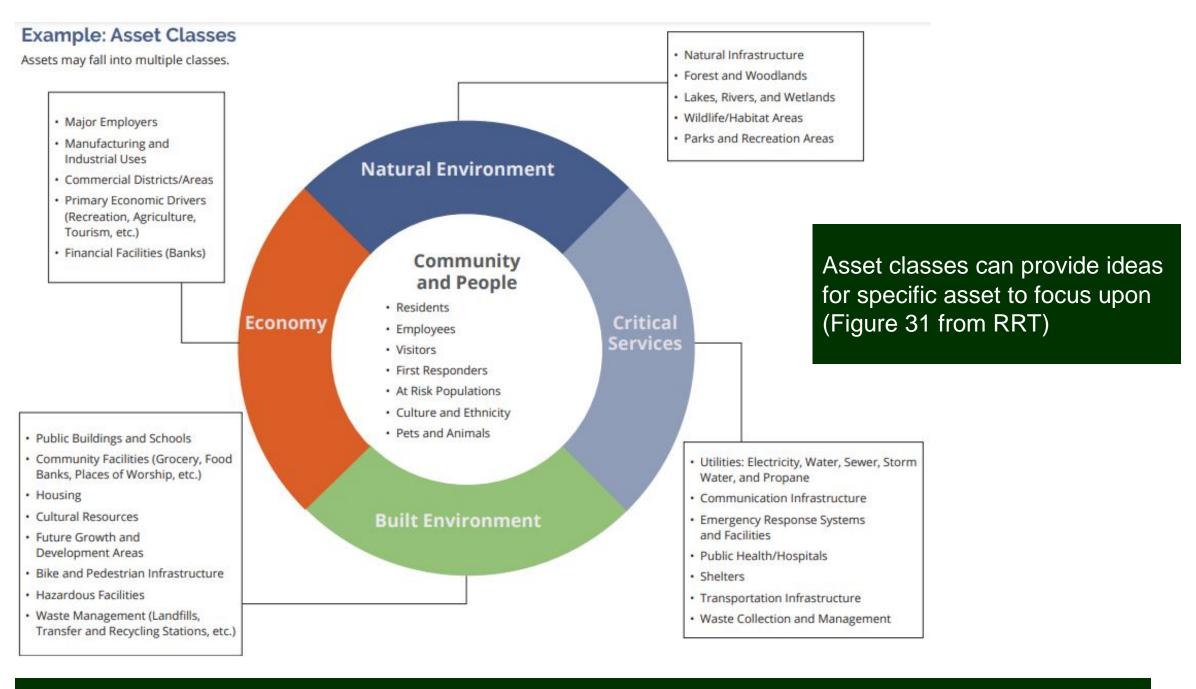
Community Asset Survey

- Complete by **Friday 9/18**

- 2 questions about your **top five assets** (specific essential services and critical facilities and infrastructure)

- Focus is on **individual assets** not asset classes.

"A unique or critically important asset for which the assessment findings would differ from other assets.

For example, a power plant or major thoroughfare may be individual assets." (RRT)

surveymonkey.com/r/losresilience

Example: Asset Classes

Assets may fall into multiple classes.

Natural Environment
- Natural Infrastructure
- Forest and Woodlands
- Lakes, Rivers, and Wetlands
- Wildlife/Habitat Areas
- Parks and Recreation Areas

Economy
- Major Employers
- Manufacturing and Industrial Uses
- Commercial Districts/Areas
- Primary Economic Drivers (Recreation, Agriculture, Tourism, etc.)
- Financial Facilities (Banks)

Community and People
- Residents
- Employees
- Visitors
- First Responders
- At Risk Populations
- Culture and Ethnicity
- Pets and Animals

Critical Services
- Utilities: Electricity, Water, Sewer, Storm Water, and Propane
- Communication Infrastructure
- Emergency Response Systems and Facilities
- Public Health/Hospitals
- Shelters
- Transportation Infrastructure
- Waste Collection and Management

Built Environment
- Public Buildings and Schools
- Community Facilities (Grocery, Food Banks, Places of Worship, etc.)
- Housing
- Cultural Resources
- Future Growth and Development Areas
- Bike and Pedestrian Infrastructure
- Hazardous Facilities
- Waste Management (Landfills, Transfer and Recycling Stations, etc.)

Asset classes can provide ideas for specific asset to focus upon (Figure 31 from RRT)

LOS Asset Classes

Asset Category	Description	Total Assets
Commercial Property	Includes non-residential properties that serve businesses and organizations, including industrial, retail, offices, restaurants, and hotels. These assets typically support commerce, jobs, and tourism.	8,994 parcels
Government-Owned and Critical Facilities	Includes fire and police stations that aid in emergency response, medical facilities, schools, energy and utility facilities, and transportation-related facilities.	3,656 parcels
Residential Property	Includes all single-family residences, multiple-family residences, low-income housing, apartments, manufactured houses, and mobile home parks.	189,208 parcels
Natural Property	Includes all farms and forestland, protected natural areas (including undeveloped parks), and developed parks (including cemeteries and golf courses).	11,946 parcels
Roads	All major and minor roads in the region.	9,450 linear miles

Wrap-up + Next Steps

Read Ahead

- 2 worksheets from Regional Resilience Toolkit (2.6 & 2.7)

- Basis for small group activity

- Partially pre-filled based on survey results (provided during Workshop 2)

2.6 Rapid Vulnerability Assessment Exercise

ASSET:

Hazard (note past occurrences):	Hazard impact statement:

Existing Conditions
Describe the asset and highlight current conditions or stressors that could affect vulnerability

Physical asset functions (e.g., type of land use, community served, services provided):	Type: ☐ Residential ☐ Institutional ☐ Industrial	Community Served (e.g., public, elderly):

Wrap-up + Next Steps

WE LOOK FORWARD TO SEEING YOU AT THE SECOND WORKSHOP!

September 23, 2020 at 1:00 PM

CONCLUSION

Project Staff Will Stay on for 15 Minutes to Answer Any Questions

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