

# Preliminary Results Assess Vulnerability and Risk Meeting

[LOCATION]  
[DATE]

# Agenda

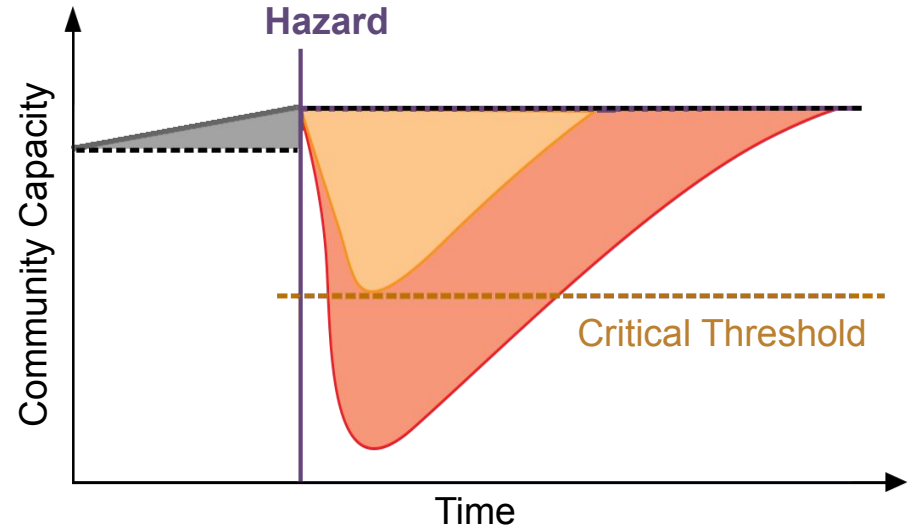
- Welcome
- Introduction to resilience & overview of the Steps to Resilience framework
- Assessment Overview & Vulnerability and Risk Review
- Preliminary results feedback exercise
- Group Discussion
- Next Steps

# Introduction to Resilience

# What is Resilience?

Resilience is about investing today to get our communities at a better place, a higher baseline, so that when a hazard does occur, our community is not impacted as much and can bounce back more quickly.

We cannot keep hazards from occurring, but if we can invest so that our community is not dropped below a critical threshold where we cannot bounce back, then we are a resilient community.



# Resilience Assessment

A methodical approach communities can use to identify their valuable assets, determine which climate-related hazards could harm them, and then identify and take effective actions to reduce their risk

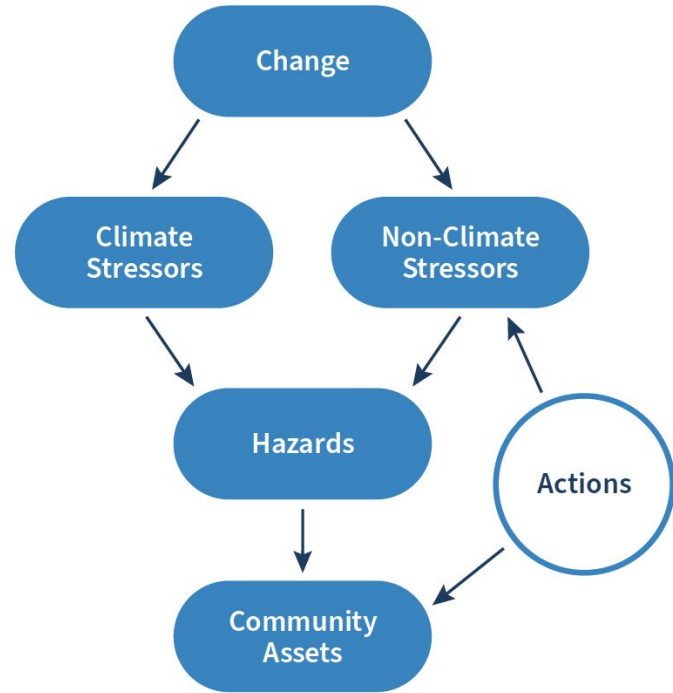


U.S. Climate  
Resilience Toolkit  
toolkit.climate.gov



# Resilience Conceptual Model

- We do not make decisions on climate alone
- Climate must be integrated across sectors with other threats and stressors
- Decisions are driven by values attached to assets
- How stressors have changed and are projected to change is a very important topic in the assessment



# Assessment Overview

# Community Assets for [LOCATION]

[Community asset themes & category examples for each]

- Critical Facilities: *fire stations, utilities, medical facilities*
- Commercial Property
- Residential Property
- Government-Owned Property
- Parks and Cultural Property



# Community Asset Maps

Parcel-level Map

Census Boundaries Results  
Map (if applicable)

# Hazards

Hazard	Data Source
Floodplain Inundation (100-yr and 500-yr)	FEMA DFIRM (Effective June 2020)
Storm Surge (Cat 1-2)	National Storm Surge Hazard Maps (NOAA)
Storm Surge (Cat 3-5)	National Storm Surge Hazard Maps (NOAA)
Tidal Flooding (Current)	High Tide Flooding (NOAA Office for Coastal Management)
Sea Level Rise and Future Tidal Flooding (3 ft + MHHW)	NOAA Sea Level Rise Viewer (NOAA Office for Coastal Management)
Sea Level Rise and Future Tidal Flooding (5 ft + MHHW)	NOAA Sea Level Rise Viewer (NOAA Office for Coastal Management)

Hazard [type]



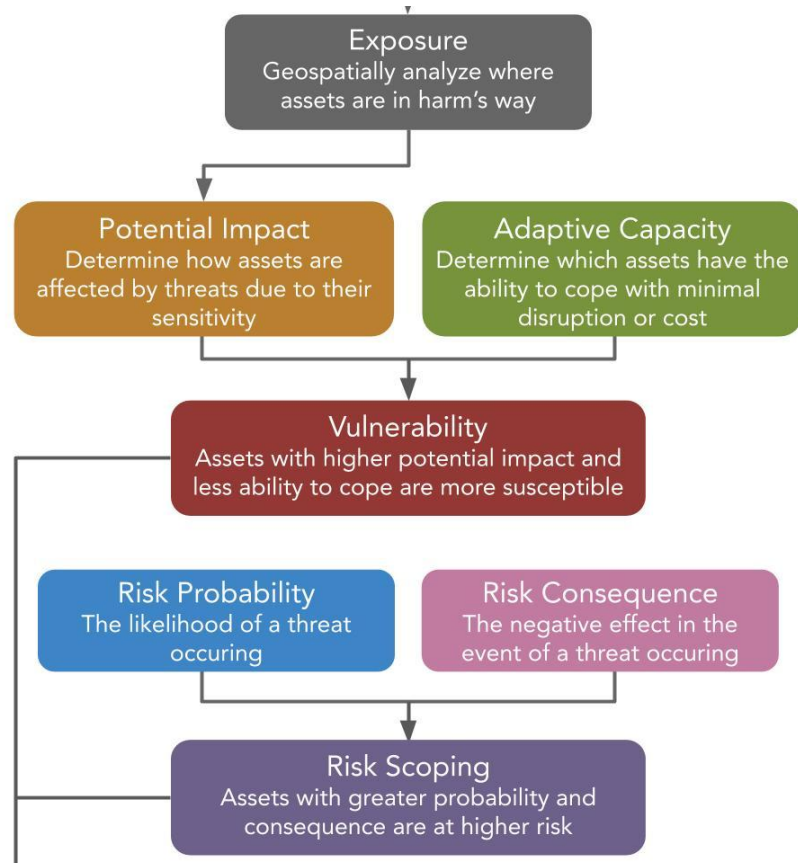
Hazard Map

# Overview of Assessment Components

# Vulnerability and Risk Assessment Components

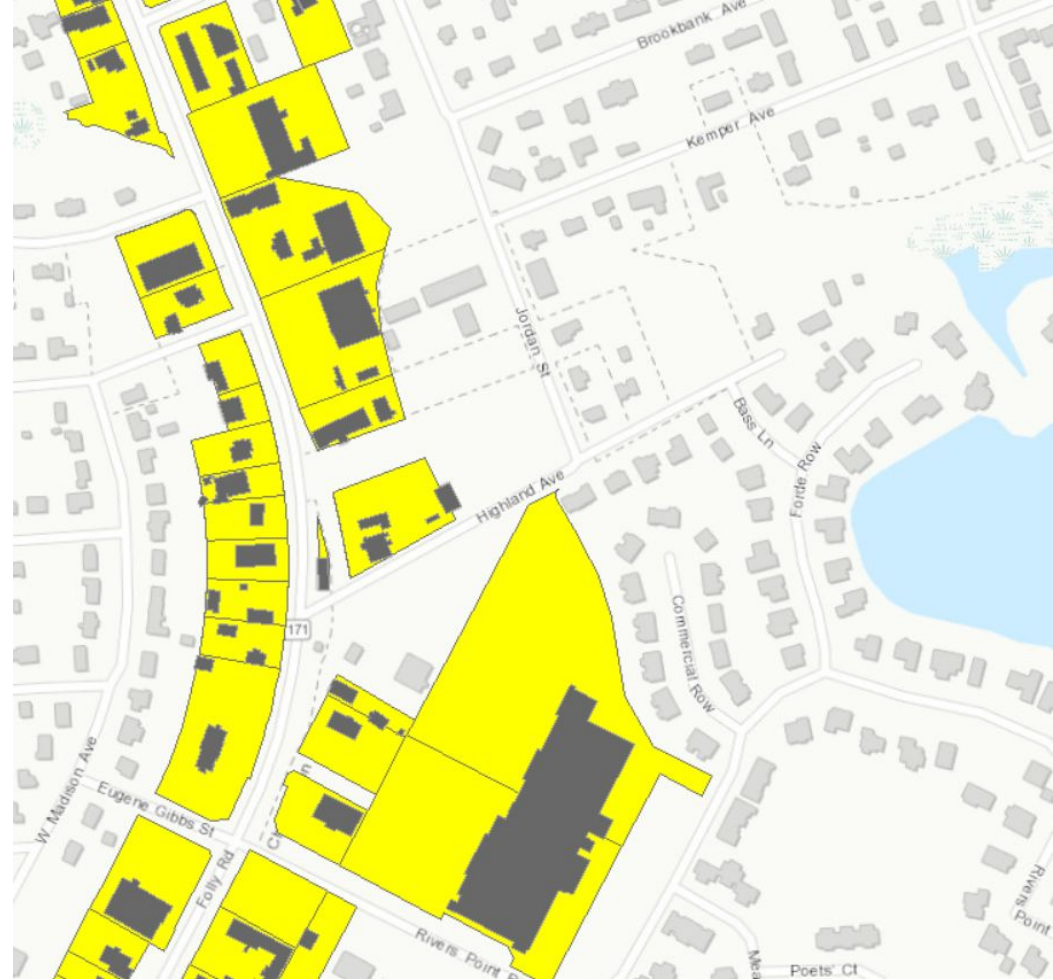
**Vulnerability:** Susceptibility based on sensitivity/potential impact and adaptive capacity

**Risk Scoping:** The probability and negative consequence of threats.

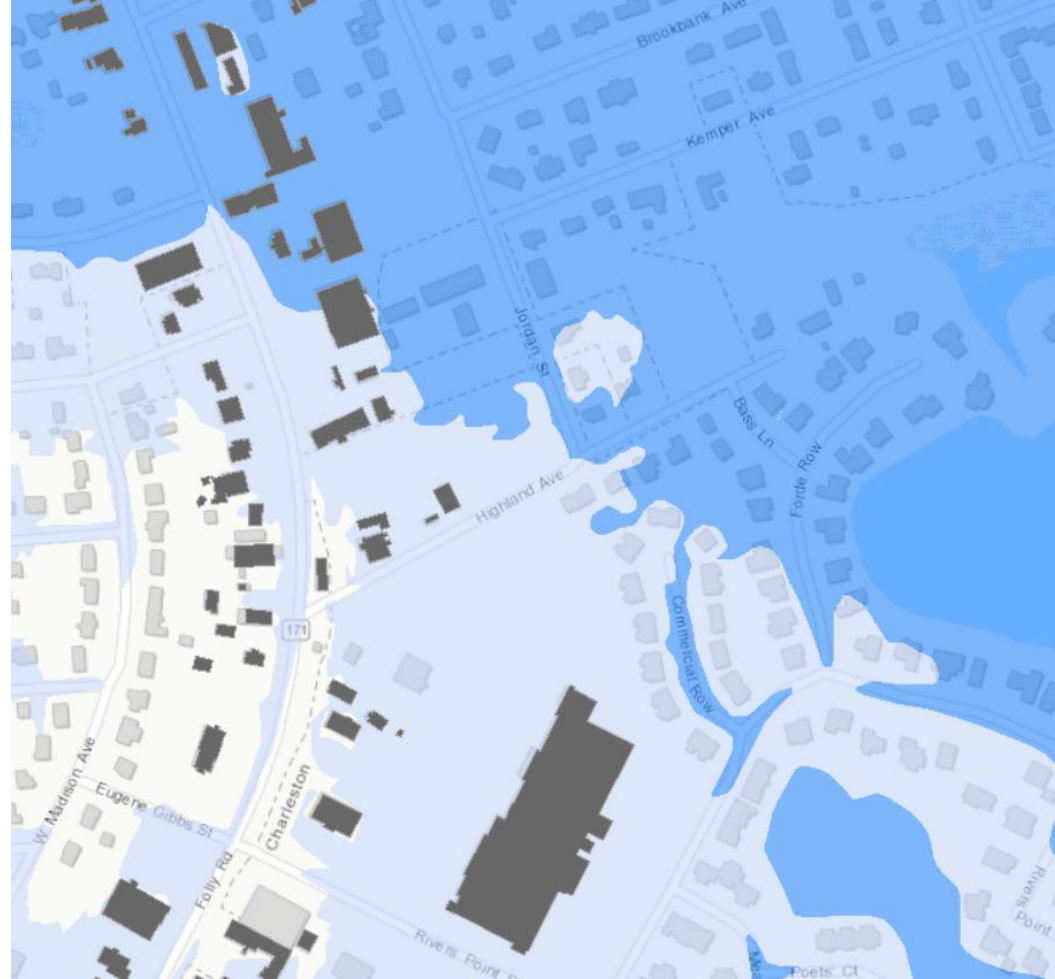
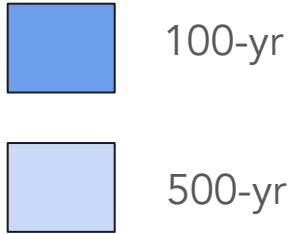


# Asset: Commercial parcels and buildings

(Only commercial and industrial parcels/buildings are shown)



# Threat: Rainfall Induced Flooding



# Exposure



Flooding threat extent



Exposed commercial property



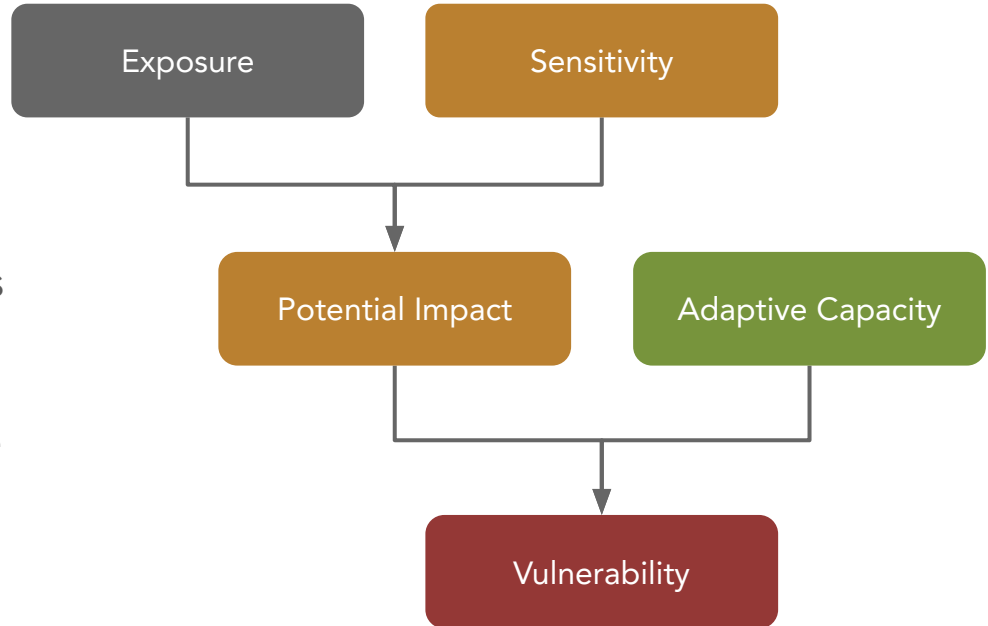


# Vulnerability

Understanding the susceptibility of societal assets due to physical and social factors.




**Sensitivity:** the degree to which assets are affected by a threat

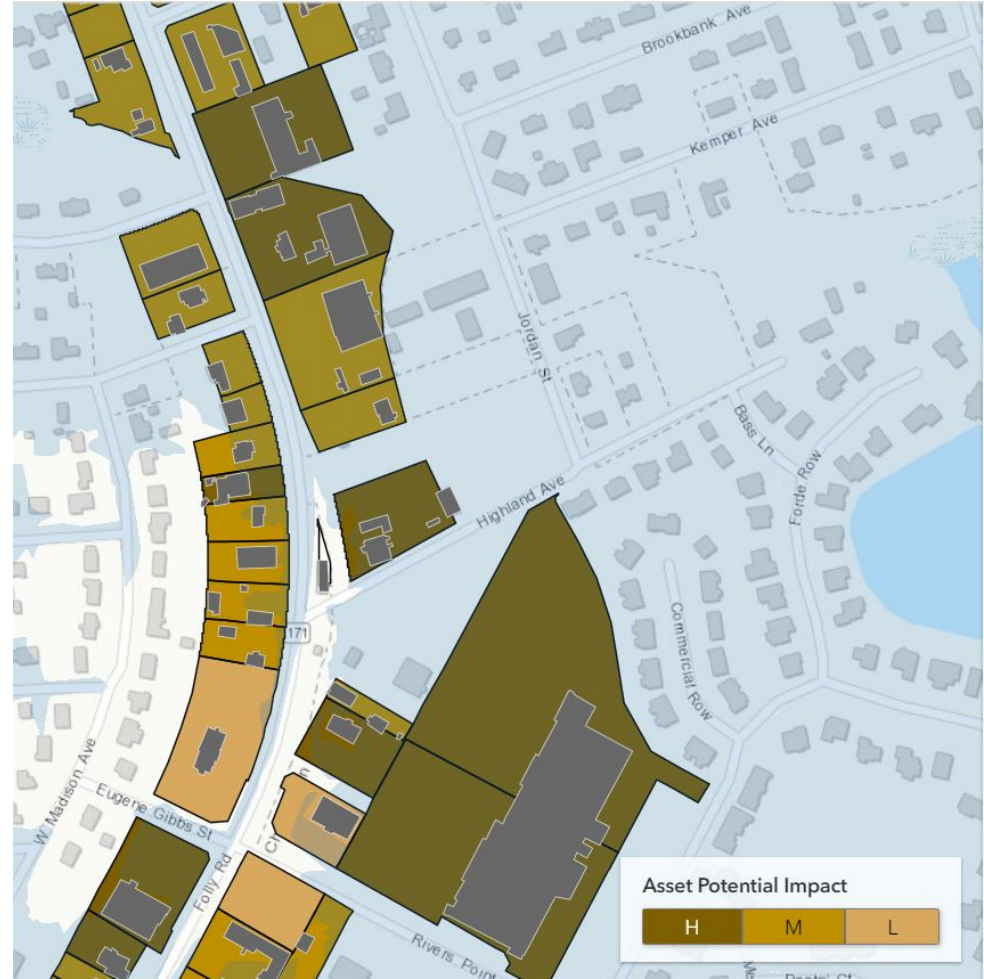
**Adaptive Capacity:** the ability to cope with impacts



# Potential Impact




Exposure + sensitivity

-  High: Structure in floodplain and historic, retail, office, restaurant, or hotel
-  Med: Structure in floodplain and warehouse or storage
-  Low: No structure in floodplain (land only)



# Adaptive Capacity

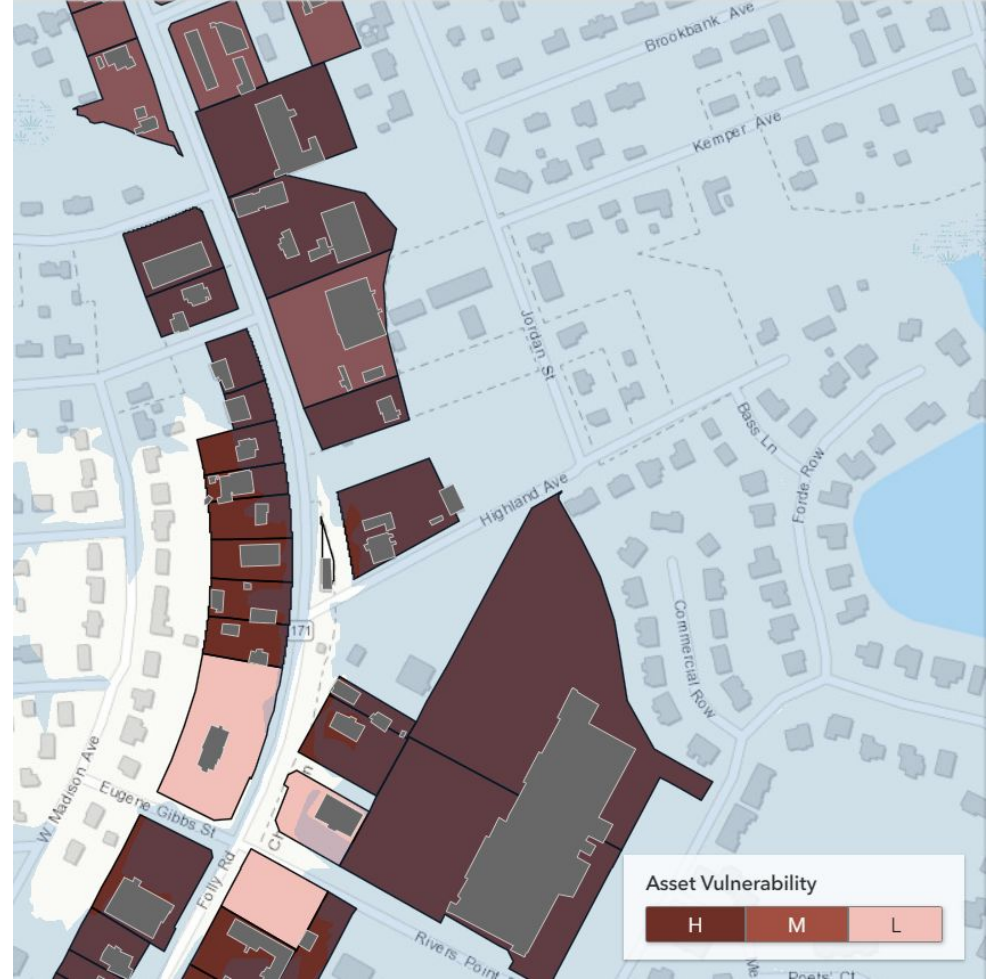
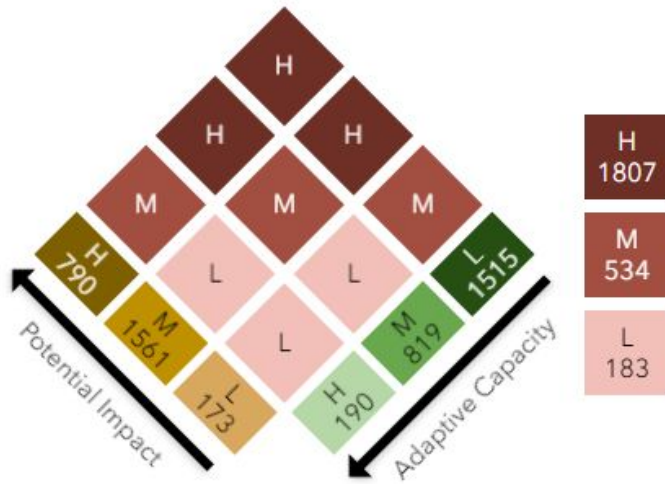
Ability to cope - influenced by floodplain development practices

-  Low: Structure in floodplain with no base flood elevation (built before 1971 or built in floodplain that is not regulated)
-  Med: Structure in floodplain with elevation at BFE (built from 1971 to 2015)
-  High: Structure is built out of floodplain, or with elevation 1-2 ft above BFE (built 2015 to present)



# Vulnerability

Susceptibility based on potential impact and adaptive capacity

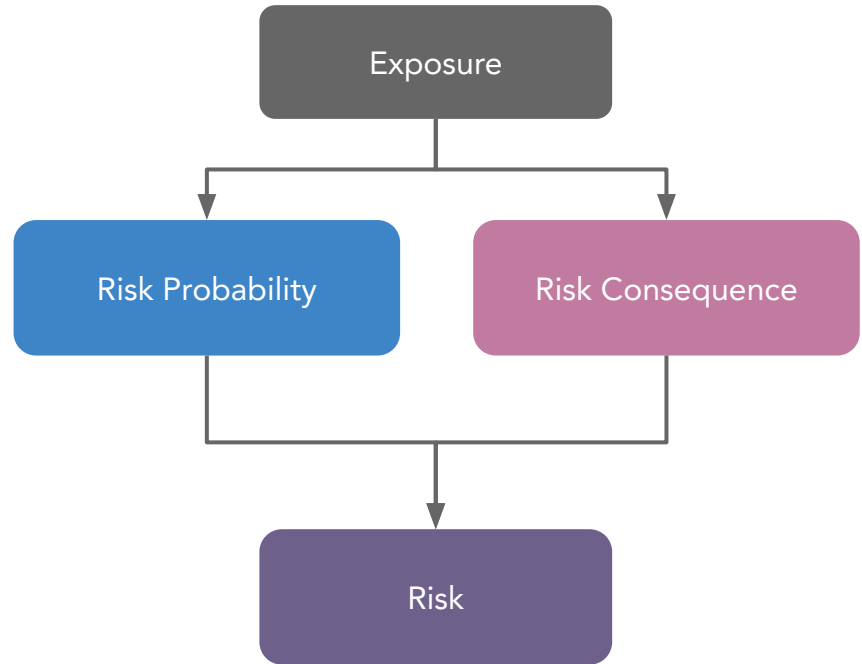


# Risk Scoping

Understanding the probability and negative outcome of threats.

**Probability:** the likelihood of a threat or hazard event occurring

**Consequence:** the negative outcome of a threat or hazard event



# Risk Probability



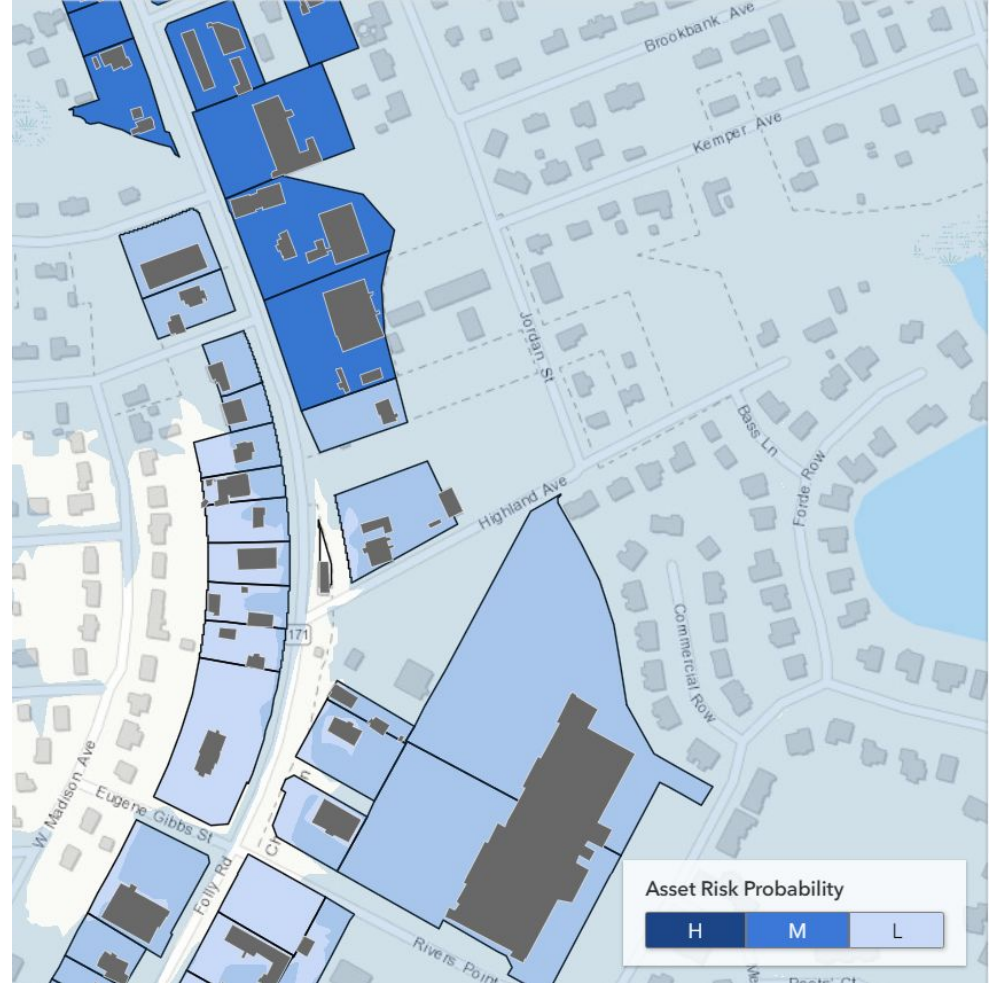
High: Floodway or open water



Med: 100 year (1% annual chance)



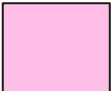


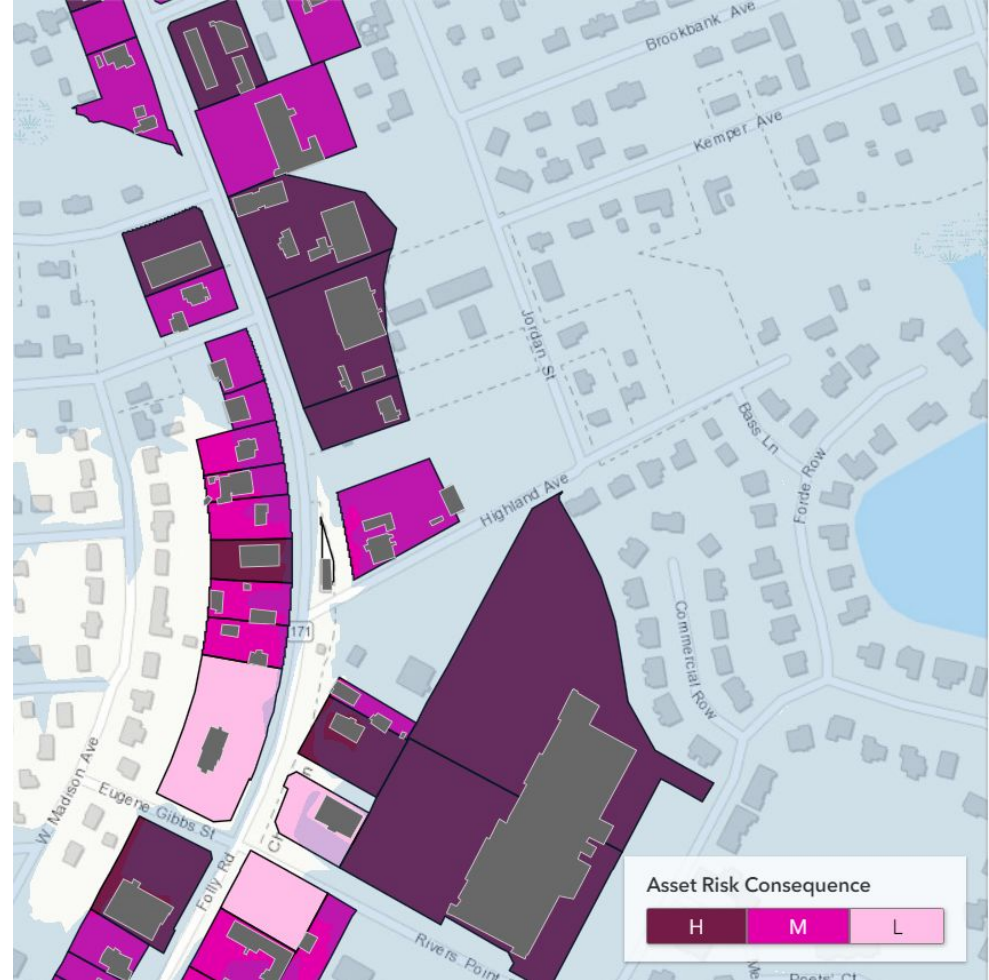
Low: 500 year (0.2% annual chance)



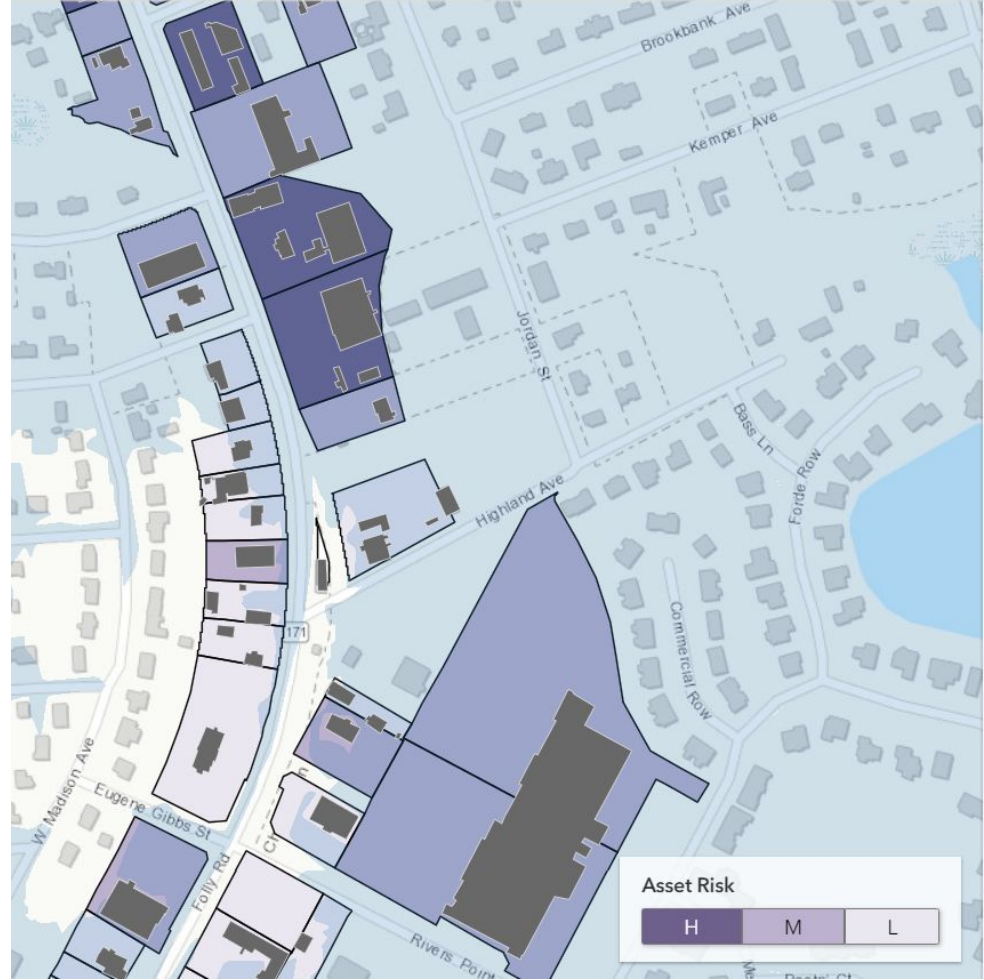
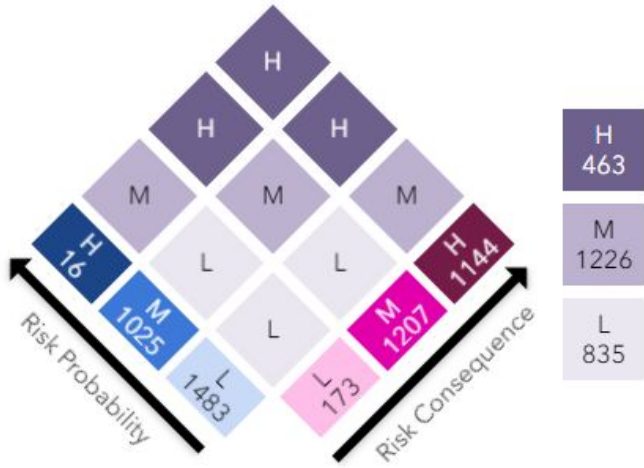
# Risk Consequence

Based on structure value relative to other commercial properties (median \$319K).

-  High: Structure exposed, above median value
-  Med: Structure exposed, below median value
-  Low: No structure exposed

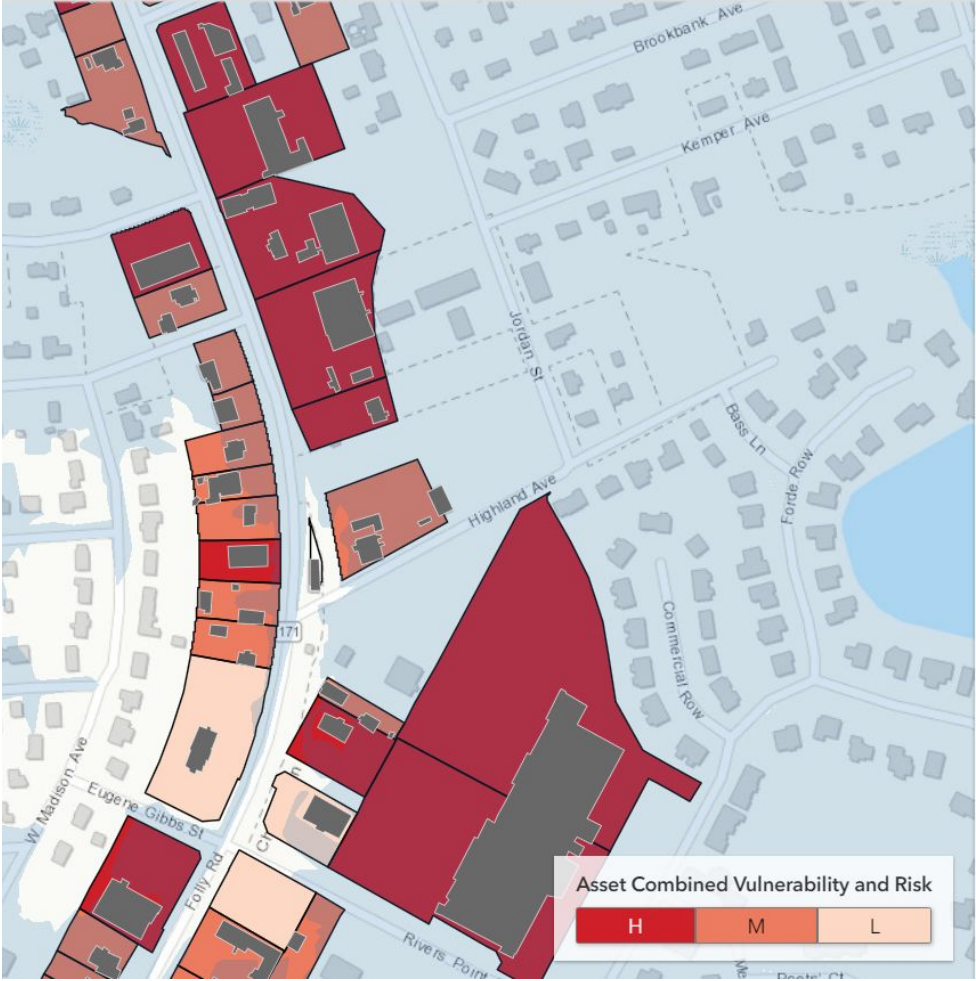
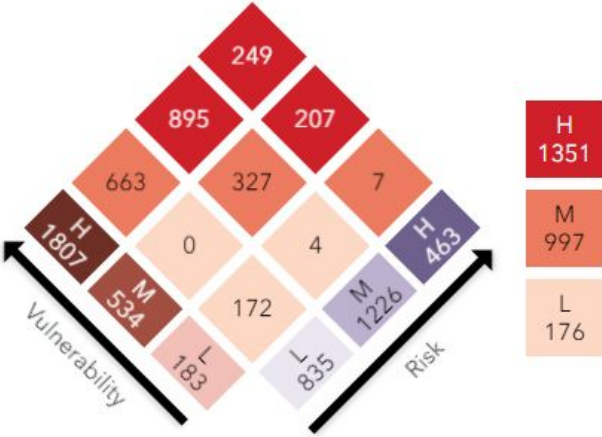


# Risk Scoping





# Combined Vulnerability and Risk



# Preliminary Results Feedback

# Instructions

Either individually or in small groups...

1. Review the worksheet [3.9 Preliminary Results Feedback - Worksheet](#)
2. Using the preliminary assessment results, answer the questions in as much detail as possible. If this exercise is being completed in groups, designate one person to be the notetaker
3. We will come together for a short full-group discussion before adjourning

**Please remember to return these exercise sheets to the practitioner before leaving!**

# Group Discussion

# Exercise Questions

**Community asset themes or areas of interest:** what are the community asset themes or areas of interest as they relate to each hazard?

**Data and criteria:** should any of the vulnerability and risk rulesets be modified based on your knowledge or expertise? Is there available local data that is not being used that would change the assessment?

**Topics of concern:** what are some concerns you have for specific services? What are the potential critical thresholds?

**What are we already doing:** are you aware of any existing projects or plans that are attempting to address these concerns?

**Any last comments or concerns?**

# Next Steps