

Public Meeting
Hazard Mitigation Plan Development

City of Framingham
December 19, 2022, via Zoom

Translated Slides



Portuguese:

framinghamma.gov/HMP1219PT

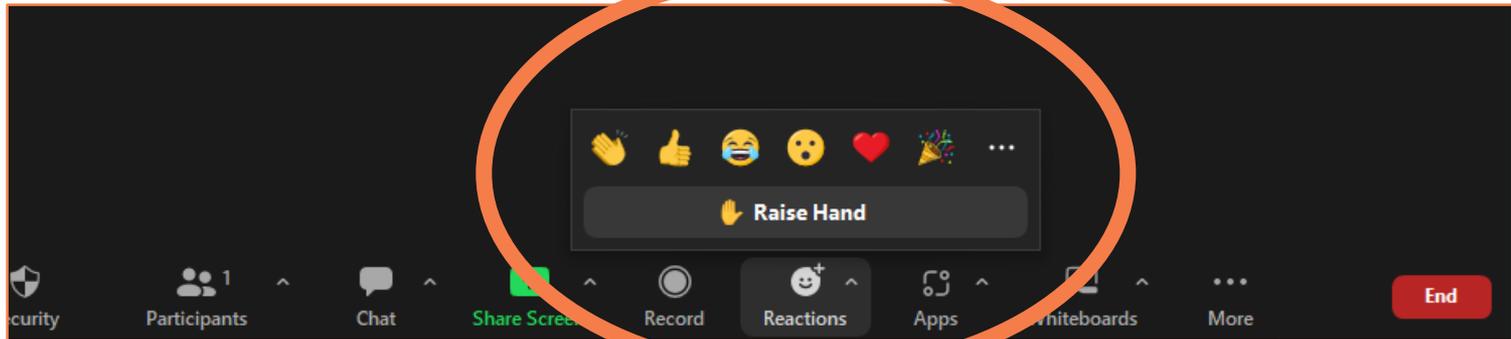
Spanish:

framinghamma.gov/HMP1219SP

Raising Your Zoom Hand



If you have a question or comment please raise your hand on Zoom. This can be done by selecting the option below:



Here come the holidays. What are you most looking forward to?

Aí vêm as férias. O que você está mais ansioso?

Aquí vienen las vacaciones. Qué es lo que más esperas?

- a. **Time off from work?** / *Tempo livre do trabalho?* / *¿Tiempo libre del trabajo?*
- b. **Gifts.** / *Presentes.* / *Regalos.*
- c. **All the above.** / *Todos acima.* / *Todo lo anterior.*

Jamie Caplan Consulting LLC

History of success in MA

- Commonwealth of MA (State Plan)
- City of Pittsfield (MVP/HMP)
- Town of Becket (MVP/HMP)
- Town of Blandford (HMP)
- Town of Dighton (MVP/HMP)
- Town of Dracut (MVP/HMP)
- Town of Fairhaven (MVP/HMP)
- Town of Lexington (MVP/HMP)
- Town of Ludlow (HMP)
- Town of North Reading (HMP)
- Town of South Hadley (HMP)
- Town of Wilmington (MVP/HMP)
- UMASS Amherst (HMP)

- Territory of American Samoa
- County of Maui
- American Indian Tribes
- South Central Region of Connecticut
- Towns in Vermont
- FEMA Mitigation Planning Support



Jamie Caplan, Project Manager



*Darrin Punchard,
Deputy Project
Manager*



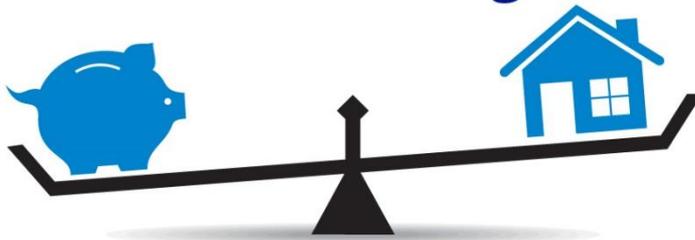
*Bill Bohn, Risk Assessment
Lead*



*David Murphy, Mitigation
Specialist*

Hazard Mitigation

More Mitigation Measures, More Savings



**One dollar invested in mitigation =
six dollars U.S. saves in future costs**



- A sustained action to reduce or eliminate risk to people and property from natural hazards and their effects.

Phases of Emergency Management



Benefits of Mitigation Planning



Identify cost-effective actions to reduce risk



Focus resources on greatest vulnerabilities



Build partnerships



Increase awareness of hazards and risk



Communicate priorities

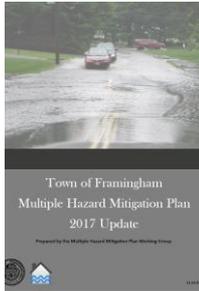


Align with other town objectives

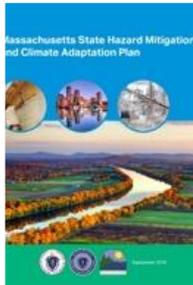


Save lives and money!

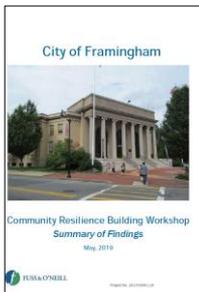
Hazard Mitigation Plan Development



Town of Framingham
Hazard Mitigation Plan
2017 Update



State Hazard Mitigation
and Climate Adaptation
Plan 2018



Municipal Vulnerability
Preparedness Program
(MVP) 2019

2022 City of Framingham Hazard Mitigation Plan

Timeline

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Task 1. Convene Local HMPC		HMPC Meeting		HMPC Meeting		Public Meeting	HMPC Meeting			HMPC Meeting	Public Meeting
Task 2. Update Hazard Profiles											
Task 3. Update Critical Facility Inventory											
Task 4. Update Mitigation Goals											
Task 5. Update Mitigation Actions											
Task 6. Plan Review, Evaluation, and Implementation											
Task 7. Public Review of Draft											
Task 8. Review and Approval											

Hazard Mitigation Planning Committee and Public Engagement



Provide supporting data or information.



Assist in the identification and prioritization of mitigation actions.



Review and comment on the draft plan.



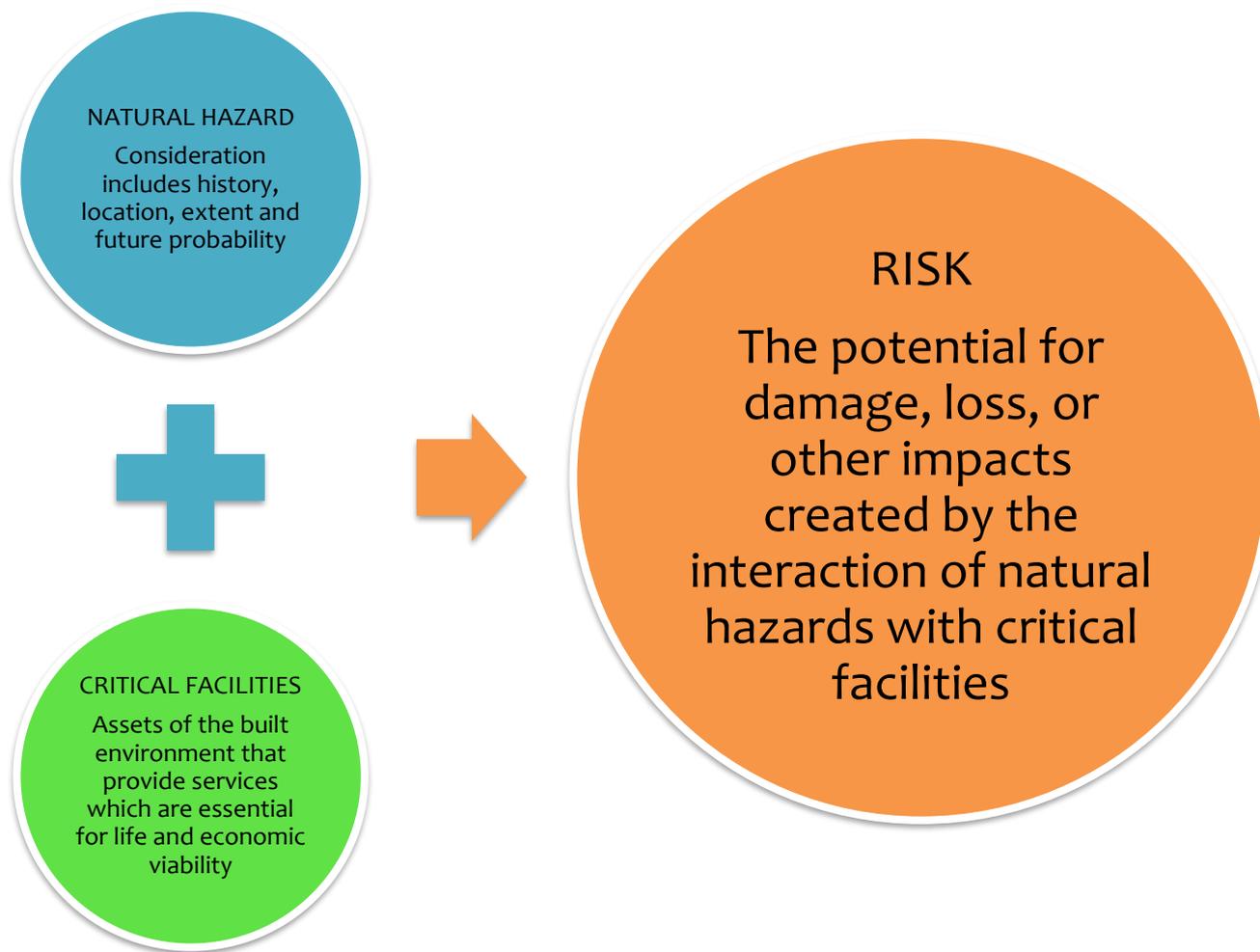
Approve final draft for submission to MEMA.

2 Public Meetings

- 7/11/2022
- 12/19/2022

Review of Draft Plan

Risk Assessment Process



What weather related hazards can impact your community?

Quais perigos relacionados ao clima podem afetar sua comunidade?

¿Qué peligros relacionados con el clima pueden afectar a su comunidad?

Framingham's Hazards

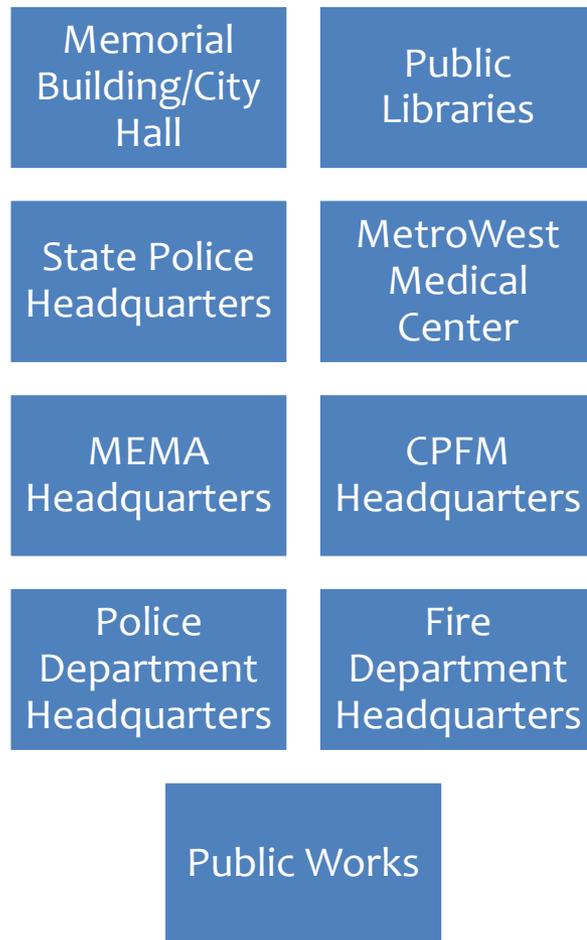
Primary Climate Change Interactions	Natural Hazards
Changes in Precipitation	<ul style="list-style-type: none">• Flooding (<i>includes riverine, dam failures, ice jams, etc.</i>)• Drought• Landslide• Sinkholes
Rising Temperatures	<ul style="list-style-type: none">• Extreme Temperatures• Wildfires• Invasive Species• Infectious Disease
Extreme Weather	<ul style="list-style-type: none">• Hurricanes/Tropical Storms• Severe Winter Storm/Nor'easter (<i>includes blizzard, ice storm, etc.</i>)• Tornadoes• Other Severe Weather (<i>includes thunderstorms, etc.</i>)
Non-Climate Influenced Hazards	<ul style="list-style-type: none">• Earthquake

What buildings and infrastructure are critical in your community?

Quais edifícios e infraestrutura são críticos em sua comunidade?

¿Qué edificios e infraestructura son críticos en su comunidad?

Critical Facilities



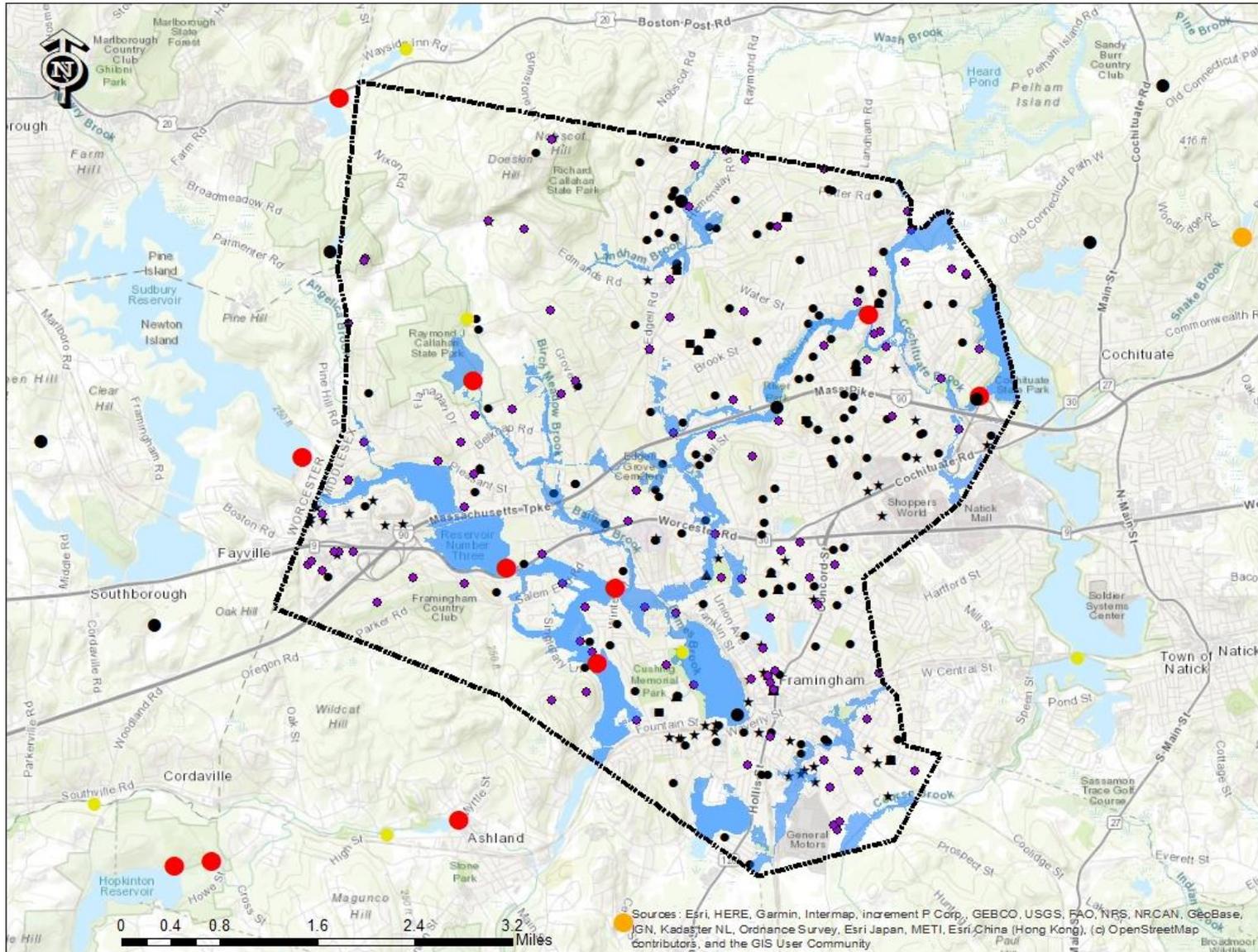
- Schools
- Callahan Senior Center
- Emergency Operations Center
- Framingham Housing Authority
- Assisted Living and Nursing Centers
- Framingham State University
- Helipads
- Reservoir Dams
- Water and Sewer Infrastructure
- Pumping Stations

Hazard Ranking



Hazards	Probability	Impact	Spatial Extent	Warning Time	Duration	Value	Rank
Flood	4	4	2	4	2	3.4	High
Landslide	1	2	1	4	1	1.6	Low
Wildfires/Brushfires	1	1	1	3	3	1.4	Low
Hurricanes/Wind	2	3	4	1	2	2.6	Mod.
Severe Winter Storms	4	2	4	1	3	3.0	High
Tornadoes	1	1	1	3	1	1.2	Low
Thunderstorms	4	2	4	2	1	2.9	Mod.
Earthquakes	1	3	4	4	1	2.5	Mod.
Drought	2	3	4	1	4	2.8	Mod.
Extreme Temperatures	4	2	4	1	2	2.9	Mod.
Infectious Disease	4	2	3	2	2	2.8	Mod.
Invasive Species	3	2	3	2	3	2.6	Mod.

Critical Facilities and 100-Year Floodplain



2 Objectives

Current

- Mitigate hazard impacts to existing community, buildings, and infrastructure.

Future

- Develop the community in a way that does not increase risk.

Mitigation Plan Goal

Reduce the loss of life, property, infrastructure, and cultural and historic resources from natural disasters and climate change through a hazard mitigation program that includes infrastructure improvements, capacity building, natural resources protection, and education.

2022 Objectives

Infrastructure

Mitigate risk to critical facilities and infrastructure from natural hazards and climate change.

Capacity

Expand the City's capacity to mitigate risk by adopting a culture of hazard mitigation through regulations, planning, and regional collaboration.

Natural Resources

Implement actions that minimize risk from climate change and natural hazards to preserve or restore the functions of natural systems.

Education

Educate all stakeholders about the value of hazard mitigation and how to implement it in their work, businesses, and homes.

A Range of Mitigation Actions

1. Local Plans and Regulations
 - Comprehensive plans
 - Land use ordinances
 - Development review
 - Building codes and enforcement
 - Capital improvement programs
 - Open space preservation
 - Stormwater management regulations and master plans
2. Structure and Infrastructure Projects
 - Acquisitions and elevations of structures in flood-prone areas
 - Utility undergrounding
 - Structural retrofits
 - Floodwalls and retaining walls
 - Detention and retention structures
 - Culverts
3. Natural Systems Protection
 - Sediment and erosion control
 - Stream corridor restoration
 - Forest management
 - Conservation easements
 - Wetland restoration and preservation
4. Education and Awareness Programs
 - Radio or television spots
 - Websites with maps and information
 - Real estate disclosure
 - Presentations to school groups or neighborhood organizations
 - Mailings to residents in hazard-prone areas

What can be done to mitigate risks you have identified? Think of activities to protect the people, buildings, and infrastructure named previously.

O que pode ser feito para mitigar os riscos que você identificou? Pense em atividades para proteger as pessoas, edifícios e infraestrutura mencionados anteriormente.

¿Qué se puede hacer para mitigar los riesgos que ha identificado? Piense en actividades para proteger a las personas, los edificios y la infraestructura mencionadas anteriormente.

Mitigation Action Statistics

- 43 Mitigation Actions
 - 12 Local Plans and Regulations
 - 6 Natural Resources Protection
 - 12 Outreach and Education
 - 13 Structure and Infrastructure Projects
- Priority
 - 17 High Priority
 - 15 Medium Priority
 - 11 Low Priority
- 18 Actions Directly Protect Critical Facilities

Leading Departments

- Public Works
- Capital Projects and Facilities Management
- Emergency Management
- Public Health
- Parks and Recreation
- Planning, Conservation and Community Development

Responsible Departments

Public Works

Capital Projects
and Facilities
Management

Emergency
Management

Public Health

Parks and
Recreation

Planning,
Conservation, and
Community
Development

High Priority Actions – Selected Examples



Retrofit, update, or replace undersized and unsafe culverts.



Complete rehabilitation of the Worcester Road Sewer Pump Station.



Integrate relevant hazard mitigation plan priorities and actions into the City's forthcoming Climate Action Plan.



Protect and restore wetland areas and water bodies.



Develop green infrastructure on municipal properties to improve stormwater management and reduce heat island impacts.



Evaluate and pursue opportunities to use clean energy technologies, such as microgrids, to provide enhanced backup power to municipal facilities.

Integrating the Hazard Mitigation Plan



Land Use Planning for Sustainable Growth



Infrastructure and Critical Facilities Protection



Natural Resources Protection



Historic Properties and Cultural Resources



Economic Development



Transportation Planning



Housing Development

What can residents do to mitigate risk to their home or business?

O que os residentes podem fazer para mitigar o risco para sua casa ou empresa?

¿Qué pueden hacer los residentes para mitigar el riesgo de su hogar o negocio?

What's Included in the Plan

- **Chapter 1. Introduction**
 - Changes since 2017
- **Chapter 2. Planning Area Profile**
 - Population
 - Infrastructure
 - Land Use
- **Chapter 3. Planning Process**
 - Who was involved
 - Studies reviewed
- **Chapter 4. Risk Assessment**
 - Hazard profiles
 - Critical Facilities
 - Summary of Risk
- **Chapter 5. Capability Assessment**
 - Plans, Administration, Finances, Education
 - National Flood Insurance Program
- **Chapter 6. Mitigation Strategy**
 - Goals
 - Mitigation Actions
- **Chapter 7. Plan Implementation and Maintenance**
 - Method and schedule for implementation

Any additional questions or comments?

Alguma pergunta ou comentário adicional?

¿Alguna pregunta o comentario adicional?

Thank you

Shawn Luz, Sustainability Coordinator

- City of Framingham
- 508-532-5652
- sluz@framinghamma.gov

Jamie Caplan, Principal

- Jamie Caplan Consulting LLC
- 413-586-0867
- Jamie@jamiacaplan.com