

# Andover Municipal Vulnerability Preparedness Plan



# Municipal Vulnerability Preparedness (MVP) Program

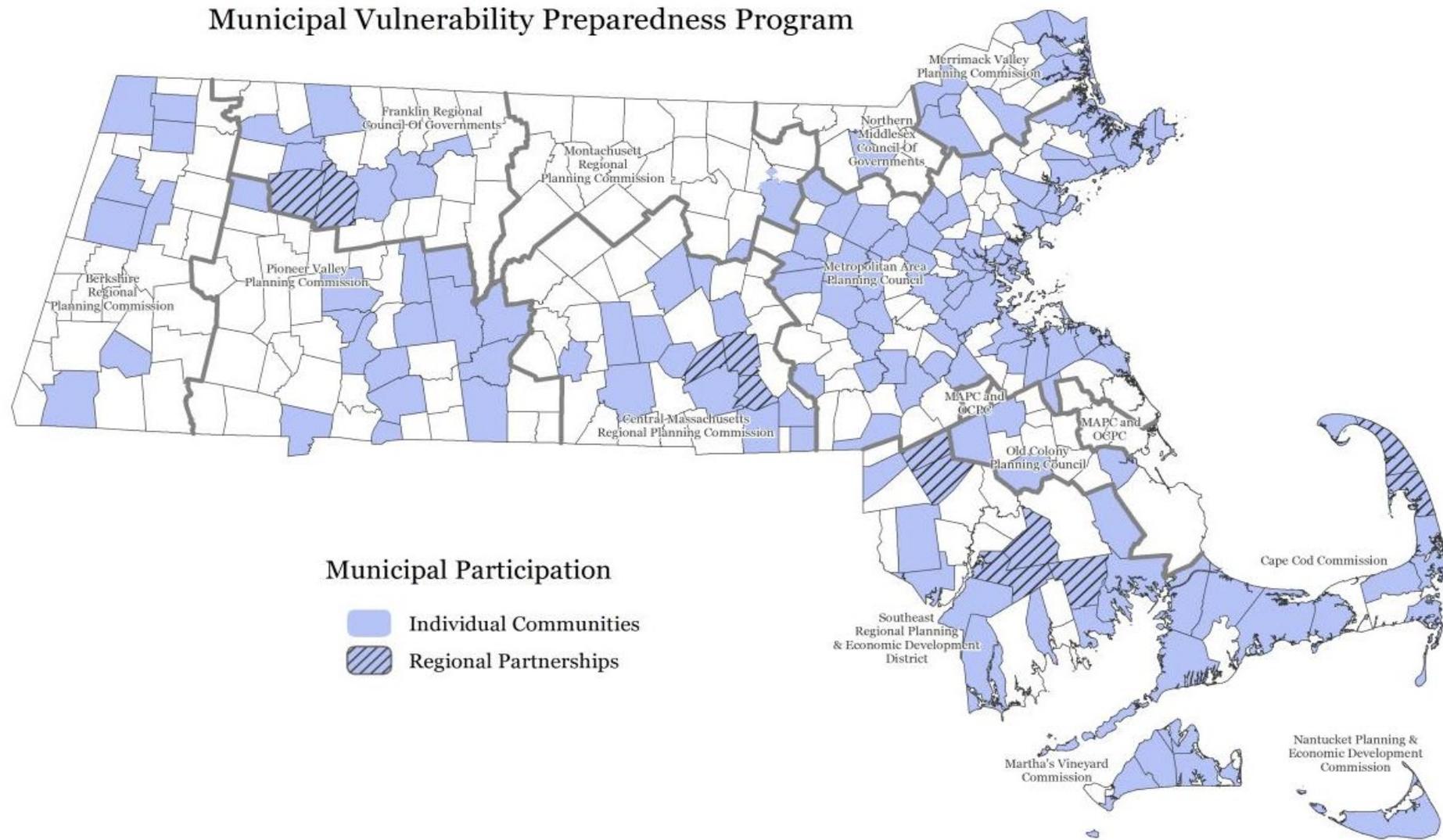


***State and local partnership to build resiliency to climate change***



2018: \$2.4 Billion  
Environmental  
Bond - \$500  
million to  
Climate  
Resilience

Second year of  
MVP Program:  
50% of MA  
communities  
participating



# Andover Flooding



OLDER PHOTO COURTESY OF ANDOVER HISTORICAL SOCIETY. MODERN-DAY PHOTO BY TIM JEAN  
The top photo is of York Street in Shawsheen Village during the March flood of 1936. In the bottom photo is a considerably drier York Street on Wednesday morning.

## Great Flood of 1936

Photo Credits: Andover Memorial  
Hall Library Collection



AIRPLANE VIEW OF THE FLOODED AREA  
OF SHAWSHEEN VILLAGE

# Andover Flooding

## Mother's Day Flood of 2006



Photo Credits: MVPC

# Andover Flooding

## Mother's Day Flood of 2006



# Sept. 13 Columbia Gas Incident: Response & Recovery



- Aging Infrastructure
- Lessons Learned in Response and Recovery

Photo source: Andover Police

# Natural Hazards Defined





# Community Resilience Building Framework

Andover Community Resilience Building Risk Matrix				www.CommunityResilienceBuilding.org					
H-M-L priority for action over the Short or Long term (and Ongoing) V = Vulnerability S = Strength				Top Priority Hazards (floods, hurricanes, nor'easters, drought, sea level rise, heat wave, etc.)					
				FLOODING	NOR'EASTERS	AGING INFRASTRUCTURE	EXTREME TEMPERATURE	Priority	Time
Features	Location	Ownership	V or S					H - M - L	Short Long Ongoing
<b>Infrastructural</b>									
<b>Roads, Bridges &amp; Culverts</b>									
Low Lying Areas (eg. North Main St.; Shawsheen Sq.; Shawheen Plaza area)	multiple	Town & MassDOT	V	Create Flood Storage Areas at Penguin Park and other Shawsheen River locations					
				Update regulatory structure (inc. Subdivision Regs & zoning to promote Low Impact Development, permeable pavement, stormwater treatment and infiltration and limit development in vulnerable areas.)					
				Integrate flood storage into planning & public works design (eg. Riverina Road)					
				Invasive plant management at riverfront areas, wetlands					
				ID, assess and map low lying priority areas to define flow bottlenecks and flood mitigation solutions					
				Acquire land for expanded flood storage ; communicate value of acquiring open space					
				Dredge Study of Merrimack					
				Design/engineering review of Shawsheen River culvert near Merrimack River outlet					
				Dedicated funding source for land acquisition for flood storage--CPA, developer contributions					
				Design engineering study of Shawsheen River Bridge at Shawsheen Village (Route 28)					
				Develop & Implement Maintenance & Management plan for culverts					
Develop neighborhood-based evacuation plans									
River St.	by Tewksbury line	Town	V	√					
High Plain Road @ Fish Brook (road reconstructed & elevated early 2010s)	at Fish Brook area	Town	V & S	√					
Rail System inc. Rail bridges & grade crossings (Lowell Junction bridge by Pfizer; xing at Dundee Park)	multiple	MBTA	V & S	√		√			

# Project Schedule

- Stakeholder Workshops:
  - Workshop 1 (Assessing Community Assets & Vulnerabilities): January 9, 2019
  - Workshop 2 (Priorities & Solutions): Thursday, January 24, 2019
- Public Meeting: Spring 2019
- Submit Final Report to State: Spring 2019

