Municipal Vulnerability Preparedness Program Action Grant Case Study

Municipality: Winthrop, MA and Metro Mayors Coalition (MMC)
Project Title: Climate Resilient Land Use and Zoning
Award Year (FY): FY2019
Grant Award: $99,740
Match: $35,184
Match Source: Barr Foundation for MAPC Staff Hours, and a mix of MMC and Winthrop Staff hours for additional in-kind match**.**
One or Two Year Project: Initially a one-year project that had an extension granted due to COVID-19 Pandemic. (FY19-FY21)

Municipal Department Leading Project: Town Manager and Planning Department

Project Website URL:
https://www.town.winthrop.ma.us/building-department-inspectional-services/pages/flood-resilience

Climate Resilient Land Use Strategies – MAPC

Community Overview:

The Town of Winthrop neighbors East Boston to the North and has a population approximately 17,500. Winthrop is a member of the Metro Mayors Coalition (MMC), a 15-municipality coalition facilitated by the Metropolitan Area Planning Council (MAPC), which has long collaborated on issues of regional significance. In 2015, the MMC made a commitment to prepare the region for the impacts of climate change and formed the Climate Preparedness Taskforce. MMC represents 1.4 million residents in the Greater Boston area.

The municipalities in this region are some of the most densely developed communities in the State, with a diverse range of social vulnerabilities. While many of the climate impacts that the region faces are similar to other areas of the State, its unique characteristics as both coastal and urbanized region make for complex challenges.

While Winthrop does not have a large Environmental Justice population, there are a high percentage of one-person households (which can lead to isolation during extreme weather events), large percentage of children under 5, and older adults over 65.

Project Description and Goals:

This project primarily addressed issues of coastal flooding due to sea level rise, storm surge, and precipitation-based flooding through the lens of urban land use, planning, and development patterns. The goals of this project were two-fold: The first being to advance local resilience in Winthrop through land use planning that would align with a future Master Plan and Zoning Overhaul. The second to be able to develop replicable resources and tools for Metro Mayors communities. During Winthrop's MVP Planning Report, they identified a priority action to "develop a Master Plan for the Town and incorporate building code and zoning." While the Master Planning process takes several years, the research conducted during this project was integrated into the Town's Vision2030 process (spring 2020) and helped advance resilient land use in the near term by establishing the Flood Resilience Checklist.

The second goal of this project was to develop best practices and models for other Metro Mayors communities, using Winthrop as a pilot project. We did this through sharing project outcomes and templates from the Town of Winthrop policy research and Flood Resilience Checklist. As well as hosted a virtual workshop series on climate resilient land use (Fall 2020), and developed an extensive website on the topic.

The project met the over-arching goals of advancing climate resilient land use practices in Winthrop and the region. The project attempted to cover some key elements that are priorities for EEA, including:

- Nature-Based Solutions: Both the resilience checklist and training included information on green infrastructure and way to integrate it into local codes. This included highlighting Somerville's Green Factors zoning code in the training, and highlighting nature-based solutions in Climate Resilient Land Use website.
- Community Engagement: In terms of stakeholder and community engagement, the project was highly impacted by the COVID-19 pandemic as many municipal staff had to shift into emergency/pandemic response and shift away from their typical jobs. Community engagement included developer interviews, an integration of climate issues into the Vision 2030 public forum, and meeting with the Planning Board.
- Regional Replicability: The resources and trainings developed through this project have helped support other municipalities in the region in considering climate resilience in their land use planning and zoning. There is now a much greater interest and enthusiasm for addressing climate impacts through this lens. However, more will be needed in this realm including continuing to support communities in adopting new policies and providing template zoning solutions (like resilience overlay districts or green factors codes). Many of these materials, including recordings of the trainings, will also be made available to the entire MAPC region on MAPC's website.

Results and Deliverables:

- Winthrop Policy Scan and Analysis (including recommendations)
- Winthrop Flood Resilience Checklist, Guidance Document and Flood Mapper- https://www.town.winthrop.ma.us/building-department-inspectional-services/pages/flood-resilience
- MAPC's Climate Resilience Website - Climate Resilient Land Use Strategies – MAPC
- Climate Resilient Land Use and Zoning Workshops Climate Resilient Land Use Trainings and Videos – MAPC
- Additional templates and documents attached
    - Guidance document on adopting a checklist
    - Template Policy Scan document

Lessons Learned:

Addressing climate resilience through local, regional, and State land use regulations and policies will be critical in protecting people and property. The buildings developed today will be in place for decades to come. Municipalities are beginning to understand the critical importance of integrating climate into local zoning code and other local policies and processes. However, the work of updating and adopting new policy is a slow one and must be aligned across multiple stakeholders.

Additionally, localized, down-scaled climate data will be important for property owners and developers to understand their specific risk to climate hazards, rather than general risks. While some communities have this information readily available, most municipalities don't, especially smaller towns and cities.

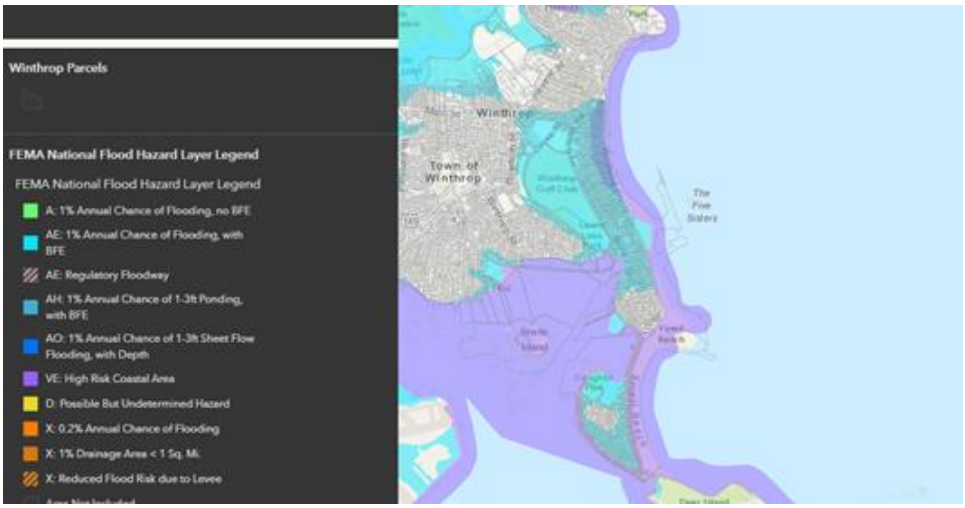
Despite the challenges of addressing local policies and regulations, municipalities interested in doing this work should look for opportunities to first tackle low-hanging fruit as well as opportunities (like a Master Planning process or Zoning Overhaul) to integrate climate data and regulations.

Partners and Other Support:

- Town of Winthrop
    - Office of Town Manager
    - Town Planner
    - Inspectional Services Department
    - Department of Public Works
    - Planning Board
- Metropolitan Area Planning Council
    - Clean Energy, Environment, Land Use, and Data Services Departments

- CAI- Town of Winthrop's GIS technology support
- KP Law- Town of Winthrop's Legal Council
- Metro Mayors Coalition Members: Arlington, Boston, Braintree, Brookline, Cambridge, Chelsea, Everett, Malden, Melrose, Medford, Newton, Quincy, Revere, and Somerville.

Project Photos:



Climate Resilient Land Use Planning: A Primer for Local Governments

November 23, 2020

This recorded workshop focused on understanding regional climate impacts and opportunities to integrate resilience into local land use planning. The workshop included resources developed by MAPC and small group discussions. This session was held on November 23, 2020 for the Metro