



NORTH
SUFFOLK
OFFICE *of*
RESILIENCE &
SUSTAINABILITY

Annual Report 2022

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LETTER FROM THE REGION

The North Suffolk Office of Resilience and Sustainability (NSORS) began its work in June of 2021, making 2022 our first full calendar year of operations. As we mark the end of this busy year, we are reflecting on the projects that were completed in 2022, and anticipating next phases, and the launch of new initiatives, in 2023. This report highlights both the office's accomplishments and its ongoing efforts.

Like the rest of the Boston area, Chelsea, Revere, and Winthrop were impacted by heat waves and drought this summer, and by extreme high tides periodically throughout the year. And as energy prices rose this summer and fall, the need for energy efficiency took on new urgency. As we start to feel the impacts of climate change in real time, regional efforts like NSORS have become increasingly more important as tools to protect our communities and reduce our greenhouse gas contributions.

With two full-time project managers and two half-time Fellows, NSORS has been able to take on new efforts in the past year, and is currently managing over \$3 million in grant funds, a large portion of which was secured by NSORS staff. In addition, Office staff are providing support to a wide range of other projects, both within the North Suffolk region and in collaborative efforts that extend beyond county lines. Some of these new collaborations include a Winthrop-led project to increase the resilience of Belle Isle Marsh; a Revere-led study to examine the impacts of coastal flooding in the Saugus/Pines River watershed; and a project led by the City of Everett to develop cooling solutions in our region. While each of these efforts extends the boundaries of collaboration beyond the North Suffolk region, having NSORS staff capacity has been integral to allowing each of the municipalities to support both regional and local priorities.

As the North Suffolk communities look ahead to 2023, we are considering new ways to promote social and infrastructural resilience, while also mitigating our local contributions to climate change. New leadership by Winthrop Town Manager Anthony Marino, who joined the Town in spring of 2022, and Revere Chief of Planning and Community Development Tom Skwierawski, who joined the City this fall, has reinforced support for our regional efforts, and we are likewise grateful to the municipal CEOs and department heads who have supported the office since its inception. We are also appreciative of the ongoing support we've received from the Barr Foundation and the Metropolitan Area Planning Council (MAPC), without whose support this Office would not be possible.

We are looking forward to another year of community-building and collaboration in 2023.

Sincerely,

Thomas G. Ambrosino
City Manager
City of Chelsea

Brian M. Arrigo
Mayor
City of Revere

Anthony Marino
Town Manager
Town of Winthrop

ABOUT THE OFFICE

In 2019, the North Suffolk County communities of Chelsea, Revere and Winthrop agreed to pursue a regional approach to address climate change issues. Together, the municipalities created a regional office called the North Suffolk Office of Resilience and Sustainability (NSORS), whose staff would dedicate time to both regional and individual municipal projects.

The municipalities, through the City of Chelsea, applied for funding from the Barr Foundation in early 2020 to establish the regional office. On December 2020, they received \$600,000 over a three-year period and developed an initial list of projects and initiatives. In June of 2021, the office hired two full-time staff to launch its efforts. In 2022, NSORS welcomed two part-time Fellows, adding capacity to support its resilience and sustainability efforts. As the years progress, the municipalities are increasing their share of funding to achieve financial sustainability for the operating costs of the office.

At about eighteen months into its existence, NSORS has made significant headway on its original slate of projects, and has added new efforts as well. The office continues to support both efforts that focus primarily on climate change mitigation by reducing greenhouse gas emissions, and on adaptation, or preparing the region for the impacts of climate change. Some projects cut across both areas, a testament to the fact that many interventions, such as planting trees and improving air quality, have benefits for both mitigation and adaptation. NSORS' 2022 projects, and the initiatives on the horizon for 2023, are summarized below, and described in detail over the course of this report.

MEET THE STAFF



DARYA MATTES
RESILIENCE MANAGER

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Darya holds a Masters in Urban and Environmental Policy and Planning from Tufts University, and has previously worked with the cities of Medford and Salem on climate resilience and environmental efforts. She is a resident of Watertown, where she is a board member for the small nonprofit Watertown Community Gardens.



IBRAHIM LOPEZ-HERNANDEZ
SUSTAINABILITY MANAGER

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Ibrahim moved to the Boston area from Puerto Rico after the passage of Hurricane María. He worked on energy policy issues in Puerto Rico, and transitioned to urban planning and climate justice organizing. He is resident of Lynn, where he enjoys walking along the Lynn Shore Drive.



AMANDA LINDLEY
RESILIENCE FELLOW

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Amanda holds a Bachelor's in Environmental Studies from the University of Vermont. She researched the success rates of local flood-plain restoration efforts and designed nature-based community spaces that reconnect people with the outdoors. She is a resident of Attleboro, where she enjoys gardening, hiking, and spending time with her cats.



BIANCA MERCADO
SUSTAINABILITY FELLOW

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Bianca works to keep environmental justice communities informed about energy efficiency opportunities and utility resources. She supports energy and sustainability initiatives, including planning for electric vehicle charging stations, the region's Zero Carbon Action Plan, and Chelsea municipal aggregation through research and community outreach.

Project	Status	Funding Type	Role	Geographic Extent	Project Manager
Racial Equity & Social Vulnerability Assessment	✓				Resilience
Resilient Zoning Development & Implementation	✓				Resilience
Building Energy & Disclosure Feasibility	✓				Sustainability
Green Communities Compliance	✓				Sustainability
Community-Based Emergency Preparedness Network	🟡				Resilience
Community Rating System	🟡				Resilience
Employer Heat Health Education	🟡				Resilience
Mill Creek Flood Mitigation & Restoration	🟡				Resilience
Neighborhood-Scale Resiliency Measures	🟡				Resilience
Saugus Pines River Advocacy for Regional Resilience	🟡				Resilience
North Suffolk Zero Carbon Action Plan	🟡				Sustainability
North Suffolk Mass Save Program	🟡				Sustainability
North Suffolk EV Charging Plan	🟡				Sustainability
Microgrid Initiative (Phase I)	🟡				Sustainability
DER Permit Accelerator Pilot	🟡				Sustainability
Northeastern University Air Quality Study	🟡				Sustainability
Tree Inventory and Management Plan	🟡				Both
North Suffolk Freight Electrification Feasibility Study	○				Sustainability
Hazard Mitigation Plan Update	○				Resilience

✓ Completed

🟡 In Progress

○ Planned

Grant Funds

In-Kind/No Funds

Municipal Funds

Lead

Support





Regional

Chelsea

Revere

Winthrop

GRANTS UNDER MANAGEMENT

Geographic Extent	Project	Grant Source	Amount	Completion Date
 Regional	North Suffolk Mass Save Program	Community First Partnership	\$180,000	June 2024
	North Suffolk Zero Carbon Action Plan	Community Compact Cabinet E&R	\$160,000	June 2023
	North Suffolk EV Charging Plan	Community Compact Cabinet E&R	\$100,000	June 2024
	Community-Based Emergency Preparedness Network	Municipal Vulnerability Preparedness	\$87,000	June 2023
	Employer Heat Health Education	MAPC Covid-Safe Cooling	\$5,000	April 2023
 Chelsea	Mill Creek Flood Mitigation & Restoration	Federal Earmark (FEMA)	\$800,000	September 2025
	Microgrid Initiative (Phase I)	Municipal Vulnerability Preparedness	\$624,000	June 2023
	Mill Creek Flood Mitigation & Restoration	Land & Water Conservation Fund	\$350,000	December 2024
	Neighborhood-Scale Resiliency Measures	Municipal Vulnerability Preparedness	\$320,000	June 2023
	Microgrid Initiative (Phase I)	Green Communities	\$200,000	June 2024
 Revere	White Roof Pilot	MAPC Accelerating Climate Resiliency	\$100,000	June 2024
	Saugus Pines River Advocacy for Regional Resilience	Municipal Vulnerability Preparedness	\$150,872	June 2023
 Winthrop	Tree Inventory and Management Plan	DCR Urban & Community Forestry Challenge Grant	\$40,000	Spring 2023
	Hazard Mitigation Plan Update	FEMA Hazard Mitigation Planning Grant (HMGP)	\$18,500	December 2023

The North Suffolk Office of Resilience and Sustainability currently manages **\$3,135,372** in grant funding for **regional** and individual projects.

The Office plans to maintain this level of grant funding by applying to recurring funding sources such as the Municipal Vulnerability Preparedness, Green Communities, and Community Compact Cabinet Efficiency & Regionalization grant programs.

Opportunities from non-recurring sources may be pursued for ad-hoc initiatives that do not require continuous funding.

RESILIENCY PROJECTS

COMMUNITY-BASED EMERGENCY PREPAREDNESS NETWORK



Volunteers at Revere's Mobile Market

The Covid-19 pandemic demonstrated how critical it is for municipalities to work with community partners to respond to emergencies, and cities around the country, including some in the Boston area, are beginning to develop networks and programs to more proactively build those relationships.

In the North Suffolk region, we have conducted a series of interviews with dozens of municipal staff and community groups in Chelsea, Revere, and Winthrop to learn what partnerships already exist, and what stakeholders would like to see happen in the future. Building on the learning from these conversations, we will use MVP program funds to work with a consultant to convene a community advisory group to coalesce the range of ideas we've heard into a plan for community resilience in the North Suffolk region.

MUNICIPALITY
Regional Effort

GRANT FUNDING
Yes

STATUS
Implementation

OFFICE ROLE
Lead

MUNICIPALITY
Regional Effort

GRANT FUNDING
Yes

STATUS
Implementation

OFFICE ROLE
Lead/Support

MILL CREEK FLOOD MITIGATION AND RESTORATION

Mill Creek, on the Chelsea and Revere line, continues to be a focus for its climate mitigation, ecological restoration, and access opportunities. This year, NSORS secured a Land and Water Conservation Fund grant to design and build a new waterfront park at 88 Clinton Street in Chelsea, with design taking place in the first half of 2023.

Chelsea also received a federal earmark that will allow the City to plan to remove an earthen berm that served as a dam for the Slade's Mill, which will help to restore tidal flow in the upstream areas of Mill Creek. A 2022 water quality study, funded by Coastal Pollution Remediation grant from the Office of Coastal Zone Management provided new insight into the sources of pollution that are contaminating Mill Creek, making the case for both sewer infrastructure updates and ecological restoration measures. And an exciting new opportunity may be on the horizon at the former Forbes Lithographic Factory site, currently vacant, which has been permitted for housing but could also provide a major opportunity for new open space and flood resilience in Chelsea; GreenRoots has taken the lead in fundraising and advocating for this ambitious project.



Mill Creek, on the Chelsea/Revere line, has high levels of contamination and obstructed flow, leading to poor water quality and the loss of its natural salt marsh ecosystem.

EMPLOYER HEAT HEALTH EDUCATION

Many of our heat mitigation strategies address heat at home (through air conditioner giveaways), in public outdoor spaces (though tree planting, shade structures, hydration stations, new parks, and waterfront access) or even public indoor spaces (through extended hours at libraries and senior centers, and designated cooling centers).

But for some people, their greatest risk from heat exposure comes while they are at work, especially for workers in construction, landscaping, kitchens, and laundries. Working with MassCOSH, NSORS is developing a heat health education program for North Suffolk employers, open to employers in Chelsea, Revere, and Winthrop. Employers will be invited to attend a workshop on heat health in the spring, followed by optional "heat audits" that will help them keep their workers safe this summer.

MUNICIPALITY	GRANT FUNDING
Regional Effort	Yes
STATUS	OFFICE ROLE
Implementation	Lead



Commercial laundry workers are among those exposed to extreme heat during heat waves. Photo credit: Wash Cycle Laundry, a Chelsea-based business.

MUNICIPALITY	GRANT FUNDING
City of Revere	Yes
STATUS	OFFICE ROLE
Implementation	Lead

TREE INVENTORY & MANAGEMENT PLAN

With funding from DCR’s Community and Urban Forestry Challenge Grant, the City of Revere is moving forward with a tree inventory and urban forest management plan, the first in many years.

Obtaining an accurate inventory of Revere’s public trees, as well as a plan for maintaining and growing the urban canopy, will provide heat mitigation and flood control benefits to Revere. In collaboration with Davey Resource Group, which has conducted similar projects in nearby communities and nationwide, the City will begin its inventory in winter 2023.



Mature trees at Gibson Park, from Revere’s River Front District Master Plan.

MUNICIPALITY
City of Chelsea

GRANT FUNDING
Yes

NEIGHBORHOOD-SCALE RESILIENCY MEASURES

STATUS
Implementation

OFFICE ROLE
Lead/Support

NSORS is adding capacity for Chelsea to conduct resiliency projects at a range of scales: from a portion of a rooftop to an entire transit corridor. Current projects include:

- **Eastern Avenue Resiliency Vision and Design Alternatives:** With funding from the Municipal Vulnerability Preparedness (MVP) program, Chelsea is conducting a study of Eastern Avenue, a major transit route through Chelsea for both residents and businesses that is very vulnerable to flooding from Chelsea Creek. The project will include outreach to landowners along Eastern Avenue, development of a vision for a more resilient roadway, and proposal of several design alternatives for both gray and green infrastructure that would contribute to that vision.
- **Chelsea Street Bridge Park Design:** The City is developing a new park at the foot of the Chelsea Street Bridge, creating much-needed waterfront access for residents as well as protection from coastal flooding. Community outreach began this fall, and will continue into 2023 as the City advances several design alternatives and coordinates with local nonprofit partner GreenRoots, which is working to develop a complementary park on an adjacent parcel.
- **212 Congress Street Park:** In summer of 2022, GreenRoots created an innovative pop-up park at this location, which was recently donated by the landowner to become public open space in one of the City's largest urban heat islands. Drawing upon designs generated by the Boston Society of Landscape Architects and GreenRoots' ECO youth, the city will begin to plan for a permanent park at 212 Congress, anchoring the "cool block" area, site of a wide range of heat mitigation measures, that is bounded by Congress Ave, Maverick Street, Willow Street, and Highland Street.
- **White Roof Pilot Project:** With an Accelerating Climate Resilience grant from the Metropolitan Area Planning Council (MAPC), the City will partner with the Jordan Boys and Girls Club to apply a white roof on a portion of their building, which is situated at the other end of the "cool block" from the future park at 212 Congress Ave. Following the installation, the City will conduct community and stakeholder outreach to educate the community about the heat reduction and energy-saving benefits of white roofs, and will seek to identify additional locations for white roof installation. Ongoing heat monitoring along the cool block corridor will help to measure the benefits of this project.
- **Bellingham Square Plaza redesign:** In 2022, the City worked with youth interns from local community organization La Colaborativa to learn what Chelsea residents want to see in Bellingham Square Plaza, directly adjacent to City Hall. Heat mitigation and stormwater capture were both focuses of the process, with the new design aiming to bring resiliency benefits to downtown Chelsea. Working with a landscape architecture firm, the City will continue to move the project forward with support from our community partners.



NSORS, City of Chelsea, GreenRoots, and MyRWA staff at the Fall Festival, a visioning event for a new park at the base of the Chelsea Street Bridge.

COMMUNITY RATING SYSTEM ADOPTION

Coastal flood risk mitigation is a major priority for all three North Suffolk communities. While we continue to weigh whether each community will join the Community Rating System program, we are taking steps toward some of the flood risk mitigation activities that will benefit residents, and could also count toward CRS certification if we choose to pursue it.

MUNICIPALITY
Regional Effort

GRANT FUNDING
No

STATUS
Planning

OFFICE ROLE
Lead

MUNICIPALITY
Town of Winthrop

GRANT FUNDING
Yes

STATUS
Planning

OFFICE ROLE
Lead

WINTHROP HAZARD MITIGATION PLAN UPDATE

Winthrop's Hazard Mitigation Plan (2014) has expired, and must be updated in order for the Town to be eligible for FEMA funding. Winthrop has applied for funding to support a plan update, and expects to hear the status of this request in January 2023. If funded, the update would begin in early 2023, bringing together stakeholders in Winthrop to identify hazards and critical infrastructure, and to highlight priority mitigation measures.



Coastal flooding in Winthrop, February 2013. Photo credit: Darren McColester / Getty Images.

REGIONAL EFFORTS BEYOND NORTH SUFFOLK

NSORS is also supporting several regional projects that extend beyond the boundaries of the North Suffolk area. Our office's regional nature recognizes that climate change adaptation must be implemented across municipal boundaries, and this is true beyond county lines as well.

Some of the projects NSORS is supporting in the wider region include:

- **Equitable Coastal Resilience and Redevelopment in Lower Mystic:** in partnership with Somerville, Malden, and Everett, plus the three North Suffolk communities, the Resilient Mystic Collaborative is leading a two-year exploration of how large-scale landowners can coordinate their development projects to ensure resilience and public waterfront access across the region.
- **Saugus River Watershed Vulnerability and Adaptation Study:** Revere is leading a collaborative study, along with Lynn, Saugus, Everett, and Malden, to learn more about flood vulnerability in the Saugus/Pines River watershed and to identify regional solutions.
- **Belle Isle Marsh: Evaluating Nature Based Solutions to Protect Abutting Communities and Critical Shorebird Habitat from Coastal Inundation:** Winthrop, Revere, and Boston are working with the Mystic River Watershed Association, state agencies, and others to identify resiliency interventions for Belle Isle Marsh, a valuable coastal habitat. Located in a highly urbanized area, the marsh has few opportunities for marsh migration as sea levels rise, and exposes nearby homes and businesses to flooding.
- **USACE/EEA Boston Metro Coastal Flood Management Study:** The US Army Corps of Engineers recently embarked on a multi-year study to explore regional flood management opportunities in Boston Harbor. All three North Suffolk communities are part of the study area, and NSORS is providing staff capacity to represent the North Suffolk municipalities in working group meetings.

MUNICIPALITY
Town of Winthrop

GRANT FUNDING
Yes

STATUS
Planning

OFFICE ROLE
Support

SUSTAINABILITY PROJECTS

MUNICIPALITY
Regional Effort

GRANT FUNDING
Yes

STATUS
Implementation

OFFICE ROLE
Lead

ZERO CARBON ACTION PLAN (ZCAP)

The ZCAP project kicke-off in early 2022, with a core team composed of staff from NSORS, the Metropolitan Area Planning Council (MAPC), Chelsea/Revere/Winthrop municipal staff, and GreenRoots staff. The Office conducted stakeholder interviews to gauge their understanding of, and interest for, climate mitigation. The MAPC team developed a GHG emissions inventory for each of the communities as well as a regional inventory.

The core team held workshops throughout the communities, with a mix of in-person and virtual gatherings to educate on the scope of the project nad its overall goals. The workshops included a Q&A section to receive resident's feedback for the project. The core team is finalizing analyzing the feedback received to analyze these into actionable categories for further community input.

In early 2023, the core team will be holding regular meetings with a steering committee compose of municipal staff and GreenRoots. The committee will provide more concrete ideas for strategies and actions that are to be included in the ZCAP plan.



Community kick-off workshop held in Chelsea. Residents learned the basics around climate mitigation, what the GHG emissions inventory looks like, and provided ideas on what they would like to see in a sustainable Chelsea.

MUNICIPALITY	GRANT FUNDING
Regional Effort	Yes

STATUS	OFFICE ROLE
Implementation	Lead



The Mass Save program is funded by utility rate payers.

MASS SAVE COMMUNITY FIRST PARTNERSHIP

In 2022, the Office lead efforts throughout the three municipalities to sign up residents and small businesses for no-cost energy assessments. These efforts have been in collaboration with the respective municipal staff, as well as All In Energy.

A Sustainability Fellow was hired to help with outreach and coordination to streamline the program's workflow. The team attended workshops offered by Mass Save vendors to understand how best approach interested residents and small businesses. In the Fall of this year, the Office published an RFI to sign an MOU with a home performance contractor (HPC). NEEECO was selected as the preferred HPC, helping to leverage their resources for outreach efforts while receiving important metrics for future energy planning.

The team's outreach efforts included:

- **Tabling** at municipal and non-municipal events.
- **Flyering** in key locations and small businesses.
- **Canvassing** in targeted neighborhoods and commercial corridors.

CHELSEA MICROGRID INITIATIVE

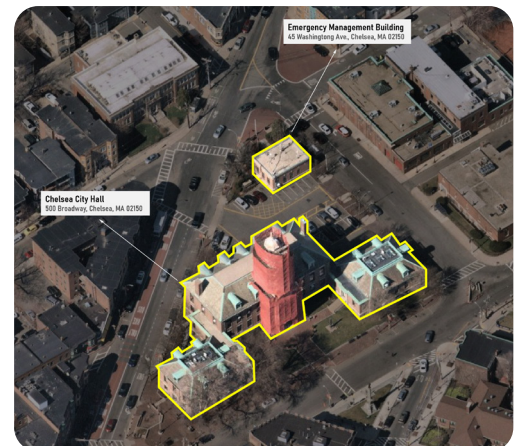
The Office is providing procurement and project management support to the microgrid team. The City of Chelsea, in partnership with GreenRoots, Climable and Clean Energy Solutions, have successfully submitted Interconnection Service Agreements (ISA) with Eversource on the sites where battery energy storage systems (BESS) will be installed. Additionally, the project will include the replacement of City Hall's generator to provide increased resiliency.

Ameresco has produced 30% and 60% design documents and associated equipment specifications, while the City of Chelsea has secured desired setbacks for BESS placement near buildings. The City is currently in contract negotiations, once finalized, the Energy Services Agreement (ESA) will be reviewed by the Department of Energy Resources per MGL 25A regulations.

Throughout 2023, the project team will finalize design documents and execute purchase order for all equipment associated with this phase of the project. Construction and installation is expected to occur in the second half of next year. Conversations on the governance of the system and scope for Phase II of the project will commence in January, while the selection of a vendor to develop a business plan is expected to occur in the first half of the year.

MUNICIPALITY	GRANT FUNDING
City of Chelsea	Yes

STATUS	OFFICE ROLE
Implementation	Lead



The Chelsea microgrid includes City Hall and the Emergency Management building, batteries will be installed to maintain operations during a power outage.

MUNICIPALITY	GRANT FUNDING
Regional Effort	Yes

STATUS	OFFICE ROLE
Implementation	Lead

NORTH SUFFOLK EV CHARGING PLAN

The Office was awarded an Efficiency & Regionalization grant from the Community Compact Cabinet to lead the development of a regional EV charging plan. The region has a total of 19 publicly-accessible charging stations, with 25% of buildings serviced within a 2.5-minute drive, 43% within a 5-minute drive, and 32% above a 5-minute drive. Currently, the region allows for 32 vehicles to be charged at any given time.

The team will be releasing an RFP through the City of Chelsea to procure a consultant to help in the development of the plan. The scope of work for this project includes:

- **Literature Review:** Understanding what the current state of municipal EV charger planning is, contextualized to the region's characteristics.
- **Stakeholder Engagement:** Conducting interviews with municipal and non-municipal stakeholders to identify opportunities and barriers to implementation.
- **Quantitative & Spatial Analysis:** Estimation of EV adoption in the region, as well as site suitability to create an effective network.
- **Site Suitability & Preliminary Design:** Identification of parcels suitable for implementation and any infrastructure or financial barriers.



An EV charging station located in Chelsea City Hall.

OTHER CLIMATE MITIGATION & AIR QUALITY EFFORTS

The Office is providing support across various projects directly related to climate mitigation or air quality. These projects are being led by other organizations (financially and in staff time), while NSORS represents some or all municipalities in their development.

- **North Suffolk Freight Electrification Feasibility Study:** in partnership with the Boston Region MPO and MAPC, the Office will support this study centered in identifying the opportunities and barriers businesses confront to effectively transition their freight network from fossil fuels to electric. Transportation is a key GHG emissions source in the region, and its negative public health outcomes are compounded by heavy industry and Boston Logan Airport.
- **Northeastern University Air Quality Study:** in partnership with Northeastern University, the Office is advising on the placement of QuantAQ sensors across Chelsea to better understand particulate matter (PM) emissions and their relationship with heat. Part of the sensor network will be strategically placed along freight routes and key intersections to measure how transportation contributes to PM emissions.
- **DER Permit Accelerator Pilot:** in partnership with the New Buildings Institute and MAPC, the Office is attending a series of workshops on municipal permitting for expedited deployment of renewables and net-zero-enabling technologies such as heatpumps.

MUNICIPALITY	GRANT FUNDING
Regional Effort	No

STATUS	OFFICE ROLE
Planning	Support



The City of Chelsea is home to the New England Produce Center, the largest produce distributions facility in the region and key freight logistics center.

COMPLETED PROJECTS

RACIAL EQUITY & SOCIAL VULNERABILITY ASSESSMENT

In spring-summer 2022, with the support of an Accelerating Climate Resiliency grant from MAPC, NSORS worked with consultants at Kim Lundgren Associates to build upon existing studies exploring social vulnerability in the North Suffolk region, and to create a new decision-making framework to help guide resilience and sustainability interventions toward equity. After a review of existing studies, a series of interviews, focus groups for residents and community organizations, and a resident survey, KLA and NSORS produced a Summary of Findings that highlights specific social vulnerabilities in each community and the region as a whole. Subsequently, the team developed a Climate Equity Framework, a tool that can be used by municipal departments to assess the equity implications of proposed projects and to modify projects to ensure that serving individuals most vulnerable to climate hazards remains NSORS' top priority. The tool is currently being piloted in the three municipalities as they identify projects for 2023. Links to the Summary of Findings, Climate Equity Framework tool, and a Recommendations Memo for the use of the tool, are available in [Appendix A](#) of this document.

WINTHROP: RESILIENT ZONING DEVELOPMENT & IMPLEMENTATION

With support from an MVP grant, the Town of Winthrop completed a review of its zoning and made modifications to more easily allow residents to take actions that support resilience and sustainability, such as renewable energy and floodproofing. The proposed changes, identified by MAPC in partnership with Town employees, were accepted by Winthrop's Town Council in summer of 2022, paving the way for Winthrop residents and business owners to make their properties more sustainable and resilient.

BUILDING ENERGY DISCLOSURE FEASIBILITY

The Office conducted an analysis to gauge the amount of buildings and respective square footage the municipalities would be able to benchmark. The purpose of energy benchmarking of non-municipal buildings is to provide technical assistance to owners to implement energy conservation measures and transition to renewable sources to reduce their respective GHG emissions footprint. The main outcome from this project was the adoption of an energy benchmarking ordinance by the City of Chelsea in June 2022, requiring buildings with 20,000 square feet to report their energy use on an annual basis.

WINTHROP: GREEN COMMUNITIES COMPLIANCE

The Office successfully submitted to the Department of Energy Resources (DOER) 5 years energy reports benchmarking Winthrop's energy use intensity, including vehicle usage. Once reviewed by DOER, Winthrop will be able to apply for Green Communities funding for this Spring 2023 to implement energy conservation measures or renewable energy projects. The Office will assist Winthrop in future Green Communities reports to maintain compliance with the program.



**NORTH
SUFFOLK
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RESILIENCE &
SUSTAINABILITY**

APPENDIXES

APPENDIX A

North Suffolk Social Vulnerability Assessment Deliverables

[Summary of Findings](#)

[Click Here](#)

[Climate Equity Framework](#)

[Click Here](#)

[Implementation Recommendations](#)

[Click Here](#)

North Suffolk Social Vulnerability and Equity Assessment: Summary of Findings



JUNE 2022

North Suffolk Office of Resilience and Sustainability
An initiative of the communities of Chelsea, Revere, and
Winthrop

Authored by: Kim Lundgren Associates, Inc.

