Sustainable Concord Case Study

Municipality: Town of Concord Project Title: Climate Action and Resilience Plan Grant Award: \$100,095 Match: \$37,840

Community Overview:

The Town of Concord, MA, with a population approaching 18,000, is an historic community located about 20 miles northwest of Boston. Concord is known for its revolutionary, literary, abolitionist, and agricultural history. It is home to the Minute Man National Historical Park, Walden Pond State Reservation, and many other notable historic sites. Concord also has a long history of sustainability, including a goal of reducing greenhouse gas (GHG) emissions 80% by 2050 and a commitment to climate resilience.

Description of Climate Impact:

Concord is already experiencing climate change in the form of increased flooding, droughts, heat, and intense storms, and we can expect more. These climate hazards can have dramatic impacts on the community including risk of heat-related and vector-borne illness, damage to habitats and biodiversity, power outages, blocked roadways, and damaged infrastructure. These experiences have incited an urgency to plan and implement actions to enhance Concord's resiliency.

Project Goals:

The goal of developing a Climate Action and Resilience Plan was to prioritize actionable solutions for reducing greenhouse gas emissions while improving Concord's resilience to the impacts of climate change.

Approach and Result:

Approach

The Climate Action and Resilience Plan, named *Sustainable Concord*, was developed through a collaborative Town-wide effort that included Town staff, committee members, residents, businesses, volunteers, and members of the community.

Two groups served as primary advisors to the development of the plan, the Climate Action Advisory Board and a municipal advisory team. Ten advisory group meetings were held from September 2019 through June 2020. Advisors also provided extensive input on draft documents and plan materials. Step 1: Baseline Assessment and Action Identification – The Plan drew upon previous Town planning efforts and reports as well as regional studies. We cast a wide net to collect potential climate actions, including town plans and reports, high-impact best practices from other communities, input from plan advisors, and ideas and insight from the community.

Step 2: Action Prioritization – With a long list of potential actions, the plan advisors relied on four guiding principles (depicted below) to prioritize climate actions based on the highest potential impact, with a particular focus on actions with high greenhouse gas reduction potential and resilience benefits. We relied on quantitative analysis in reports including the GHG inventory and a wedge analysis of potential mitigation strategies as well as the most recent climate science provided by MA Resilient.



Step 3: Final Plan Development – Using the priority actions, we developed the final plan through multiple iterations and reviews by the plan advisors and the community.

Community engagement was a priority throughout the process. We hosted events, presentations, discussions, and online engagement.

- ✓ 112 responses to an online survey about actions
- ✓ 8 one-on-one stakeholder interviews
- ✓ 100+ attendees at community open house
- ✓ 3 presentations at community events
- ✓ 16 responses to business resilience survey
- ✓ 1 business resilience open house
- ✓ 20+ social media posts
- ✓ 20+ ideas submitted via online form

<u>Result</u>

The resulting climate action and resilience plan includes 22 priority actions organized into five plan elements with goals for each. The priority actions represent the most important next steps for Concord to take in the next 5 years.



Implementation blueprints for each priority action outline how Concord will move these priorities forward, identifying a champion who will lead the work, implementation steps with timeframes and key partners, as well as details about tradeoffs, equity considerations, potential financing mechanisms, tracking success, and engaging the community.

The Town recognizes that truly effective climate leadership will require that sustainability is integrated into daily operations, decision-making, and planning. It calls for a culture of climate change awareness and understanding. The plan also identifies three cross-cutting leadership priorities in the area of governance, education, and social resilience.



Governance Integrate sustainability goals, metrics, and evaluation criteria into Town planning, including staff and department evaluations and budgeting.



Education Work with educators, parents, students, the School Department, and the State to bring climate education curricula into schools and student activities.



Social Resilience Prepare businesses, residents, and agriculture for the impacts of climate change through education and climate preparedness planning.

Lessons Learned:

Developing a climate action and resilience plan is a significant undertaking and success requires extensive stakeholder and community engagement, knowledge of high-impact climate actions, understanding of climate impacts in the community, and dedicated town staff time and expertise.

Key to success was the ability to draw on previous work. For resilience, this included the MVP planning process, Resilient MA, MAGIC's regional climate vulnerability assessment, and the work of Concord's town departments such as natural resources and public works. For

mitigation, this included a community-wide greenhouse gas inventory, a wedge analysis, and the municipal light plant's strategic plan.

Community engagement and transparency throughout the process was also critical to success. This was made especially challenging in the final months of the project when COVID-19 resulted in closing of town offices and cancelling of all in-person meetings and events. We transitioned to virtual meetings for the advisory groups and adapted our final months of community engagement to online formats. For example, we created a 7-minute recorded presentation sharing an overview of the plan and posted on YouTube with the release of the plan for public comment.

Prioritizing climate actions is inherently challenging because climate change is a complex issue. By setting clear project goals and agreeing on the core principles at the beginning, we were able to frequently revisit the goals and principles to ensure the resulting plan achieved the goals. Many members of the community would have liked to see additional data analysis in the process, but given the timing, scope and budget, that was not realistic. This as well as a few other immediate next steps outside the scope of the project were identified and will be taken once the plan is completed. Overall, the plan advisors agreed that the plan is a solid foundation for taking action on climate in the next 5 years.

Partners and Other Support:

This project, and decades of past climate action in Concord, is thanks to the hard work of volunteers, community groups and town committees.

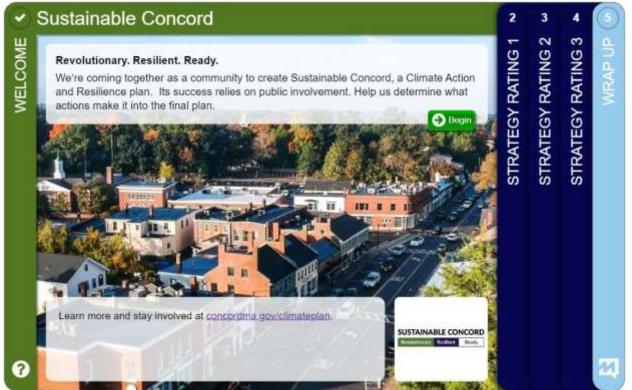
The municipal advisory team made up of 15+ department and division heads played a critical role in developing this plan as well as the 10 volunteer members of the Climate Action Advisory Board.

Project consultants included:

- *Kim Lundgren Associates, Inc.:* Project lead, with expertise in incorporating innovative stakeholder facilitation and equitable engagement into climate action and resilience planning projects.
- ONE Architecture: Expertise in unique resilient design for the built environment that provided for a focused vulnerability assessment of business districts within town and recommendations for resilient design improvements.
- *Center for Sustainable Energy*: Technical expertise in overcoming market barriers to widescale implementation of key sustainability technologies such as electric vehicles, photovoltaics, and net-zero energy buildings.

Project Photos:

Photo of Metroquest Survey to gather community input.



Graphic used on social media and website to introduce draft plan for public comment.



Graphic used on social media and website to promote community survey.



Kate Hanley, Director of Sustainability, recording voiceover for a video from home during office closures.

