Sustainability Fellowship
Sustainability Guidelines for Historic Homes
Town of Concord, MA
Concord, MA

About the Sustainability Fellows Program:
UNH Sustainability Fellowships pair exceptional students from across the U.S. with municipal, educational, corporate, and non-profit partners in New England to work on transformative sustainability initiatives each summer. Sustainability Fellows undertake challenging projects that are designed to create an immediate impact, offer a quality learning experience, and foster meaningful collaboration. Fellows work on-site with their mentors at partner organizations during the summer, supported by a network of Fellows, partners, alumni, and the UNH Team. Graduate students, exceptional undergraduate students, and recent graduates from any accredited college or university are eligible to apply.

A detailed description of one Fellowship follows. To learn more about the other Fellowships offered this year, and for application instructions, see: www.sustainableunh.unh.edu/sustainability-fellows.

About the Host Organization:
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 by 80% by 2050.

About the Fellowship:
About 30% of community-wide GHG emissions in Concord come from residential homes. Achieving Concord’s 80% GHG reduction goal will require retrofitting our existing housing stock, much of which is located within an historic district or is subject to a Demolition Delay bylaw (approx. 1,260 homes), to be more energy efficient and carbon-free. Retrofitting historic buildings present unique challenges, for example replacing inefficient windows and/or installing rooftop solar panels require approval by the Historic Districts Commission when the structure is within a historic district. Many residents have expressed an interest in adapting or retrofitting existing homes rather than demolish and rebuild, but don’t always have access to the critical information needed to consider such an option.
The summer fellow will work with Town staff to:
- Identify and understand specific regulatory, technical, and financial barriers that apply to:
  o Retrofitting older, historic homes for energy efficiency (replacing windows, improving insulation, etc.)
  o Installing renewable energy at historic homes (solar)
  o Fuel-switching by installing ground-source or air-source heat pumps
  o Other sustainability or resilient measures
- Identify and document best practices from other communities for owners of older, historic homes to improve sustainability and resilience to climate impacts (case studies, resources, etc.)
- Identify success stories of older, historic homes or buildings in Concord that have made sustainable improvements for future case studies (for example, Orchard House, featured in a case study on the Town’s Sustainability webpage)

Outcomes:
The Fellow will create sustainability resources and outreach materials for owners of older, historic homes and properties within the historic districts in Concord. The format of materials will be determined through consultation with stakeholders - possibilities include some combination of guidelines, a handbook, fact sheets, web content, etc.

Impact:
The fellow will have the opportunity to both experience Concord’s history and dig deep into the technical, financial, and regulatory barriers to energy retrofits in older, historic homes, gaining valuable experience in aspects of both sustainable design and historic preservation. The fellow will report to the Director of Sustainability and will also engage with staff in the Department of Planning and Land Management and Tourism and Visitor Services as well as members of various town committees, thus gaining broad experience in municipal government operations. The fellow will be expected to take ownership of the project, demonstrate creativity, and work independently.

The fellow’s work to provide resources for how to achieve sustainability in historic homes will address a significant challenge to reducing GHG emissions from Concord’s existing buildings and help Concord achieve its climate goals. We also hope that this will serve as a resource for other communities with older, historic homes and buildings.

Desired Qualifications:
- Knowledge of green building best practices
- Experience or academic background in historic preservation, urban planning, and/or architecture
- Experience engaging diverse groups of stakeholders
- Strong written and oral communications, as well as interview skills
- Self-motivated, able to manage time responsibly and work independently to meet deadlines
• Ability to convey complex information to a range of stakeholders (Town staff, elected officials, residents, business groups, etc.) in clear and visually engaging ways
• Passion for sustainability
• Interest in history and/or working in local government

Work Location: 22 Monument Square, Concord, MA 01742

Mentors: Kate Hanley, Director of Sustainability, Town of Concord, MA

Compensation: $6500
(taxable and distributed on a two-week payroll cycle over the course of the fellowship)

Expectations:
Fellows are expected to be primarily dedicated to their assigned projects throughout the summer, and also participate in a variety of networking activities, professional development opportunities, and presentations coordinated by UNHSI. Specifically, Fellows are expected to:
• Attend a mandatory orientation at UNH prior to the start of the fellowship term, May 26-28, 2020. (Travel scholarships may be available for students traveling from outside New England.)
• Work full-time on-site at the partner organization, June 1 - August 14, 2020
• Complete 400 hours of work, including work at host site as well as UNHSI activities, between May 26 – August 14, 2020.
• Complete a fellowship project according to the work plan (with adjustments as necessary).
• Participate in weekly webinars or advisory group meetings.
• Present work at mid-term and final poster sessions at UNH on July 10 and August 7. (Travel support available.)
• Engage in additional professional development, networking, and advisory activities as offered.
• Provide and receive feedback at the end of the fellowship.

Apply by February 10 at www.sustainableunh.unh.edu/sustainability-fellows.

Questions may be addressed to megan.carney@unh.edu.