



UNH Sustainability Institute

Sustainability Fellowship Climate Action Data Analysis Northampton, MA

The City of Northampton, Massachusetts, is deeply committed to sustainability—as evidenced by the fact that it is one of only five cities in the US to earn the highest possible score in the STAR Community Rating System™ (www.starcommunities.org/). The City is scheduled to update its “Sustainable Northampton Comprehensive Plan” in 2018, and has identified climate adaptation and mitigation as key areas in which to focus and improve the updated plan. To that end, Northampton has signed on to the global Compact of Mayors (see <https://www.compactofmayors.org/>), under which it is required to track annual energy and GHG emissions trends, create plans for mitigation and adaptation, and document progress. The City sees this as a crucial opportunity not just to “check a box” in terms of reporting requirements, but to ensure that the climate mitigation and adaptation planning efforts they are undertaking are as well-informed, clear and transparent to the community, and innovative as possible.

The Climate Action Data Analysis Fellow will engage deeply in this data collection and analysis effort. Specific deliverables will be the following:

- A complete community- and municipal-level Greenhouse Gas inventory using the CDP Cities protocol (see www.cdp.net). This will entail use of existing data when available (e. g., municipal utility data and, if available, city-wide utility data) as well as the creation of models and identification/use of relevant proxy data when the desired data points are not available (e.g., heating oil and gasoline consumption).
- Analysis of the projected GHG reduction impact of potential policies (e.g., implementation of bike share, denser land use policies, building retrofits, expanded PV, etc)
- Additional data collection and analysis, as time permits, to prepare for a post-fellowship community-informed vulnerability assessment, building on current city research (e.g., the current hazard mitigation plan and a commissioned study on health effects of climate change) and other data sources.
- Creation of infographics to communicate the results of these analyses
- Creation of a set of desk instructions/how-to manual to make it simple for future interns to conduct annual updates of the GHG inventory.

This is an excellent opportunity to inform and help shape the climate leadership efforts of the City of Northampton, to develop in-depth expertise around effective approaches to community GHG mitigation and adaptation, and potentially to help advance current “best practices” in the realm of community-level carbon accounting and reporting. The project will also provide excellent opportunity for networking, as it will involve working closely with staff in the Office of Planning and Sustainability and across departments.

Location: Office of Planning and Sustainability, City of Northampton

Time commitment: 40 hours per week, June 5-August 18, 2017

Compensation: \$6000 stipend

Desired Qualifications:

- Fluency in carbon accounting protocols and concepts, and previous experience in conducting GHG-inventories, ideally at the community level
- High levels of motivation and self-direction
- Demonstrated excellence and fluency in quantitative analysis
- Strong verbal and written communication skills
- Creativity, curiosity, and problem-solving skills informed by a systems-thinking approach
- Academic or experiential background in community planning, policy, and/or energy all extremely helpful

UNHSI Sustainability program eligibility:

Graduate students, exceptional undergraduate students, and recent graduates are eligible. We will encourage, but not require, an academic sponsor or reference for each fellow, and where possible we will ask that course credits are awarded.

Supervision, Training, Mentoring and Evaluation

This fellow will receive supervision from OPS Director Wayne Feiden, as well as mentoring and extensive professional development offerings from UNHSI.

Fellows will be expected to participate in three MANDATORY events:

- A three-day, two-night orientation in Durham, NH, May 31st- June 2nd. Lodging and food are provided; Fellows are responsible for any associated travel costs.
- Midterm project presentations to UNHSI staff, faculty and relevant project partners (can be done remotely).
- A summative evaluation and feedback session at the end of their placement.

Apply by February 17th at www.sustainableunh.unh.edu/sustainability-fellows