



## Cambridge Climate Change Vulnerability Assessment

### Project Update

We have had an unintentional pause in communications about the Cambridge Climate Change Vulnerability Assessment. Much work has been taking place and some changes in the scope of work have become necessary. So the project team would like to provide a project update to the Technical Advisory Committee (TAC), Expert Advisory Panel (EAP), and the public.

#### **What the project has been doing**

**Developing technical protocols:** The project team, led by our consultants at Kleinfelder and the inter-departmental steering committee, have met with the Expert Advisory Panel several times to review proposed protocols for making climate change projections, assessing economic impacts, and assessing public health impacts. The project team has finalized those protocols, which will be included in a report in the fall.

**Documenting Existing Conditions:** The consultant team has been collecting data and other information to document existing conditions that will serve as a baseline for the assessment. Several TAC members have met with the consultants and provided data and information about their systems and property. Existing conditions information is also being pulled from other sources.

**Public outreach and engagement:** In addition to the EAP meetings, City staff have been reaching out to a wide range of community organizations and stakeholders to inform them about the vulnerability assessment and to gather early input. The original plan called for centralized public meetings, but it was decided instead to reach out directly to a broad range of constituencies and make mini-presentations and solicit survey input. A group of staff from multiple City departments, including Community Development, Public Health, Public Works, Water, and Fire, participated in a training workshop about the vulnerability assessment. Kleinfelder, the Consensus Building Institute, and City staff developed a set of presentation slides, a two-page project summary, and a short survey questionnaire. Jennifer Lawrence of the Community Development Department reached out to organizations to schedule presentations and coordinated the deployment of staff to these presentations. Meetings have been held with neighborhood associations, business associations, environmental organizations, City advisory committees and boards, youth groups, senior groups, individual businesses, and other types of community organizations. To date, about three dozen presentations have been made to about 500 people. Over 200 surveys have been completed. Any organization interested in hosting a presentation can contact Jennifer Lawrence at [jlawrence@cambridgema.gov](mailto:jlawrence@cambridgema.gov) or 617-349-4671.

**Regional Coordination:** In the course of our project, the City learned of related climate change preparedness work in our region. The Massachusetts Department of Transportation (MassDOT) is conducting a vulnerability assessment of the Central Artery tunnels to flooding. As part of their project, an ADCIRC-based model is being built for the Boston Harbor basin. ADCIRC, which

stands for advanced circulation, is a powerful computer model of coastal processes. The City has decided that the use of this model will enhance Cambridge's vulnerability assessment in terms of understanding the risk of storm surge flooding with sea level rise given the complex topography of the coastline near Cambridge. MassDOT has been very supportive and open with the City about their project and provided us with the opportunity to take advantage of their approach. The project team has spent considerable time coordinating with MassDOT and their consultants. This opportunity has necessitated pushing the project schedule back some, but we feel it is worth it.

The City is also coordinating with related activities by the City of Boston, the Boston Water and Sewer Commission and the Metropolitan Area Planning Council. Cambridge was also one of the inaugural participants in the Resilient Communities for America initiative of ICLEI – Local Governments.

**Climate modeling:** ATMOS Research, one of the City's sub-consultants, has been developing climate change projections for 2030 and 2070. The work will provide future temperature, precipitation, relative humidity, and sea level projections, which will inform the development of planning scenarios for the project.

**Scope of work revision:** The vulnerability assessment has evolved from the original concept. The project team received robust feedback from the EAP and members of the TAC. We have also been monitoring climate change preparedness work in other places such as New York City and trying to glean best practices. As a result, the scope of work has been expanded and modified to include a more robust approach on storm surge flooding, to provide for more effective involvement of stakeholders in identifying and ranking vulnerabilities, and to do more on social vulnerability.

### **Project schedule**

The original plan was to complete the vulnerability assessment by the end of 2013. But given the circumstances that arose, particularly with the storm surge flooding modeling, the planned project completion date is now June 2014. With the completion of the vulnerability assessment, the project will then move onto development of a climate change preparedness plan for Cambridge.

### **Upcoming Activities**

This fall the project plans to present a report on existing conditions and climate change projections. Meetings with the TAC and EAP will be held to review the work to date. A general public meeting will also be held to present the work. Notice of meetings will be posted on the project webpage at <http://www.cambridgema.gov/climateprep>.

For questions, please contact John Bolduc at [jbolduc@cambridgma.gov](mailto:jbolduc@cambridgma.gov) or 617-349-4628.