

# Ask the Climate Question: Adapting to Climate Change in Urban Regions

July 22, 2009

## Summary of Speaker Remarks

Wednesday's briefing enriched the understanding of what it means to do adaptation in counties and cities around the country by providing real world, tangible examples of adaptation actions taking place today. With opening remarks from CCAP and the Rockefeller Foundation, the audience heard from representatives of the proactive adaptation programs in Chicago, King County, and New York City about the successful planning strategies and projects that are underway at the local level. The panelists also spoke about the ways in which the federal government and government agencies can contribute to efficient and effective adaptation outcomes from coast to coast.

Christina Rumbaitis Del Rio of the Rockefeller Foundation discussed their \$70M initiative on building climate resilience with a focus on poor and vulnerable communities, noting the Foundations' work in Asia, Africa and the U.S. on the issue. She acknowledged the work that CCAP Urban Leaders has done to accelerate the learning among adaptation practitioners and helping people around the world think about adaptation as "groundbreaking". The Urban Leaders partner cities are demonstrating the power of public, private and academic partnerships to spur action to build resilience to the impacts of climate change.

Steve Winkelman of CCAP explained the role of the Urban Leaders program in catalyzing adaptation planning and implementation in urban regions. He emphasized that climate change impacts generally will not comprise insurmountable challenges never before faced by communities but rather an intensification of existing challenges that can be met via concerted efforts to plan and prepare for in advance. The good news is that state and local governments in many cases are "doing it already" in that they have many of the skills and tools that will be needed to adapt to climate change (e.g. emergency preparedness, building codes, zoning, flood management). Winkelman also pointed to the importance of all levels of government to Ask the Climate Question: How will climate change impact what, where and how we build? In many instances climate adaptation actions can simultaneously have positive mitigation results lowering energy use or absorbing carbon while also increasing community resilience to impacts (e.g. water conservation, green roofs, urban forestry). In addition, many adaptation actions present opportunities for economic benefits through increased resource efficiency. All levels of government from local to state to federal should key an eye open for opportunities in their decision and policy making to exploit the nexus or intersection of climate adaptation and mitigation, and the potential economic benefits of adaptation planning and implementation, via the filter of "asking the climate question."

Joyce Coffee offered a closer look at the assessment process used by Chicago to identify and prioritize the most vital adaptation actions. Using the concept of collateral benefits as their main tactic, Chicago also included economic assessments of climate impacts in their risk assessment process. In assessing the heat impacts of climate change and the Urban Heat Island effect, Chicago found that the areas most impacted by extreme heat tracked to the areas with the highest rates of foreclosures, noting an important link between the impacts of climate change and most vulnerable communities, which frequently comprise citizens with the lowest levels of income. Additionally, stimulus oriented funding making buildings more energy efficient and therefore less expensive to live in also could help people keep their homes producing a positive benefit rather than a negative cost to the economy. The city is using these maps to focus resources where they can make the biggest impact for reducing vulnerability to heat in the city.

Matt Kuharic from the executive office of King County, Washington described some of the innovative work being done by the county government to manage impact risks related to loss of water resources from mountain snowpack. Among the most compelling stories in the region is the creation of the Flood Control Zone district which is able to do 10 times the work it used to on strengthening levees and reducing flooding risks because taxpayers voted to raise their own taxes in order to support the effort with \$335 million in funding. The County is also utilizing proactive strategies such as relocating at-risk communities and allowing rivers to reoccupy parts of their original floodplains to adapt to the impacts of climate change on flooding frequency.

Adam Freed of New York City highlighted the need to build beyond current specifications, which were constructed on historical data that no can longer be used to predict future climate conditions. Because of the increasing extremes in weather as a result of climate change, Freed purports that city planners must change how they think about infrastructure, how it is designed, and where they decide to put it. One important lesson identified by New York City when looking for solutions to climate impacts is to coordinate and think of the downstream impacts of any adaptation strategy, such as identifying the effects that closing street drains to protect the Subway from flooding will have on surface water flooding and runoff impacts.

Each of the panelists offered views on the needs of local governments and ways that the federal government could help advance adaptation efforts. The modernization of the country's aging water-related infrastructure will be key to answering the climate question for many cities where this infrastructure is over 100 years old. Updating mapping tools, especially the FEMA flood maps to which building codes are tied, on a regular basis will be critically important to ensuring that infrastructure and buildings are built with consideration to climate impacts. CCAP highlighted the importance of creating a climate extension service in order to provide local governments with the relevant, actionable climate data at the right scale for planning and implementation of the most beneficial adaptation actions.

Panelists also noted that while local governments have control of the most important adaptation tools, current legislation puts the adaptation funding in the hands of the states and that changing this dynamic to ensure funding reaches the local level would have a positive impact on adaptation efforts in the country. Finally, panelists asserted that funding for adaptation actions should be appropriated based on greatest vulnerability to and risk from climate change impacts to ensure that dollars are spent where they are most needed rather than based on an across the board per capita calculation.

This briefing just scratched the surface of the efforts underway by Urban Leaders partners on climate change adaptation. For those looking for additional adaptation stories, lessons learned and recommendations for federal policy, refer to the recently released CCAP report: "*Ask the Climate Question: Adapting to Climate Change in Urban Regions*". CCAP is working to continue the dialogue created at this briefing and continues to work with the Urban Leaders partners around the country on how to create resilient communities for an age of climate change.