

**Cambridge Climate Resilience Zoning Task Force
Joint Meeting with City Council Health & Environment Committee
City of Cambridge, Massachusetts**

**Summary of Task Force Meeting #5
Wednesday, May 29, 2019
5:30 PM to 7:30 PM
City Hall, Cambridge, MA**

Task Force members present:

1. Jason Alves, East Cambridge Business Association
2. Louis Bacci Jr, Laborers Local 151/East Cambridge/Planning Board
3. John Bolduc, Environmental Planner
4. Doug Brown, West Cambridge
5. Tom Chase, Energy & Resilience Consultant, New Ecology
6. Ted Cohen, North Cambridge/Planning Board
7. Conrad Crawford, East Cambridge/Cambridge Redevelopment Authority
8. Nancy Donohue, Cambridge Chamber of Commerce
9. Iram Farooq, Assistant City Manager for Community Development
10. Tom Lucey, Harvard University
11. Margaret Moran, Cambridge Housing Authority
12. Mike Nakagawa, North Cambridge
13. Mike Owu, MITIMCo
14. Tom Sullivan, Divco West
15. Kathy Watkins, City Engineer/Assistant Commissioner

Project staff and facilitation team members present:

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| 1. Shabnam Bista | Zoning and Development Intern, City of Cambridge |
| 2. Elizabeth Cooper | Facilitation team, Consensus Building Institute |
| 3. Ona Ferguson | Facilitation team, Consensus Building Institute |
| 4. Eric Kramer | Urban Forest Master Plan consultant, Reed-Hildebrand |
| 5. Jeff Roberts | Director of Zoning and Development, City of Cambridge |

Next steps:

- The next meeting will be held on Wednesday June 26.

Meeting Overview

In this joint meeting of the Cambridge City Council Health and Environment Committee and the Cambridge Climate Resilience Zoning Task Force, participants reviewed the work by the task force to date, primarily on predictions of and proposals to mitigate future climate-change-induced flooding in Cambridge. They discussed key issues related to flooding and important considerations for the city. *See presentation slides online:* <https://www.cambridgema.gov/CDD/Projects/Zoning/climateresiliencezoning>.

Progress Update on Task Force Work & Committee Q&A – Jeff Roberts, Director of Zoning and Development and Kathy Watkins, City Engineer

Jeff Roberts described the committee’s charge and those aspects of the city’s built environment governed by zoning (a sort of Zoning 101).

Kathy Watkins reviewed flood risks, sharing information from the city’s Climate Change Preparedness and Resilience Planning work. The city encourages residents and property owners to understand their flooding risks by using tools such as the city’s flood viewer, and to prepare to protect against flooding from a 2070 10-year storm and recover from a 2070 100-year storm. She noted that different uses of space imply different levels of risk and impact from flooding (e.g. in an area vulnerable to flooding, a basement that is a primary living space is more vulnerable than a basement primarily used for storage).

Themes from the Task Force’s discussions included questions on the types of flooding that the city will face, the levels of risk that should be prioritized, and how impacts will affect different populations, parcels and types of buildings. Task force members have identified issues to keep in mind as they develop proposals, including the need for the city address public infrastructure, the need for zoning to consider the variety of structure types and ownership capacity, the need for emergency preparedness considerations, and the need to allow property owners some choice in what action they take given varied interests and capacities. Committee members did not have comments on the work to date.

Public Comment

- One commenter asked those at the table to remember that climate risks will be cumulative, and that we should be planning for cumulative impacts.
- A second commenter noted the exceptional capacity of the people in the room to work on this topic and appreciated the thorough review of impacts in the process. He noted that hurricanes in the future could inundate half the city in some way, and that we will begin to see impacts well before 2070. He noted concern that mold and foundation problems will arise sooner, and that impacts and the trajectory will not be linear. He supports using development standards to address flooding, and noted the importance of having a comprehensive green infrastructure strategy for the homeowner, city, and at regional scales.

Climate-Related Flooding & Zoning Discussion

Participants of both the committee and the task force then had a wide-ranging discussion of flooding-related concerns and ideas. Committee members indicated their appreciation for the skill of the staff and team working on this zoning initiative. This discussion has been summarized and organized for readability.

Process-related

- *Current city planning activities* – This task force should use the updated Alewife urban design plan (out soon) as a tool to test our ideas and explore. There will be an urban forest master plan released later this year that ties closely to green infrastructure decisions. At the June urban forest master plan meeting there will be a presentation on the urban heat island effect.
- *Ongoing engagement* – Perhaps there should be an ongoing resilience committee to work on these topics over time, somehow related to the Climate Protection Action Committee (CPAC). It isn't possible to "solve" the question of how to make the city's zoning ensures resilience in a year-long process, so there is a need for flexibility and an ongoing process.
- *Capacity* – It took 400 people to land human beings on the moon. We together have huge capacity to make a difference.
- *Appropriate tools* – Be sure the approaches developed through the task force are best suited to zoning. Pass other recommendations along to the appropriate people.
- *Consider scale* – Choose the right tools for addressing city-wide needs, and more pointed, tailored ones to address more targeted issues.

Zoning-related

- *Expectations* – Residents assume that the city will protect people from unsafe practices. We don't assume landowners will all know about these future risks (e.g. basement flooding). We should aim to make things more resilient (better), not just prevent things from getting even less resilient (worse). We should, in our planning, be trying to celebrate the work we're doing and create models – e.g. making climate-ready neighborhoods with great mobility. Flooding is very contaminated and wreaks havoc. Even with insurance money or federal assistance, people may need to borrow significant amounts of money to rebuild after a flood, so we should work hard to protect against flooding. We need to protect our water quality (e.g. Fresh Pond) to the greatest extent possible, and could consider inviting Water Department staff to this conversation. Focus on what the city wants homeowners to do and then create incentives – either subsidizing the cost of taking action or giving other benefits.
- *Wetlands* – It would be helpful to work to let former wetlands revert to wetland, possibly by transferring development rights. We could do what people in northern Europe have been doing – creating areas designed to be flooded that are attractive public spaces when not flooded. There could be wetlands restoration projects in the Fresh Pond area, for example. Depaving is important. Transfer of development rights

might be one tool in exchange for creating significant green infrastructure (possibly in the form of the ability to add FAR or more infill).

- *Open space* - Open space is a public utility, not a luxury.
- *Development* – Consider if there is a point at which continuing to add buildings might make it impossible to achieve priorities like having functional wetlands. Also, consider whether some zoning changes might inadvertently reduce property values (e.g. people think that requiring energy ratings at point of sales for buildings – an idea that has been considered - would reduce property value.)
- *Green infrastructure* – On-site infiltration / sequestration of water on all properties is essential for the city. That is currently required only in the floodplain but should probably be expanded. Green impact can have a significant impact reducing flooding impacts in smaller storms. It also has substantial benefits for water quality and the urban heat island. Consider the opportunity for significant tree cover at the Volpe site.
- *Projections* – Our estimates could over- or under-estimate how soon these climate-induced changes come. We should not depend on them to be accurate at particular years.
- *Thresholds* – The city can only invite people to change, or require them to change at particular thresholds (e.g. sale of property, significant upgrade, etc.).
- *Safety* – Try to consider and address the many impacts of climate change on people.
- *Basements* – A city councilor indicated that it would be helpful for the task force to let the city council know if they need to rethink the practice of allowing development of basements. Today the city shares information on flooding but doesn't have a mechanism to tell people what they can and cannot do to their basements.
- *Financing & incentives* – Is there a way to build up a fund to help homeowners with some financing for home improvements, if we want them to make changes? We should create incentives for things like de-paving. Could the city's AAA bond rating be used to make low-interest loans available on a sliding scale for those doing desired upgrades? Or maybe the city could use Community Development Block Grant funds? There are different constraints on money that comes from the city (taxes) or the federal government. Or perhaps development fees could help fund something to support residents and small businesses like this. Create incentives (e.g. allowing people to build larger) for environmental enhancements to properties (flat roofs, heat pumps, etc.). Could Just-a-Start do resilience upgrades in homes? Could there be a mini bond sale to build a fund for low interest loans?
- *Phasing* – Consider phasing requirements over time, like the net zero requirements, so people can prepare.
- *Utility siting* – Consider siting of utilities and throw the full power of the city behind arguments for where the MA Department of Public Utilities ought to site infrastructure. Could there be higher requirements related to siting of public utilities and resilience that, for example, Eversource would have to build to? Electric substations have a long lifespan, so should be held to a high standard.

Other resilience-related topics, to be dealt with elsewhere (not in the Zoning Task Force)

- *Emergency response* –
 - Who cleans up after flooding? Should the city build the capacity to add to FEMA and the Red Cross?
 - What happens to people without cars if our evacuation routes depend on having cars?
 - Many of the city's evacuation routes are through flood zones (Route 16, Route 2). What about traffic congestion in that situation? Consider using transportation demand management to help evacuate people.
 - Build on examples of evacuation plans from elsewhere (don't start from scratch).
- *Displacement* – It would be better to plan for where people will go in the case of an emergency than to make the decision on the fly. Being displaced can be very disruptive.
- *Business Disruption* – Economic losses could be huge overall. How could the city protect small businesses so they can open after several weeks of disruption? After Superstorm Sandy, many small businesses could never reopen. Small businesses are considered a vulnerable population. The toolkits for renters, small business owners and larger organizations, developed with MVP funding, will be released soon. The toolkits contain practical measures to increase resilience in the short and long-term.