

**Climate Resilience Zoning Task Force  
City of Cambridge, Massachusetts  
Summary of Meeting #7  
July 31, 2019**

**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. Tom Chase, Energy & Resilience Consultant, New Ecology
5. Ted Cohen, North Cambridge/Planning Board
6. Conrad Crawford, East Cambridge/Cambridge Redevelopment Authority
7. Nancy Donohue, Cambridge Chamber of Commerce
8. Iram Farooq, Assistant City Manager for Community Development
9. Brian Goldberg, MIT Office of Sustainability
10. Tom Lucey, Harvard University
11. Joe Maguire, Alexandria
12. Margaret Moran, Cambridge Housing Authority
13. Mike Nakagawa, North Cambridge
14. Craig Nicholson, Just-a-Start
15. Tom Sullivan, Divco West
16. Kathy Watkins, City Engineer/Assistant Commissioner

**Project staff and facilitation team members present**

1. Jeff Roberts, Director of Zoning and Development, City of Cambridge
2. Sarah Scott, Associate Zoning Planner, City of Cambridge
3. Ona Ferguson, Consensus Building Institute facilitator
4. Elizabeth Cooper, Consensus Building Institute facilitator
5. Nathalie Beauvais, Kleinfelder
6. Eric Kramer, Reed Hilderbrand
7. Indrani Ghosh, Kleinfelder

**Next steps:**

1. City to send revised principles and criteria document to Task Force
2. City to send fall meeting dates and calendar invites to Task Force

## Meeting materials:

For more details of the analysis summarized below, see the meeting materials available at <https://www.cambridgema.gov/CDD/Projects/Zoning/climateresiliencezoning>.

## Introduction

Jeff Roberts, Director of Zoning and Development, reviewed the progress of the Task Force to date and posed some discussion prompts to help guide the Task Force members in their deliberations about the specific outcomes that a set of zoning recommendations would aim to achieve. It was noted that articulating desired outcomes is an important part of any zoning effort, because zoning is regulatory and the actual outcomes would be determined by the actions of property owners.

## Discussion of potential objectives to achieve through zoning

Task Force members reviewed a framework outlining 12 desired land use/design objectives and the benefits and considerations of each. Each member reflected on this list of objectives individually before assembling into small groups to discuss their reactions. The members then reconvened as a full Task Force to discuss the following prompts. Some members also provided written comments, which were incorporated in this summary:

1. *What works about this slate of objectives? Where was your group aligned on priorities?*
  - Objectives that benefit people and community should be prioritized.
  - All the objectives seem worthy, but without details of their execution it becomes hard to judge their suitability or implementability via zoning.
  - There is an opportunity using these objectives to lead on the development of housing, commercial space, and transportation in a resilient way.
  - Several of the objectives would be enhanced by removing regulatory barriers (e.g. parking minimums, which interfere with increasing permeable surfaces.)
  
2. *What did you find to be missing, problematic, or in need of more discussion on the list?*
  - More focus on people and community is needed in discussing what land use outputs can and should achieve.
  - It would be helpful to have more options that are accessible to homeowners and that influence existing home stock. Additionally, more sensitivity to the variable capacity of property owners would be helpful.
  - More explanation is needed regarding the scope of zoning and generally how implementation would work to achieve these outputs.
  - Provide options that help overcome hurdles that small businesses and small property owners face, including consideration of helpful incentives.

- The City’s boundaries are small; these efforts will be a drop in the bucket.
- The reach of zoning is limited. Additionally, some of these objectives should be worked on by the City – e.g. tree canopy coverage in rights of way.
- Reallocating land could be problematic.
- We should not lose sight of what can be put under ground: a below-grade parking lot with the right bathtub technology frees up grade-level space.
- Requirements for emergency plans sound like a good thing, but may not belong in zoning.
- Options for additional protectiveness should be added if they do not substantially increase costs (e.g. elevating slightly more to protect against more extreme storms.)
- Embrace a regional focus/seek solutions that scale up beyond the parcel level.
  - Options to pool open space to enhance its effectiveness are promising.
  - Emergency shelters and services should be addressed above the parcel level.
- Other potential objectives to add are:
  - On-site renewables and energy resilience;
  - Non-elevation-based flood-protection technology;
  - Options to pool open space to make it more functional;
  - Internalize auto-trip generation;
  - Options to address growing cooling/AC needs and mitigate any impact on the grid of increased use of AC.
  - Bold measures such as increasing the scope of floodplain maps to match best predictions are needed.

3. *What other information do you need to move forward in the deliberations?*

- The timing of climate impacts should influence prioritization.
- More clarification on the parameters around what zoning can achieve relative to these outcomes. Evaluations of effectiveness must consider the slow pace of change through zoning.
- A more explicit articulation of where there are tensions with other City goals.
- Where is the City already implementing measures towards these objectives?
- How to better get at existing building stock?
- More discussion of the strategies to achieve these outcomes in order to be able to weigh the tradeoffs effectively.
- More information is needed to assess the effectiveness of various options.

4. *From your personal perspective (or the perspective of those whose interests you represent on the Task Force), which of these objectives would raise the most concerns for you (due to being hard to implement or for other reasons)?*

- Some versions of tree-canopy and other open-space requirements would significantly impact the ability of parcels (especially larger parcels) to achieve other goals, particularly housing at a density to be economical.
  - Increased building height could help address the obstacles to density.
- Several members commented that many of these objectives would be challenging to accomplish on a parcel-by-parcel basis, but that larger-scale approaches create more opportunities to achieve the same objectives.
  - Objectives that require open space on a parcel level, but do not incentivize aggregating that open space across parcels, confer fewer benefits to people. For example, a larger tree canopy area provides more heat mitigation benefits and may offer opportunities for recreation, whereas isolated trees on small amounts of open space across multiple parcels do not provide the same benefits.
  - It would be helpful for this group to think about how to encourage collaboration with adjacent property owners.
  - There may be opportunities to use “payment in lieu” strategies, with timed and locally bounded implementation requirements, to foster pooling of resources.
- Should below-grade use be further restricted?
- Highly prescriptive requirements are more disruptive of other goals, such as maintaining historic buildings.
- Those outcomes that can be better met by non-zoning tools should not be recommended for zoning.
- For small businesses and property owners, requiring the elevation of vulnerable equipment would be challenging, particularly if it significantly decreased the usable space in a building.
- It would be helpful to hear more ideas about engaging small property owners. It is hard to imagine single-family homeowners retrofitting their homes. Perhaps a tool such as requirements for updates upon property title transfer could be used, similar to current requirements for septic systems.
- Many of these requirements are already being asked of large developers.
- While the cost for property owners is an important factor, we should require what is necessary for safety based on the data, and then create mechanisms to provide assistance to those for whom the requirements would be an undue financial burden.
- Ability to achieve necessary density should not be sacrificed. This is a concern for open space/green infrastructure requirements as framed.
- As density is increased in vulnerable areas, compensatory flood storage is needed to compensate for filling in of floodplains.

## Zoning considerations preview: “things to know before trying”

Jeff Roberts presented a review of considerations for developing zoning requirements.

### How zoning effects change

Zoning protects existing conditions and regulates how changes can be made, but in and of itself it does not “make” anything, as property owners decide what changes to make and the preexisting condition remains legal. Zoning effects the value of the proposed condition and the cost of making a change. If the value of the change is high relative to the cost of making the change, then changes are more likely to occur (e.g. in the case of increased leeway to renovate basements.) Otherwise, most often, change only occurs very slowly. New construction is still a small proportion of total housing supply and a sizeable portion of the Cambridge population will continue to live in older homes.

### Zoning does some things better than others

Zoning is better at regulating a fixed condition that is likely to stay once built and that is easily quantifiable. As rules get more complicated or difficult to achieve, their scope of application is more limited. For example, requirements for trees and vegetation can be complicated because maintenance over time is difficult to enforce.

Some proposed zoning rules relevant to resilience overlap with current zoning requirements, such as open space; planting; relief for green roofs, insulation, and shading; and green building standards. Some provisions in existing zoning, such as incentives to use basement space, height limits, FAR and other dimensional limitations that apply to canopies and other structural shading, and requirements for parking and pathways, are in tension with the task force’s objectives.

### Public comment

One resident noted that it would be valuable to be explicit about where objectives have climate mitigation, water quality, and other co-benefits. She also commented that the emergency plan requirements seemed better suited to be addressed outside of zoning. Finally, she noted that the goal of safety for people during a climate-event-induced emergency should, in zoning, focus on access to buildings and measures to deal with the loss of electricity for a period of time.

The meeting was adjourned at 8 PM.