

Cambridge Climate Change Preparedness and Resilience Alewife Plan Public Feedback

August 2018

Prepared by the Consensus Building Institute

In November, 2017 the City of Cambridge issued its [Climate Change Preparedness and Resilience \(CCPR\) Plan for the Alewife](#) area and asked for feedback from the public and stakeholders. The City shared the plan, which serves as an overview, and the handbook, which contains the details about each individual strategy. Find the plan [here](#) and the handbook [here](#).

The City began accepting feedback in an open house on November 30, 2017. During this public meeting, 39 attendees heard an overview of the project and draft plan. They then toured stations to learn about the four CCPR strategy groups. Participants voted for strategies that most contributed to the resiliency of their household and their communities (see dot rankings below by strategy section), and submitted comment cards with further suggestions. After the meeting, 25 members of the public submitted comments online through a survey platform. Four more individuals emailed lengthier comments to the City. To view the survey results and public comments submitted through the survey platform, visit ccpralewife.consider.it.

The City notes that the number of commenters on the plan was small and the comments may not reflect the general sentiment of the community. The density of the information and length of the plan documents is recognized as an impediment to greater engagement. As the process moves toward the development of the citywide plan, the City will work to broaden community engagement and foster greater input.

This summary groups public feedback into general comments, broad suggestions, and by strategy group. Under each group, strategies are sorted by “Total Score,” the sum of all online respondents’ opinions, where opinions fall on a [-1, 1] range. These rankings have been adjusted to account for the comment cards submitted during the public meeting, which largely supported this order except where noted. Strategies are also sorted by rankings in the sticky dot exercise. Note that some people likely shared their thoughts multiple ways (on comment cards, via sticky dots, and through the online survey), so these rankings cannot be added together nor seen to represent the opinions of different individuals.

This public feedback will be used to refine the Climate Change Preparedness and Resilience (CCPR) planning for the Alewife area, and comments will be reflected in the final citywide CCPR Plan.

I. General Feedback

Broad Support

While participants offered suggestions for adjustments and some additions, there was broad support for the contents of the plan and the efforts of the city to move this type of resilience planning forward.

Prioritize Strategically

Many online respondents indicated that most or all of the listed strategies are important to build resiliency in their homes and neighborhoods. The CCPR effort was broadly supported under each strategy group. As such, respondents indicated it might be more useful to group and prioritize the strategies by estimated expense and achievability than by their perceived impact on households and neighborhoods.

Address Tension with New Buildings/Re-Development in Floodplain

Many respondents support restricting additional construction of new buildings in commercial and re-development districts in the Alewife floodplain until zoning and regulations are in place that prioritize resiliency principles and preserve greenspace. They noted that new buildings are currently being constructed in Alewife in areas that are most at-risk of increased flooding. Some went on to state that development might be displacing area that could be used to site essential green infrastructure and trees.

Offer More Concise Format

Respondents asked that the city create a more concise and approachable version of the Alewife Preparedness Plan for outreach purposes. They suggest 4 or 5 pages of text and infographics. Furthermore, several people supported combining similar strategies where possible to reduce the total number while retaining the same content.

II. Broad Suggestions

Local Energy Production

The proposal with the most support from respondents suggested that the Alewife CCPR Plan should include a recommendation under strategy C2 (Resiliency of Electrical Distribution System) to support development of a local microgrid: a 'backup power ready' program to allow residents to couple solar panels with inverters which would enable electricity to be used if the grid ever goes down. One person suggested encouraging battery storage backup and inverter installations for homes with solar through financial incentives like property tax credits or low-interest loans.

Transportation and Evacuation

Respondents supported the addition of more strategies to build the resilience of the City's transportation systems. Commenters expressed concern about citywide evacuation or shelter-in-place plans for extreme weather events, especially given that a significant percent of Cambridge residents may not own cars and so rely instead on public transit and ridesharing. They noted that improving access to the Alewife MBTA stop would not help in the event of a required evacuation, as the Red Line there only leads into Boston. Furthermore, MBTA tunnels may take on water during a flood event. Given current traffic constrictions around Alewife at peak hours, commenters indicated that it is essential for the city to optimize car and bus evacuation routes.

Regional Coordination

Another area many respondents supported was ensuring that the Plan be coordinated with the climate change plans of neighboring cities like Watertown and Belmont, especially those in the same watersheds. Respondents suggested aligning and publicizing any multi-community resiliency planning, noting that adjacent communities share many of the same vulnerabilities as

Cambridge. Some noted that implementation of strategies like neighborhood networks and water system management across town boundaries will make the strategies more effective.

Hurricane and High Wind Protection

There was support for adding a strategy about hurricane protection under the Adapted Buildings or Resilient Infrastructure strategy groups. Comments mentioned the need to protect buildings, electricity, and phone lines from high winds and downed trees. Protecting Cambridge's telecommunication systems was singled out as an essential component of the city's disaster response.

Local Food Production

Finally, one person argued that the co-location and integration of facilities that produce food and process waste in the Alewife area is a critical component of resilience and disaster recovery. Composting and anaerobic digestion facilities, biochar production, food storage depots, flood-resilient greenhouses and open-air farming were listed as examples. This also has the attendant benefit of decreasing food insecurity during non-emergency periods.

III. Feedback by Strategy

Strategy Group A: Prepared Community

When asked to prioritize the Prepared Community strategies by how important each is for their households and the Alewife neighborhood in terms of resilience, commenters in the survey and individual comments ranked them as follows:

1. A7: Strengthen Existing Emergency Preparedness and Response Plans
2. A4: Support Systems for Vulnerable Populations
3. A3: Emergency Communications
4. A8: Healthcare Continuity and Access
5. A6: Critical Community Facilities Resilience
6. A1: Neighborhood Resilience Hub
7. A9: Stronger Social Networks
8. A2: "Cool" Cooling Centers
9. A5: Business and Organizational Preparedness

These five strategies also had the highest average and most unified support from respondents. The primacy of the healthcare system was singled out by commenters, who noted that healthcare has to be an anchor of resilience in response to climate stressors.

People at the public meeting who put up sticky dots indicating which strategy was most important for the neighborhood in terms of community resilience in strategy A gave their individual "vote" as follows (listed in order of how many votes they got):

- 4 votes each
 - A3: Emergency Communications
 - A4: Support Systems for Vulnerable Populations
 - A6: Critical Community Facilities Resilience
- 3 votes each
 - A7: Strengthen Existing Emergency Preparedness and Response Plans
 - A8: Healthcare Continuity and Access

- 2 votes each
 - A1: Neighborhood Resilience Hub
 - A9: Stronger Social Networks
- One vote
 - A2: “Cool” Cooling Centers
- No votes
 - A5: Business and Organizational Preparedness

People at the public meeting who put up sticky dots indicating which strategy was most important for their household or work in terms of community resilience in strategy A gave their individual “vote” as follows:

- 10 votes
 - A7: Strengthen Existing Emergency Preparedness and Response Plans
- 3 votes each
 - A1: Neighborhood Resilience Hub
 - A4: Support Systems for Vulnerable Populations
- 2 votes
 - A9: Stronger Social Networks
- One vote each
 - A2: “Cool” Cooling Centers
 - A6: Critical Community Facilities Resilience
 - A8: Healthcare Continuity and Access
- No votes
 - A3: Emergency Communications
 - A5: Business and Organizational Preparedness

Respondents were particularly concerned about hard to reach and vulnerable populations: schoolchildren, newly arrived residents, multi-family residency dwellers, transient communities, people without vehicles, and the elderly and isolated. In addition to providing a sign-up for email-based alerts, respondents were concerned that there be multi-targeted alert systems for those without access to the Internet. In addition to an centralized educational hub (A1), respondents suggested the City put out education materials on climate risk preparedness: posters in businesses and large residential buildings, clauses in building leases, online tools, and in-school curricula.

Furthermore, some respondents said the city could do more to alert property owners and potential buyers of buildings in flood zones of their risk by sending out individual mailers or requiring that information be distributed during real estate transactions.

Strategy Group B: Adapted Buildings

When asked to prioritize the Adapted Buildings strategies by how important each is for their households and the Alewife neighborhood in terms of resilience, commenters were most supportive of the following:

1. B7: Adapted Zoning, Policies, and Regulations
2. B6: Site Green Infrastructure
3. B3: Flood Protection for Existing Buildings

4. B4: Heat Protection for Existing Buildings*
5. B1: Flood Protection for New Buildings
6. B2: Heat Protection for New Buildings
7. B5: Building Management for Flood and Heat Protection

Strategy B7 (Adapted Zoning, Policies and Regulations) had the highest total support from respondents, in part because they said updated zoning, regulations, and building codes create long-term systemic change and enable every other strategy in this group. Several said it is irresponsible to allow development to continue in the Alewife floodplain before the Climate Plan is finished and can be integrated into city planning, zoning, and regulations.

Commenters said green infrastructure siting (B6) is desirable for addressing water management and reducing heat-island effects because of its distributed public benefits. Commenters also indicated that the city should prioritize strategies B3 and B4 (flood and heat protection for existing buildings) because 80% of building stock that will be present in 2030 exists today. They said there should be a schedule and funding opportunities for retrofitting existing buildings.

People at the public meeting who put up sticky dots indicating which strategy was most important for the neighborhood in terms of community resilience in strategy B gave their individual “vote” as follows:

- 15 votes
 - B7: Adapted Zoning, Policies, and Regulations
- 5 votes
 - B6: Site Green Infrastructure
- 1 vote each
 - B2: Heat Protection for New Buildings
 - B3: Flood Protection for Existing Buildings
 - B4: Heat Protection for Existing Buildings
- No votes
 - B1: Flood Protection for New Buildings
 - B5: Building Management for Flood and Heat Protection

People at the public meeting who put up sticky dots indicating which strategy was most important for their household or work in terms of community resilience in strategy B gave their individual “vote” as follows:

- 10 votes
 - B3: Flood Protection for Existing Buildings
- 5 votes
 - B7: Adapted Zoning, Policies, and Regulations
- 3 votes each
 - B4: Heat Protection for Existing Buildings
 - B6: Site Green Infrastructure
- 2 votes
 - B5: Building Management for Flood and Heat Protection

* Ranked higher than strategies for new buildings in open house comments

- 1 vote each
 - B1: Flood Protection for New Buildings
 - B2: Heat Protection for New Buildings

Strategy Group C: Resilient Infrastructure

When asked to prioritize the Resilient Infrastructure strategies by how important each is for their households and the Alewife neighborhood in terms of resilience, commenters were most supportive of the following:

1. C5: Watershed Scale Flood Storage
2. C4: Regional Flood Resiliency at Amelia Earhart Dam and Other Sites
3. C2: Resiliency of Electrical Distribution System
4. C7: Combined Sewer Separation
5. C1: Protect Fresh Pond Reservoir
6. C6: Sub-Neighborhood Scale Flood Protection
7. C8: Stormwater Storage
8. C3: Resiliency of the Transportation System
9. C9: Clean-Energy Facility

Overall, support was fairly even for strategies in this group. Commenters supported structural and operational improvements to the Amelia Earhart Dam and other flood storage measures, noting that it is critical to work on resiliency at the regional watershed scale (C4 and C5). Some respondents were conflicted as to whether it was more cost-effective to invest in flood-proofing Fresh Pond or to purchase MWRA water (C1). However, a majority leaned towards flood protection, which has the additional benefit of protecting water treatment equipment.

There was broad support for resiliency in the electricity distribution system across the board (C2), though respondents were less unified about installing a clean energy facility (C9). Several comments supported modifying C2 to include support for development of local micro-grids.

People at the public meeting who put up sticky dots indicating which strategy was most important for the neighborhood in terms of community resilience in strategy C gave their individual “vote” as follows:

- 8 votes
 - C1: Protect Fresh Pond Reservoir
- 6 votes
 - C4: Regional Flood Resiliency at Amelia Earhart Dam and Other Sites
- 3 votes each
 - C3: Resiliency of the Transportation System
 - C7: Combined Sewer Separation
- 2 votes each
 - C2: Resiliency of Electrical Distribution System
 - C9: Clean-Energy Facility
- 1 vote each
 - C5: Watershed Scale Flood Storage
 - C6: Sub-Neighborhood Scale Flood Protection
- No votes

- C8: Stormwater Storage

People at the public meeting who put up sticky dots indicating which strategy was most important for their household or work in terms of community resilience in strategy C gave their individual “vote” as follows:

- 6 votes
 - C6: Sub-Neighborhood Scale Flood Protection
- 5 votes each
 - C2: Resiliency of Electrical Distribution System
 - C3: Resiliency of the Transportation System
- 4 votes
 - C1: Protect Fresh Pond Reservoir
- 1 votes
 - C9: Clean-Energy Facility
- No votes
 - C4: Regional Flood Resiliency at Amelia Earhart Dam and Other Sites
 - C5: Watershed Scale Flood Storage
 - C7: Combined Sewer Separation
 - C8: Stormwater Storage

Strategy Group D: Resilient Ecosystems

Public comments on this section noted that, as described, green infrastructure opportunities (D4) seems to be the overarching strategy group theme, with the other three strategies falling under that heading. Comments stated that this group could be fleshed out with more strategies describing concrete ideas. They also noted these strategies should highlight the economic value of habitats and the cost of habitat restoration. When asked to prioritize the Resilient Ecosystems strategies by how important each is for their households and the Alewife neighborhood in terms of resilience, commenters were most supportive of the following:

1. D3: Reduce Impervious Area
2. D1: Resilient Urban Forest
3. D4: Green Infrastructure Opportunities
4. D2: Enhanced Outdoor Thermal Comfort

All respondents ranked reducing impervious area (D3) as a high priority, but one comment noted it may be too granular and targeted to be an entire strategy. Increasing urban forest canopy and green infrastructure were also popular (D1 and D4), with commenters noting that these will reduce the urban heat island effect. To retain and encourage urban canopy, respondents suggested an adopt-a-tree program, new development incentives for retaining trees, and purchasing land parcels to keep or plant trees.

People at the public meeting who put up sticky dots indicating which strategy was most important for the neighborhood in terms of community resilience in strategy D gave their individual “vote” as follows:

- 9 votes
 - D1: Resilient Urban Forest
- 5 votes

- D4: Green Infrastructure Opportunities
- 1 vote each
 - D2: Enhanced Outdoor Thermal Comfort
 - D3: Reduce Impervious Area

People at the public meeting who put up sticky dots indicating which strategy was most important for their household or work in terms of community resilience in strategy D gave their individual “vote” as follows:

- 9 votes
 - D3: Reduce Impervious Area
- 7 votes
 - D4: Green Infrastructure Opportunities
- 4 votes
 - D2: Enhanced Outdoor Thermal Comfort
- 1 vote
 - D1: Resilient Urban Forest

Participants in the November 20, 2017 CCPR Alewife Open House & Individuals Who Submitted Online Comments

Members of the Public

Adam Hasz
Alice Heller
Alison Altman
Amy Munstat
Andrea Williams
Ann Stewart
Ashley Barquin
Betsy Boyle
Bill Pisano
Bridget Martin
Bruce Moulton
Carol Weinhaus
Claudia Majetich
Dalia Munenzon
David Bedoga
Douglas Parker Brown
Duke Bitsko
Ellen Mass
George Schneeloch
Harold Nahigian
Hubert Murray
James Butler
Jana Odette
Janis Blat
Jason Bobowski
Jerry Callen
Jessica Nahigian
Jim Brown
Jim Devereaux
John Gravelin
Judy Johnson
Julia Wyatt

Julie Wormser
Katie Moniz
Larissa Brown
Lee Farris
Lucy Patton
M.A.
Macky Buck
Maddie Fletcher
Manny Stefanakis
Melissa Highter
Mike Nakagawa
O.R. Simha
Pamela Hart
Paula Maute
Paula Sharaga
Peggy Barnes Lenart
Quinton Zondervan
Rachel Jacobson
Sally Watermulder
Skip Schiel
Sue Donaldson
Susan Redlich
Terry Greene
Tim Weiskel
Tom Chase

City & Consultant Team Members

John Bolduc
Nathalie Beauvais
Ona Ferguson