Cambridge Urban Design Guidelines

Planning Board Presentation July 26, 2022



Agenda

01 Introduction 5 min

Introduction to project, team, timeline, and process

02 Review of Global Best Practices 5 min

Review of guidelines from 48 places around the world

03 Review of Cambridge Existing Guidelines 5 min

Review of existing Cambridge guidelines documents

O4 Highlights & Emerging Takeaways from Staff Workshop 3 min

July 12, 2022 Staff Workshop takeaways

05 Next Steps for Observation & Engagement 2 min

Update on September Observation and Community Engagement Plan

06 Questions for Planning Board

Discussion

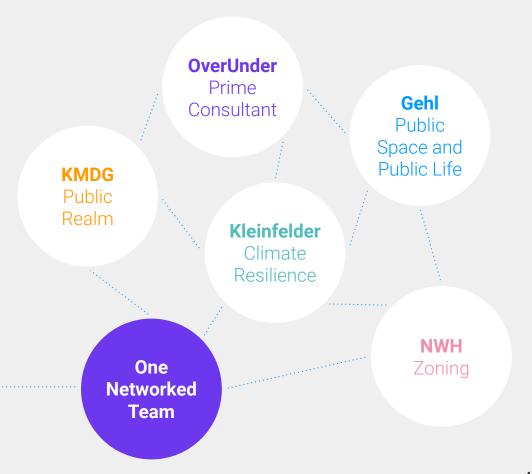


Introduction

The Team

We're working together over this 18-month process to develop a vision for Cambridge's urban design guidelines.

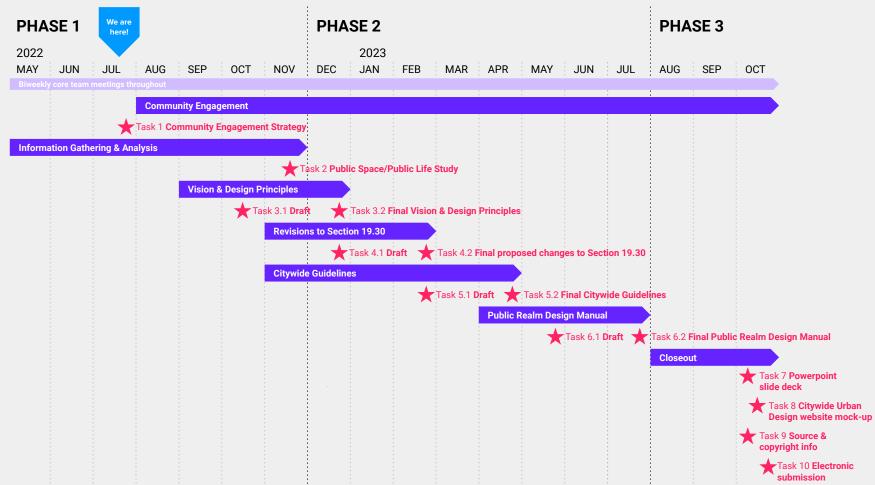




CITYWIDE URBAN DESIGN OBJECTIVES & DESIGN GUIDELINES

'	provide direction and guidance to:
	Developers
	City Departments
	Planning Board
	General Public
On c	desired form and character of

Public Realm





Review of Global Best Practices

Core Research Questions

We explored how guidelines took shape from inception to rollout.



Priority Content Areas

SUSTAINABILITY

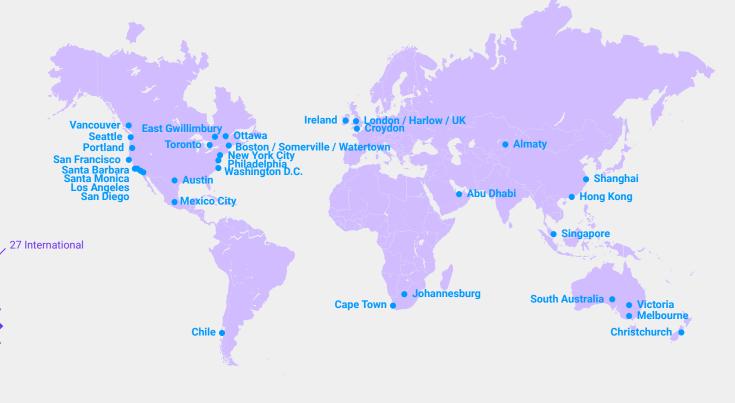
How do guidelines address environmental and resilient design?

EQUITY

How do guidelines address equity from formation to rollout?

We reviewed guidelines from around the world.

48 places



21 U.S.

We interviewed planning officials from three cities.



Guideline Style & Format

/ DEVELOPMENT

How are guidelines generated? Who do guidelines speak to?

/ ORGANIZATION

How are guidelines organized and related to other city plans?

/ IMPLEMENTATION

How are guidelines used across different city agencies to ensure accountability?

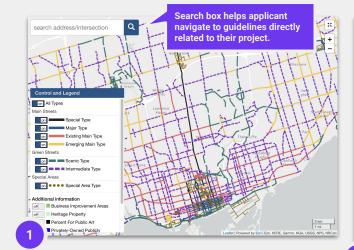
/ UPDATES

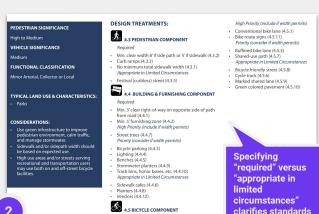
How often are guidelines updated, and what systems are in place to do so?

GUIDELINE DEVELOPMENT

Form follows audience with the best examples using clear language, searchability, and accessible visuals.

Q. How might Cambridge format its guidelines in a way that maximizes clarity, with room for updates over time?





Downtown Mixed-Use

High pedestrian volumes and a wide Pedestrian Zone take center stage on Downtown Mixed-Use Streets. Use of the Emphana Zona verias hasari on land usa, such as chairs and tables at cafés, planted areas at residential entrances, and sidewalk retail spilling out of stores. Typically the Greenscape Furnishing Zone is narrow and functional. The lavered and ever-changing Frontage Zone makes the sidewalks of Downtown Mixed-Use Streets stimulating places that encourage pedestrians to linger and interact. Newbury Street in Back Bay and Tremont Street in the South End exemplify the character of this Street Type.



Neighborhood Main Street

also characterized by high volumes of pedestrian activity and a mix of uses stood the sidewalk. The overall scale though is smaller than Downtown Strees, with typically narrower sidewalks such as those on Dorchester Avenue in Dorchester and along Centre and South Streets in Jamaica Plain. The focus is on providing access to the many entrances of small ousinesses lining the street. The Greenscape/Furnishing Zone should be as generous as possible and flexible in order to accommodate holiday events, farmers' markets, street fairs. and other community gatherings.





Highlighted illustrations and photos help the general public understand and engage with technical guideline materials.



for reviewers.

- For Applicants → Need applicability. quidance, clarity / Best practice example: Streetscape Manual, Toronto
- **2** For Reviewers → Need compliance check and quality design consideration criteria / Best practice example: Complete Streets Design Handbook, Philadelphia
- 3 For Public → Need engagement and learning opportunities / Best practice example: Complete Streets Design Guidelines, Boston

GUIDELINE ORGANIZATION

Within the guideline document, organization can vary depending on City priorities and audience. Beyond the document, many cities draw connections between sets of guidelines and plans.

Q. How might Cambridge select an organizational structure for guidelines that is easy to understand and intuitive to apply?

Within the Guidelines

Urban design elements

Pedestrian access, building facade, signage, lighting, landscape...

 $\rightarrow \textbf{Best for} \text{ public-facing}$

Urban space typology

Streets, plazas, waterfronts, etc.

→ **Best for** project applicants to understand expectations

Urban design principles

Sustainability, connectivity, human-scale, etc.

→ **Best for** public-facing, applicants, and reviewers to check compliance

Land use & Building Typology

Residential, commercial, mixed-use, industrial...

→ **Best for** project applicants and reviewers to check compliance

Beyond the Guidelines

Citywide Plan

Many cities build guidelines off of existing policies, principles, and values established in the citywide General / Comprehensive Plan.

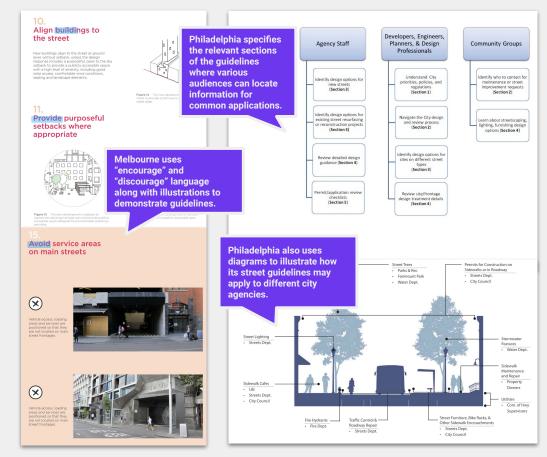
Relationship between Guidelines, Zoning Code, and Community-specific Design Requirements

Some cities' guidelines work in conjunction with the city's zoning code, area-specific regulations, and citywide topic-specific regulations for project reviews.

GUIDELINES IMPLEMENTATION

By providing clear go/no-go guidelines, cities can avoid excessive back-and-forth with applicants. Some sets of guidelines also delineate policy applications for different audiences.

Q. How might Cambridge help applicants by providing clear guidance on priority elements to abide by, and what to avoid?



Central Melbourne Design Guide, Melbourne Complete Streets Design Handbook, Philadelphia

GUIDELINE UPDATES

Most updates happen on an ad-hoc basis; they don't tend to function as adaptable, living documents.

Q. How might Cambridge create a clear process and system for updating the guidelines over time?

Most cities
have no
clear system
for updating!

"Periodically amended as necessary to maintain consistency with statutory policies and to evolve with international best practice aspirations."

- Calgary, AB, CAN

"Plan Submissions for development will serve to clarify, update and improve upon the suggested standards."

- East Gwillimbury, ON, CAN

"May be amended as necessary by the City Planning Commission."

- Los Angeles, CA

"If necessary, the guide will be reviewed in order to **accommodate emerging best practice** and ongoing continuous improvement."

- Croydon, UK

"The urban design principles get refreshed every five or so years **as practices change and evolve.**"

- New York City, NY

"Intended to evolve and adapt to incorporate new treatments and techniques as they are developed and put to use."

- Boston, MA

Interactive formats are more likely to be updated regularly.

Priority Content Areas

/ **SUSTAINABILITY** How do guidelines address environmental and resilient design?

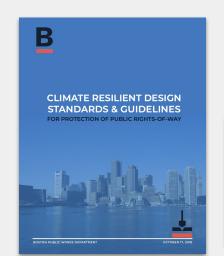
/ EQUITY

How do guidelines address equity from formation to rollout?

SUSTAINABILITY

Environmental goals tend to exist in separate documents from UDGs and focus on buildings, and boost accountability when enshrined into policy. If not, it's better if they have defined checklists and success metrics.

Q. How might Cambridge effectively **link to other tools for reference**, while **setting clear benchmarks** for using urban design of buildings and the public realm to advance climate action?





Sustainability Guidance & Checklists, Harlow and Gilston Garden Town







NYC Mayor's Office of Resiliency

Climate Resiliency Design Guidelines - Version 4.0

1. Reduce Urban Heat Island effect

Capital construction shall minimize contribution to the Urban Heat Island effect. The design interventions provided below offer benefits to the community and the facility through reduced heat loading, reduced energy costs, and/ or improved occupant health and thermal comfort. The appropriate combination of design interventions will vary dependent on the project scope.

 a. A minimum of 50% of the project's site area shall be shaded, vegetated, and/or high solar reflectance surfaces.²³

Lighter, reflective surfaces temperatures. This reduces e other paved surfaces. Utilizing a facility's contributions to ambient vegetative species can help keep but

The City has programs in place to selection, such as the NYC Cool Rt Laws 92 and 94 of 2019. Besides restormwater management, shade, a light the stressphere.

Many cities set minimum standards for environmental design quidelines.

tures.
e cover
ct Local
provide
noisture

ds, and

tolerant

reduce

Additionally, City capital projects are subject to Leadership in Energy and Environmental Design (LEED) certification, and reflective, shaded, and vegetated surfaces can earn LEED credits. 20 Suggested strategies include:

 Green roofs on a broader range of facilities (including industrial buildings, storage, garages administration buildings, etc.).

hecklists, Climate Resiliency Design Guidelines, Town New York City

EQUITY

Most cities focus on creating an inclusive process, rather than setting equity standards in guidelines themselves. If equity is in guideline content, it is often only addressed in terms of accessibility for all modes and abilities.

Q. How might Cambridge **center equity** — in all its forms — in the **content, process, and implementation of the guidelines**? What does equity mean to Cambridge, and within the context of the guidelines?

SNAPSHOT / EQUITY AS GUIDELINE PROCESS

Engage architects, designers, and engineers of color Engage residents of all ages

Make sure meetings, notices, and materials are accessible Reflect community input in the final outcome of guidelines

Eliminate disparities in race, class, gender, other dimensions of diversity Be clear, specific and direct so that outcomes can be measurable Mandate accountability in zoning or implementation plans Enact zoning code that supports human-scale development and connectivity

SNAPSHOT / EQUITY AS GUIDELINE CONTENT

"Public realm should be accessible for all regardless of age or ability."

"The use of curbside **space** should be **distributed equitably** to support the needs of all users."

Opportunities Review of Global Best Practices

- → STRIVE FOR SIMPLICITY / Use clear language / visuals to make it easier for everyone to adopt the guidelines — a tool for reviewers to check compliance, for applicants to abide by best practices, and for the general public to participate meaningfully in public reviews.
- → FORMAT FOR FLEXIBILITY / Be flexible with format and platform

 beyond a text-heavy report. For example, short booklets and digital platforms open the door to wider distribution, ease of navigation, and regular updates. (Note: With more formats, more clarity is needed to delineate audience and purpose)
- → EMBED GOALS IN CONTENT + PROCESS / Make the guidelines a platform for advancing citywide goals and issues (e.g., equity, sustainability) by embedding these goals as high-level principles, into design recommendations, and into the process of developing and implementing the guidelines.
- → SET THE STAGE FOR DESIGN EXCELLENCE / While design excellence wasn't a focus of the guidelines best practice research, there is an opportunity for guidelines to clarify standards of design excellence for a city.



Review of Existing Cambridge Guidelines

We reviewed the City's Area-specific and Citywide guidelines.



Guideline Style & Format

/ AUDIENCE W

Who do Cambridge's guidelines speak to?

/ FORMAT

How are Cambridge's guidelines formatted?

/ UPDATES

How often are Cambridge's guidelines updated, and what systems are

in place to do so?

GUIDELINE AUDIENCE

Most guidelines are addressed to applicants, City staff and the Planning Board. Recent guidelines include the general public as one of their intended audiences.

Q. How might Cambridge's guidelines **be accessible to all of their intended users?**

Illustrations can make the guidelines accessible to a broader audience.



Volpe site (2017)

GUIDELINE FORMAT

Earlier guidelines tend to use narrative texts, while more recent ones have shifted to a bullet point objectives format.

Q. How might the format of Cambridge's guidelines balance clarity and nuance?

Bullet points can increase user-friendliness.

Scale and Massing

4. Built Form

- Major Public Streets

Goal: Create a strong datum by setting back the building at upper floors to create a strong edge to the street and to limit the sense of height at street level.

Measure

- a. Set back approximately two-thirds of the building façade above 85 feet from the principal façade by a depth of about 15 feet; flexibility will be considered when street/ground floor setback is provided.
- Façade areas without setback may be appropriate at corners or in specific locations to create architectural variety.
- c. In instances of infill development on constrained sites, provide distinct horizontal articulation at the datum height that relates to the façade of adjacent or facing buildings through means other than a setback (significant change in material, projecting cornice/fin/shade etc.)



- Secondary Streets

Goal: Create a strong datum by setting back the building at upper floors to create a strong edge to the street and to limit the sense of height at street level.

Measure

- Set back any portion of the building above
 45 feet by approximately 10 feet from the
 principal façade. Where appropriate, design
 these setbacks to include balconies and rooftop
 terraces.
- b. Create a strong horizontal definition line on the façade at a height of 45° through means other than a step-back if it successfully expresses a scale distinctly more intimate than a major public street (such as significant change in material; projecting cornice, fin or shade etc.).

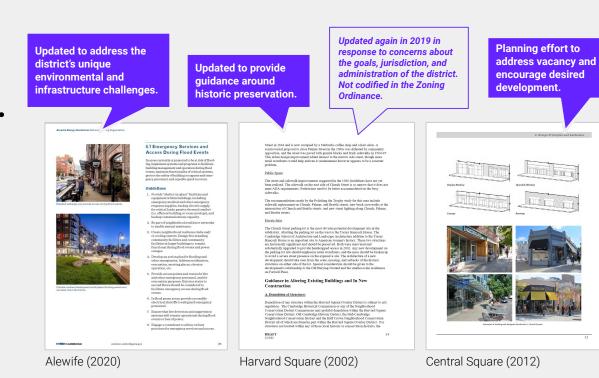


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GUIDELINE UPDATES

Cambridge has only updated three of its guidelines in the past. These updates occurred for very different contextual reasons.

Q. What might trigger Citywide and area-specific quideline updates in the future?



Guideline Content

/ GAPS

/ SUSTAINABILITY

/ EQUITY

What is missing from Cambridge's Area-specific & Citywide Guidelines?

How do Cambridge's guidelines address environmental and resilient design?

How do Cambridge's guidelines address equity?

GAPS	Historic Development Context	Built Form	Open Space	Streets & Sidewalks	Mobility	Sustainability	Equity	Review Process
East Cambridge 1985								
North Mass Ave 1986								
University Park 1987								
Central Square 1989		•••••			·			
South Cambridgeport 1992		•••••						
Eastern Cambridge 2001		•••••			: :			
Harvard Square 2002								
Concord-Alewife 2006								
Prospect Street 2007								
Central Square 2012					 : : :			
Kendall Square 2013								
Volpe Site 2017					:			
Affordable Housing 2020								
Alewife 2020								



SUSTAINABILITY

Most guidelines do <u>not</u> address sustainability.

- → Earlier guidelines refer to the efficient use of resources and encourage LEED compliance.
- → Some highlight environmental comfort principles, such as shadows, wind and noise mitigation, lighting and vegetation.
- Recent guidelines get into more detail about building performance.
- → Alewife addresses sustainable site design, resilient building design and response to flood events.

28

Equity

Review Process

> "Celebrate and maintain the mix of old, new, venerable and funky enterprises activating the Central Square Cultural District."

- Central Square Design Guidelines

"Ensure that outdoor spaces provide comparable facilities for all people regardless of their ability to climb steps. Use technology to help compensate for limitations in sensory abilities."

- Kendall Square Design Guidelines

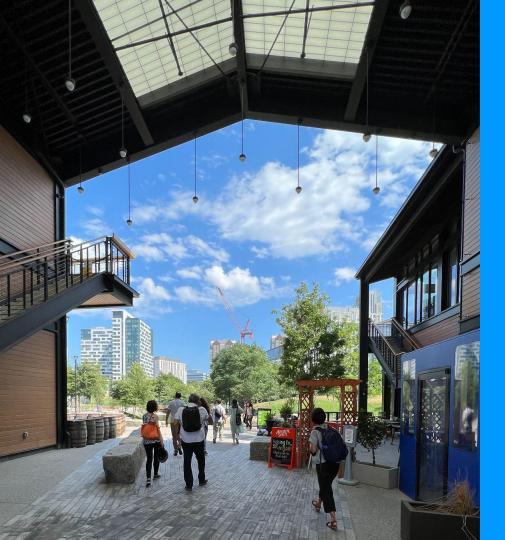
EQUITY

Half of the guidelines do <u>not</u> address equity.

- → Some guidelines include sections on universal access & design.
- → Some discuss affordable housing and business retention as broad goals.

Opportunities Review of Existing Cambridge Guidelines

- ADDRESS GAPS IN KEY CONTENT AREAS / Update older, outdated guidelines, lacking in the areas of sustainability, open space and bicycle mobility. Make use of the guidelines to tackle issues of equity and sustainability, both key goals for the City set in a number of recent plans, such as the Envision Cambridge comprehensive plan, the Climate Change Preparedness Plan, the Resilient Cambridge Plan, and the Urban Forest Master Plan.
- → WORK TOWARDS A CLEAR & TRANSPARENT PROCESS / Build on recent efforts to make guidelines clear and accessible to a broader audience. Provide a step-by-step description of the building review process, including required materials and City departments and authorities involved. Provide information on the historic development context of Cambridge's neighborhoods.
- → DESIGN FOR FLEXIBILITY & ADAPTABILITY / Create a clear template for future area-specific and citywide quideline updates.



Highlights & Emerging
Takeaways from
Workshop

Highlights & Emerging Takeaways from Workshop



Avoid redundancy and confusion across City departments and documents

e.g.,

- → Adopt a quarterly inter-agency meeting to keep documents up to date and integrated
- → Reflect all the agency goals and constraints in the guidelines
- → Provide a master 'table of contents' that links out to respective departments' guideline documents

2

Communicate guidelines in as clear and simple a way as possible, balancing clarity and nuance

e.g.,

- → Use plain language
- → Use simple visuals
- → Consider alternative media (website, dashboard, etc.)

3

Monitor and update the guidelines (and related documents) over time

e.g.,

- → Create a document that reflects the moment without being too prescriptive
- → Deploy updated post-occupancy checklist of new developments to identify common pitfalls and the efficacy of the Guidelines

4

Celebrate Cambridge's eclectic built environment

e.g.,

- → Advise projects to respond to immediate surroundings to embrace neighborhood-specific character
- → Embrace sense of history and modern amenities in equal measure
- → Focus on goals to and provide clarity on how Guidelines can be applied on a site-by-site basis

5

Sharpen understanding of how the Guidelines can advance equity in both process and content

e.g.,

- → Set a clear and understandable working definition of equity as it relates to the Guidelines
- → Clarify the ways that equity needs to be embedded into the content and implementation of the Guidelines

6

Advance climate action through the content and format of the Guidelines

e.g.,

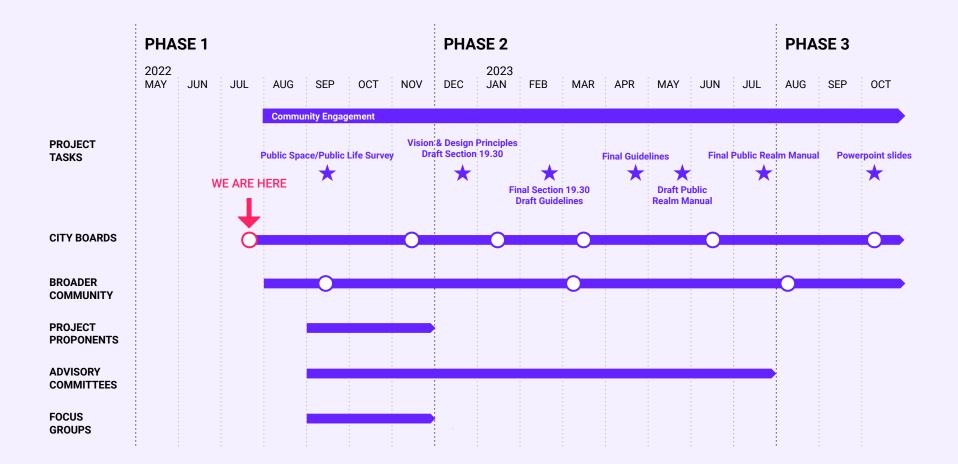
- → Consider a checklist or point system for rating project incorporation of climate-friendly features
- → Use climate responses as a way to create a sense of place
- → Incorporate sustainable transportation across sets of guidelines (climate, mobility, urban design, etc.)



Next Steps for Observation & Engagement

Community Engagement

	Broader Community	Project Proponents	Advisory Committees	City Boards
AUDIENCE	Youth, students, young professionals, seniors, homeless, immigrant, AAPI, Black, Hispanic, Haitian, Arabic	Designers, developers	Bicycle Committee, Pedestrian Committee, Planting Committee, Transit Committee, Disabilities Commission	Planning Board, City Council
FORMAT	PSPL SurveyPublic meetingsSurveysOutdoor eventsFocus groupsBasic website	Working group meetings Survey	Working group meetingsWalkshops	 Presentations
CONTENT	 How do people move around in the city? How do they interact with each other in public spaces? What are people's favorites spaces in Cambridge? What are places that need improvement? What are design guidelines and why are they important? How does the process relate to the Citywide plan? 	 How do project proponents view the process? What is working? What are some of the shortcomings? What would they change? Have they used the City's existing Citywide and Area-Specific guidelines? What do they like about them? What would they change? 	 How do the guidelines and design manual impact each group's priorities? How can we incorporate concerns around transportation and access into these documents? 	 How does the Planning Board use the guidelines? What is working well? What could be improved?

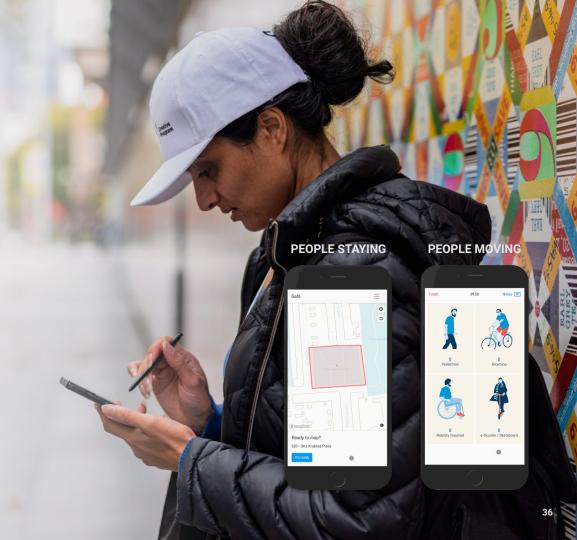


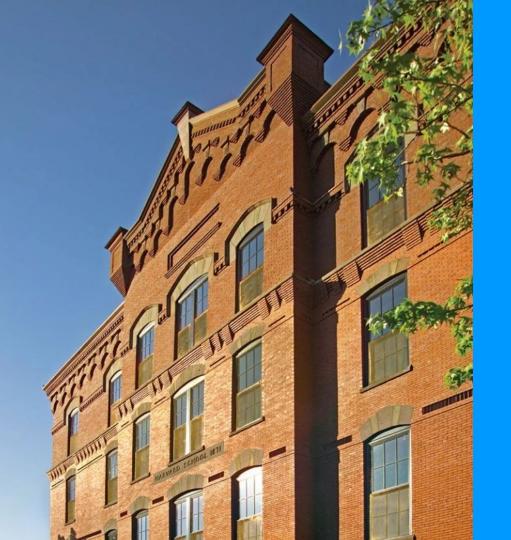
Public Life App



The Gehl public life app will be used to:

- → Understand how people move through and spend time in Cambridge's public realm today
- → Reveal opportunities to **update the guidelines** based on people's lived experience of the built environment





Questions for Planning Board

Questions for Planning Board

- → IN-SCOPE VS. OUT-OF-SCOPE / What is in the scope of Cambridge Urban Design Guidelines (UDGs)? i.e., How citywide is "citywide"?
- → CURRENT GUIDELINES / How do you use the guidelines today? What is working well? What's not working well? (i.e., guideline content, guideline process / implementation)
- → FUTURE GUIDELINES / Drawing from global inspiration and knowing the Cambridge context, what does success look like? What would you like to see in the updated UDGs?