

# Envision Cambridge Advisory Committee

May 17, 2017



# Agenda

## **Project Update**

## **Cambridge and its Corridors**

- Corridor considerations
- Initial corridor development analysis
- Possible Futures for the Corridors: What ifs?

## **Draft Goals for Urban Form**

## **Next Steps**

# Working Groups

Six topic-focused working groups will provide input to the ECAC for plan development.





# Alewife Quadrangle: Revised Scenario *as presented 4/27/2017*



Total GFA at 100% buildout	5.61m SF
District FAR	1.56
Total GFA at 60% buildout	4.52m SF
New housing	1,080 units
Office / lab space	1.78m SF
Ground floor retail*	31,100 SF
Industrial space	387,120 SF

- Accessory Retail Zone (in Light Industrial Space)
- Mixed use Light Industrial, Commercial above
- Ground Floor Retail (in Commercial building)
- Commercial
- Residential
- Bicycle Lanes
- Open Space

\*does not include zone for accessory retail in light industrial spaces







## Food Manufacturing

4% job growth nationally, 2011-2015

Only 38% of regional demand for beverage manufacturing is met by local companies



**Manufacturing of baked goods** (Pictured: Iggy's Bakery. Source: FreeFoodBoston.Wordpress.com.)



**Fruit and Vegetable Preserving** (Pictured: Tiptree Jam Factory in England. Source: BBC.com.)

**Grain Milling**

**Confectionery Product Manufacturing**

**Dairy Product Manufacturing**

## Fabricated Metal Product Manufacturing

2% job growth, 2011-2015

Only 53% of regional demand for fabricated metal manufacturing is met by local companies



**Machine shops** (Pictured: Student Machine Shop at UC Berkeley. Source: Physics@ Berkeley)



**Makerspace** (Pictured: The Foundry in Baltimore, which trains residents for manufacturing jobs. Source: Technically Baltimore)

**Forging and Stamping**

**Architectural and Structural Metals Manufacturing**

Data Sources: National job growth rates calculated from U.S. Census Bureau LEHD. All other stats are calculated using EMSI.

## Beverage Manufacturing

4% job growth nationally, 2011-2015

Only 41% of regional demand for beverage manufacturing is met by local companies



**Breweries** (Pictured: Lamplighter Brewery. Source: Christopher Mark)



**Wine manufacturing** (Source: Manufacturing & Technology Enterprise Center)

**Ice manufacturing**

**Soda or tea manufacturing**

## Medical Equipment and Supplies Manufacturing

Level employment nationally, 2011-2015

Only 37% of regional demand for medical manufacturing is met by local



**Medical kit assembly** (Source: iStock)



**Manufacturing of surgical and medical instruments, appliances, and supplies** (Source: TeluguOne News)

**Dental equipment and supplies manufacturing**

Data Sources: National job growth rates calculated from U.S. Census Bureau LEHD. All other stats are calculated using EMSI.



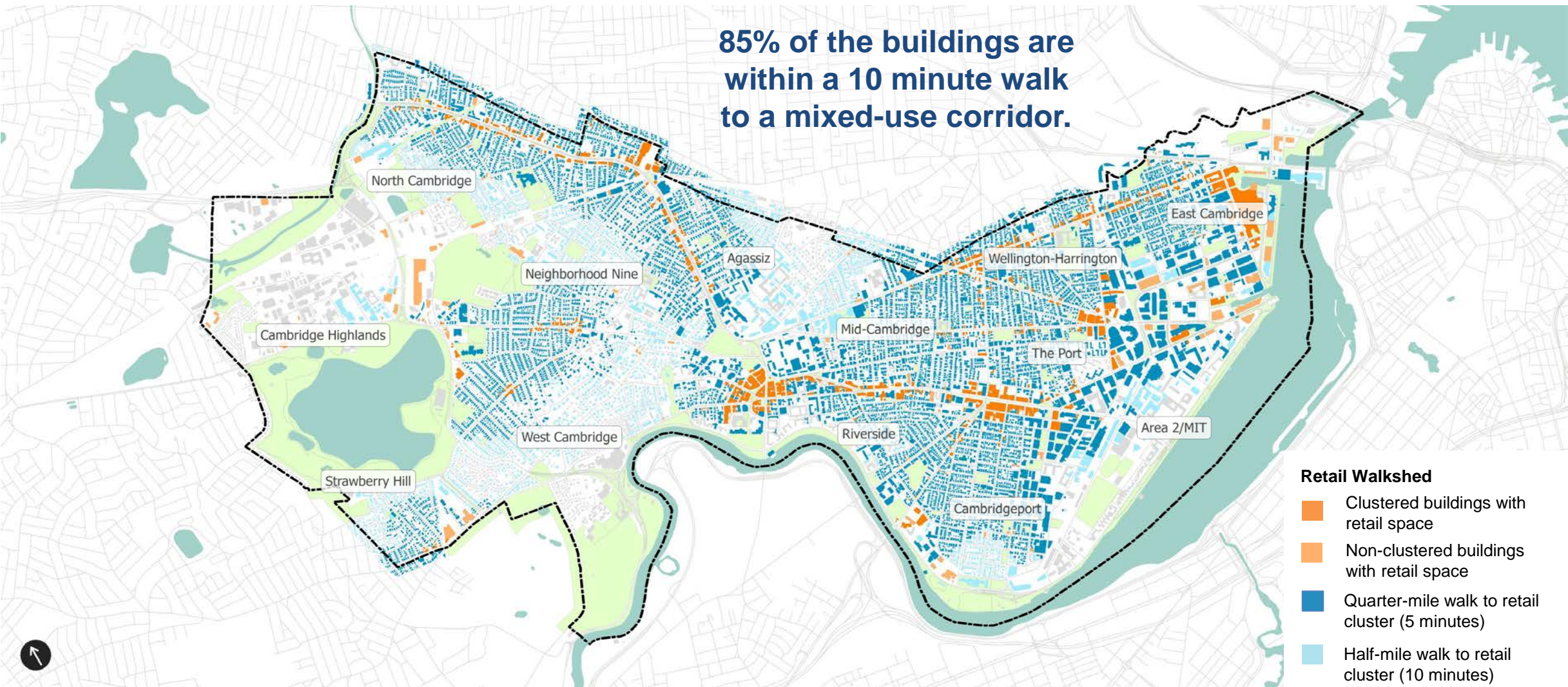
# The Corridors

Mass. Ave. and Cambridge St., Cambridge's commercial corridors, are the center of the city's civic, social, and cultural life. They also provide the walkable amenities for everyday life.

*How do we want to manage growth on the corridors?*



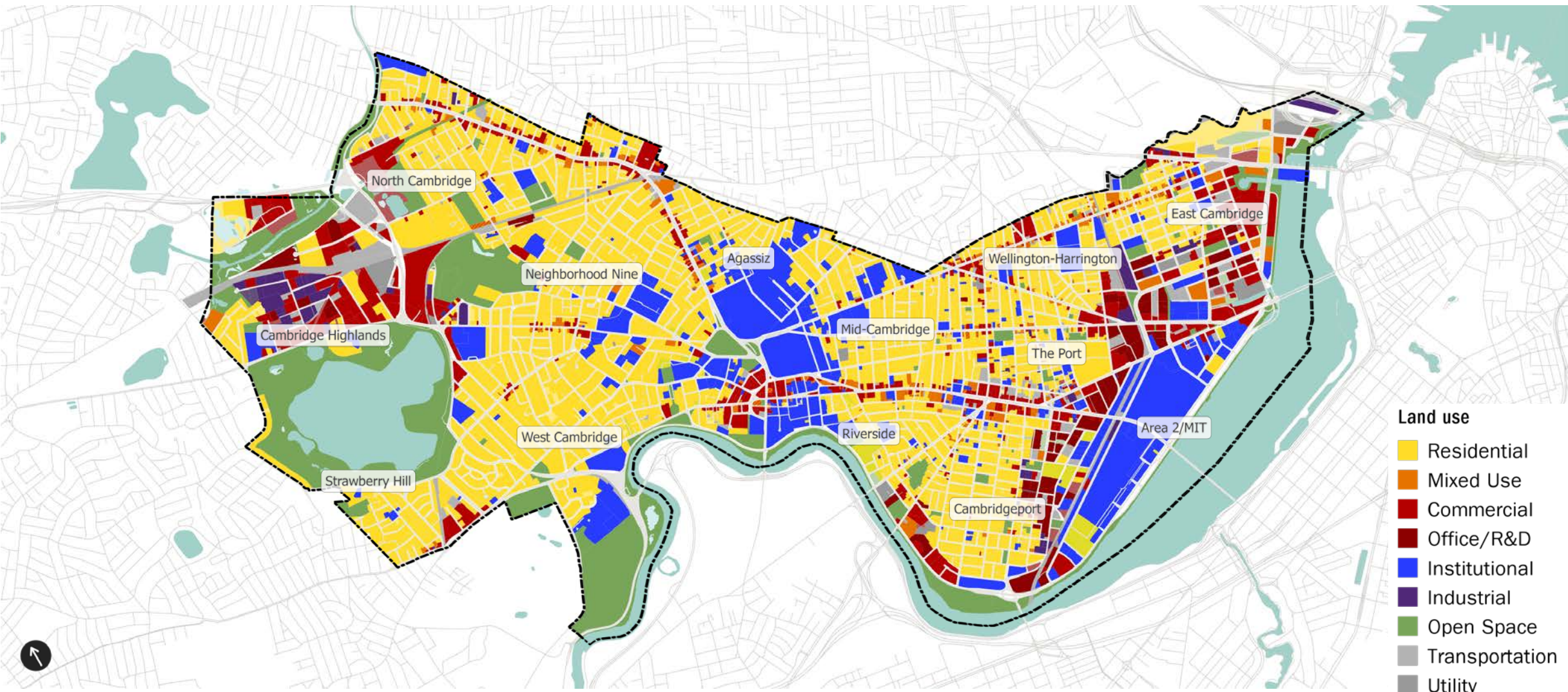
This pattern resonates among present-day land uses and enables residents to be well served by neighborhood retail.



Source: City of Cambridge CDD, Envision Cambridge Analysis. Retail clusters are any group of five or more buildings with retail space without a distance of 400 ft. or greater between those buildings. List of land use codes used to determine retail space available upon request.



**Places:** Cambridge is defined by the relationship of its residential neighborhoods to university campuses and mixed-use commercial centers and corridors.

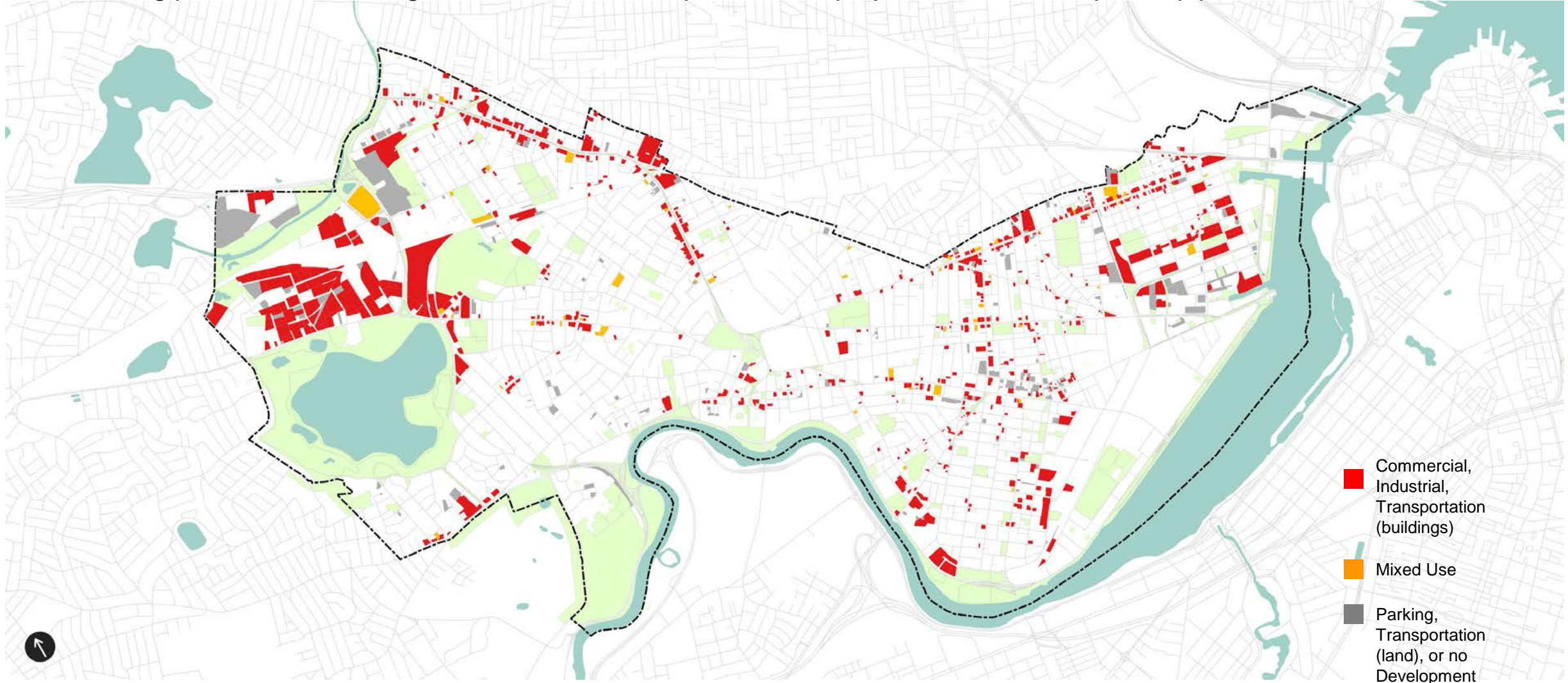


Source: Cambridge CDD



# Commercial and mixed use: FAR < 1.5 or height < 40 ft.

Not including parcels with buildings built after 1995 and parcels with projects in the development pipeline



Source: Cambridge CDD and Assessing Department. Pipeline as of December 2016.



# Inman Representative Parcels



Least Likely to Be Developed



Likely to be Developed



Most Likely to be Developed



# Inman Square Corridor

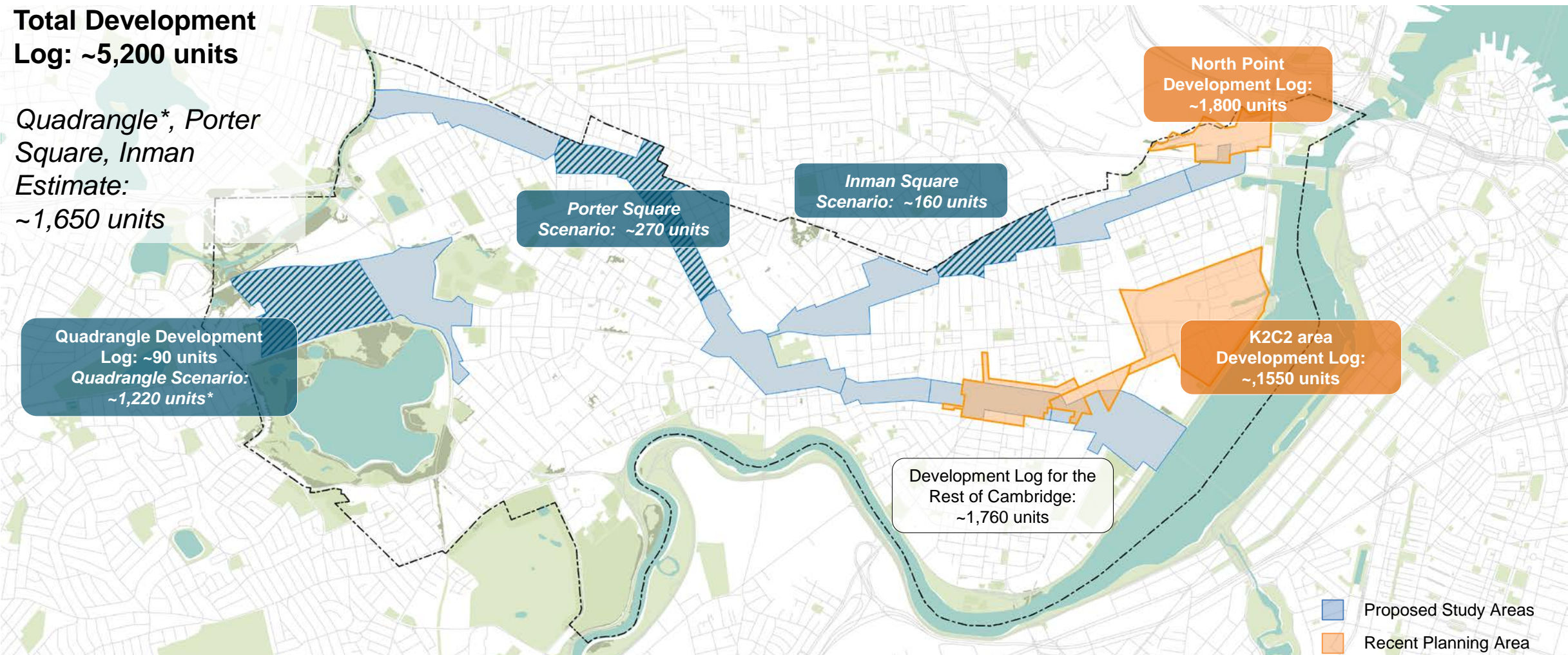
- Most Likely to Transform
- Less Likely to Transform
- Study Boundary



Approximately 160 units and 79,800 SF of retail generated by optimal stick-built construction



# Housing in the pipeline and tested during the planning process



Source: City of Cambridge CDD Development Log; Envision Cambridge Analysis. Total number reflects permitted projects in specified areas and all development log projects in unspecified as of December 2016.

\* Quadrangle scenario housing units estimate is from the April 27, 2017 Alewife Working Group presentation (this process is ongoing) and includes new information about a proposed project at 55 Wheeler (530 units). The total number of 1,220 units reflects an estimated 60% buildout by 2030.



# Housing needs based on projections

Keeping up with projected population growth is not the main driver of development policy on the corridors

Population forecast (2030 horizon)	Current (2010 pop. count)	Some growth (2030 Status Quo)	Mid growth (2030 Stronger Region)	High growth
Total population	105,162	110,623	118,625	123,000
Population change 2010 - 2030		5,461	13,463	18,208
Residential forecast				
New Housing Demand (A)		3,121	7,693	10,405
Housing stock added since 2010 and in development pipeline (B)		8,486	8,486	8,486
Housing Deficit (C = A – B)		0	0	1,919
Total housing GSF needed (C x 1,000 SF)				1,096,571

Assumptions: Average household size - 1.75 persons; Average net household area - 1,000 SF





## What role could the corridors play in...

- *Help meet the city's housing needs*
- Encourage people choose sustainable transportation modes
- Enhance connections between neighborhoods and between residences and jobs
- Support local independent retail
- Create employment and entrepreneurship opportunities
- Become the hubs for the civic, social, and cultural life of the city
- Provide public civic spaces for the community to gather



# What people said about the corridors

**“I could envision 5-story buildings where there are now one-story retail only buildings on Mass Ave.”**

- Community member via online survey

**“More units of affordable housing BUT neighborhood-appropriate design.”**

- Community member via online survey

**“Make buildings that are beautiful to look at and not just a large blob that looks like a hospital in the middle of a neighborhood.”**

- Community member via online survey

**“Neighborhood streets will have better public transportation linking Rte 2 and Mass Ave.”**

- Community member via online survey

## Land Use: Mix of uses

- Many people want more retail, especially neighborhood-serving retail (e.g., dry cleaners).
- Some residents suggested that the corridors might be the place to add significant housing. Others expressed concern about maintaining the urban character of the city with new development.
- Residents asked about the large-scale commercial buildings, and whether these could be made more welcoming.

## Urban Form: Character of buildings, public spaces, and streets

- Residents and workers like the “human scale” of city’s fabric and how knowable the city is.
- The squares are central to Cambridge’s identity, and the corridors tie the squares together. However, the character of the corridors is uneven, and does not match the liveliness or quality of the squares.

## Mobility: Ways of getting around

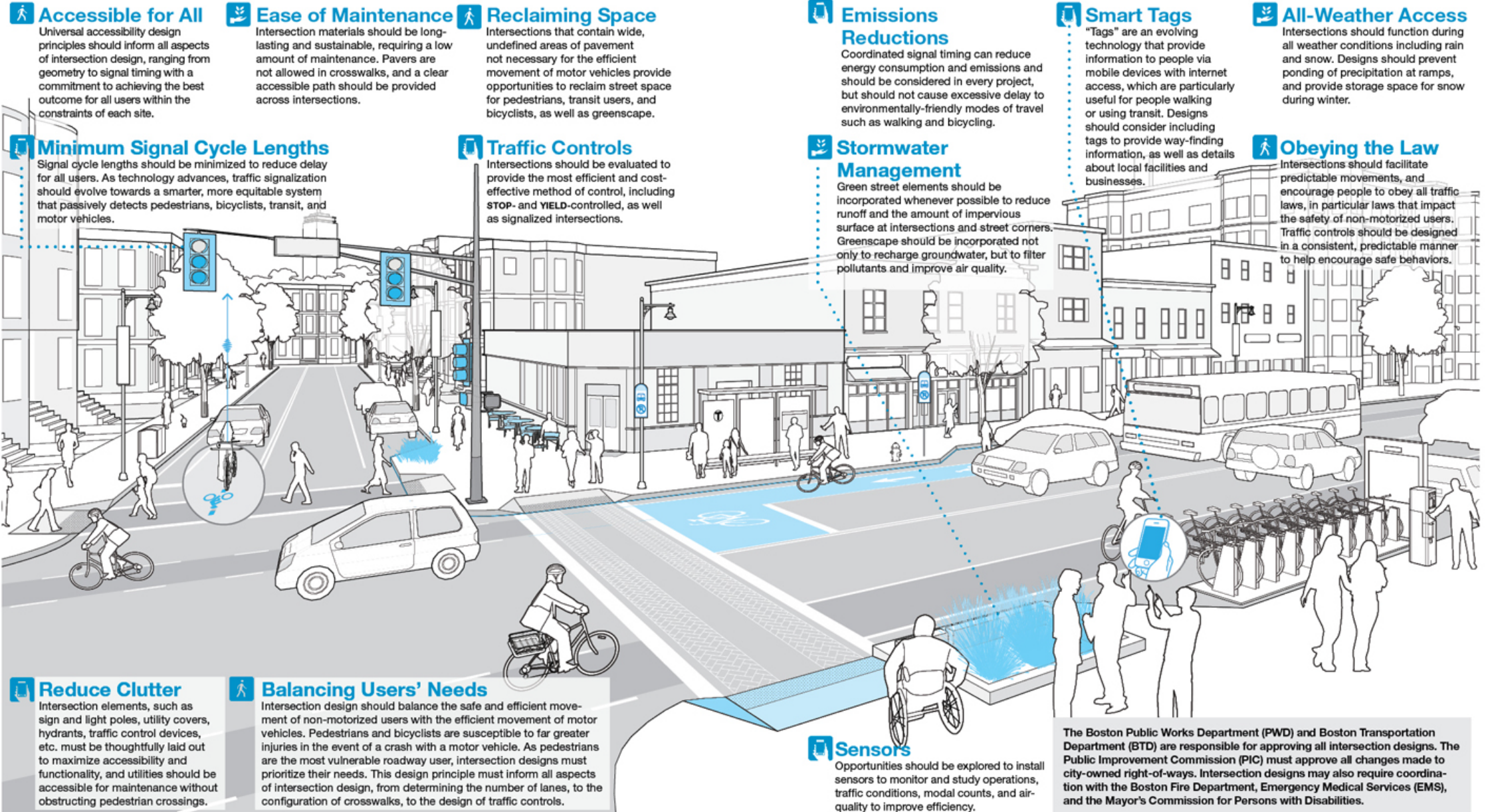
- Residents want the corridors to become better places for biking and walking, while also increasing transit capacity.

**“Encourage more options to cross neighborhood boundaries. While I love my part of town, it's very rare that I feel it's worth the hassle of trying to cross Mass Ave to get to other parts of town.”**

- Community member via online survey



# Intersection Design Principles



4 INTERSECTIONS

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Past patterns of development have resulted in competing types of urban fabric where corridors meet neighborhoods.





# Corridor Development Guidelines – City of Toronto



Source: Avenues & Mid-Rise Buildings Study, City of Toronto, May 2010



# Corridor Development Guidelines – City of Toronto

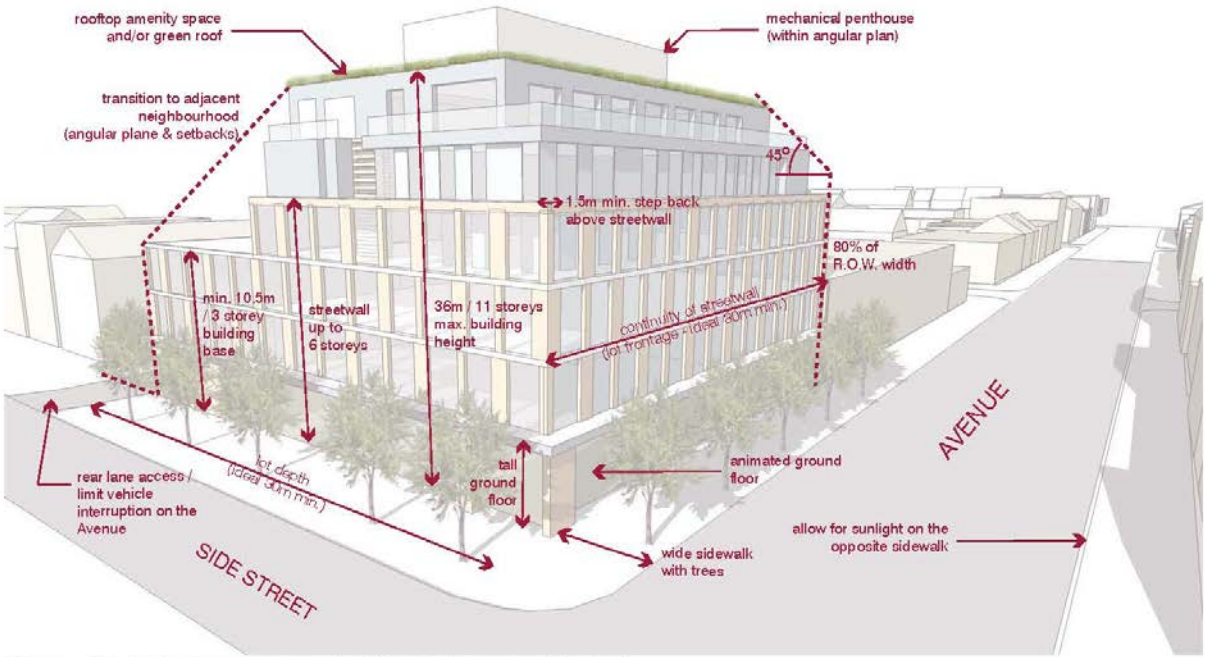


Diagram illustrating key components of the Performance Standards.



A 20 metre wide R.O.W. with several sites that may accommodate potential redevelopment.



The Avenue can gradually intensify through the introduction of mid-rise buildings



Eventually the Avenues will transform as vibrant streets providing a high level of services and amenities while protecting the character of adjacent neighbourhoods

Source: Avenues & Mid-Rise Buildings Study, City of Toronto, May 2010



# Corridors Today



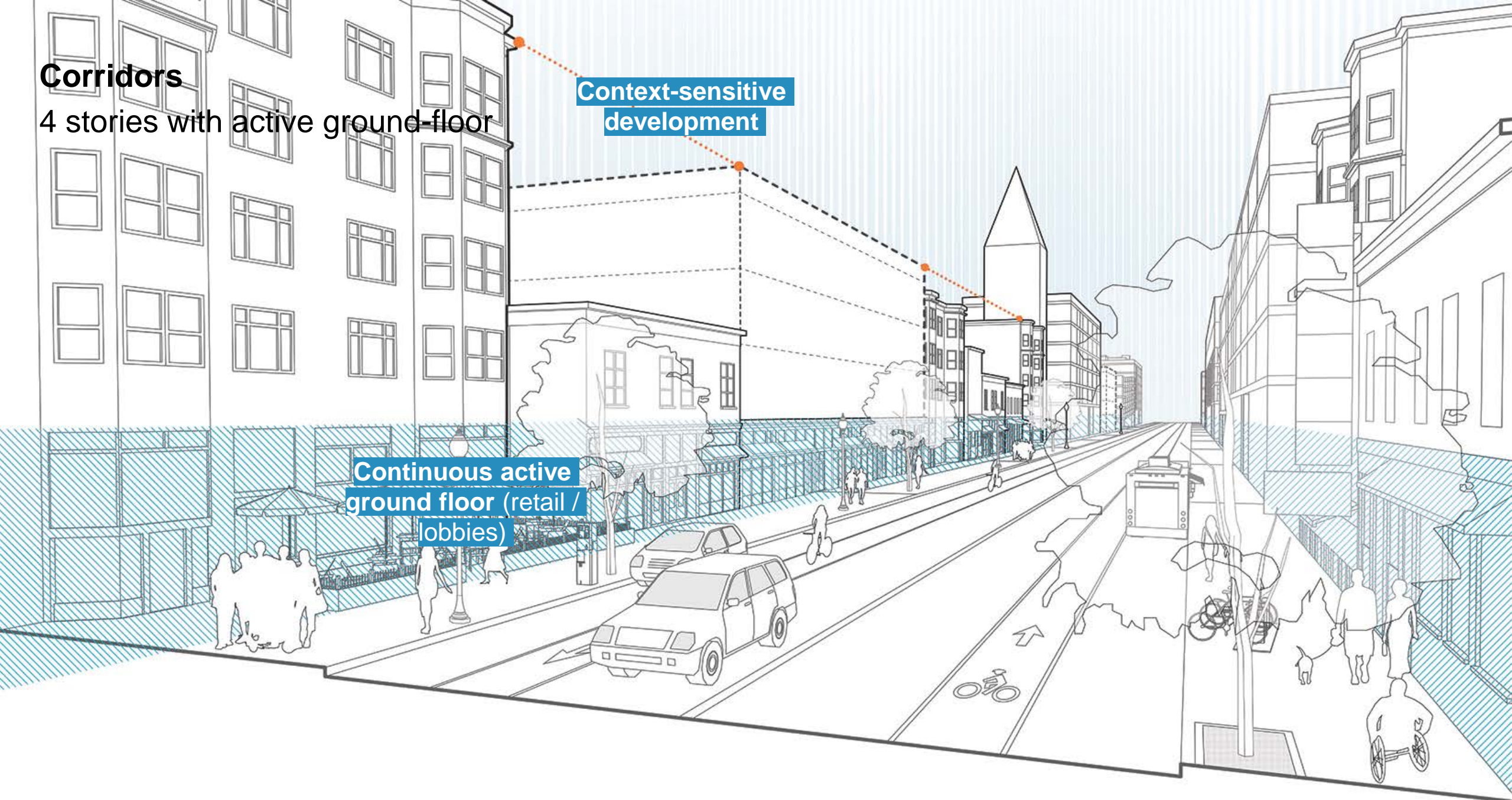


# Corridors

4 stories with active ground-floor

Context-sensitive  
development

Continuous active  
ground floor (retail /  
lobbies)



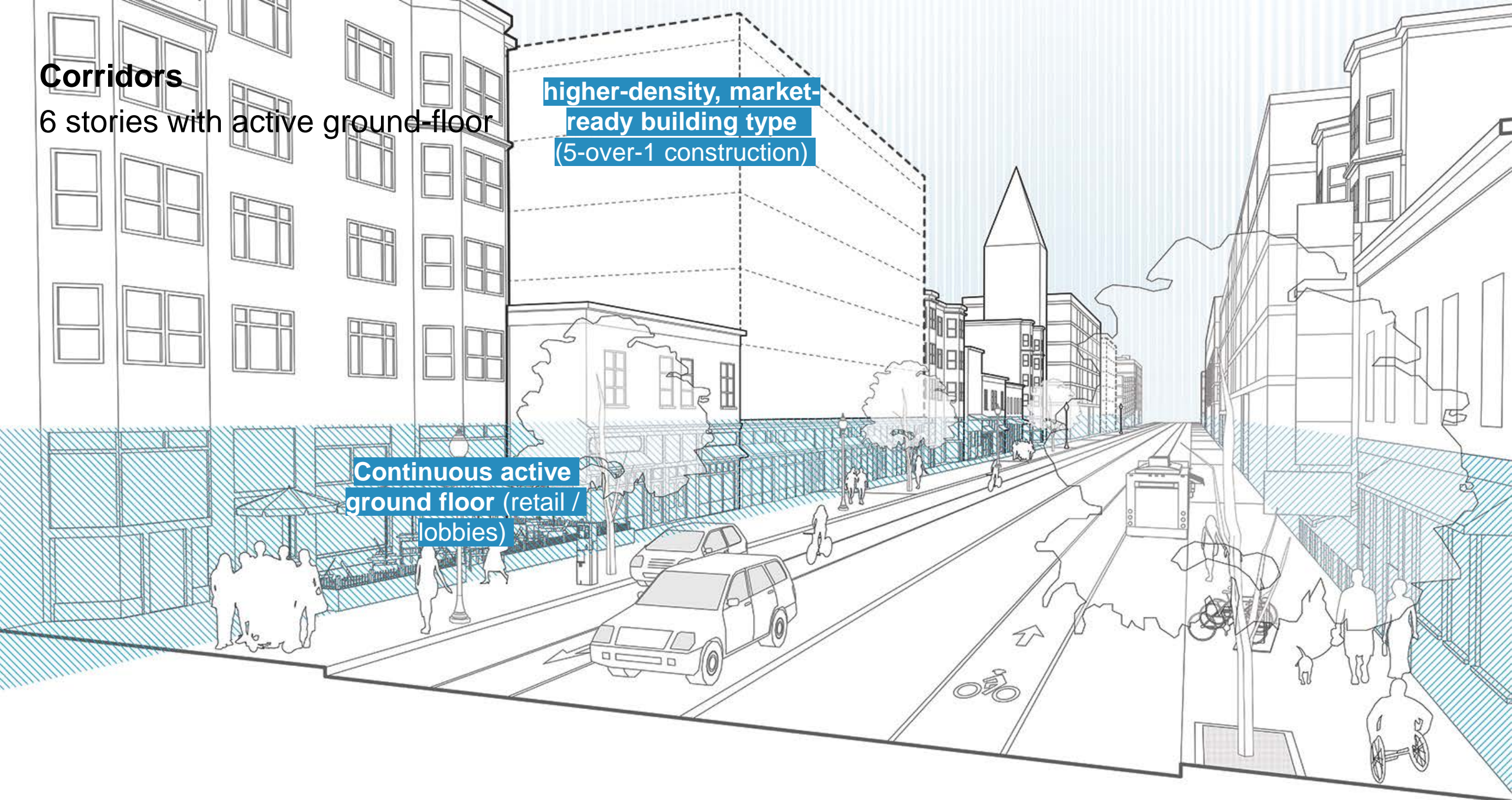


## Corridors

6 stories with active ground-floor

higher-density, market-ready building type  
(5-over-1 construction)

Continuous active  
ground floor (retail /  
lobbies)



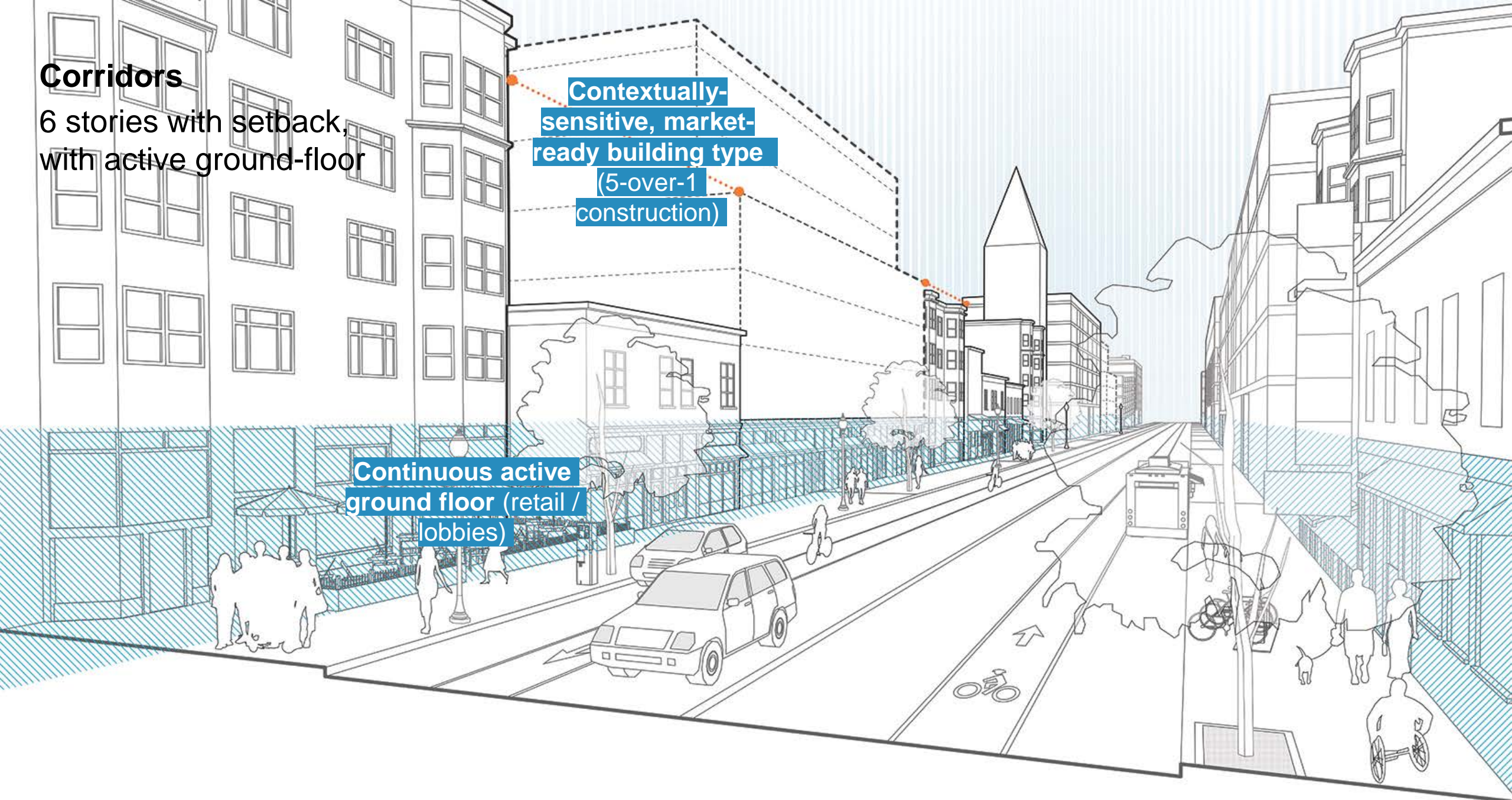


## Corridors

6 stories with setback,  
with active ground-floor

Contextually-  
sensitive, market-  
ready building type  
(5-over-1  
construction)

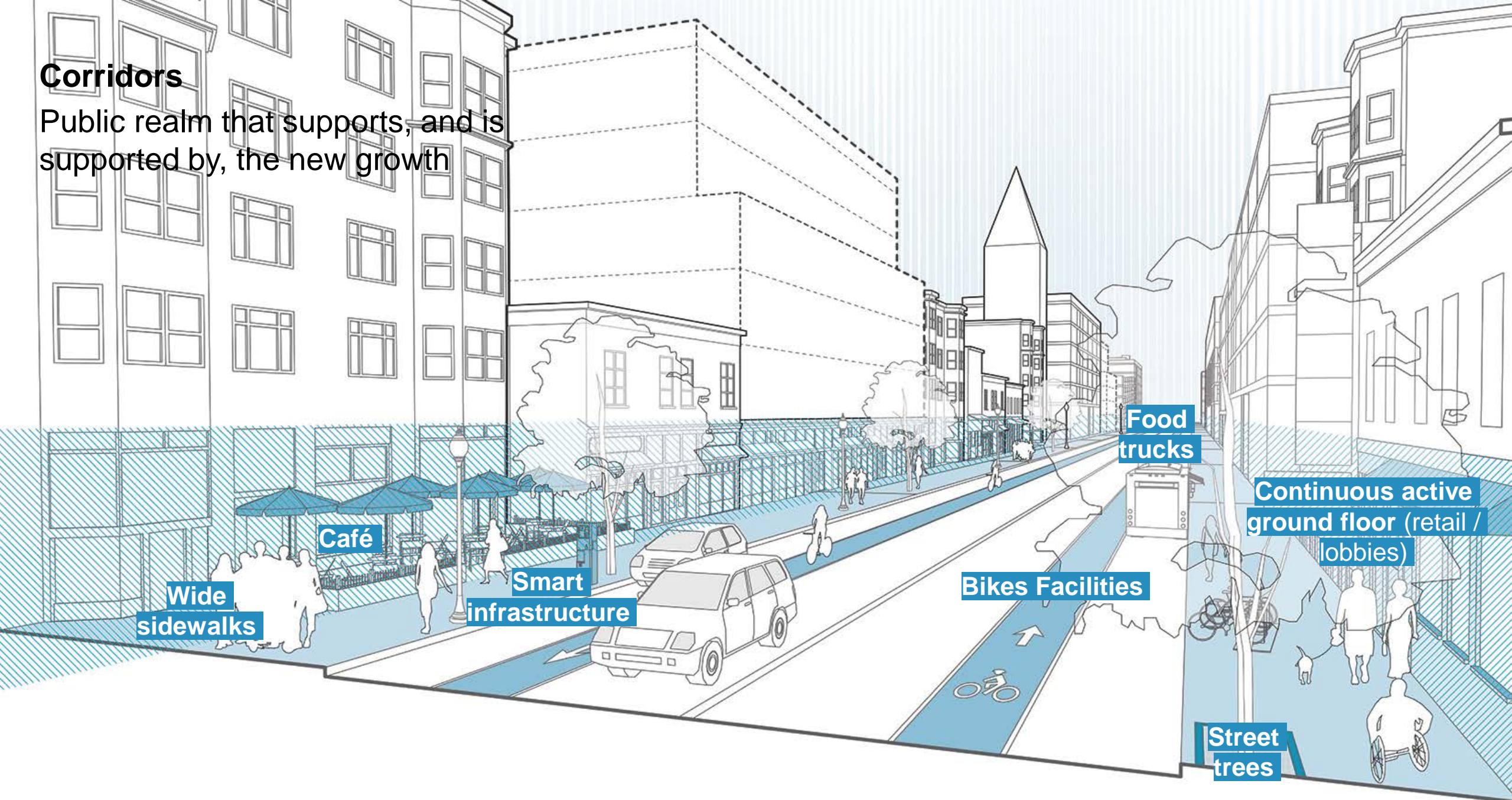
Continuous active  
ground floor (retail /  
lobbies)





# Corridors

Public realm that supports, and is supported by, the new growth





# Questions for Discussion:

## How can we shape the corridors to achieve our goals and values?

### **Character and form**

Which parts of Mass Ave or Cambridge Street are walkable and have a coherent and compelling character? Which stretches are unappealing and poorly defined? What can we use as models, from Cambridge and other cities?

### **Public open space**

What public spaces on the corridors are underutilized, or could be improved? What types of public spaces on the corridors would you like that Cambridge currently does not have?

### **New Development**

What qualities or features should new development along the corridors include? Would you consider denser and/or taller development in exchange for a continuous active edge along the sidewalk, better quality, and/or more context-sensitive design?

### **Regulatory Approaches**

What rules would be essential for new development along the corridors? Are you familiar with form-based zoning?

### **Urban Form Areas of Focus**

In addition to the corridors and Alewife, are there other areas of the city where the urban form of new development should be considered?



# Draft Goals for Urban Form

- **Goal 1: Strengthen the existing patterns of the city:** Reinforce the historical structure of the city - residential neighborhoods complemented by key corridors, squares, and open spaces – with land use regulations, the appropriate densities, and a coordinated mobility plan.
- **Goal 2: Achieve harmonious transitions between neighborhoods:** Create a harmonious relationship between new development and the existing fabric with a particular focus on the seams between the corridors and commercial centers and abutting residential neighborhoods.
- **Goal 3: Direct new development to be human-scaled:** Shape new development so that it balances the desire for human-scaled design and the larger footprints required by specific uses and favored by the real estate market.
- **Goal 4: Ensure a high quality urban environment:** Develop strategic regulations that ensure that private development contributes to the overall quality of the urban environment through the introduction of publicly accessible open spaces and active ground floor uses.
- **Goal 5: Maintain and enhance the public realm:** Find ways to better use public space, such as sidewalks and the right of way, to encourage social interaction and improve the environment.