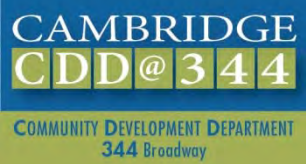


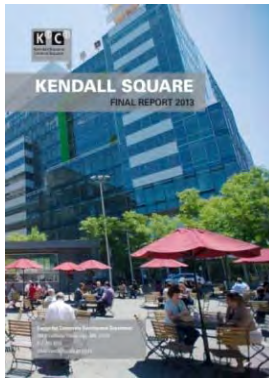


# PUD-KS (Volpe Site) Rezoning November 17, 2015



Community Development Department





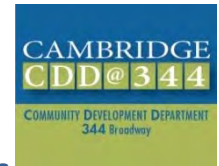
*K2 Study Process 2011 – 2012*



*ECPT/CBT Plan*



*Connect Kendall Sq Competition*



2011

**K2 Study**

- 20-person Advisory Committee --residents, businesses, property owners/developers, MIT, Kendall Square Association, CRA
- Multidisciplinary consultants -- Goody Clancy
- 18 committee meetings, 5 public meetings/working sessions/site tours
- City Council roundtable

2012

2013

2014

**PUD-KS Proposal developed with discussions at Planning Board**

2015

**PUD-KS Petition Filed by Planning Board Ordinance Committee/Planning Board Public Hearings**

**Volpe Site Community Outreach (summer/fall)**

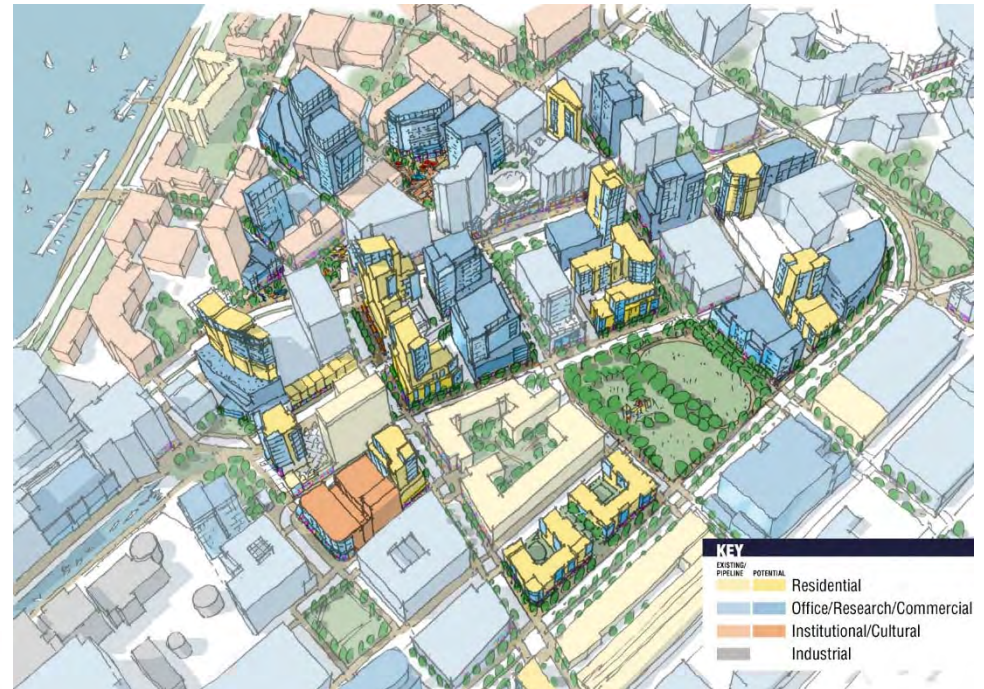
**PUD-KS Refiled – August 2015**

**Petition Hearings (ongoing)**



# Vision for Kendall Square

“A dynamic **public realm** connecting diverse choices for **living, working, learning, and playing** to inspire continued success of Cambridge’s **sustainable, globally-significant** innovation community.”



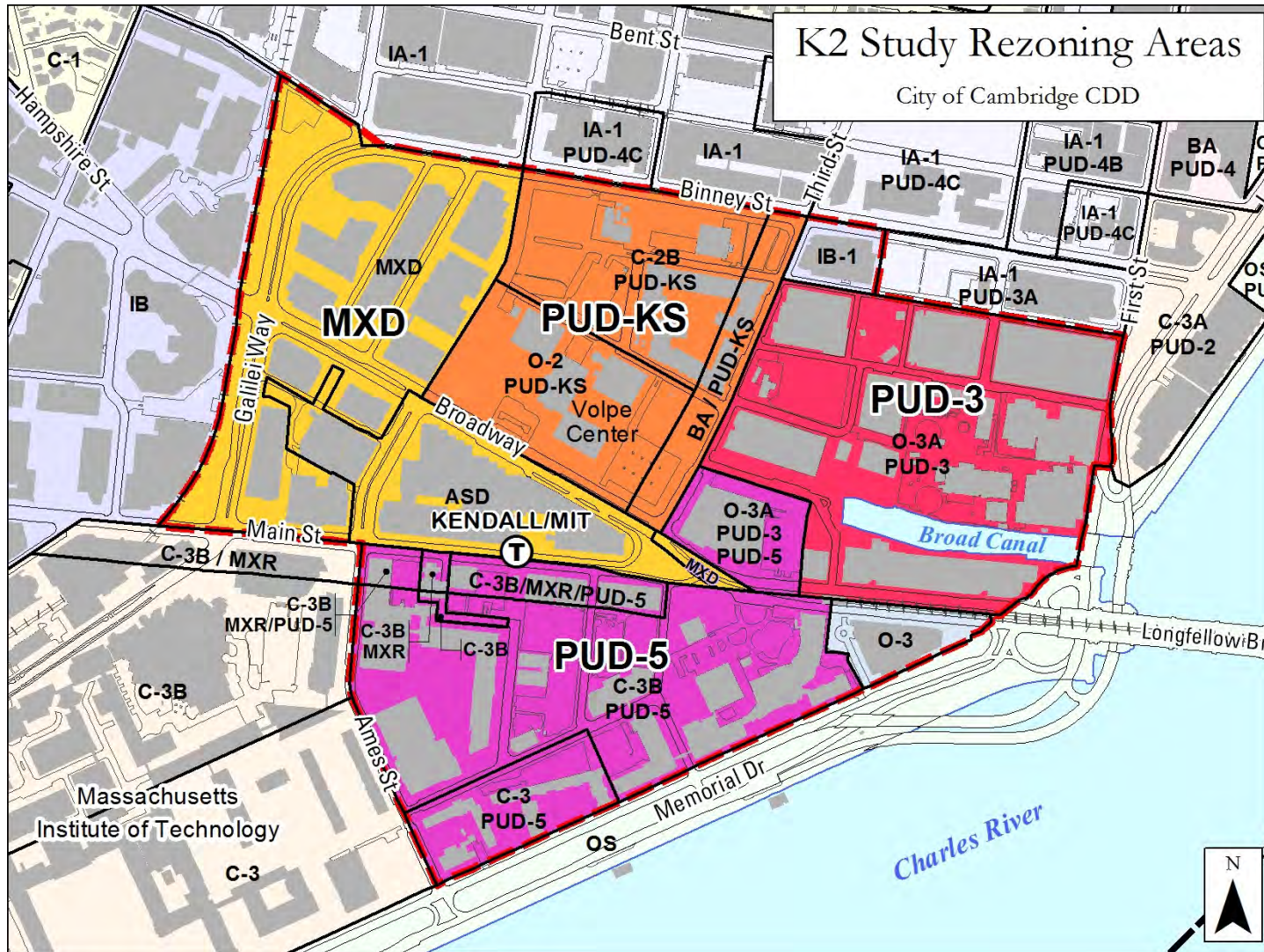
K2 Planning Vision (Goody Clancy)



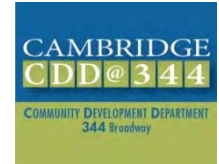
ECPT Planning Vision (CBT Architects + Planners)



# Zoning

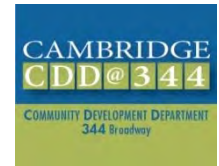


# Major Proposed Modifications



- **Affordable Housing Requirements**  
*15% low-moderate + 5% middle income minimum*
- **Open Space**  
*Detailing desired open space functions*  
*Limiting how much of the requirement can be met on a Federal site*
- **Height**  
*More flexibility in arrangement, limiting bulk at taller elevations*
- **Active Uses**  
*More desired ground floor uses including grocery stores, family-serving uses, small independent operators; limitations on banks*
- **Urban Design**  
*Urban Design Framework to inform future development review*

# Modifications: Affordable Housing



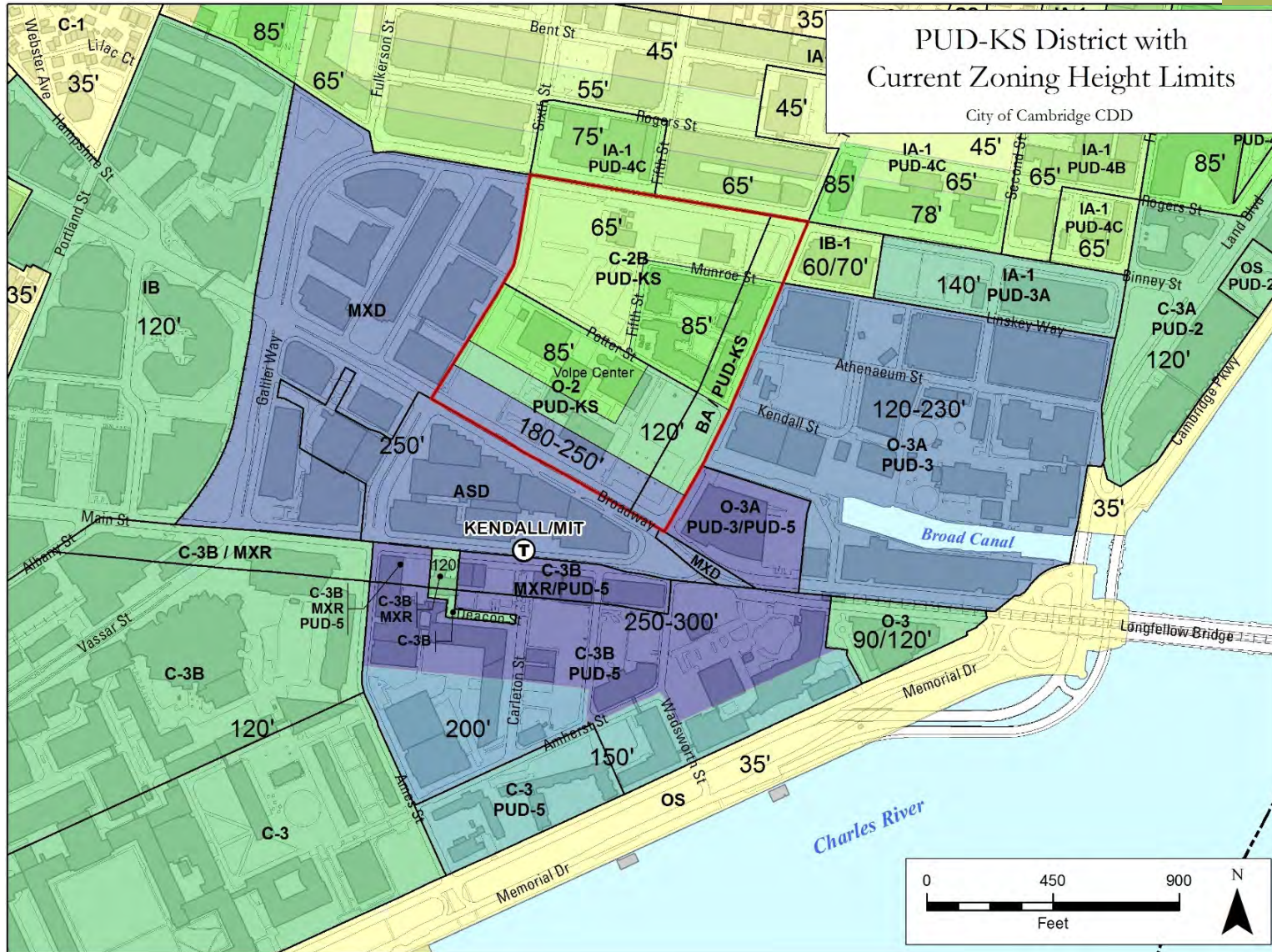
<i><b>APPROXIMATE</b></i>	<b>Current Zoning</b>	<b>Initial Proposal</b>	<b>Modifications</b>
Total Units	879	1,014	1,014
Low-Moderate Units	101	101	152
Middle Income Units	None required	51	51
<b>Total Affordable Units</b>	<b>101</b>	<b>152</b>	<b>203</b>

# Modifications: Public Open Space

- **System:** All spaces must serve a public function, integrate with the area's open space network
- **Civic park or plaza:** Required element of the public open space system
- **Federal site:** Fulfills no more than half of requirement

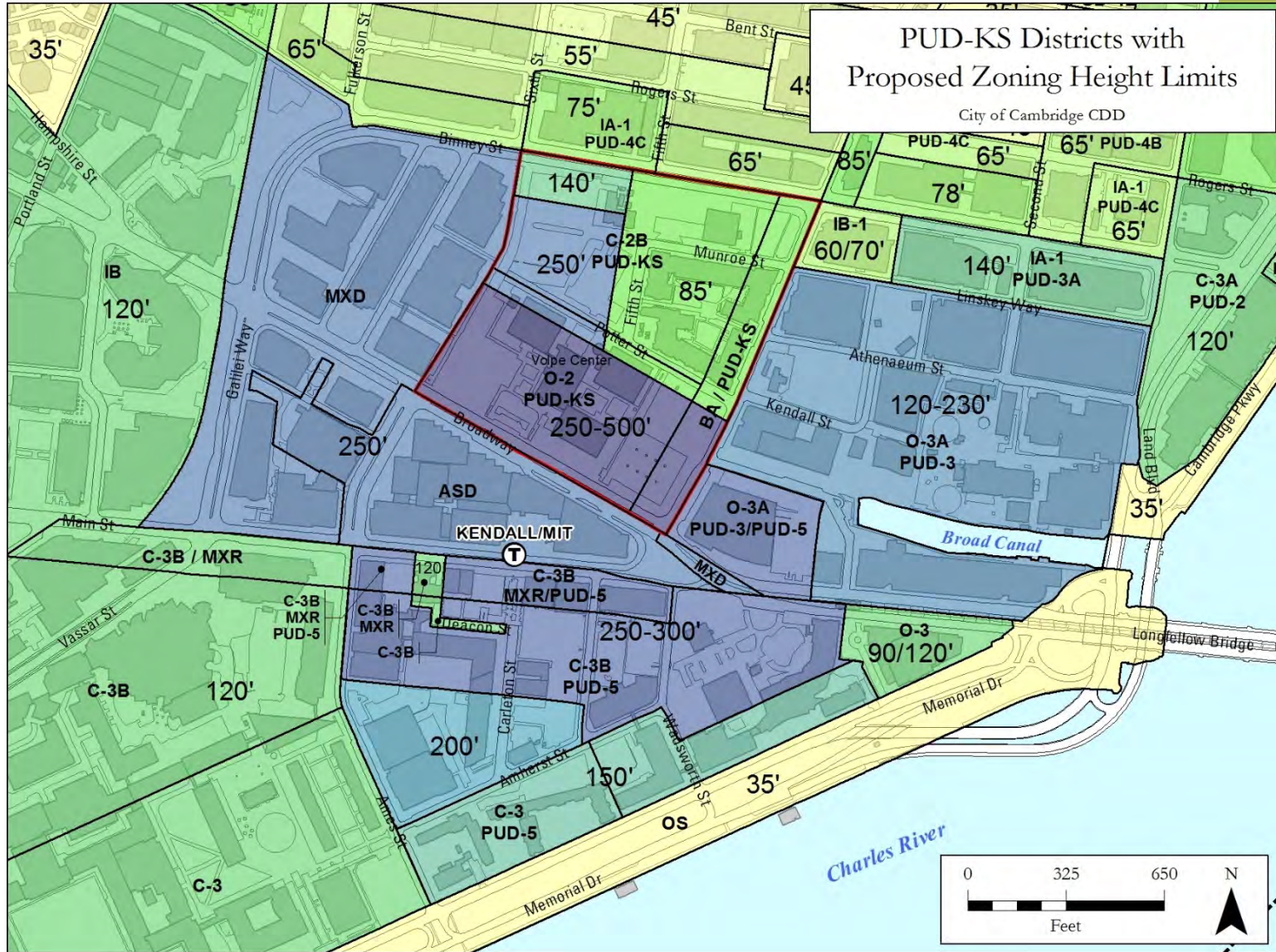


# Height Limits: Current

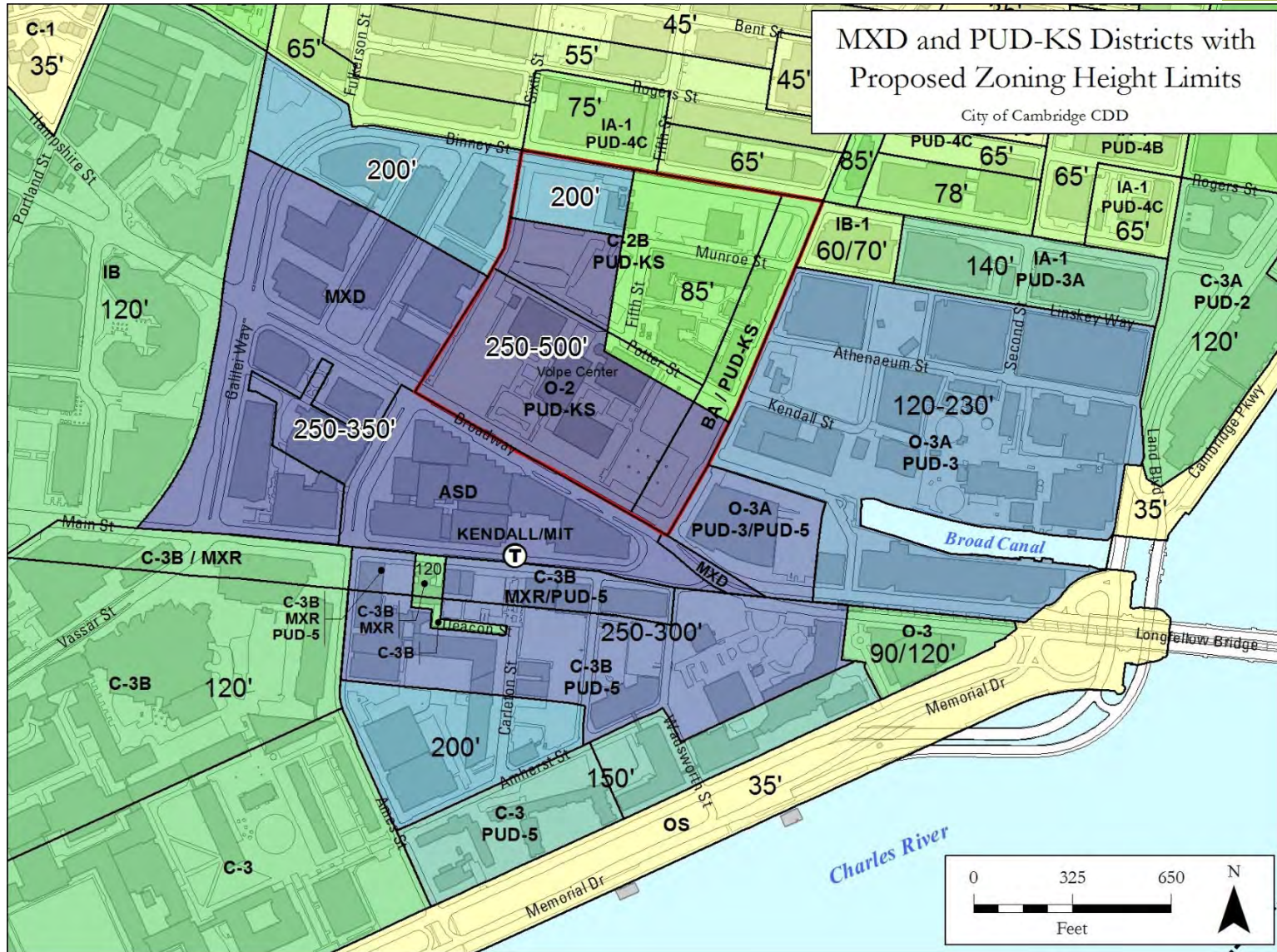




# Height Limits: Initial Petition

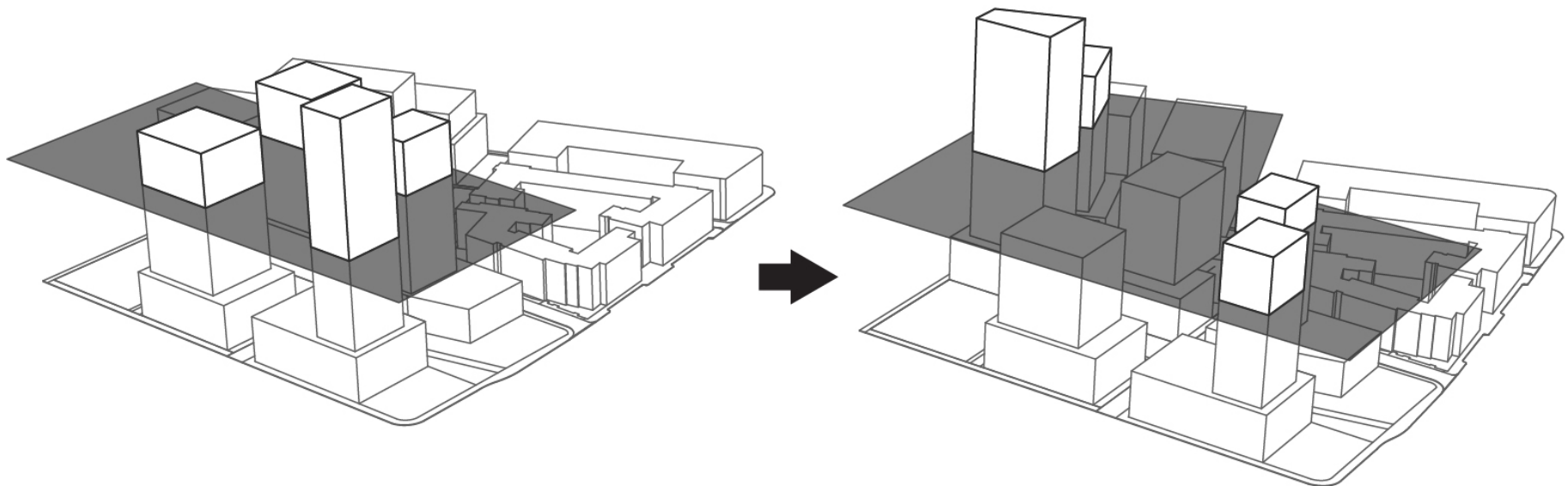


# Height Limits: Proposed Modifications



# Height Limits: **Proposed Modifications**

- **Above 250 feet:**
  - No more than 15,000 SF floor plate
  - No more than 10% of parcel area total (62,000 SF)
- **Above 350 feet:**
  - No more than one building as a distinctive landmark
  - Planning Board can reject a proposal if it does not provide the desired benefit, in favor of a plan with a 350-foot limit

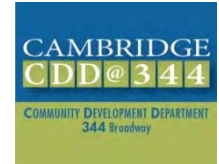


# Modifications: Active Ground Floors



- **Required:** 75% of frontage along major streets
- **Incentivized:** spaces of 5,000 square feet or less
- **Active Uses Must Include:** grocery, market or general store space for small operators (2,500 square feet or less)
- **Active Uses May Include:** child care, recreation, education and cultural uses for families
- **Active Uses May Not Include:** banks, office lobbies

# Volpe Site: Anticipated Development



	Current Zoning	Proposed Zoning
<b>Site Area</b>	620,000	620,000
<b>Residential</b>	967,000 (min)	1,116,000 (min)
<b>Office / Lab</b> (not including Innovation Space)	1,086,000 (max)	1,632,000 (max)
<b>Retail</b>	50,000	140,000
<b>Innovation Space (min)</b>	0	84,000
<b>Total Private Development</b>	2,103,000	2,972,000
Volpe Facility (replacement)	375,000 (exist.)	375,000 (approx.)

*Figures in Square Feet of Gross Floor Area. ALL FIGURES APPROXIMATE*

# Benefits of PUD-KS Zoning Proposal (as Modified)

---

## Housing

- 1,000 units minimum (approx.)
  - 150 affordable, 50 middle-income (approx.)
  - \$20+ million in total incentive zoning payments
- 

## Active Ground Floors

- Continuous active use on Third Street, Broadway
  - Up to 140,000 SF ground-floor retail (exempt)
  - Grocery/general merchandise, small operators, family uses
- 

## Public Open Space

- At least 3.5+ acres Public Open Space
  - Connections to adjacent streets and spaces
  - At least one major civic plaza/park, other public functions
- 

## Innovation Space

- 84,000 SF (approx.) at full commercial buildout
- 

## Transportation

- Cap on total parking
- 

## Sustainability

- LEED Gold + energy, stormwater requirements
  - Additional requirements from Net Zero Plan
- 

## Community Funds

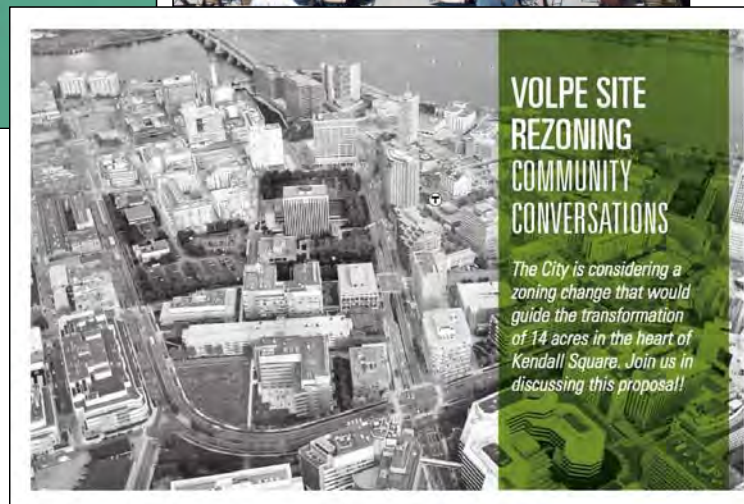
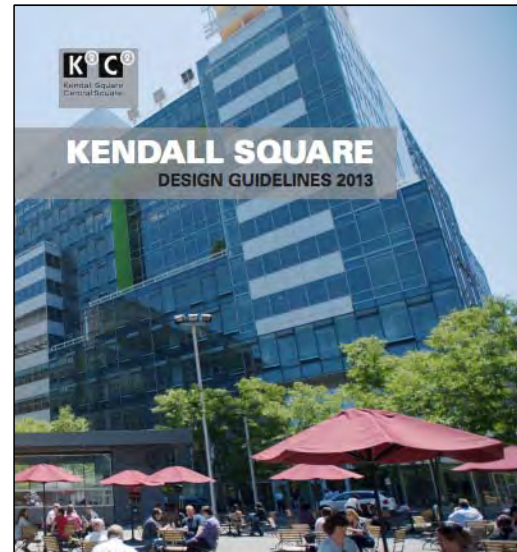
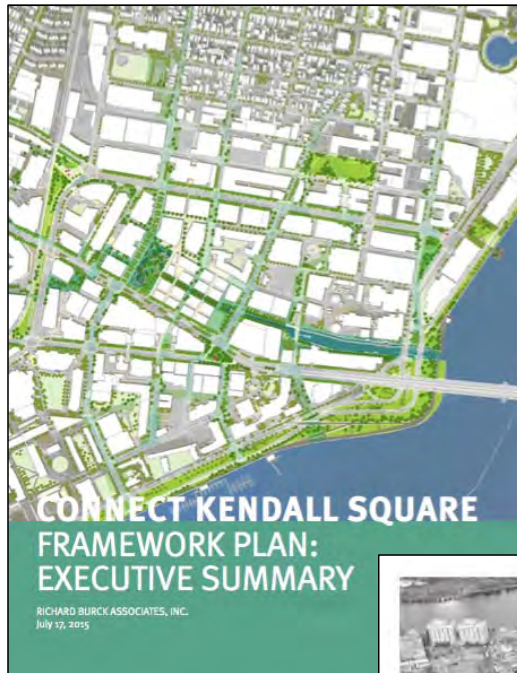
- \$16+ million total for open space programming, transit improvements, workforce readiness
- 

## Urban Design

- General K2 Design Guidelines
  - Site-Specific PUD-KS Urban Design Framework
-

# PUD-KS Urban Design Framework

## Background materials



## Purpose

1. Visually represent the City's and the community's key goals and aspirations for the site
2. Inform the City's review process for development projects
3. Identify key principles, concepts, and ideas

# PUD-KS Urban Design Framework

## Vision – Volpe site

- An **accessible, diverse and unique place** that **integrates** the PUD-KS district **seamlessly** into the surrounding **urban fabric** of Kendall Square and the Eastern Cambridge neighborhoods, and the **community**.
- A place that is defined by **high quality sustainable architecture, urban design and open space** with an **enduring sense of place** that celebrates Kendall Square's spirit of **innovation and creativity**.

## Framework structure

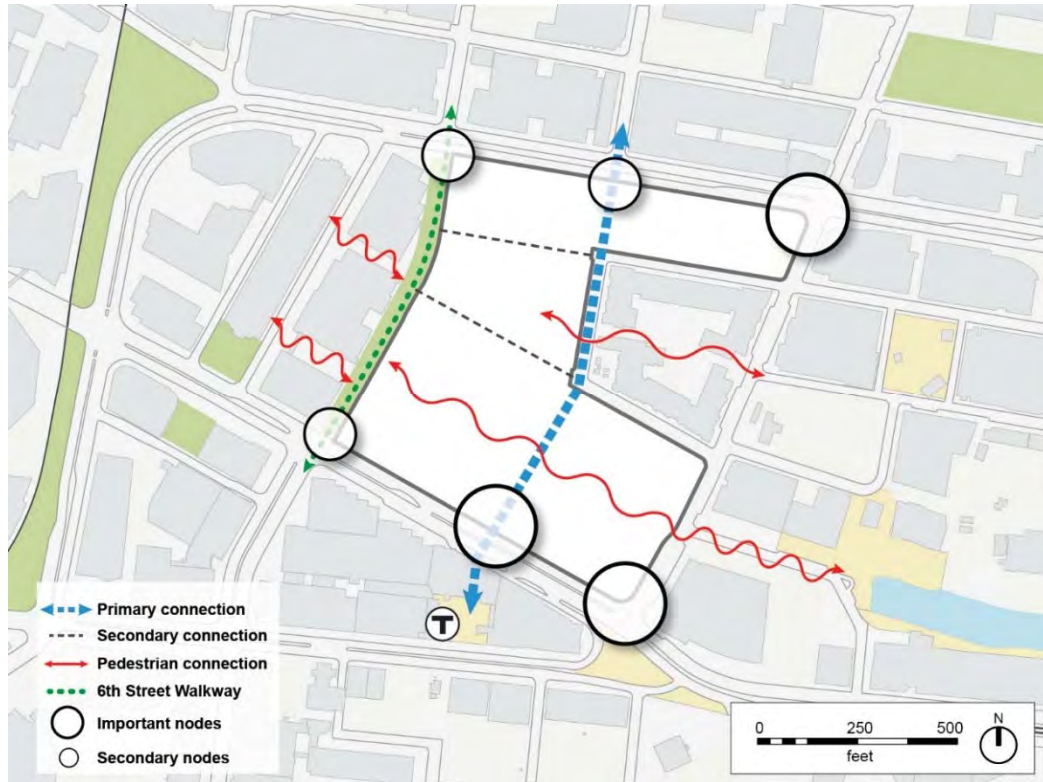
1. Connections
2. Open space
3. Active ground floors
4. Built form
5. Housing for families





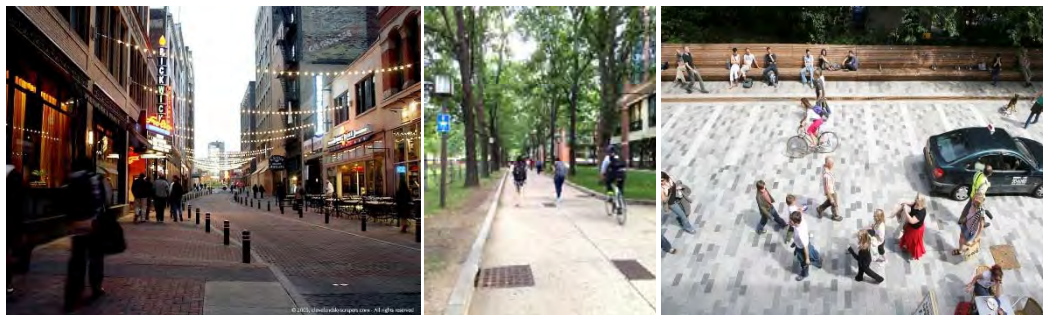
# PUD-KS Urban Design Framework

## Connections



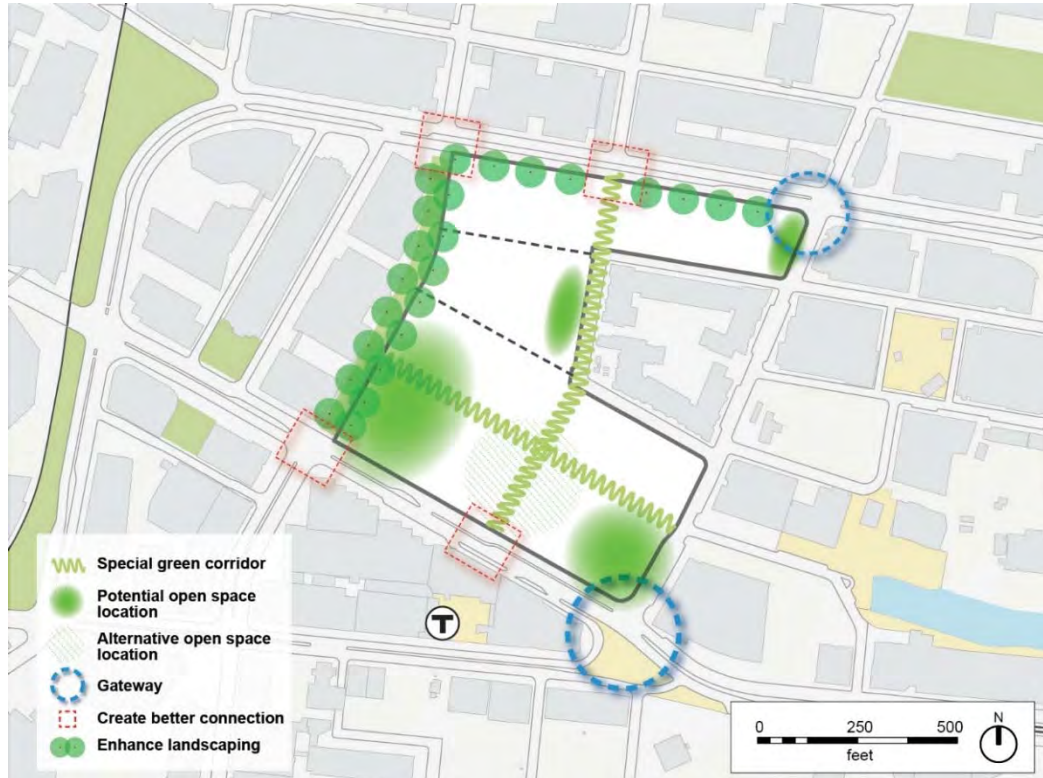
### Main organizing features

1. Extension of surrounding streets and connections through the site (e.g., Fifth Street and Broad Canal Way)
2. Enhancement of the Sixth Street Walkway
3. Provision of different types of connections (e.g., shared streets, multi-modal streets, bike lanes, mid-block connections, alleys etc.)



# PUD-KS Urban Design Framework

## Open space



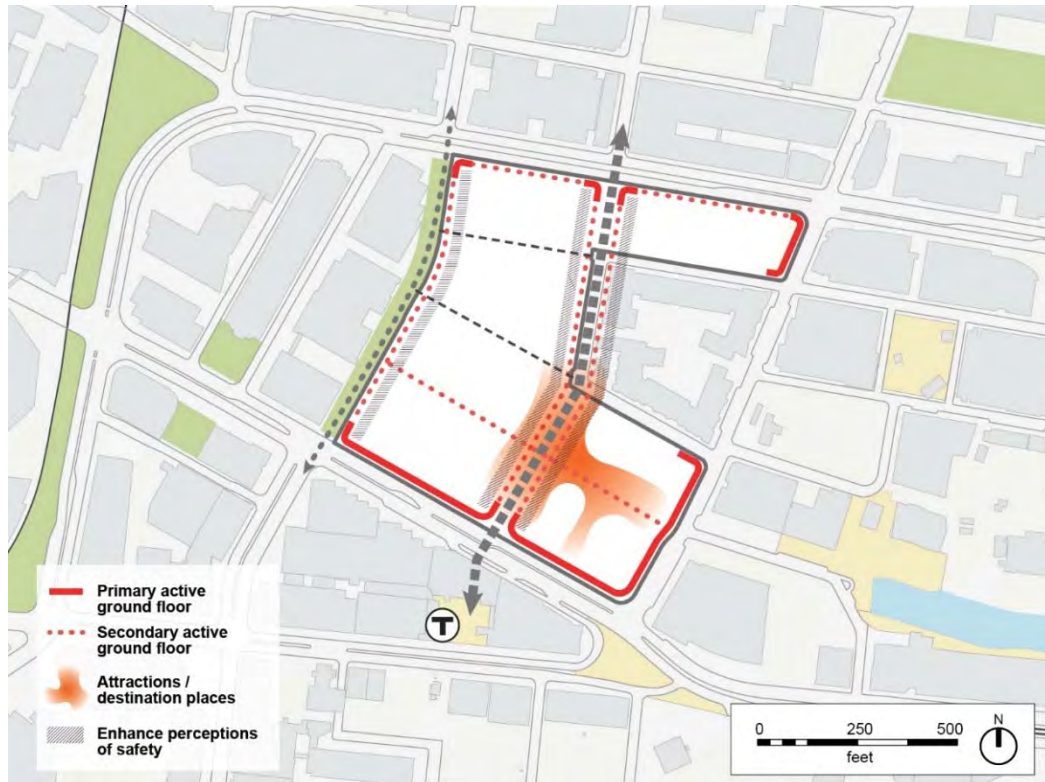
## Main organizing features

1. Network of open space areas organized along the extension of Fifth Street and/or Broad Canal Way
2. The corner of Broadway and Third Street as a gateway
3. A balanced mix of lively gathering spaces and more naturalistic, passive parks



# PUD-KS Urban Design Framework

## Active ground floors



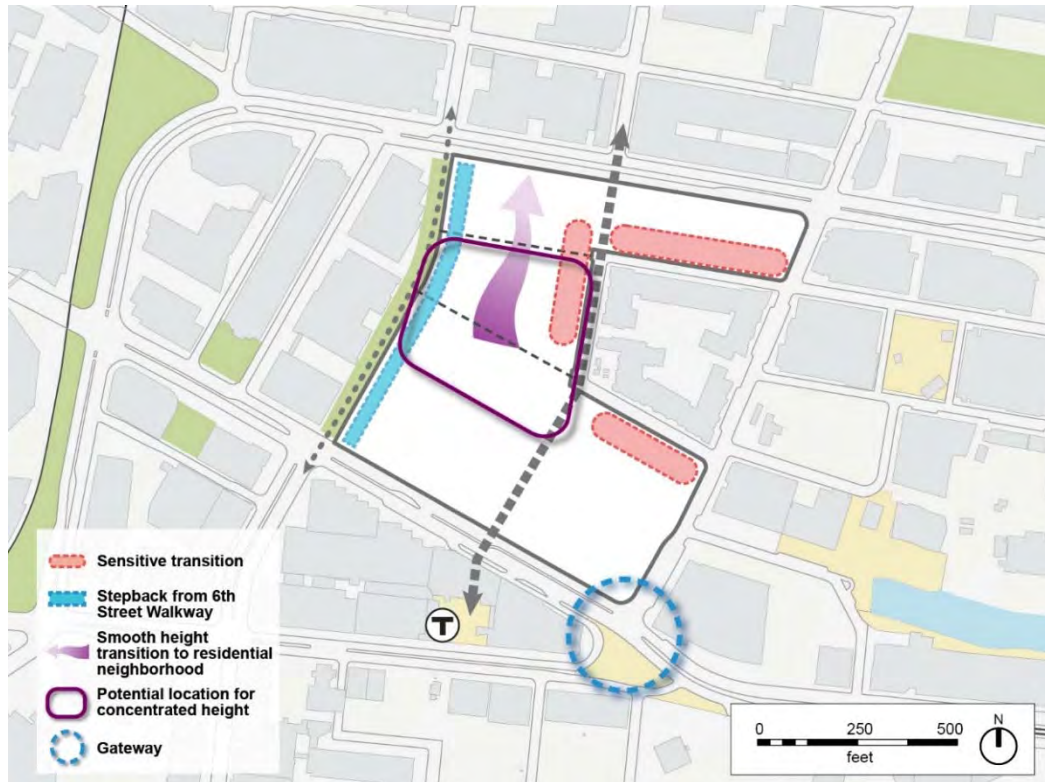
## Main organizing features

1. Creating a hierarchy of streets with different activity levels
2. Concentration of destination type activities



# PUD-KS Urban Design Framework

## Built form



## Main organizing features

1. areas and interfaces that require careful and sensitive transition to the surrounding environment

Also includes matters the Planning Board should consider when determining if a tall building is a “distinctive architectural landmark”

# PUD-KS Urban Design Framework

## Housing for families



1. Design objectives and guidelines to address key siting and design issues relating to housing for families with children.

# PUD-KS Urban Design Framework



# PUD-KS Urban Design Framework

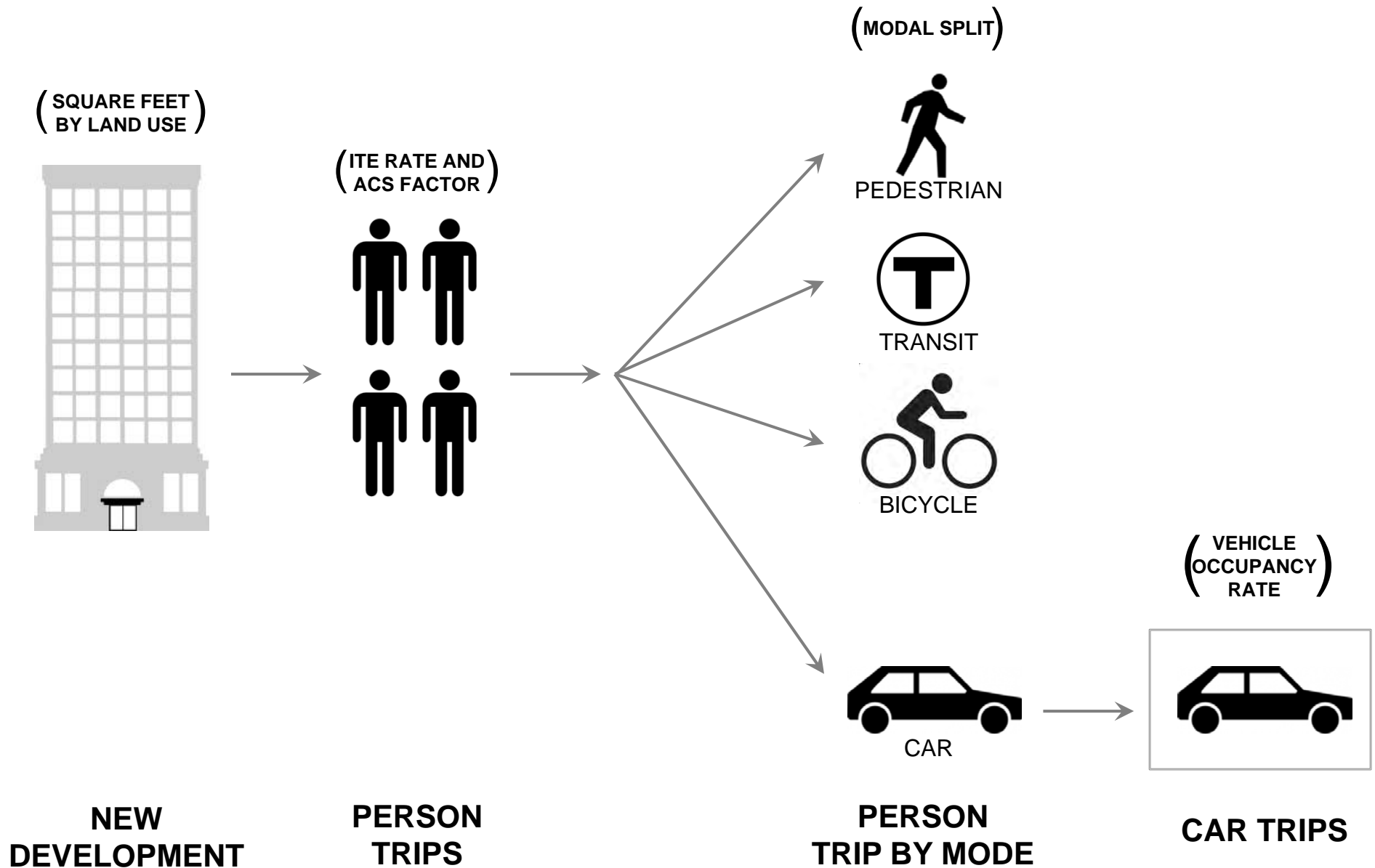




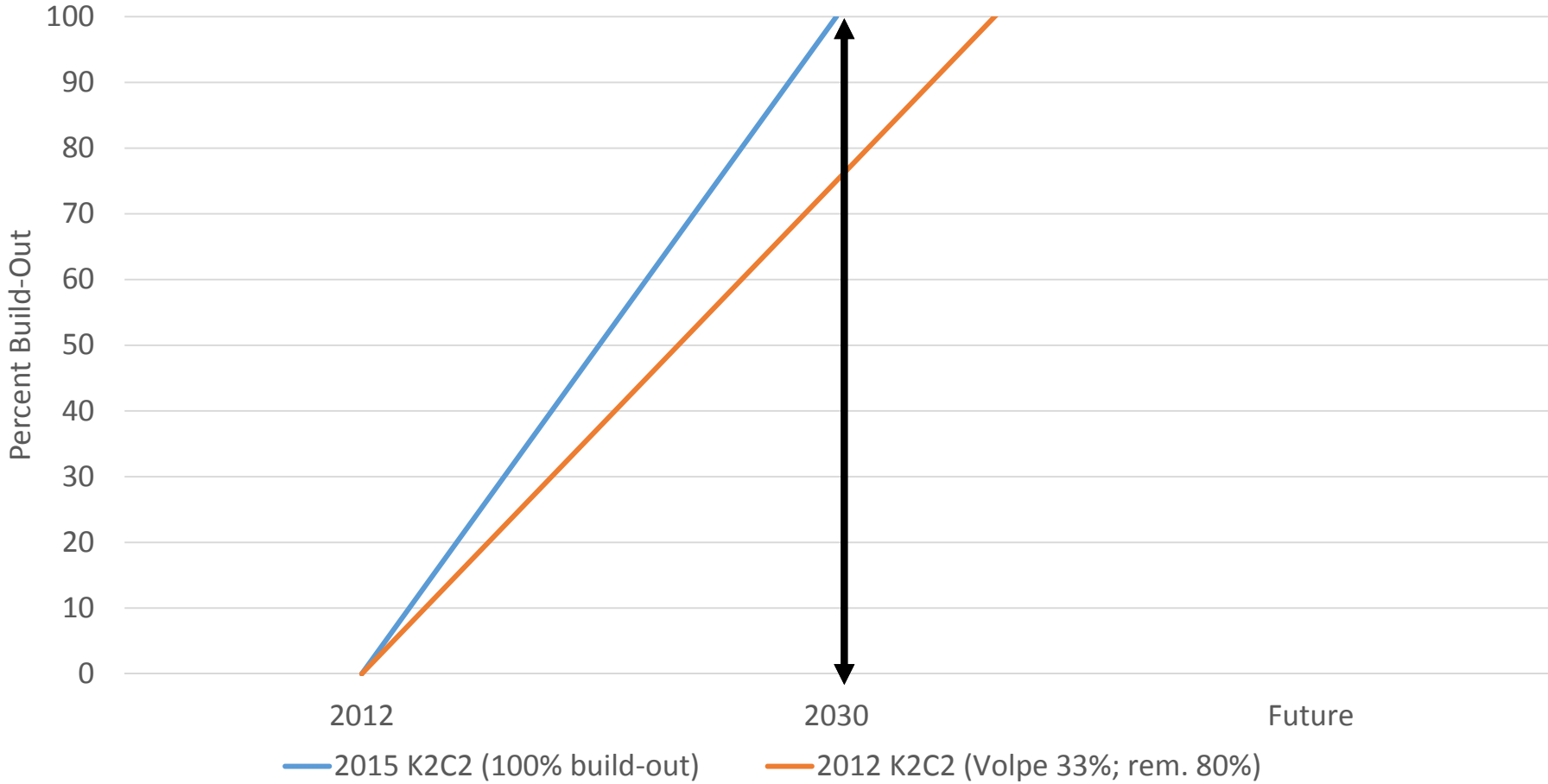
# K2C2 Transportation Analysis



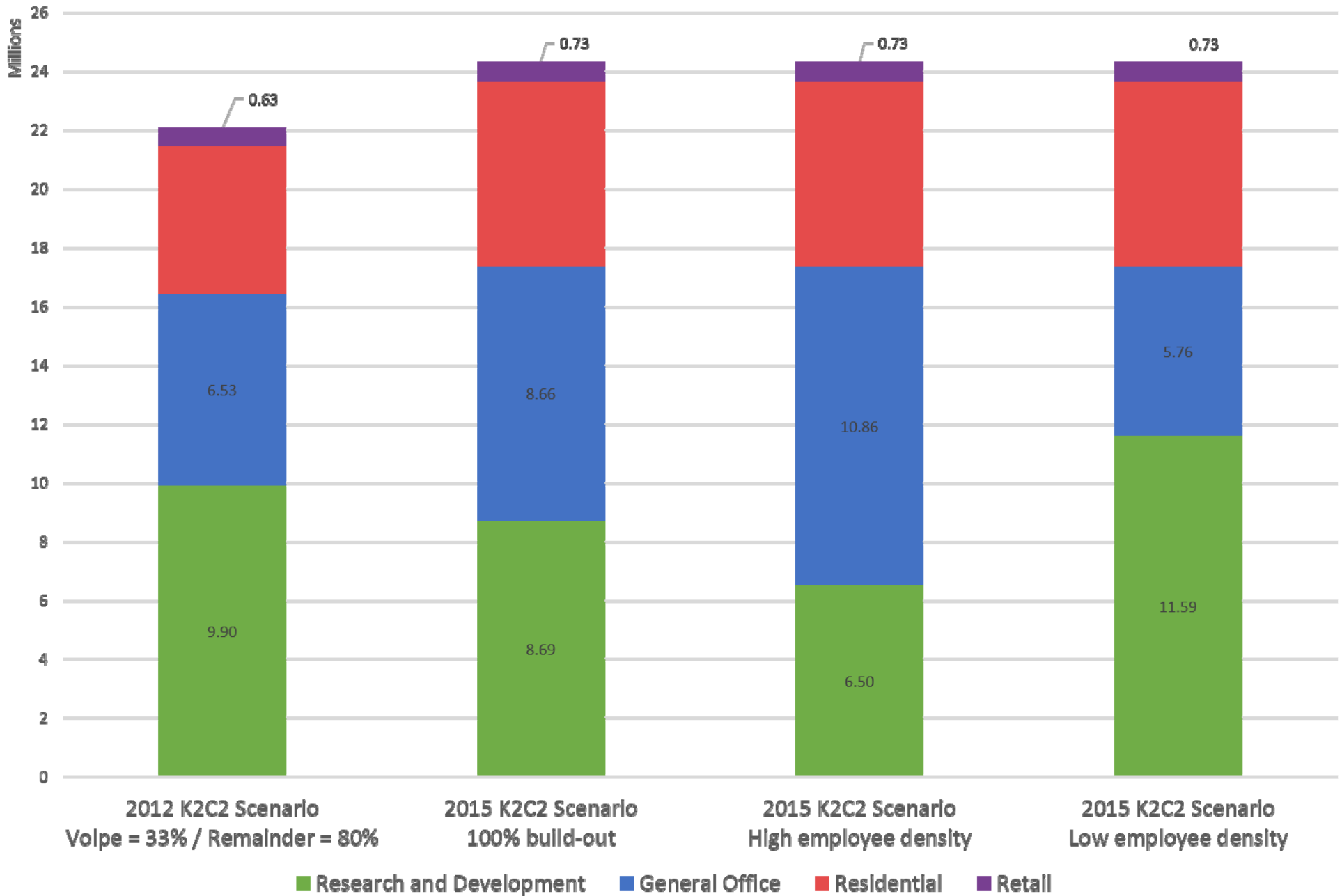
# Calculating New Trips



# Pace of Development Scenarios



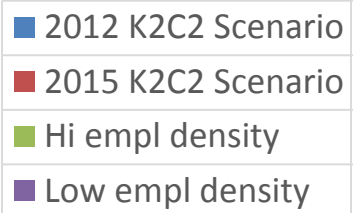
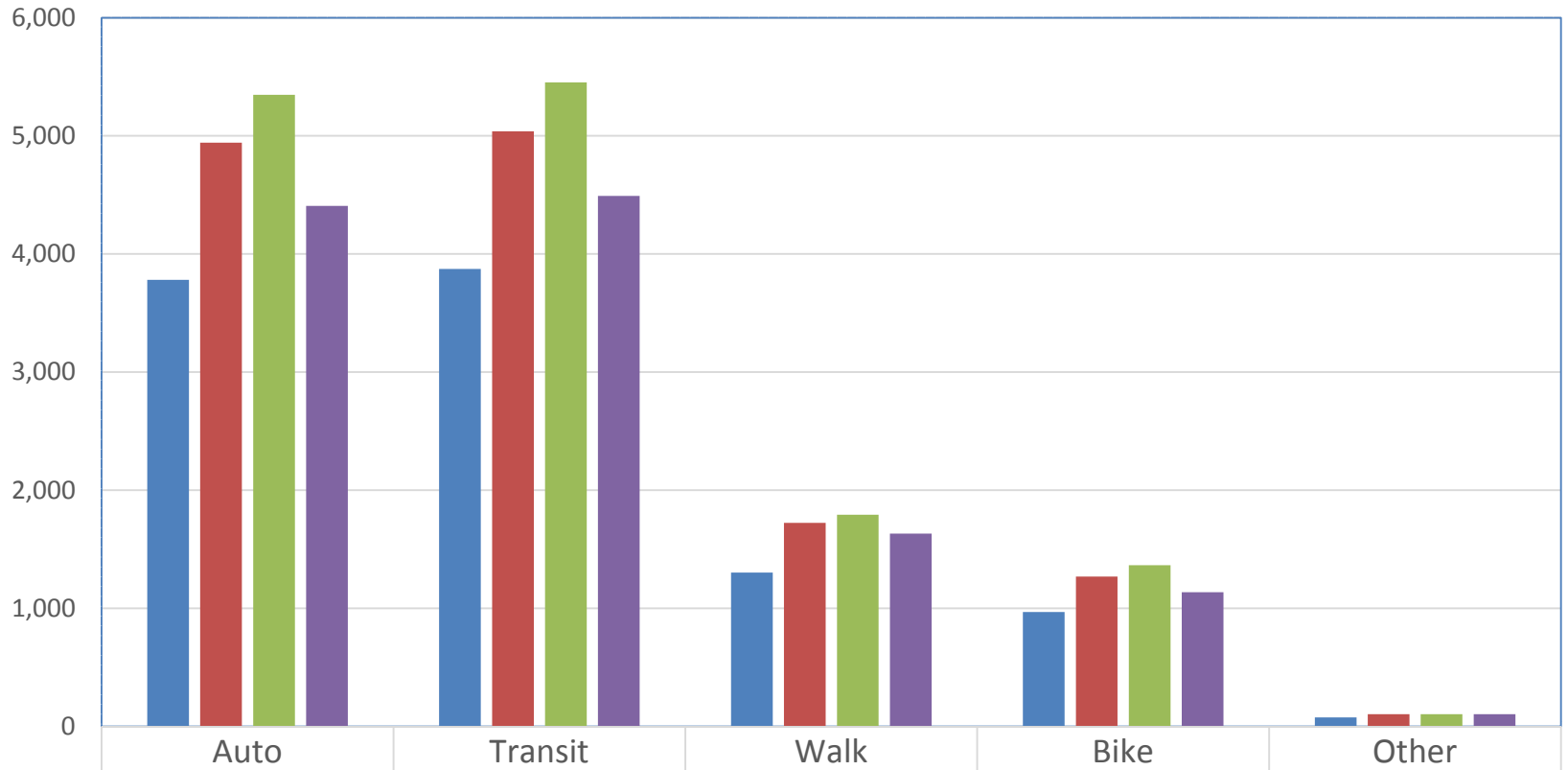
# 2030 Build-Out Scenarios by Square Footage



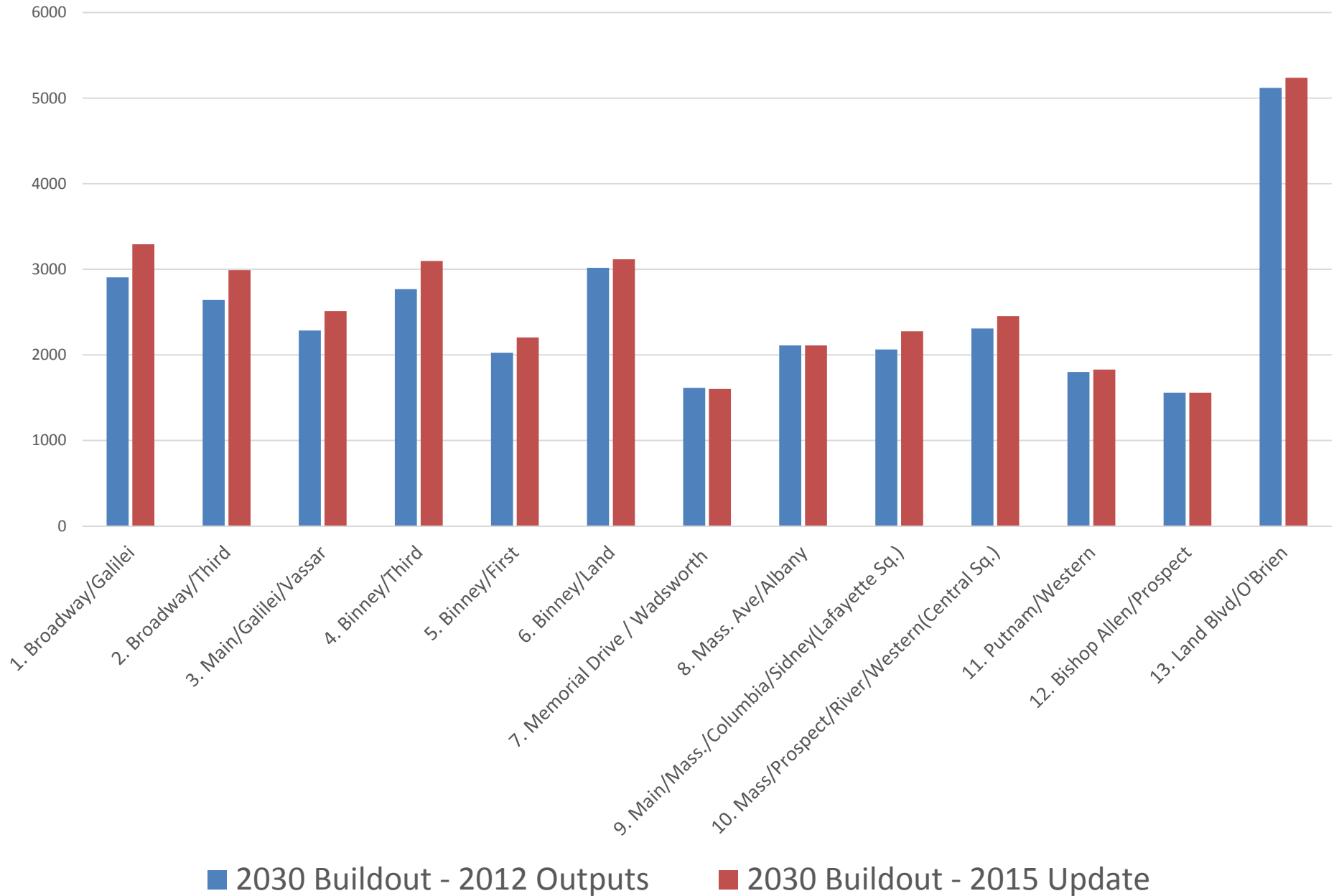
# 2030 Estimated Total Person Trips Comparison



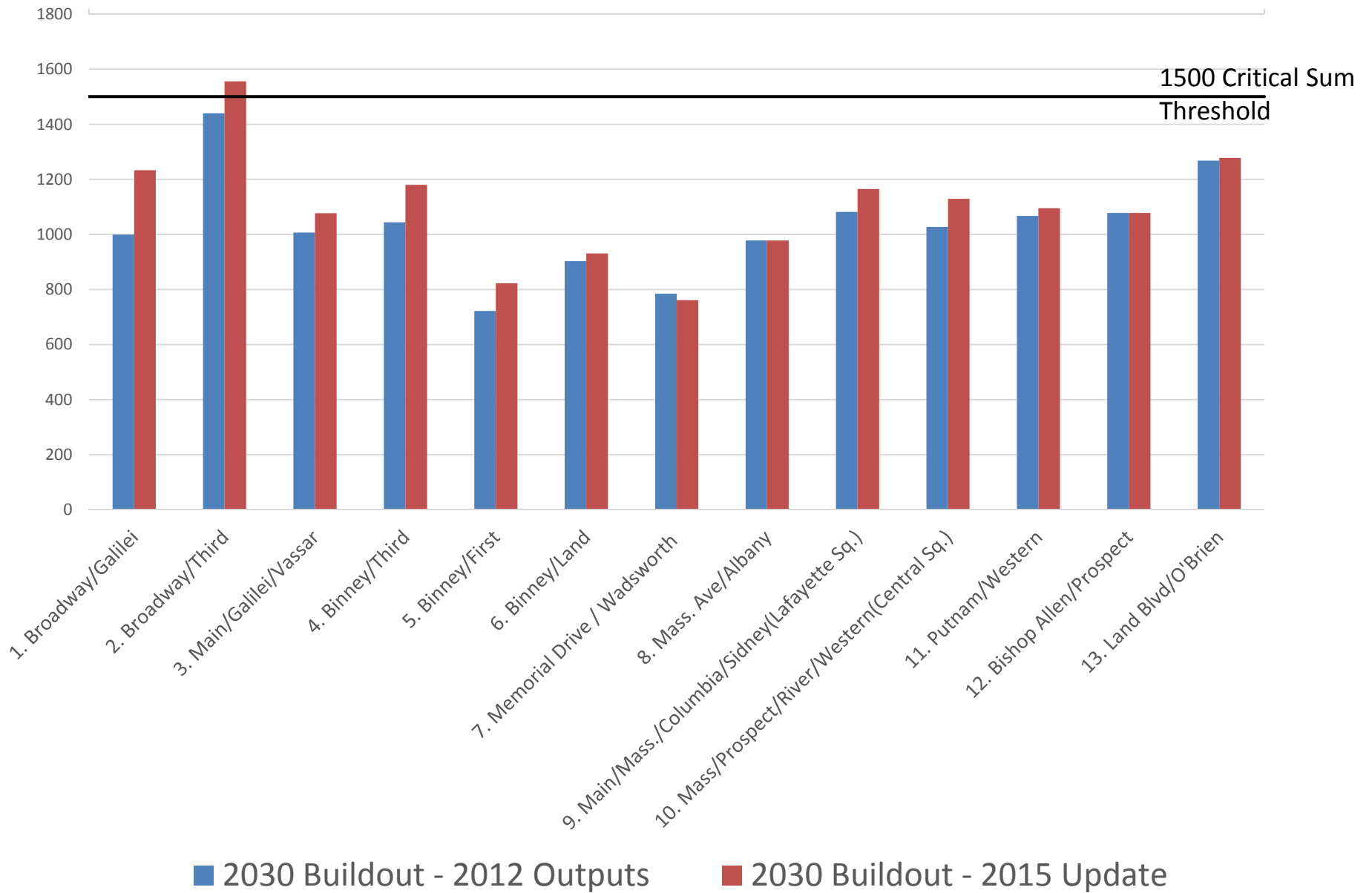
# 2030 Estimated Person Trips by Mode



# 2030 Traffic Volumes by Intersection Comparison



# 2030 Critical Sums by Intersection Comparison



# Approach

- Current zoning requires traffic study and mitigation program
- Require transit analysis and mitigation
- Link to milestones, thresholds or performance standards
- Current proposal includes \$10 per square foot requirement (\$6.67 for open space and transit)
- Final Development Plan/Special Permit to include specific and detailed set of requirements



# Preliminary Financial Analysis

Cambridge Redevelopment Authority

HR&A Advisors

# Assumptions and Methodology

<b>Program</b>	<b>Total Proposed SF</b>	<b>Percent of Total</b>
Residential	1,116,000 SF	38%
Office	816,000 SF	27%
Lab	816,000 SF	27%
Retail	140,000 SF	5%
Innovation	84,000 SF	3%
<b>Total</b>	<b>2,972,000 SF</b>	<b>100%</b>

<b>Key Assumptions</b>	<b>Amount</b>
65% AMI	15.00%
95% AMI	5.00%
Interest Rate (Total Project Costs)	6.00%
LTV (Total Project Costs)	60.00%
Program Size (Baseline)	2,972,000 SF

## **Estimated Construction Costs (Hard & Soft)**

Residential	\$407 per GSF
Office	\$358 per GSF
Lab	\$413 per GSF
Retail	\$330 per GSF
Innovation	\$358 per GSF
Parking	\$100,000/space

# Assumptions and Methodology

- Preliminary cash flow analysis based on Kendall area development comps
- Modeled as a horizontal developer pro forma
- “Land Value” based on 3 phases of land disposition
- Resulting value is “supportable site costs”
- Based on industry acceptable 15% Internal Rate of Return

# Land Value Output

Costs Included in Program Analysis	Additional Site Improvement Costs to be Supported
Building construction	Federal facility (building and fit-out)
Soft costs	Site Remediation
On site improvements	Public Streets and Parks
Inclusionary and Middle Income Housing	Off site Infrastructure
Linkage / Incentive Payments	
Community Fund @ \$10	

# Preliminary Results

<b>Estimated Residual Land Value</b>	<b>Per GSF</b>
Residential	\$58
Office	\$155
Lab	\$199
Retail	\$68
Innovation	\$129
<b>Total*</b>	<b>\$126</b>

\*Based on proposed program SF

<b>Private Development</b>	<b>2,972,000 SF</b>
Residential (w/ 15% low-mod, 5% mid)	38%
Office	27%
Lab	27%
Retail	5%
Innovation	3%
<b>Supportable Site Improvement Costs</b>	<b>\$283,000,000</b>

