Reinventing Kendall Square for the 21st Century
Updated Vision and Framework

KENDALL SQUARE ADVISORY COMMITTEE
MARCH 22, 2012

urban design/planning study for the central and kendall square area
Agenda

• Vision priorities
• Vision framework and implementation strategies update
  – Integrate activities
  – Create places
  – Promote sustainability
  – Nurture Kendall’s innovation culture
• Discussion
Kendall Square Vision

- Enhancing neighborhood **identity** and sense of place
- Creating a more active, accessible and extensive **public realm**
- Attaining the right **mix of land use/activities**
- Sustaining Kendall’s strong **innovation culture**
- Expanding the amount and range of **housing**
- Expanding **retail choices**
- Making Kendall a **global leader in sustainability innovation and practice**
- Improving accessible **transportation choices**
- Ensuring plan implementation delivers **effective results**

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Plan framework: Four perspectives

CREATE PLACES THAT FOSTER COMMUNITY AND VITALITY

PROMOTE ENVIRONMENTAL SUSTAINABILITY

NUTURE KENDALL’S INNOVATION CULTURE

INTEGRATE ACTIVITIES THAT SUPPORT CREATIVE INTERACTION

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From innovation in isolation...
...to innovation through collaboration
FRAMEWORK: Integrate activities

GUIDING PRINCIPLES
- Leverage community and innovation benefits of mixed-use environment
- Focus intensity around transit
- Prevent development pressures on traditional neighborhoods
- Support city and state economic development
Use mix: potential

Approximate floor areas (beyond pipeline):

- **Housing**: 2,000-2,500 units
- **Office/research**: 2.5-3 million sf
- **Retail/active ground floor**: 200,000-250,000sf
Building form: principles

• Performance-based approach
• At street scale:
  • Frame streets as public outdoor rooms.
  • Create an appropriate pedestrian scale.
  • Relate new development to scale of context buildings.
• Above street scale (intermediate and tallest heights):
  • Accommodate significant additional research and housing development intensity where infrastructure and mixed-use concentrations best support it.
  • Leverage development value to support community benefits.
  • Produce variety of building height and massing to enhance aesthetics and sense of place.
Building form and use: application

- **Streetwall**: 16’ step-back at 80’ on Main, Broadway, Third and other streets per design review (1/3 of frontage excepted)
- **Streetwall to 120’ tall**: 30,000sf max. floorplates
- **120’ to 200’ tall**: 25,000sf max. floorplates
- **200’ to 250’ tall**:
  - 20,000sf max. floorplates if carried down to 160’
  - 8,000sf max. floorplates
- **250’ to 300’ tall**: 8,000sf max. floorplates (housing only)
- **Upper-floor connections** over side streets encouraged for tenants needing larger floorplates (i.e., 35,000-70,000sf)
- **Active ground floor uses required** in core areas, encouraged elsewhere; retail exempted from FAR count
- **Minimum amount of housing development** to be required in conjunction with research/office development (example: 60% max. commercial development on Volpe Site per existing zoning)
Community benefits may take a variety of forms

Examples of potential benefits:
Support for...

• Parks/public spaces (space and/or financial support)
• Workforce readiness programs and education
• Unique small/local retail
• Superior sustainability performance
• ...and of course, expanded transportation alternatives and demand management
GUIDING PRINCIPLES

- Connections should serve internal tenant circulation rather than diverting public circulation from street level
- Not over primary streets
- Majority of exterior should be glazed
- Integrated with building architecture

Floorplates of 35,000-70,000 possible

Sample buildout scenario

- 250'
- 300'
- 200'
- 120'
- 80'
- 30,000-35,000sf
- 35,000-40,000sf
- 55,000-60,000sf
- 65,000-70,000sf
Transition Area

- Zone C-1
- 0.75 FAR maximum
- 35’ height maximum

- 2.75/4.0 FAR
- Active ground floor uses exempt from FAR
- 45 degree height plane
Research/office restricted west of Windsor

Priority area for housing

Active ground floor uses not counted toward FAR

May locate no further west than 280' from Windsor Street

Height must fit within 45 degree plane ascending from Main Street centerline (housing exempt from plane height limit)

Allow higher density on Newtown Court site enabling potential longer-term mixed-income redevelopment and/or infill

1:1 replacement of public housing units required

Building height may rise to 60' within 100' of Main Street, and within 100' of Portland St as far as X Street

Building height may rise to 45' beyond 60' height envelope

Standard maximum FAR

FAR bonus possible with housing affordable to moderate incomes

Research/office restricted west of Windsor

Priority area for housing
FRAMEWORK: Create places
Built and public spaces grow in tandem...
To bring the core of Kendall Square to life

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The public realm is enriched and nearly doubles...

Outdoor public places
- Gardens and Courtyards
- Roof Gardens
- Parks
- Plazas
- Promenades
...creating a network of diverse places that contribute to community, vitality, innovation

Active sidewalks and interiors

- Residential front doors
- Educational/cultural venues
- Retail (frontage more than doubles)
Active sidewalks/interiors

- Retail/info kiosks (Darmstadt)
- Traffic separation, interior connection (Seattle)
- Public art/activity at challenging edges (Charlottesville)
- Interior/exterior transparency (Rome)
- Interior/exterior transparency (Portland)

- Existing: over 350K+ sf
- Potential: over 350K+ sf
Active ground floors: application

- Condition development approval on active ground floor use and design
  - Core area: Retail or public educational/cultural use
  - Emerging areas: Convertible to retail or public educational/cultural use; Live/work
- Other streets: Housing with frequent front doors, stoops, gardens; Commercial uses with at least 50% transparent glazing
  - Retail does not count toward FAR
Active ground floors: application

• Coordinate retail tenanting strategy among major property owners:
  – Third party helps define retail themes, attract prospects, and offer them to all interested property owners
  – Property owners independently contract with tenants as desired
  – Motivations: predictability, synergy, value
A connected public realm
...with signature public places
Volpe Park

- Serve a variety of activities and users—residents, workers, visitors...
- Respite from energy elsewhere
- Create in tandem with mixed-use redevelopment, including community destination
- Connect to storytelling promenades: history of Kendall, sustainability
Broad Canal

- Celebrate unique experience of nature
- Enhance connections to Charles River
- Engage the water’s surface
- Introduce new active edges
- Extend the views, experience with storytelling promenade along historic canal route
- Add cultural venue
Kendall/MIT station plaza

- Experiential showcase and laboratory for innovation
- Multimodal access hub
- Walking, wayfinding and view connections—Infinite Corridor, river, Broadway
- New active edges
- Storytelling promenade: history of Kendall
Point Park at Kendall Square

- Kendall’s premier outdoor living room, shaped by active edges
- Iconic, experiential public art
- Multimodal access hub
- Walking, wayfinding and view connections
- Connected to River via Wadsworth promenade
Great public places: application

• Condition development approval on public place enhancements
  – Open space and/or contribution to public place fund per development review policy; onsite or off
  – Enhancements to impacted street edge
• Coordinated city infrastructure investments
  – Main-Third reconstruction
  – Other street and park investments
• Coordinated operations through public/private partnership
  – Programming
  – Public art
  – Clean and green
FRAMEWORK: Promote sustainability
Sustainability in K2: Goals

• Build neighborhood with reduced environmental impacts
• Demonstrate leadership as sustainable, cost-efficient place to do business
• Support community vitality
Sustainability in K2: Goals (cont’d)

- Reducing consumption of non-renewable energy is a key strategy
- 80% of Cambridge greenhouse gas emissions come from building-energy consumption in existing buildings
- Proposed land use vision increases built square footage potential by 3 million square feet
- Significant portion of future square footage likely to have high energy intensity
Sustainability in K2: Objectives

- High building energy performance
- Increased use of renewable energy and district steam
- Water conservation
- Low reliance on automobiles; increased use of alternative fuel vehicles
- Mitigation of urban heat island
- Reduced storm water runoff quantity and improved water quality
- Minimized waste generation
- Make sustainability visible
Sustainability in K2: Potential Strategies

- Potential strategies for BUILDINGS:
  - LEED Gold certifiability (current standard is LEED Silver certifiability; focuses on building construction)
  - LEED Existing Buildings Operations and Management (focuses on building performance)
  - Energy Star Label (building in top 25% nationally for energy use per square foot)
  - District steam feasibility assessment
  - Conformance with MEPA GHG Policy
  - Cool roofs (white/green); vegetated walls
  - On-site stormwater retention/treatment
  - Green office programs (recycling, purchasing, etc.)
  - Creation of K^2 “Sustainability Management Association”
Sustainability in K2: Potential Strategies

- Potential strategies for STREETSCAPE/OPEN SPACE:
  - Increase tree canopy coverage
  - Paving materials with high reflectance

- Potential strategies for TRANSPORTATION:
  - TDM (already incorporated)
  - Support for Hubway bikesharing program
  - Expansion of EV charging network
  - Increased use of alternative fuel vehicles (EV, biodiesel)
FRAMEWORK: Nurture Kendall’s innovation culture
From innovation in isolation...
...to innovation through collaboration