Reinventing Kendall Square for the 21st Century

Updated Vision and Framework



KENDALL SQUARE ADVISORY COMMITTEE MARCH 22, 2012



Agenda

- Vision priorities
- Vision framework and implementation strategies update
 - Integrate activities
 - Create places
 - Promote sustainability
 - Nurture Kendall's innovation culture
- Discussion



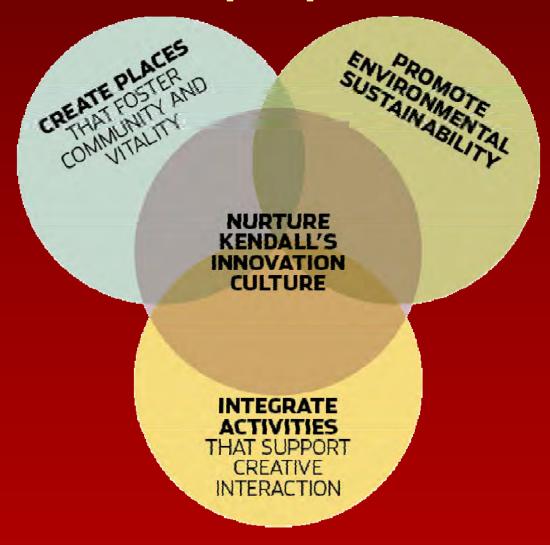


Kendall Square Vision

- 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**



Plan framework: Four perspectives

















From innovation in isolation...















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

...to innovation through collaboration





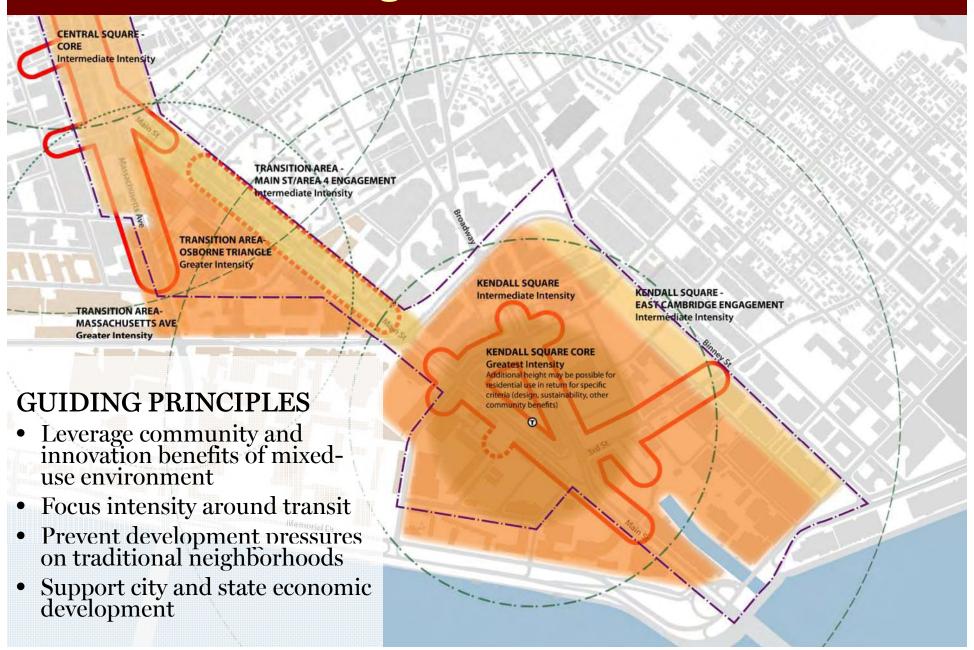




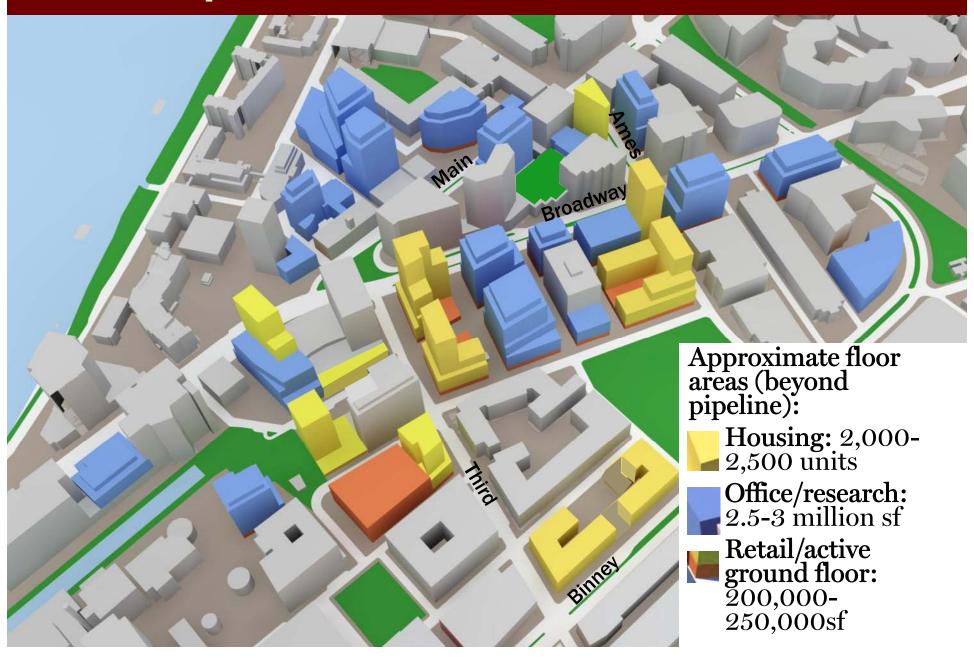




FRAMEWORK: Integrate activities

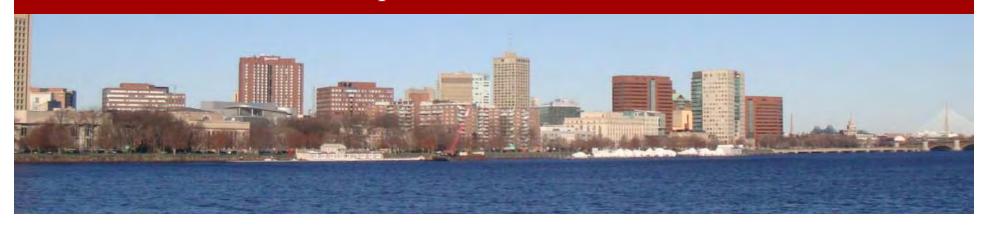


Use mix: potential



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...

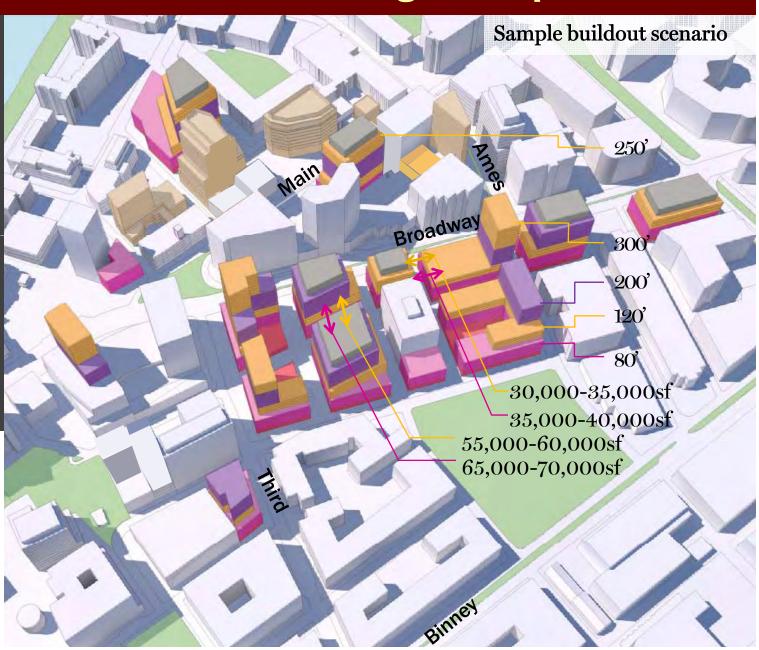
- Parks/public spaces (space and/or financial support)
- Workforce readiness programs and education
- Unique small/local retail
- Superior sustainability performance
- ...and of course, expanded transportation alternatives and demand management

Upper floor connections enable larger floorplates

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

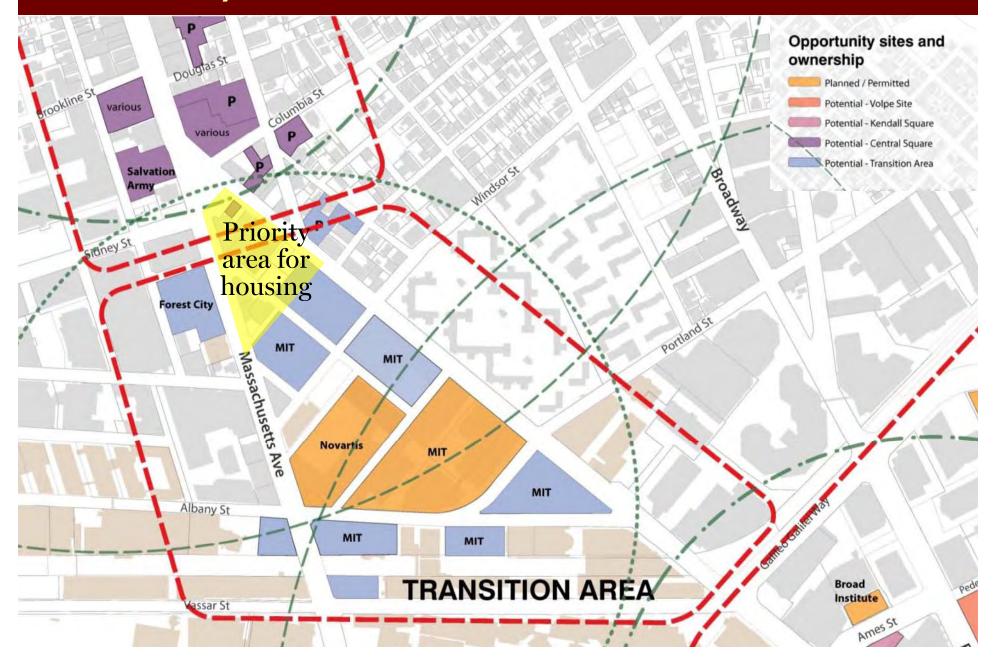
Floorplates of 35,000-70,000 possible



Transition Area

Portland Washington Newtowne Court •2.75/4.0 FAR • Zone C-1 Active ground floor • 0.75 FAR maximum Windsor uses exempt from FAR •35' height maximum • 45 degree height plane

Research/office restricted west of Windsor



FRAMEWORK: Create places











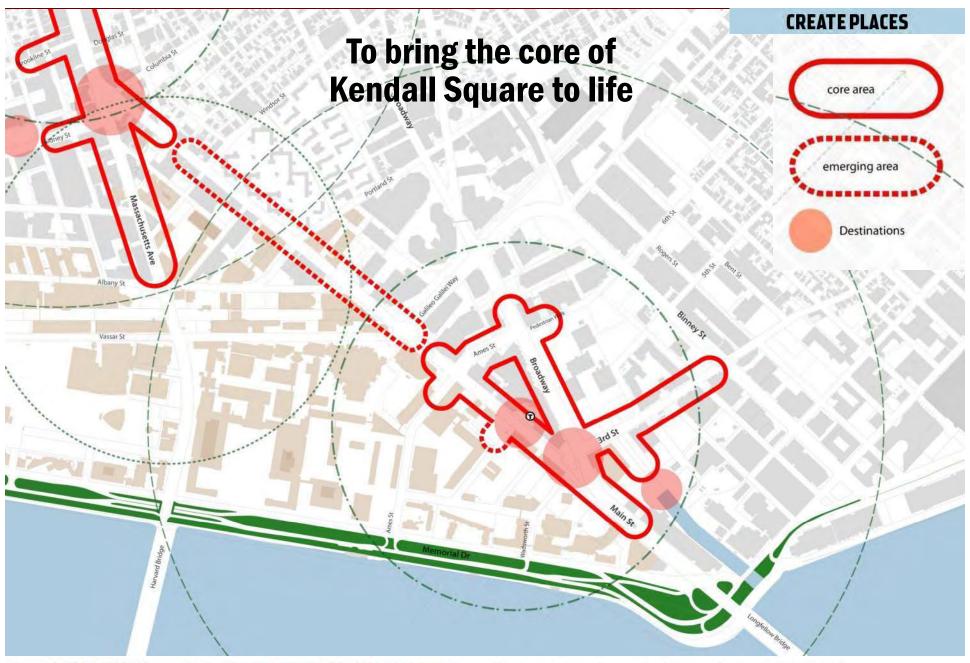


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CREATE PLACES

Built and public spaces grow in tandem...







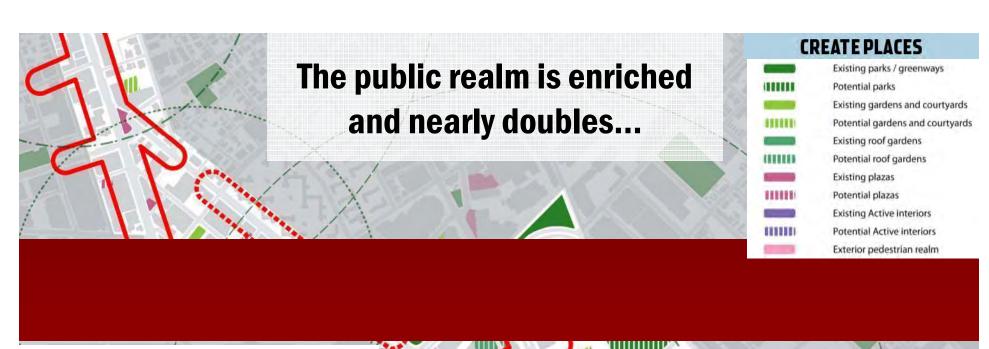








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...creating a network of diverse places that contribute to community, vitality, innovation



Active sidewalks and interiors

Residential front doors > more personal Educational/cultural V venues more interactive Retail (frontage more than doubles)















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CREATE PLACES

Active sidewalks/interiors



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



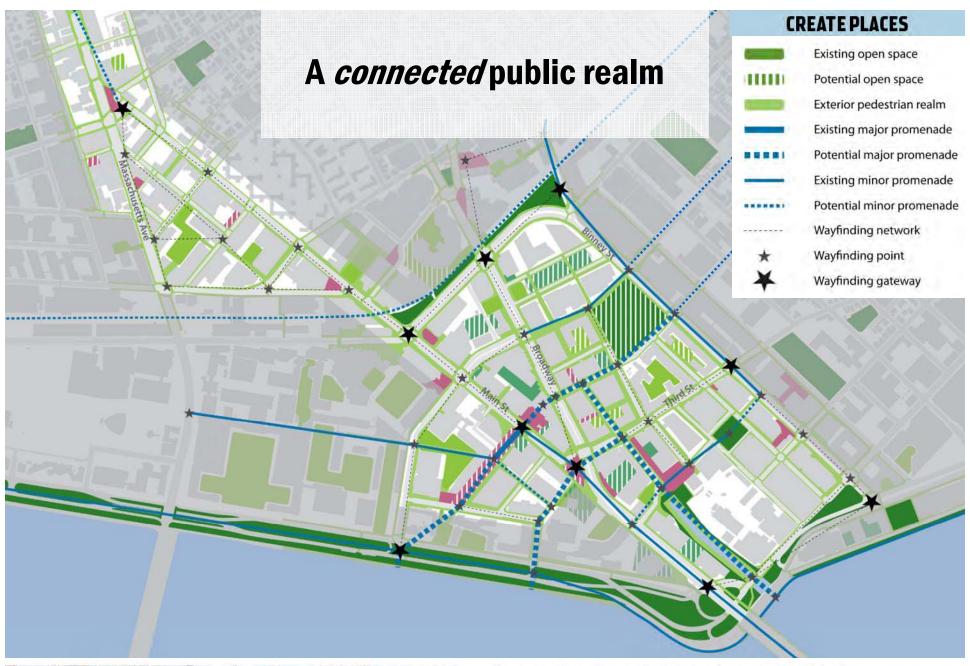


Active ground floors: application

- 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









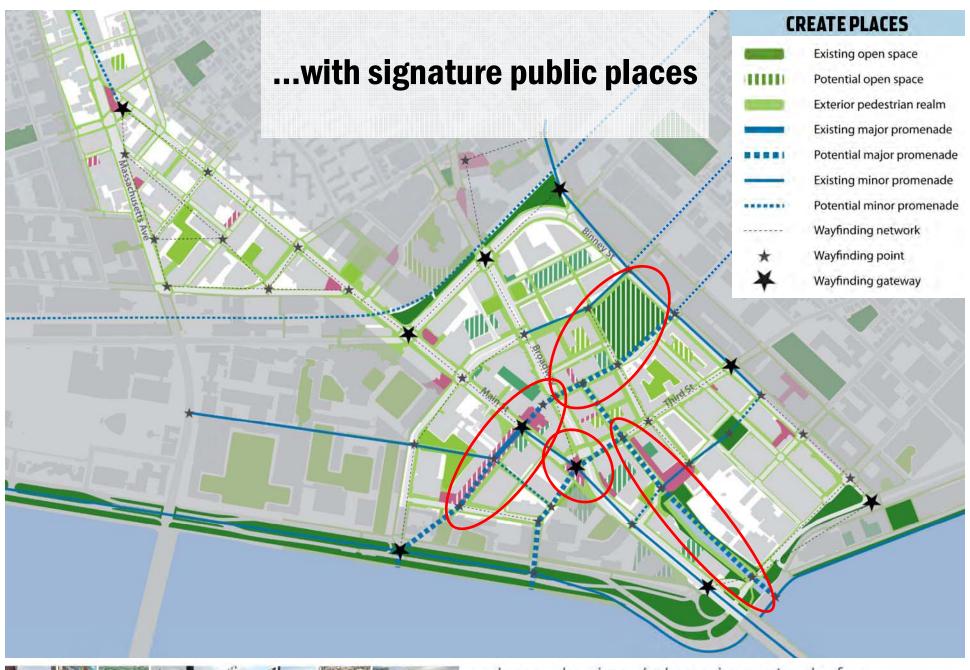








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Volpe Park

- 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















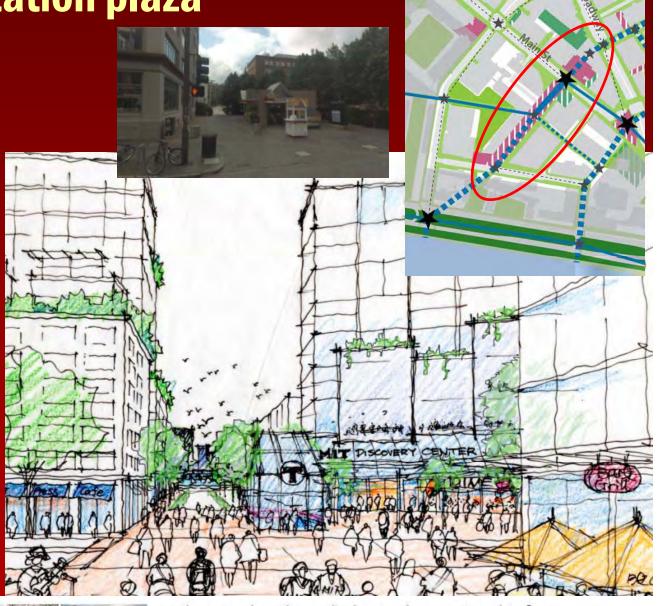
Broad Canal

- 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



CREATE PLACES









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











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Sustainability in K2: Goals

- Build neighborhood with reduced environmental impacts
- Demonstrate leadership as sustainable, costefficient 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 K² "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























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