

DRAFT

**KENDALL
IMPLEMENTATION
PLAN**

**KENDALL SQUARE
URBAN RENEWAL AREA**

**2016
2020**

C CAMBRIDGE
REDEVELOPMENT
AUTHORITY



The Cambridge Redevelopment Authority (CRA) was founded on November 12, 1956 pursuant to the authority granted by Massachusetts General Law Chapter 121B, § 3.

CRA Board Officers

Kathleen L. Born, Chair
D. Margaret Drury, Vice Chair
Christopher F. Bator, Treasurer
Conrad Crawford, Assistant Treasurer
Barry Zevin, Assistant Secretary

Thomas L. Evans, Executive Director

MISSION: The CRA is committed to implementing imaginative, creative development that achieves social equity and environmental sustainability. Our goal is to work in the public interest to facilitate infrastructure investments and development projects that integrate commercial, housing, civic and open space uses. We are public real estate entity with a unique set of development tools, working in close partnership with the City of Cambridge and other organizations.

TABLE of CONTENTS

	CONTEXT	4
	TRANSPORTATION	6
	OPEN SPACE	8
	ECONOMIC DEVELOPMENT	10
	SUSTAINABILITY	12
	HOUSING	14

INTRODUCTION

The Cambridge Redevelopment Authority's (CRA) Kendall Implementation Plan represents the scope of work to be accomplished in the next few years within the Kendall Square Urban Renewal Plan (KSURP) area. The Implementation Plan shares many elements with the K2 Plan, a product of the City of Cambridge's K2C2 planning process, the 2014 CRA Strategic Plan and the upcoming Infill Development Concept Plan for the MXD District. It covers City projects, CRA programs, and private development affecting the public realm and community benefits within the district.

All the projects listed in this Plan relate to the objectives stated in the KSURP and seek to positively impact the five focus areas identified as priorities for the future development of Kendall Square: economic development, housing, open space, sustainability, and transportation. This document is intended to serve as a dynamic, living plan of efforts to implement those objectives.



CONTEXT

Due in large part to the investments made in the urban renewal area over the past 50 years, Kendall Square has developed into one of the state's most important economic development engines and a national center for technological and biomedical innovation. While the KSURP originally included a federal NASA facility, (now the Volpe Center for Transportation) most of the building activity in the KSURP area over the past 30 years has been private development within the MXD District.

K2 Plan

The K2 Plan, published in December 2013 by the Cambridge Community Development Department (CDD), was the result of an extensive community-based planning and design process. The K2 Plan performed a comprehensive review of economic development opportunities, community needs, transportation issues, land use policies, and environmental and infrastructure conditions. The K2 Plan vision for Kendall Square set forth four implementation goals to guide future growth and investment.

- Goal #1 - Nurture Kendall's Innovation Culture;
- Goal #2 - Create Great Places;
- Goal #3 - Promote Environmental Sustainability;
- Goal #4 - Mix Living, Working and Playing

These goals along with the public realm improvements and zoning recommendations also described in the K2 Plan, provide the basis of the 2015 KSURP Amendment.

CRA Strategic Plan

During 2013-2014, the CRA embarked on a strategic planning process to determine the future direction of the CRA. It was a collaborative effort between the CRA Board and staff, with input from the City of Cambridge and many other stakeholders through CRA meetings, workshops, presentations, and online forums. The new CRA Strategic Plan was approved by the Board and published in July 2014, and includes its new mission and operating principles.

The 2014 CRA Strategic Plan highlights several areas where redevelopment activities could further the K2 Plan goals for Kendall Square. This implementation document serves as the work plan for Kendall Square, building off the 2014 Strategic Plan, and catalogs public and private investments within the KSURP.

Urban Renewal Plan & MXD Zoning

The CRA worked for two years toward the adoption of Amendment 10 of the KSURP and the accompanying MXD Zoning petition, approved by the Cambridge City Council on December 21, 2015. This will enable a new mix of residential, commercial, and retail development reflecting the goals of the City's K2 Plan.

The KSURP Amendment and MXD Zoning provide additional development capacity along with a host of new requirements to provide public benefits leveraging commercial development. Some community beneficial land uses are provided an exemption from the aggregate development cap. The KSURP Amendment also provides the CRA the opportunity to modernize the urban renewal plan's objectives consistent with the goals of the K2 Plan.

Land Use	Existing	Construction	MXD Infill Development	Total
Office / R&D	2,521,000 SF	-	Max. 600,000 SF	3,121,000 SF
Innovation	6,000 SF	-	56,000 - 112,000 SF	66,000 - 118,000 SF
Retail	122,000 SF	16,000 SF	20,000 - 50,000 SF	148,000 - 188,000 SF
Hotel	435,000 SF	-	-	435,356 SF
Housing	-	200,000 SF	Min. 410,000 SF	610,000 SF
Total	3,084,000 SF	216,000 SF	1,090,000 - 1,170,000 SF	Max. 4,472,000 SF



Environmental Impact Report

Because the KSURP Amendment required an approval from the state, a Massachusetts Environmental Protection Act certification of an EIR was required. The EIR conducted in-depth analysis of transportation, energy, water, and air quality impacts. The EIR presents a series of mitigation measures, listed within this Implementation Plan to track those obligations.

Many of these mitigations are already directly reflected in the KSURP Amendment and MXD Zoning. Most mitigations will be achieved through partnerships with city departments, local developers, non-profits, associations or a combination. Some mitigations may be relatively quick projects, while others may be long-term processes and requiring ongoing support.

Infill Concept Development Plan

The KSURP and MXD Zoning require the creation of an Infill Development Concept Plan (Concept Plan) for new development in the MXD District. The purpose of the Concept Plan is to provide context and analysis of future development proposals. The Concept Plan will include details of future buildings including site phasing plans, a transportation impact study, housing program, open space plan, streets and public infrastructure designs, and a sustainability plan. The CRA Board and Planning Board must approve this Concept Plan as part of a Special Permit application.

The Concept Plan will set the framework for future development in the KSURP area with extensive plan details on selected topics as required by zoning. The Implementation Plan outlines the neighborhood investments to be detailed in the Concept Plan.

Outreach

The CRA launched a significant public engagement effort on the KSURP Amendment. This included a new coUrbanize online public forum, presentations at community meetings throughout the year, an interactive CRA public forum, and a poster-campaign to engage and extend the public audience. The CRA Board discussed the KSURP Amendment and MXD zoning petition at its monthly meetings throughout 2015. Ideas and feedback from these public engagement efforts led to the creation and prioritization of projects for the CRA to pursue for the next five years in Kendall Square in this Implementation Plan.

Implementation Plan Organization

A summary of the topic areas for Implementation Plan are described below. Along side this description is a chart detailing the activities anticipated over the next five years. Each project in the plan is illustrated with a rough timeline for implementation or completion. Items of continuous work are shown as a band across the full five year period.

Transportation

For over 20 years transportation in Kendall Square has been a carefully studied by the CRA and the City to assess if the transit-oriented goals of the urban renewal plan and transportation demand management programs were being met. Through traffic counts and tenant surveys the CRA has found that Kendall employees have consistently maintained high transit and pedestrian commute pattern mode, a low single occupancy automobile mode share and a growing reliance of bicycle trips to the area.

The original KSURP anticipated the need for wider streets to attract commercial investment in the area, and thus added vehicle lane capacity to the roadways in the area. Over the past 5 years, the CRA and the City have pursued many retrofits of those streets to distribute more street right-of-way to active transportation modes.

The 2015 EIR for the KSURP Amendment conducted extensive analysis of traffic, transit, pedestrian

and bicycle access to the project area. The EIR includes a series of mitigations primarily designed to increase street safety of all roadway users rather than increase roadway capacity. Commitments have been made by the City, Boston Properties and the CRA to enhance pedestrian safety and expand the bicycle infrastructure in the project area. Advanced Transportation Demand Management Programs and future expansion of the EZ Ride Shuttle service are all measures seeking to direct new trip generation to sustainable transportation modes.

To reinforce the favorable mode splits for train and bus commutes, the KSURP establishes the Kendall Square Transit Enhancement Program (KSTEP) which will provide a funding mechanism for transit investments in the area. The CRA and the City are participating in the MassDOT Kendall Square Mobility Task Force and expect to use the Task Force recommendation to guide the KSTEP funding priorities.

Metrics:

- Total Daily Vehicle Trips
- Percent of Transit, Pedestrian, and Bike Commute Trips
- Hubway Usage
- Number of major traffic incidents



Projects

	2016	2017	2018	2019	2020
Increase Number of Hubway Stations <i>The 88 Ames Street development, the Infill Development Concept Plan, and plans for Parcel Six all include expansion of the Hubway system in Kendall Square.</i>					
Ames Streetscape and Cycletrack <i>As an element of the land transaction with the City for the 88 Ames St Residential project, BP is rebuilding a narrower street with a two-way protected bike lane from Broadway to Main Street.</i>					
Grand Junction Path - Phase One <i>The CRA with assistance from DPW and funding from MIT is completing the initial phase of the Grand Junction multi-use path between Main St. and Broadway.</i>					
Transit Screen on Kendall Plaza <i>The CRA is assisting BP's installation of a real-time transit information system at the MBTA headhouse for transit users to access information on train and bus departure times from the plaza.</i>					
Enhanced Traffic Report <i>Building off the 20 years of traffic data, the CRA is developing an expanded scope of data collection and analysis to track the travel patterns within the KSURP Area.</i>					
KSTEP Transit Investment Plan <i>The KSURP establishes a program to identify and provide funding for projects to provide measurable improvements to transit access to Kendall, including Red Line upgrades, bus route improvements or new service on the Grand Junction corridor.</i>					
Galileo Gallili Road Diet and Cycletrack <i>In collaboration with the City, the KSURP project will continue the redesign of Binney Street around the perimeter of the MXD along Galileo Way to add protected bike lanes to the street.</i>					
Intersection Safety Improvements for Broadway <i>The EIR requires a safety audit and redesign of the intersection to reduce conflicts between roadway users. A protected intersection design would facilitate the connection between the Grand Junction Path and Broadway bike traffic.</i>					
25% Design of Grand Junction Path North of Binney <i>The CRA and City are engaged in a cooperative effort to continue the Grand Junction Path northward from Binney Street Somerville. The design requires thoughtful analysis of the right-of-way, neighboring properties and future transit uses in the corridor.</i>					
Retiming of Five Intersections <i>The EIR identified five intersections impacted by development to an unacceptable level of service that would be mitigated with signal timing adjustments to rebalance the phasing of traffic signals while promoting safe pedestrian travel.</i>					
Streetscape and Mid-Block Crossing of Broadway <i>Coordinated with construction on the North parcel, a new streetscape will be installed potentially reducing travel lanes and adding a mid-block crossing of Broadway.</i>					
New bike parking in Kendall <i>The combined commercial and housing development require over 600 new bicycle parking spaces to be constructed. Creative high density parking designs within all phases of the project will be considered to meet those requirements.</i>					

Open Space

An outcome of the K2 planning process was the recognition that the open space system in Kendall Square and Eastern Cambridge needs improvement through a more diverse, and energetic system of parks, plazas, and pathways. The City followed up the K2 Plan with the undertaking of the Eastern Cambridge Kendall Square Open Space Planning Study (ECKOS) resulting in a design competition titled *Connect Kendall*. The goal was to create an interconnected network of public spaces accommodating a variety of activities spanning a continuum from more interactive to more personal experiences.

The KSURP Amendment and MXD Zoning made modifications to the open space requirements in the district to advance these goals for the

neighborhood. The lot by lot open space requirement was modified to establish a more district wide program of public open space. The Concept Plan requires a specific open space plan that must include an outline of public programming for park spaces.

The CRA is working in close coordination with the City to improve existing open spaces into active vibrant public parks. The CRA is working with BP to enhance the interstitial spaces between buildings in the MXD. Finally, the CRA is working with the BP, the KSA and the Arts Commission to bring public art and engaging programming into public places in Kendall Square.

Metrics:

- Square feet of public open space
- Pedestrian traffic on key corridors
- Funds invested in park upgrades



Projects

	2016	2017	2018	2019	2020
KSURP Open Space Programming Plan <i>The open space element of the Concept Plan will include a public programming. The CRA and the KSA will work with property owners to launch a broader initiative to activate Kendall parks.</i>					
Renovation of Point Park <i>Upon completion of the Main St sidewalks, BP will reconstruct the plaza around the Galaxy sculpture. The CRA is working the City exploring design concepts for future improvements.</i>					
Design and Construction of Binny Street Park <i>The CRA is transferring ownership of Parcel 7 (the Porkchop parcel) to the City for open space. The City hired Stoss Design to design and oversee park construction, including the extension of the Grand Junction Path.</i>					
Renovation of Sixth Street Walkway <i>The Officer Lowery Footpath receives a high volume of pedestrian and bicycle travel. New designs will be implemented to separate bicycle and pedestrian travel and adding park amenities along the linear open space.</i>					
Improvement to Block Three Interior Space <i>The interstitial space between the Whitehead and Broad Institutes provide an opportunities to link Danny Lewin Park and Main St. through a network of small scale open spaces.</i>					
Interim Use of Parcel Six <i>As a preview of future retail on the corner of Third and Binney, a pilot food truck program will seek to activate this vacant lot. Interim site improvements will provide seating and planting for this civic space.</i>					
Completion of Pioneer Alley Improvements <i>The 88 Ames Street Residences includes the creation of a shared use alley with seating providing mid-block access to the roof garden, the Main St Atrium, and the Kendall Plaza.</i>					
Design Connections to Charles River <i>A theme of the Connect Kendall competition was to create links to the Charles River through streetscape and park connections. The CRA will work with partners to link streets, wayfinding, & park designs to the river.</i>					
Renovation of Danny Lewin Park <i>While remaining sensitive to the symbolic importance of the park, modifications will be considered to enhance the public access and seating within the open space.</i>					
Creation of Roof Top Open Space <i>The redevelopment of the Blue Garage provides an opportunity to build a new public open space above grade to provide another layer of public space with programming for residents, workers, and visitors.</i>					
Build Indoor Seasonal Garden <i>Complementing improvements to open space, the Infill Development Concept Plan creates to opportunity to build an indoor public space for year-round public access to landscaped and programmed space.</i>					
Urban Agriculture <i>Building off the existing roof top raised garden plots and beekeeping, BP and the CRA will seek out opportunities to expand the urban gardens and agricultural programming opportunities in the area.</i>					

Economic Development

The KSURP Amendment provides for 600,000 square feet of additional Gross Floor Area (GFA) for commercial development to meet the continued demand for office and R&D space in East Cambridge. The KSURP leverages this demand to create new commercial programs for ground floor retail and innovation office space. All buildings along retail corridors are mandated to provide active ground floor uses along 75% of their street frontage. Small scale retail area, that include at least 25% local or independent operators, or a grocery store / pharmacy may be exempt from the commercial GFA cap in the KSURP and MXD Zoning. The CRA has begun exploring programs to target innovative, entrepreneurial uses of ground floor retail space in new and existing spaces.

New commercial buildings trigger a 10% requirement for innovation space designed as shared work space with short-term leases to incubate entrepreneurs, start-ups and scale-up companies. Up to 20% of the commercial space designated for such use and thus exempt from the commercial GFA cap, if at least 25% percent of the space utilization is set aside for below market rate membership into the shared work environment. The CRA is working with the City to design a program to populate this space with local residents and businesses that would benefit from a lower barrier to enter into the innovative economy.

Metrics:

- Total Employment
- Number of Retail Establishments
- Square Feet of Innovation Space
- Number of start-up companies



Projects	2016	2017	2018	2019	2020
Broadway Retail Expansion <i>Infill development will create new retail space along the north side of Broadway. Per the KSURP and MXD zoning, the new retail space will emphasize small-scale, independent retailers.</i>					
Retail Plan - Urban Market <i>Within each large building opportunity, options for an urban food market and/or a pharmacy will be explored. The CRA will track the leasing of retail spaces within the District through a Retail Plan.</i>					
Office and R&D Expansion <i>The MXD Zoning allows an additional 600,000 SF of office space to accommodate the growing technology and bio-technology cluster in Kendall.</i>					
Innovation Space <i>Innovation office space equal to 10% to 20% of new commercial development will be provided as start-up and scale up space for growing companies with short-term leases in shared workspace.</i>					
Below Market Entrepreneur Space <i>At least 25% of the innovation space will be made available for below market membership opportunities for Cambridge residents and start-up businesses.</i>					
Career Connections for Youth <i>The CRA is working with the Department of Human Services and the KSA to increase the access for Cambridge youth to training opportunities in technology careers from one day visits to semester based programs.</i>					

Kendall Square is already a model of smart growth with its burgeoning mix of uses centered around transit. To further enhance its sustainability features, convenient, affordable transportation options need to be expanded. The K2 Plan emphasized that new development opportunities should be utilized to create a healthier natural environment, including the reduction of resource consumption, waste generation and greenhouse gas emissions. The Kendall community needs to seize the opportunity of new growth to leverage the environmental and economic benefits of compact development.

The KSURP EIR undertook an analysis of resource impacts from potential new development including energy, water, and wastewater. Through the MXD Zoning the project has committed that all new construction shall be LEED Gold certified, and solar ready. Redevelopment must meet the DPW standard for water quality management and the retention/detention of stormwater - low impact development (LID) strategies are particularly encouraged as a means to meeting these standard. The EIR commits new development to contribute to resiliency measures for new buildings and public infrastructure.

Metrics:

- Energy Use per SF of Commercial Space
- Greenhouse gas offset from cogeneration and renewable power
- Stormwater capacity increase in area
- Number of trees



Projects

2016 2017 2018 2019 2020

Provide Tenant Guidelines for Sustainable Fit Out

New MXD buildings will be designed to LEED Gold standards. Tenant guidelines for fit-out improvements and operations to optimize the environmental performance of new offices.

Implement Enhanced TDM Measures

The City will work with building proponents to design more aggressive Transportation Demand Management programs for office & residential uses consistent with the K2 Plan recommendations.

Design and Install Resiliency Measure for T Station

The Kendall Station is potentially vulnerable to flooding during high water events in the future, thus the EIR requires the project to deliver resiliency measures to protect the Kendall MBTA station.

Remove 4:1 gallons of wastewater

In compliance with state regulations, new development must remove four gallons of wastewater volume from the combined sewage systems in the area for every gallon of new sewage discharged into that system.

Install measures to contain stormwater

The DPW enforces strong stormwater requirement for development to retain specific volumes of rain water. The CRA is working with BP and DPW to explore district based solutions to stormwater management.

Develop Remediation Program for North Parcel

The development of some parcels in the North blocks of the MXD pre-date the current soil remediation regulations, thus redevelopment of these properties will require new testing and mitigation measures.

Complete Energy Study for Kendall EcoDistrict

The Eco-District is conducting an Energy Study of the demands & opportunities for renewable energy production to support the future growth in the district. The Concept Plan will build off this to analyze the feasibility of District energy expansion in the MXD.

All buildings to be LEED Gold & Solar Ready

The MXD Zoning requires all infill development to be designed to LEED Gold certification, be wired for solar voltaic energy production, and commissioned for environmental performance.

Increase Tree Coverage

The CRA is conducting a tree inventory of Kendall Square and will work with BP and other property owners to increase tree coverage on streets and open space.

EcoDistrict Governance

The CRA is working closely with the EcoDistrict stakeholders to design an ongoing governance structure to undertake district sustainability projects in the future.

Housing and Neighborhood Identity

The KSURP Amendment added a significant new emphasis on mixed-income housing development. The affordable housing requirements in the KSURP and MXD Zoning are currently the highest requirements in Cambridge. The plan increases the on site inclusionary housing requirements from a functional 11.5% to 20% of the GFA of new residential development. An additional 5% of the GFA is required for middle income households, but is exempt from the MXD GFA cap. Further 5% of the overall housing portfolio must be three-bedroom units designed for families. These 3-bedroom units must be included in the 25% below market rate housing set aside.

The project will deliver approximately 560 housing units, including 140 below-market rate units. These are in addition to the 260 units of housing under construction at 88 Ames with 36 affordable units.

Along with new housing opportunities, the K2 Plan and the KSURP set out to create a more vibrant neighborhood in Kendall Square. This includes public space programs, neighborhood placemaking, cultural amenities, and street activation designed to create a complete community within the intense commercial and research environmental of Kendall Square. The Concept Plan will include a Retail Plan that will outline targets for new vendors with the goal of balancing the retail composition in the MXD to provide more regularly needed goods and services for the neighborhood.

The CRA is working with the KSA and property owners to implement a wayfinding program for the neighborhood, and in the future will work to expand public art and historic interpretation programs reflecting Kendall's past.

Metrics:

- Total Number of Housing Units
- Quantity of Affordable Housing Units
- Participants in Planning Activities
- Number of Educational & Cultural Events



Projects

2016 2017 2018 2019 2020

Main Street Reconstruction

The K2 Plan identified improvements to Main St as a key public realm improvement, including new intersection designs and unique streetscape installations reflecting Kendall's technology identity.

Ames Street Residences

88 Ames Street will deliver 280 units of housing to Kendall Square with 36 affordable units, along with 16,000 SF of retail space including a medium format area targeted to a pharmacy or market.

Kendall Square Wayfinding Kiosks

The CRA along with multiple property owners in the area are working through the KSA to design and install wayfinding kiosks to provide Kendall Square identity and enhanced orientation for visitors.

Residential Project on North Parcel

KSURP Infill Development is required to initiate a residential phase of 200,000 or more SF before new commercial space exceeds 325,000 SF.

Public Art Program

The CRA is working with the Arts Commission to build partnerships in Kendall Square to expand public art installations throughout the area connecting the commercial center to the neighborhoods.

Outdoor Lighting

Taking into account the work of the Outdoor Lighting Task Force, the CRA will seek to upgrade pedestrian oriented lighting in public spaces to engage the sense of comfort, safety, and vibrancy.

Public Meeting Space

The CRA will work with new or existing development to designate contemporary public meeting spaces for medium and large scale community meetings and events.

Broad Museum

The Broad is working with the CRA and the research community to re-think and re-design the lobby museum area of 401 Main St. to provide a public educational display on genetic research and medical applications.

Kendall Innovation History

The CRA is exploring creative ways of broadcasting the history of Kendall Square and local innovation in outdoor public displays or other media.

Events and Outreach

The CRA will expand its efforts to engage the community in planning efforts as well as encourage the expansion of and resident participation in cultural and scientific events in Kendall Square.

Urban Market

The CRA will work with BP and other property owners to seek space designed and available for lease to an urban grocery store and a pharmacy to provide nearby access to basic essentials for residents and employees in the neighborhood.



KSURP Objectives

A) To secure the elimination and prevent the recurrence of blighted, deteriorated, deteriorating, or decadent conditions in the project area;

B) To insure the replacement of such conditions by well-planned, well-designed improvements which provide for the most appropriate reuse of the land in conformity with the general plan for the City of Cambridge (the "City") as a whole and with definite local objectives, which objectives are:

1. The provision of land uses which maximize job opportunities at a variety of skill levels within Kendall Square's knowledge and innovation based economy, including blue-collar and non-professional white-collar employment, for present and future Cambridge residents, upgrade Cambridge workers' skills and wages in a manner commensurate with the cost of living in Cambridge, and help stabilize the City's economic base and maximize the provision of local jobs;

2. The improvement of land development and design to facilitate multi-modal circulation, emphasizing transit, pedestrian, and bicycle travel;

3. The improvement of public transportation facilities, infrastructure and utilities, open space and other public realm improvements;

4. The improvement of material handling and freight access to and within the project area; and

5. The provision of a decent, pleasant, and humane environment involving a mixture of those land uses needed to produce balanced development;

C) To capitalize on the location of rapid transit facilities to maximize the full socio-economic potential of the project area with transit-oriented land uses and densities, and consistent with the other objectives stated herein;

D) To promote economic development which strengthens the City's tax base without unacceptably impacting upon the physical, social, and cultural environment;

E) To establish the minimum necessary land use controls which promote development, yet protect the public interest and the common good; with a flexible set of controls which are adaptable to both current and future market conditions;

F) To create an urban environment that encourages innovation, entrepreneurship, and creative interaction;

G) To secure development in the shortest possible time period to be responsive to economic conditions and housing demand;

H) To relate to development controls in the surrounding area;

I) To provide economic development opportunities for residents of the existing surrounding neighborhoods, including East Cambridge, Area Four, and Wellington Harrington;

J) To help alleviate problems of mobility throughout the surrounding neighborhoods for all modes of travel and goods movement;

K) To achieve harmonious visual and functional relationships with adjacent areas;

L) To establish a sense of identity and place for Kendall Square and integrate it into the built environment including public open space;

M) To encourage the development of Kendall Square as an activity center in which to live, work, play, and learn;

N) To promote neighborhood safety, public health, and wellness through universal access and active environmental design; and

O) To promote both environmental sustainability and climate change resiliency through resource efficient development and district level infrastructure planning.