



Kendall Square
Central Square
Planning Study

CENTRAL SQUARE

FINAL REPORT 2013

Cambridge Community Development Department
344 Broadway, Cambridge, MA 02139
617-349-4600
www.cambridgema.gov/cdd

CREDITS

EXECUTIVE OFFICE

Richard C. Rossi, *City Manager*

Lisa Peterson, *Deputy City Manager*

CITY COUNCIL

Henrietta Davis, *Mayor*

Leland Cheung

Craig A. Kelley

Kenneth E. Reeves

Minka vanBeuzekom

E. Denise Simmons, *Vice Mayor*

Marjorie C. Decker

David P. Maher

Timothy J. Toomey, Jr.

PLANNING BOARD

Hugh Russell, *Chair*

Steve Cohen

Ahmed Nur

Steven Winter

Thomas Anninger (*retired 2013*)

H. Theodore Cohen

Catherine Preston Connolly

Tom Sieniewicz

Pamela Winters

William Tibbs (*retired 2013*)

CENTRAL SQUARE ADVISORY COMMITTEE: 2011/2012

Patrick W. Barrett III

Anya Alexandra Bear

Mark Boyes-Watson

Kathryn Lachelt Brown

Kara Cournoyer

Susan Fleishmann

Randa Ghattas

Josh Gerber

Nicholas Haney

Ester Hanig

Ming-Tai Huh

Gavin Kleespies

Robin Lapidus

Morris M. Naggar

Heather Nelson

Ahmed Nur

Patrick Rowe

Loryn Sheffner

Michael Simon

Saul Tannenbaum

Gail Willett

Property Owner

MIT, Government and Community Affairs

Resident

Forest City

Novartis

CCTV

Resident

Business Owner

Intercontinental Developers, Inc.

Resident

Resident

Resident

Central Square Business Association

Property Owner

Resident

Planning Board

MIT Investment Management Company

Resident

Property Owner

Resident

Resident

CITY STAFF

Community Development Department

Brian Murphy, *Assistant City Manager*
Cassie Arnaud
Roger Boothe
Chris Basler
John Bolduc
Cliff Cook
Chris Cotter
Stuart Dash
Anna Dolmatch
Iram Farooq
Susan Glazer
Stephanie Groll
Minjee Kim
Yuna Kim
Brendan Monroe
Linda Prosnitz
Susanne Rasmussen
Jeff Roberts
Jeff Rosenblum
Pardis Saffari
Cara Seiderman
Robin Shore
Rob Steck
Elaine Thorne

Cambridge Historical Commission

Charles Sullivan, *Executive Director*

Department of Public Works

Owen O'Riordan, *Commissioner*
John Nardone
Kathy Watkins

Traffic, Parking & Transportation

Sue Clippinger, *Director*
Jeff Parenti
Adam Shulman

Human Services Department

Ellen Semonoff, *Assistant City Manager*
Stephanie Ackert
Susan Mintz
Mina Reddy
Sue Walsh

Cambridge Arts Council

Jason Weeks, *Executive Director*
Lillian Hsu

CONSULTANT TEAM

K2C2 Planning Study

Goody Clancy
Nelson Nygaard
Carol R. Johnson Associates
MJB Consulting
wZHA

Special Thanks

Barry Bluestone, Dukakis Center for Urban and Regional Policy
Gretchen Ertl, Photographer

CONTACT

Planning Study

www.cambridgema.gov/K2C2
Iram Farooq, *Acting Deputy Director*
Cambridge Community Development Department
344 Broadway, Cambridge MA 02139
ifarooq@cambridgema.gov; 617-349-4606

Kendall Square Roadway Infrastructure

Kathy Watkins, *Supervising Engineer*
Department of Public Works
147 Hampshire St, Cambridge MA 02139
kwatkins@cambridgema.gov; 617-349-4751

TABLE OF CONTENTS

Executive Summary:

Letter from the Central Square Advisory Committee 2011/2012 7

1

Background 17

- K2C2 Overview
- Historical Background
- Planning Initiatives Influencing Central Square

2

Analysis: Issues and Opportunities. 25

- Land Use
- Open Space
- Housing
- Economic Development
- Environment and Stormwater
- Transportation

3

Goals and Recommendations 53

- Goal 1: Public Places to Build Community
- Goal 2: Retail, Cultural, and Non-Profit Diversity
- Goal 3: Increase Housing Stock and Promote Residential Diversity
- Goal 4: Connecting People to the Square
- Goal 5: A Sustainable Future for Central Square
- Recommendations for Zoning
- Recommendations for Municipal Parking Lots
- Recommendations for Transportation

An aerial photograph of New York City, showing Central Park and the Hudson River. The city skyline is visible in the background, with the Empire State Building standing out. The foreground shows a dense urban area with many buildings and trees.

EXECUTIVE SUMMARY

**LETTER FROM THE
CENTRAL SQUARE
ADVISORY COMMITTEE:
2011/2012**

(Also known as C2 Committee)

MEMORANDUM

TO: The Community of the City of Cambridge
Henrietta Davis, Mayor
Members of the Cambridge City Council
Robert Healy, City Manager
Members of the Cambridge Planning Board
Members of the Staff, Cambridge Community Development Department

FROM: The Central Square Advisory Committee

DATE: November 28, 2012

INTRODUCTION

In the Fall of 2010, the Cambridge City Council requested that the City Manager engage a consultant to commence a comprehensive study of the development of Kendall and Central Squares. After selecting Goody Clancy as consultants, the City Manager appointed the Central Square Advisory Committee, consisting of twenty-one individuals, to advise the City and the Community Development Department in this process. The Committee was formed among residents, property owners, business owners, institutions, nonprofits and individuals who care greatly about the future of Central Square. We each volunteered to be part of this Committee because we believe Central Square is a special place and want to do our part to help it continue to thrive.

Over the past year we have conducted an in-depth study of Central Square to form recommendations designed to keep the Square a special place for the coming decades. Our role was not to recommend or oppose any specific project, but rather to develop a set of incentives, recommendations and design guidelines intended to keep future development in Central Square consistent with its civic identity, support sustainability and provide for appropriate density, while being transparent to the community. This framework is meant to shape market forces to support the housing, transportation, retail, non-profit organizations, historic preservation and open space desired by the community.

Our effort was made possible by our partners in this endeavor: the City of Cambridge Community Development Department (CDD) and the planning firm Goody Clancy. We thank the staff of both organizations for their countless hours of dedicated service, their guidance and insights, their expertise and knowledge. We appreciate the members of the public who chose to take time out of their busy lives to attend committee meetings. Your dedication, passion, concerns, and perspectives were invaluable to our understanding of Central Square that forms the foundation of our recommendations.

As in any committee of this kind, our thinking about Central Square represented a variety of different perspectives. Over the course of the past year we have learned a lot from each other by discussing, debating, and listening. We have participated in monthly (and often more frequent) meetings, charrettes, workshops and seminars, learning from experts in various fields including urban planning, retail, housing, development, open space and

transportation, and hearing from our friends and neighbors in the community at each step along the way. While we recognize that this list of topics falls far short of encompassing all that comprises Central Square, we feel that it reflects some of the most important components that help to make Central Square what it is today.

In organizing the Advisory Committee and facilitating a process that included public feedback at all meetings, open forums, and charettes, the City cultivated a wide range of opinions, and ensured that the work of the Committee has remained open to the public throughout. We applaud the transparency with which the City has approached this project. We feel well informed by Committee conversations, our own research, experts in the field, and the public's commentary.

The intent of this document is to serve as the voice of the Committee and to summarize our findings, recommendations, and aspirations. We feel that this document complements the report produced by CDD and Goody Clancy, which gives more specific recommendations. In this overview we will speak thematically to share our perspective and offer recommendations where we feel they are appropriate. We are happy to report that we, the members of the Committee, share a similar perspective about the Square's strengths, opportunities and challenges. Below, we provide an overview of the guiding principles that served as the underlying framework for our discussions, followed by a brief summary of each of the main topics we've covered as a Committee.

GUIDING PRINCIPLES

Throughout the Committee's discussion of specific planning issues, a number of principles emerged regarding civic identity, market realities, sustainability, density and built form, and transparency.

CIVIC IDENTITY

In addition to being the civic heart, the government center, of the City of Cambridge, Central Square embodies many of the positive aspects of a vibrant, active downtown. Recently designated a Cultural District by the Commonwealth of Massachusetts, the Square combines spaces for the arts and culture, music, technology, dining and entertainment, as well as a wide range of creative businesses. It is a major transit hub that is surrounded by four residential neighborhoods: Cambridgeport, Area IV, Riverside and Mid-Cambridge. Central Square and its adjacent side streets bustle with activity of residents, workers, and visitors - in different manners at different times of day or night.

Central Square's civic identity stems from its rich and diverse cultural heritage, and one that encompasses both longtime residents and recent arrivals. Greater Central Square's residents represent a broad diversity. They include a mix of income levels, race, family size, and immigrant backgrounds. Some residents are short term or temporary, such as students from adjacent colleges, and some have lived in the neighborhood for generations. The Committee expressed a strong commitment to Central Square's special civic character, and support for Central Square as a place that contains a range of programming and public spaces that serve all residents and users of the Square.

MARKET REALITIES

In recent years, national demographic shifts and other factors have magnified Cambridge's market advantages. Climate change, wage stagnation, and longer commutes, among other factors, have propelled more and more people to want to live in cities adjacent to public transit and in walkable communities. Unlike the previous urban flight, many cities nationally are facing immense pressure to provide housing to a generation of young adults, families and empty nesters looking to live in vibrant, diverse, active communities. This is particularly true in Cambridge, where despite the recent economic recession, prices have continued to escalate and there is increasing pressure on the existing housing stock. At the same time, Cambridge has developed into one of the most innovative economies and sought-after real estate locations in the country for a blend of institutional and private users.

Simultaneously, the Committee confronted a seeming paradox in today's market conditions in Central Square: despite the commercial development pressures, especially around Kendall Square, and the strong residential market in Cambridge, Central Square contains many underutilized storefronts and parcels and few development proposals have been put forward. Certain types of retail and restaurants flourish, but others have disappeared. These market realities have led the Committee to recommend a shift in zoning to create greater incentives for desired development types, especially in the areas of retail and housing, and specifically in support of the city-wide objective of maintaining economic diversity. Based on what we have learned during the past year, we also agree that providing incentive for the development of new housing in the core of Central Square will require greater density than what is currently allowed, and mixed-income housing will require even greater density.

SUSTAINABILITY

Preservation and sustainability are two additional threads that ran through the Committee's discussions about Central Square. In drafting our recommendations, we seek to encourage sustainable development through environmental standards and historic preservation, with a focus on 'smart growth' – e.g. a density driven, walkable, mixed-use downtown and transit center where diverse people can live, work, and play. Central Square's existing smart growth characteristics are among its greatest competitive advantages. The Committee supports measures that enhance this advantage by pushing the envelope on green-building and transportation innovations. More broadly, the Committee supports development patterns that are socially, environmentally, and economically sustainable, in order to secure Central Square's future for the next century.



DENSITY AND BUILT FORM

The topics of density and what kinds of built form are appropriate for Central Square also represent an important underlying context of our Committee. Informed by design and development expertise offered by City staff, Goody Clancy and outside experts, and by participation of members of the community, we came to better understand the potential benefits of focused density, though we also remain concerned about protecting access to light and air, and diversity in the size and height of the built form that defines the streets and open spaces of Central Square. We support the idea of allowing additional height and density by special permit in a limited number of locations as an incentive tool to encourage development of more housing and the creation of more public open space, as well as the recommendations for Transferable Development Rights. We agree that the character of the Osborn Triangle, located to the east of Lafayette Square along Mass Ave and Main Street, is different than the character of the Heart of Central Square district that runs between City Hall and Lafayette Square, and we agree that the Osborn Triangle district can support somewhat greater height than can the Heart of Central Square. However, we want to emphasize that it is always important to protect the Neighborhood Edges that abut existing residential neighborhoods in both districts with more limited cornice heights and bulk plane requirements.

TRANSPARENCY

Underlying the Committee's discussions concerning development was the desire to be certain that when any development rights are enhanced in exchange for a community benefit, this exchange is done in an open, transparent setting. Often, part of the trade off for new development includes community benefits, which may take a number of forms, including affordable and middle income housing, ground floor retail, open, public spaces as well as other improvements to Central Square. The Committee feels strongly that the City needs to be completely transparent about community benefits negotiated for any new development project. This transparency could take the form of a simple, easy to access web site that documents, for each project, commitments made by the developers and the City, together with a mechanism ensuring long term accountability for such commitments.

HOUSING

Central Square, and its surrounding neighborhoods, collectively offer a wonderfully dynamic and amenity-rich place to call home. The Square is home to a wide range of household types including young and old, low/middle/high income households, singles and families, all of many ethnic and racial backgrounds. This diversity is one of the true strengths of the Square that we believe should be preserved. Demand on housing from people who want to live in Central Square has continued to grow despite the economic downturn of the past five years. In contrast, there has been little new supply added to the area. This combination of increased demand and minimal new supply has resulted in escalating housing prices. While the City has actively tried to keep property taxes low and to retain some of its low and moderate income residents through policies that include the Community Preservation Act, inclusionary zoning, and the Affordable Housing Trust, the policies have not been enough to maintain affordability to middle income residents, especially families. Cambridge is currently facing a true crisis in maintaining diversity as it continues to lose middle income families to more affordable adjacent communities.

Through our many discussions on housing over the course of the Committee's study, it became clear to us that the most important thing that can be done to preserve the diversity of the Square is to increase the supply of housing. The Committee feels strongly that incentives should be created so that property owners choose to create more housing options including market rate, low to middle income, and family housing.

Based on our desire to increase the overall housing stock in Central Square, we have the following four recommendations: 1) zoning modifications should be made to increase allowable height and density for residential uses, 2) additional height should be tied to the creation of middle income and family housing, but with a mix of units including market rate, middle, and low income so that in aggregate, property owners are sufficiently incentivized to develop the additional housing units, 3) a Transfer of Development Rights mechanism as outlined in the recommendations should be created within the Square so that the extra density is created in distributed locations, not throughout the Square, and 4) the City should explore possible opportunities for housing development and other public uses on City-owned properties.

PARKING AND TRANSPORTATION ISSUES

Central Square is a major transportation hub, serving Cambridge as well as other communities in the north metro area. Our vision of Central Square is one that promotes sustainable transportation, placing housing near transportation hubs, decreasing the reliance on cars. We recommend reducing zoning-required parking minimums, allowing developers and the Planning Board to create projects unburdened by the costs of unnecessary parking. Beyond discouraging automobile use, particularly of single occupancy vehicles, we urge a focus on creating a bicycle and pedestrian friendly Square.

To these ends, the Committee would like the City to focus its efforts and funding resources on emphasizing a stronger biking and pedestrian safety program and continue to promote Cambridge as a biking and pedestrian friendly community. Improvements to the bicycling infrastructure and movement towards an environment where bicycles and vehicles are on equal footing are priorities. We urge Cambridge to exert its influence to increase funding to mass transit, in order to increase capacity. We ask the City to work with the MBTA to explore the extension of bus lines that currently terminate in Central Square, to reconsider locations of current bus stops to improve pedestrian flow, and to install new bus signage that includes real time transit information. While we envision a Square far less reliant on cars, we are sensitive to neighborhood and retailer concerns about providing necessary parking. We urge the City to remove any impediment to the efficient use of private parking lots and act creatively in meeting parking needs. We would suggest, as well, that the City investigate the construction of a new central parking facility to absorb parking demand should the City-owned lots be developed, as discussed below.



RETAIL AND NONPROFIT USES

Central Square is a unique and highly valued retail and cultural environment. Our community has long understood and valued its special character, which was recently affirmed by the Commonwealth through its designation as the Central Square Cultural District, one of only fourteen Cultural Districts in the Commonwealth. The Committee recognizes that one of the greatest challenges we face as a community is the need to protect, promote and encourage a diverse mixture of retail throughout Central Square and its environs. It is incumbent on the City and the community to work with property owners to ensure that the Central Square Cultural District achieve a diverse and eclectic mix while at the same time providing incentives and encouragement for additional retailers who complement the historic urban fabric of the Square.

The Committee affirms the recommendations of the City that are designed to protect, promote and encourage a diverse retail mix with a strong focus on small, independent retailers and nonprofit uses in the Central Square Cultural District. We support the proposal for GFA exemptions for ground floor retail spaces that meet certain size and frontage restrictions, and agree with the recommendation for encouraging retail on side streets where feasible. The Committee believes that the City's current signage regulations are at odds with our goals of fostering the expansion of small, creative, independent retailers, and we suggest that these regulations should be modified so that they allow for a case by case review enabling creative signage opportunities that embrace the uniqueness of the Central Square Cultural District.

PUBLIC SPACES

The Committee recognizes the continuing need to enhance, activate, preserve, and create public places in the Square that are accessible and enjoyable by all members of our community. The Committee affirms the City recommendations designed to amplify Central Square's public realm by further activating and enhancing current public places, identifying opportunity areas for new sites, establishing interactive play and the presence of public art to be enjoyed by people of all ages and backgrounds, and augmenting signage and making use of real-time transit information to improve convenience. In addition, we recognize that various organizations, community partners, and the City have fostered regular programming in existing public places, and we encourage the continuation of these efforts. The Committee also recommends a holistic approach to identifying Central Square as a district through continued streetscape improvements by the City, and supports the reflection of the Central Square Cultural District designation on infrastructure throughout the Square. In recognizing the need for more public spaces, the Committee supports incentivizing new public spaces in potential developments, as well as looking at opportunities for indoor and outdoor gathering spaces by redeveloping City parking lots, as discussed below.

SOCIAL SERVICES

One of the unique aspects about Central Square is the concentration of social service organizations. These organizations help play an important role in serving challenged segments of our population by providing instrumental services - they are an important asset to the local community and serve as a reflection of our community's core value system. However, despite the work of these organizations, there remains a significant population on the streets of Central Square that engage in undesirable behavior including public alcohol consumption and intoxication, drug dealing and use, and panhandling - behaviors that detract from our goal of creating a safe and dynamic urban neighborhood.

While we realize that these are hard issues to solve and applaud the work that is already being done by the City, the various social service organizations, and the local residents and business community, we believe the following three recommendations would contribute to helping to tackle the challenges that remain: 1) Prohibit the sale of single consumption alcohol containers in the Square, 2) explore the opportunity for daytime social services as there appears to be an imbalance between daytime and night services, which results in more problematic behavior during daytime hours, and 3) explore the opportunity for a roving social worker to help reach the needy street population.

POTENTIAL FOR DEVELOPMENT OF CITY OWNED PROPERTY

By virtue of its ownership of the land, municipal parking lots represent one of the City's greatest opportunities for realizing a vision we have for Central Square. We urge the City to use that leverage and explore alternate uses for the parking lots. The Committee has voiced, and has heard from residents, ideas for many possible uses, all of which add more to the Square than surface parking. These include the construction of mixed use buildings that would include housing and ground floor retail, the creation of a public market, and creation of more public open space. We believe that the City should explore these possibilities and aggressively consider the public-private partnerships required to bring development of the selected alternatives to fruition.

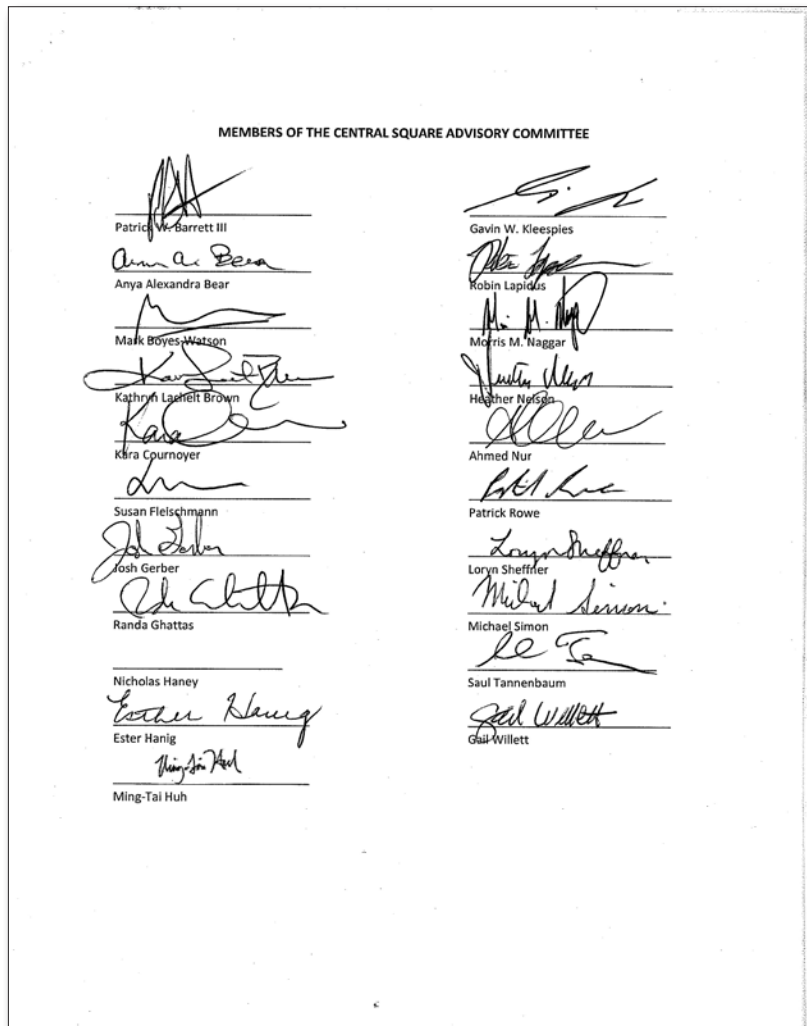
While outside the area which was formally our purview, the Committee notes that the Green Street Garage and the Central Square Branch Library represent opportunities, as well. We urge that the City rethink the Branch Library as a public cultural, media and technology center and consider the redesign and reconstruction of the Green Street Garage.

CONCLUSION

There is a general consensus in the City that Central Square exhibits and embodies many of the complex cross currents that are unique to Cambridge. Representative of many of these same cross currents, the Advisory Committee has worked together, despite divergent interests among its members, to establish and articulate qualities and aspirations for the Square on which its members can and do agree. Having understood some of the qualities of the Square that must be preserved, and having recognized some of the opportunities and challenges the City and Central Square face - whether it be nurturing and reviving vibrant retail or the urgent need for diverse and affordable housing - the Committee has sought recommendations which are bold enough to engender the positive changes that are sorely needed, while protecting against outcomes that would destroy cherished qualities that are part of the Square's identity. With this memorandum and the comprehensive report prepared by CDD and Goody Clancy, it is our hope that as the process unfolds, the work we have done together to imagine, discuss and agree can be very useful in helping positive change move forward in the Central Square of the future.

Very truly yours,

Members of the Central Square Advisory Committee: 2011/2012



CHAPTER 1

BACKGROUND

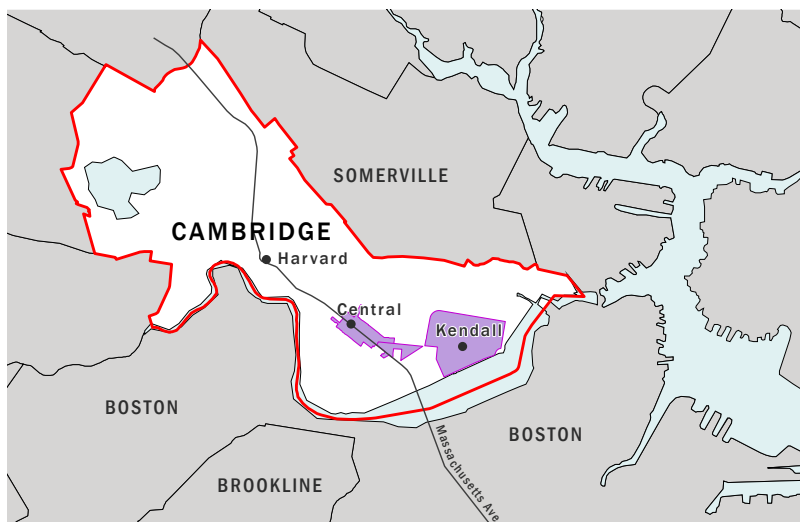


K2C2 OVERVIEW

Kendall Square (K2) and Central Square (C2) are vital mixed-use districts crucial to the future of Cambridge, less than a mile apart, with very different characters and development histories. The Osborn Triangle area south of Main Street that connects them is a hybrid encompassing some of the characteristics of each of the squares, while retaining an industrial character of its own. Responding to interest in increased development capacity from several property owners in Kendall Square and the Osborn Triangle, and an ongoing Red Ribbon Commission effort to reframe a vision for Central Square, the City began a coordinated planning study of the entire K2C2 area in early 2011. The overarching goal is to articulate visions for each that acknowledge the interconnected qualities and dynamic future outlooks of the two squares. Kendall Square should continue to be a world center for biotech, entrepreneurship, high tech, and the knowledge economy, while adding liveliness through more housing and retail. Central Square should continue to expand its rich cultural vitality while participating in the extraordinary economic benefits of the rest of Cambridge as suggested in the work of the Central Square Red Ribbon Committee, which immediately preceded the K2C2 work.

The City Manager appointed a committee for K2 and a committee for C2 to help guide the planning process led by City staff and a consultant team headed by Goody Clancy & Associates. While each committee focused on its square, City staff and the consultants took on the role of coordinating the two efforts so that the visions could be assembled in companion reports at the end of the process, and could be reflected in a wide variety of follow-through actions, both in zoning and in other efforts now and in coming years.

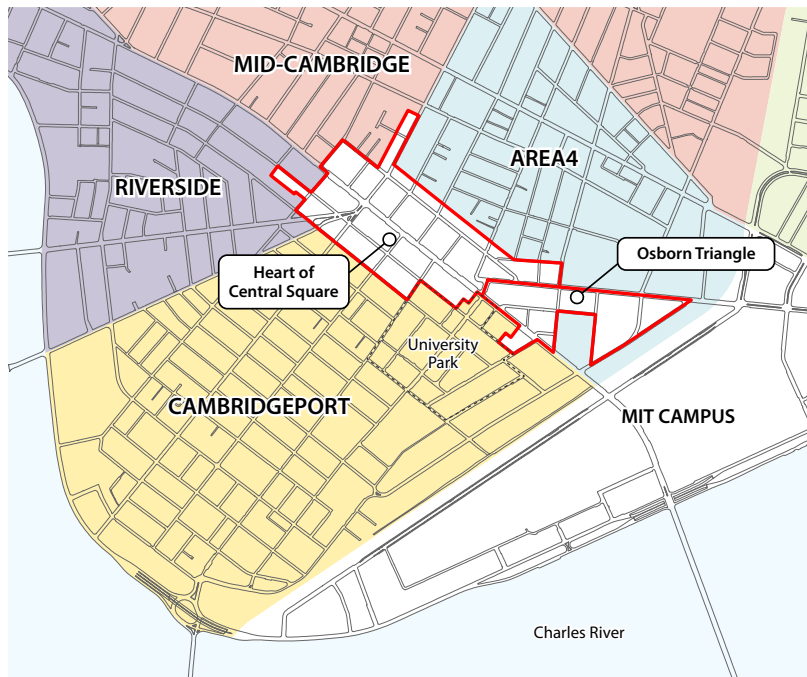
The two squares have in common good access to public transportation, nearby student and residential neighborhoods, and proximity to MIT. These assets should continue to support future growth in each area. With significant growth potential, each could benefit from better connections to the other. The area where Main Street intersects with Massachusetts Avenue, known as Lafayette Square/Jill Brown-Rhone Park, and its urban context including the area along Main Street east of Lafayette Square, is referred to as the Osborn Triangle Area. The development of the



Osborn Triangle Area can help make it easier for users to flow from one square to the other, while experiencing an interesting and active urban streetscape and retail environment. There are several new and proposed projects that have the potential to help activate this area, including the growing presence of Novartis and the planned new building by Forest City Enterprises for Millennium Pharmaceuticals.

HISTORICAL BACKGROUND

Central Square is Cambridge's vibrant downtown district directly adjacent to the Cambridgeport, Area 4, Riverside and Mid-Cambridge neighborhoods. The site of City Hall and other civic buildings, the district is at the northwest end of the MIT campus and abuts the mixed-use University Park area. In addition to neighborhood-serving shopping, Central Square features a number of retail, food, and entertainment venues that attract residents and visitors regionally, and at its core physically carries forward a rich legacy of buildings reflecting its past. The square has been the focus of several infrastructure projects and planning studies over the last 30 years.



Before the 1980s: Faded Downtown

Central Square had a very strong presence as Cambridge's downtown, dating from the early twentieth century when so many of its historical buildings were constructed. In the Great Depression, many multistory buildings were reduced in height to reduce their property tax burden. This left the Square much less unified architecturally. By the post-WWII era, as industries that provided employment declined, coupled with the movement of residents to suburbs across the country, Central Square found itself in an economic decline, with many marginal uses and vacant storefronts.



In order to respond to the auto-oriented development pattern in the 1950s, a six lane expressway (the Inner Belt) was proposed to be constructed on the alignment of Brookline Street in Cambridgeport. While plans for the Inner Belt were ultimately abandoned, the Brookline Street corridor suffered from disinvestment as property owners worried about the impacts that would come if the plan were implemented.

1980s-1990s: Central Square Begins a Revival

The Square has always been very important to local residents and businesspeople. Towards the end of the twentieth century, many efforts advanced to revitalize the Square. One of the most forceful statements of what might be done to bring back the Square's vitality was in the work of the Mayor's Commission to Promote and Enhance Central Square Now! Following the lead of this Commission, a Central Square Improvements Commit-

tee was established to plan and execute streetscape improvements throughout the Square.

2000s-2012: Central Square Revival Continues

A key advancement to help the Square realize its potential is the work of the Red Ribbon Commission, which published its findings in December 2011 following many sessions investigating “the delights and concerns of Central Square.” As the C2 Committee began its work, these findings helped form a backdrop for looking at how to crystallize a vision and initiate actions to help make that vision a reality.

Central Square Today

During the Committee deliberations, it has been clear that Central Square is a place loved by its residents and by its businesses as well. People are passionate about keeping it “edgy” while also making it an even better place. Interestingly, there have not been many new buildings constructed in the Square recently. The Holmes project at Carl Barron Plaza, the most recent housing development in the heart of Central Square, was built fifteen years ago. Perhaps the most prominent new building is the Central Square Theater, built five years ago.

The most important change in the Square has not been in new development, but in heightened interest and activity, for example the emergence of the Central Square Cultural District and the growth of outdoor dining. As the Square has become increasingly desirable as a place to live and recreate, it has also been welcoming active new businesses, such as the current arrival of Workbar—a cutting-edge co-working space which stems from the innovation and creative economy. Given the backdrop of this positive change, perhaps the biggest challenge is how to deal with economic pressures that are making housing more expensive—a problem not just for C2 or Cambridge, but for the entire region. Like the Red Ribbon commission, the C2 Committee encourages growth near transit, while looking for ways to address the challenges of keeping Central Square as diverse as possible, including diversity in residential options. Given the strength of the current economy, it is likely that there will be more new development in the coming years than in the last few decades, and it is important that community goals are met as new projects come into focus.



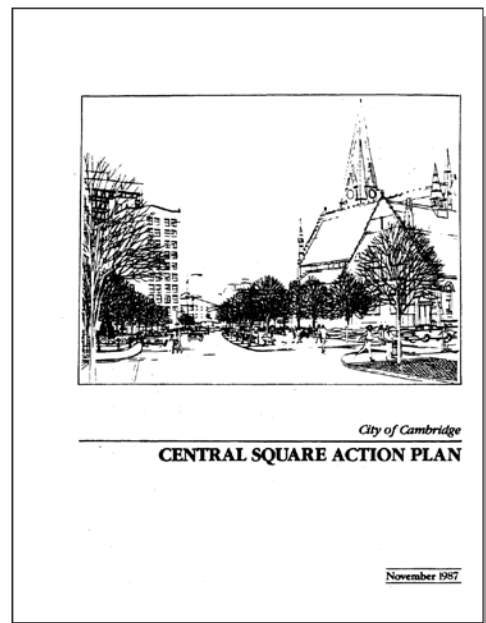
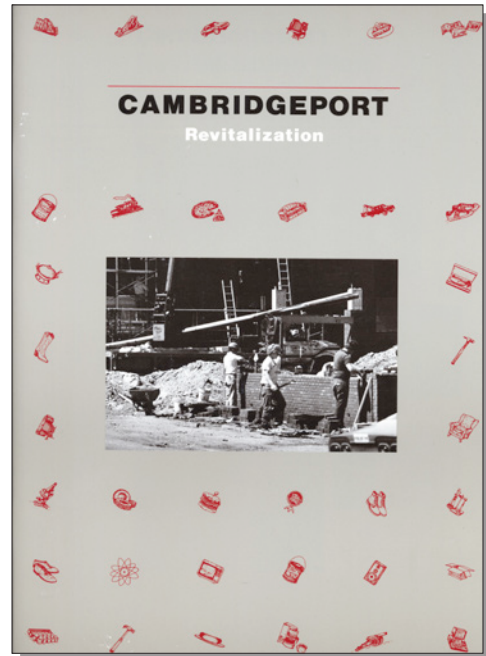
One of the exciting developments in the last several years is the proliferation of outdoor dining, often making use of widened sidewalks that the City provided to encourage just this kind of positive activity.

CHRONOLOGY OF PLANNING INITIATIVES

As the revival unfolded and following a decade of debate, three major steps were taken to guide Cambridgeport/Central Square development. First, the Community Development Department (CDD) published the **Cambridgeport Revitalization Plan (1983)**. Then the **Cambridgeport Blue Ribbon Plan (1986)** built upon the initial plan and led to the **Cambridgeport Revitalization Development District (CRDD) Rezoning (1988)** that governed the University Park project.

The **Cambridgeport Revitalization Plan** had several guiding recommendations:

- Kept density lower near Brookline Street.
- Allowed higher density towards MIT and the railroad corridor.
- Arranged new buildings around a coordinated open space plan.
- Proposed a roadway connector near the Ford Assembly Plant to manage traffic: **Waverly Connector built in 2007**.
- Suggested that a green space with clearly defined pedestrian connections would be desirable in place of the gas station at Lafayette Square, leading to **Jill Brown-Rhone Park built in 2008**.
- Suggested another green space on a former industrial site between the University Park site to the north and the mixed-use district to the south, leading to **Pacific Street Park built in 1996**.
- Called for preserving four special historical buildings that had been slated for demolition, all of which have now been renovated and reused:
 - **The Kennedy Building** at Lafayette Square (1990)
 - **The Kennedy Biscuit Factory**, reused for housing—Kennedy Lofts (1992)
 - **The NECCO Building**, reused by Novartis (2001)
 - **The Ford Assembly Building**, new home for Sanofi/Aventis (2011).



Historical planning documents such as the Cambridgeport Revitalization Plan (1983) and Central Square Action Plan (1986) are available on the CDD website.

The **CRDD Rezoning** reaffirmed the goals of the preceding plans, and required that the amount of retail should be limited so as not to negatively impact Central Square retail.

The **University Park** development by Forest City, in the northern section of the 1983 plan area nearest Mass Ave, produced (1998-2002):

- 674 residences with 200 affordable units;
- 1.3 million square feet of research space;
- 250,000 square feet of hotel, restaurant, and retail space; and
- 100,000 square feet of open space giving a sense of place to all the activities within the area.

The **Central Square Town Squares and Commons Project (1984)** received funds from the Commonwealth of Massachusetts for creating the park space at the juncture of River Street and Western Avenue, opposite the former Police Station. As part of this project:

- The gas station on the site was removed.
- The alignment of River Street was curved as it enters Central Square to slow down the traffic, particularly trucks, as they head to the traffic signal at the heart of the square.
- A pedestrian walk with trees and benches adjacent to the Central Square Baptist Church was created.

The City worked with the MBTA on the **Central Square Station Modernization Project (1984)** to create new entries to the station on the western corners of the Mass Ave/Prospect intersection (towards City Hall—the plan had originally been designed to expand towards MIT). This project also provided art specifically designed for the station.

Central Square Action Plan (1986) laid out many basic goals for Central Square that have been and continue to be important to managing growth and change in the Square. Important concepts:

- Preserve scale and historic assets.
- Encourage retail.
- Phase out undesirable uses and conflicts with abutting neighborhoods.
- Improve pedestrian amenities.



One of the big concerns during the rezoning process that led to the development of University Park was how the new development could provide housing, jobs, and open space while not hurting the economy of the broader square. In particular, limits were placed on the amount of retail within the development area so as not to leave C2 retail behind.

The plan led to the establishment of the Central Square Overlay District in 1989, which set up a development review process and the Central Square Advisory Committee. To promote a successful retail scene in the Square, the City commissioned the **Gibbs Report on Retail (2000)** which suggested ways to improve the retail mix and environment in Central Square.

The work of **The Commission to Promote and Enhance Central Square Now! (1993)** was a major step towards defining a vision for the types of uses and improvements that people in and around the Square desired. Building upon the work of the Commission, the **Central Square Improvements Master Plan Phase I (1995)** led to physical upgrading from City Hall to Lafayette Square in 1996. Key components:

- Removed lane of auto traffic to allow for expanded sidewalks and bike lanes.
- New lighting system: high lights for roadway surface and low lights for pedestrians.
- New landscaping and benches throughout.
- Carl Barron Plaza was enlarged and upgraded.

Mass Ave Improvements Phase II (2008) carried the Master Plan pattern of improvements from Lafayette Square to MIT/Charles River. Lafayette Square (known as Jill Brown-Rhone Park) is now a critical link between Mass Ave./Central Square and Main Street/Kendall Square, and serves as an entry to University Park. It has become a focal point—an informal gathering place as well as an outdoor entertainment venue.

Through the Community Development Department's **Façade Improvement Program and Signage and Lighting Program (Ongoing)**, twelve facades as well as twenty-three signage and lighting projects have been implemented in Central Square in the last eight years. The Community Development Department published Façade Art guidelines for storefront revitalization in Central Square in 1980, the first matching grant program that was the model for the current citywide program. Numerous projects have been implemented citywide over the last 30 years, with a majority in Central Square.



While Carl Barron Plaza itself needs revisiting, the concept of making Mass Ave more friendly for non-auto users has been a very successful strategy overall.

Other Important Central Square Projects

- The **Holmes Block (1999)** transformed a lower-scale block directly next to the MBTA Station, bringing mixed-income residential with ground floor retail to the heart of the Square.
- The arrival of **Novartis (2001)**, originally into the former NECCO building, and subsequently expanding into an adjacent new building (**2007**) with ground floor uses such as Flour Bakery and Cafe, and Central Bottle and Provisions.
- The **Central Square Theater (2008)** a joint venture of the City, MIT, and the Nora Theatre Company and Underground Railway Theater created new venue for activity near Lafayette Square, with ground floor retail space.
- **823 Main Street (2009)**, a Just-A-Start affordable homeownership development, provides an attractive housing use very near Lafayette Square, helping to extend a residential presence along Main Street.

Other Initiatives

Many City initiatives—from zoning, to master plans, to design review, to public works projects—are helping to manage the course of development throughout the city, including Central and Kendall Squares. Taken together, these initiatives have guided, and will continue to guide, the overall evolution of Cambridge.

Cambridge Growth Policy: Toward a Sustainable Future (1993 with 2007 update), includes economic development policies that are particularly relevant to growth in both squares:

- Existing retail districts should be strengthened; new retail activity should be directed toward the city's existing retail squares and corridors.
- Trend to cluster related uses should be strengthened.
- Retail districts should be recognized for their unique assets, opportunities, and functions to maintain their economic viability.

Citywide Rezoning (2001), coupled with the Eastern Cambridge Planning Study (2001), addressed concerns relevant to both squares:

- Manage density and traffic.
- Meet the need for housing.
- Require public review of development.
- Encourage good urban design and district vitality.



Throughout the K2C2 area, strengthening the availability and convenience of non-auto modes of travel has been and will continue to be a fundamental goal.

An aerial photograph of a city intersection. In the foreground, there's a large parking lot with several cars and a yellow school bus. To the left, a multi-story brick building is visible. In the center, a street runs vertically, with a yellow school bus driving up. To the right, a modern, multi-story office building with a glass facade is prominent. The background shows more city buildings and streets. The text 'CHAPTER 2' is overlaid in a semi-transparent grey box in the upper left.

CHAPTER 2

ANALYSIS: ISSUES AND OPPORTUNITIES

In this aerial view, Prospect Street runs up to Mass Ave at the main Central Square intersection. In the middle foreground are parking lots that serve the Intercontinental Central Plaza office building complex at the corner. These sites illustrate the potential, as well as the concerns, related to the existence of surface parking lots and the future of the Square.

The C2 Committee, working with the City and consultants, studied a wide range of issues concerning future growth as well as the opportunities for improvement that appear to be desirable, as expressed in the Executive Summary that introduces this report.

Land Use The land use planning approach for the future of Central Square has to take into account the very strong urban structure that already exists in the heart of the square and the edges where the square meets the surrounding residential neighborhoods. The community has expressed a desire for building carefully and incrementally upon what is already there, with an emphasis on housing and locally-owned ground floor retail.

Open Space There are not many parks and plazas in Central Square, so the ones that do exist are very important resources that need special attention to the roles that they play in the life of the Square. A major strength is the vitality of the Massachusetts Avenue corridor, which, in addition to its transportation function, can be thought of as an important public space linking the diverse elements of the district.

Housing Central Square is surrounded by established residential neighborhoods. There are several urban apartment buildings within the Square itself, ranging from 1970s housing for seniors, to 1980s apartments, and more recently the 2001 Holmes housing project and other smaller apartment projects off Massachusetts Avenue. The Committee supports more housing, especially middle-income family housing.

Economic Development The character of business is evolving, so that there is now a mix of more traditional firms alongside those in the emerging innovation and cultural economy. With regard to retail, the Square has a very strong existing mix of interesting establishments, some that have been there for decades as well as many relative newcomers. There are good prospects for more of both kinds of businesses as infill and redevelopment occurs.

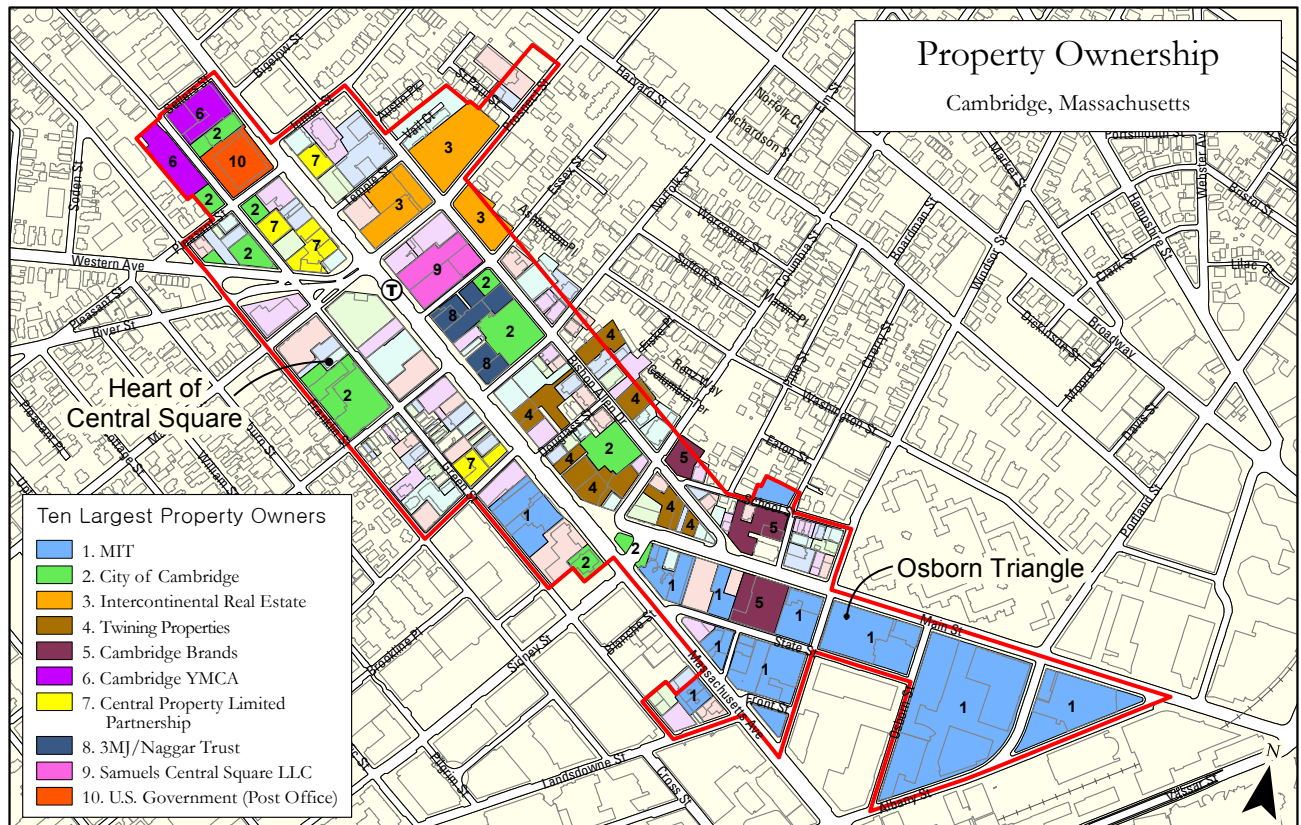
Environment & Stormwater The City has taken many recent actions to strengthen requirements for environmentally responsible development, and those will apply to new projects that are proposed for the Square. In particular, any new development will have to address issues of stormwater management, especially in the eastern portions where there is filled tidal land that is prone to flooding.

Transportation One of the strengths of Central Square is its role as a multi-modal transportation center. As is the case throughout the city, transit needs to be supported over the long term to address regional demand and travel by single occupant vehicles needs to be reduced. In this regard, the Committee is interested in considering reduced parking requirements.

Development Tools and Strategies The Committee thought very hard about how to leverage public benefits from new development. A key strategy would be to allow more dense development only if certain goals are met, for example for affordable housing or increased open space.

Existing Zoning Districts
Cambridge, Massachusetts

Central Square extends along Massachusetts Avenue, with the civic presence of City Hall at one end and the institutional presence of MIT on the other, it is surrounded by the four residential neighborhoods of mid-Cambridge, Area Four, Cambridgeport, and Riverside, and is complemented by the mixed-use commercial campus of University Park. Central Square, with all its history, bridges the gap between these diverse edges and is home to a tremendous mix of evolving uses. The heart of the Square is occupied by commercial and non-profit offices, ground floor retail and restaurants, some housing, social service and cultural non-profits, nightlife and entertainment. A number of surface parking lots, both municipal and privately owned are scattered throughout the square. A priority for the C2 Committee was to encourage increasing the housing stock in the Square for a mix of income groups, and possibly using City-owned land to help achieve this goal. The C2 Committee also expressed its concern about maintaining the locally-based quality of shops.



Property ownership in the heart of Central Square is quite fragmented, with each block divided amongst two or more owners. This ownership pattern, coupled with the protections for historic buildings, has contributed to the stability of Central Square's physical environment in recent times. In the Osborn Triangle, MIT is the principal owner.

Density

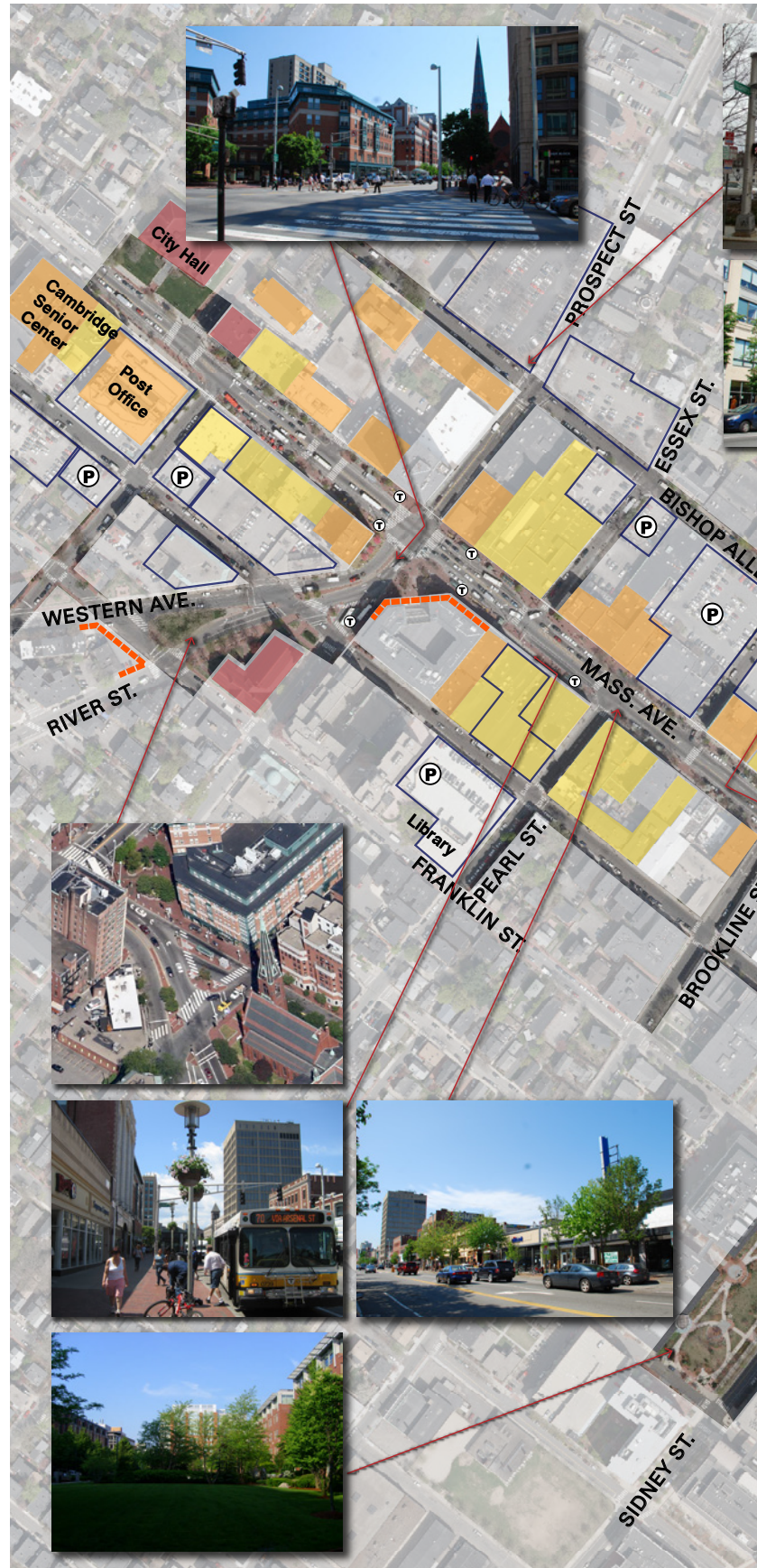
The character of Central Square is that of a generally dense city, with historical buildings mostly of lower heights. Some exceptions are the 100-foot tall historic tower at the heart of the Square and some more modern higher rise structures, such as the 1970s building opposite that historic tower (this modern building has just been renovated). The current zoning allows a maximum height of 80 feet, with a 60-foot cornice, and was intended to encourage new projects to reflect the historical pattern. Development under this zoning has been limited. The Committee expressed its openness to increasing height and density to encourage desired transformation and the development of housing, if community goals would be met. There are limited opportunities for development on unoccupied sites, so a great deal of attention has been given to whether reusing the City parking lots could play a role in bringing some of the desired changes to the square, possibly in coordination with private development.

OPEN SPACE

Public spaces in Central Square need much more design attention. For example, over many years, Carl Barron Plaza has been modified with the intent of making it more successful, but still more thought is needed as to how to make it a place where everyone feels comfortable. At the other end of the study area, Lafayette Square is more successful, with the creation of Jill Brown-Rhone Park in 2008 and associated improvements to sidewalks and crosswalks that enable people to flow easily through this end of the Square. Another key success has been the flourishing of outdoor dining from one end of the Square to the other, giving increased vitality to the major public space that is Massachusetts Avenue. New projects should be carefully considered as to how they will contribute to the success of public spaces, whether through the provision of ground floor retail that enlivens the street or through the creation of new public spaces within the project. The Committee also felt that C2 could benefit from an indoor gathering space.

This image was originally prepared for the C2 Built Form Workshop held in fall 2012. This overview highlights the character of existing spaces and their surrounding context. The image also highlights sites with potential for change and opportunities for desired pedestrian connections.

One of the key challenges is how to meet the community desire for better public places that help build positive community interaction. A promising step has been taken with the creation of the Central Square Cultural District designation, which is an indicator of the kind of liveliness that people in the area wish to support and enhance through open spaces, as well as cultural facilities such as theaters and nightclubs, and civic spaces such as the public library.





HOUSING

Over the twenty years since the initial 1993 publication of **Cambridge Growth Policy: Toward a Sustainable Future**, the City and the Community Development Department have pursued a two-pronged housing strategy: encourage expansion of the housing supply while working to preserve the range of existing housing opportunities available to residents. This strategy, reconfirmed in the **Cambridge Growth Policy Update 2007**, has informed a set of goals that are central to Cambridge's planning efforts, including the following:

- Construct a variety of housing types and models to meet the needs of residents, catering to both a range of incomes and family sizes;
- Preserve existing affordable housing and create new affordable housing consistent with neighborhood scale and character;
- Meet the needs of the workforce attracted to Cambridge by the technology based economy of the 21st century and by the amenities offered by the rich urban fabric of the city;
- Place housing in close proximity to jobs to better manage the capacity of our transportation networks.

Cambridge Growth Policy also recognized the impact of university populations within the housing market, and set a policy of encouraging universities to provide housing for their students, faculty and staff. This policy was also supported by the 1991 report of the Mayor's Committee on University-Community Relationships.

The record of development starting in 2001 provides evidence for the success of the City's efforts. About 5,900 net new housing units were built in the years since 2001. Among them are more than 700 permanently affordable units completed or now under construction which are affordable under the requirements of the Inclusionary Housing Ordinance and related measures.

Increasing the supply of housing in the market helps to mitigate the effects of increasing market demand and upward pressure on housing costs. However supply alone will not make housing affordable for all residents. For this reason the City has for many years employed a vast array of tools to preserve and expand housing affordability for low, moderate and middle-income residents in efforts to preserve the socio-economic diversity of the community. The effort and resources that Cambridge has committed to affordable housing are unmatched among Massachusetts communities and are among the strongest municipal commitments to housing in the nation.

Despite the positive outcomes of the City's efforts, rents for market-rate housing have continued to rise over the past ten years as the demand for housing remains strong. According to the City surveys, median advertised asking monthly rents for one, two and three bedroom apartments were \$2,300, \$2,800 and \$3,175 respectively in 2012. The housing sales market is similar. Condominiums represent 79% of market rate housing sales, and their median price in 2012 reached \$445,500, a 5% increase from the prior year. Prices such as these are not affordable to low or moderate income households. Families with children, graduate students, single persons with limited incomes and others have found limited housing options in Cambridge within the past few years. Middle income households have found that their opportunities to own housing are also limited and rapidly shrinking.

Current Housing Challenges in Cambridge

Therefore, while the fundamental challenge remains to preserve affordability and diversity in a city that is an increasingly desirable place to live, and preserve the character of Cambridge's traditional neighborhoods, the current time period brings its own unique set of challenges:

- Expiring affordability restrictions for more than 650 rental units before 2020;
- Declining federal support for affordable housing programs;
- Escalating housing market costs which continue to far outpace the incomes of low and moderate income residents and which are now impacting middle-income households, especially families in need of larger units;
- Changing characteristics of the population, in particular the aging of the Baby Boomer generation and the newfound interest in urban living among younger generations;
- Evolving composition and housing needs of the workforce;
- Recognizing the role of housing in supporting the City's transportation and environmental goals.

The 1997 to 2000 Growth Management Advisory Committee rezoning effort explicitly sought to increase the housing supply in the City by rebalancing commercial and residential density across Cambridge. The 2001 Eastern Cambridge Planning Study and the 2007 Concord-Alewife Planning Study both sought to accomplish the same goals within the specific context of each study area. The K2C2 plan also shares these goals. The Committee believes that orderly growth and continued prosperity in and around Kendall and Central Squares will rely on the expansion of housing opportunities integrated with commercial development.



This housing project at 821 Main Street replaced a vacant night club.

In recent years newly created market housing in the city has largely been designed as luxury housing which has been affordable only to high income households. Making new housing affordable to a range of incomes including moderate- and middle-income households has proven to be a significant challenge. While new housing has been completed in recent years or is now under construction in other areas, Central Square has not seen any significant new housing since the mid-2000s when the last residential buildings at University Park were completed. New residential development has not been built in Central despite its ready access to retail, transit, and

jobs in life sciences and technology. While there are several new residential projects in the planning stages, there have been concerns that new housing would follow the model of new development in Kendall Square, serving smaller higher-income households where the most pressing need expressed by the community is affordable housing for low, moderate, and, middle-income families.

The costs of land and development in Cambridge have made the development of moderately priced market housing difficult, while the demand from high income households has led many developers to design high-end units and buildings with luxury features and conveniences. Furthermore, rents from lab and office spaces are much higher than what can be generated even from high-end housing. While office, particularly lab uses prefer a large floorplate, land for which is not generally available in the heart of Central Square, this is a real consideration on large sites such as the Quest block and sites in the Osborn Triangle.

The C2 Committee discussed the need for creating new housing in Central Square to help mitigate rising housing costs as well as the need to ensure that new housing will include units affordable to low-, moderate- and middle-income households. While new housing might not lower rents, it would help to moderate cost increases that would be more dramatic without new supply. The Committee recommended that new zoning include strong incentives for developers to create affordable housing for middle-income households and that new housing continue to comply with the City's Inclusionary Housing Ordinance which requires the inclusion of units that are affordable to low- and moderate-income households. Therefore, the primary goals of this plan are to emphasize the importance of housing, to provide mechanisms to increase the housing stock, and to create new incentives to spur the creation of housing that will be affordable to households who would not be able to afford newly created units at market prices including middle-income households. New housing would ideally include a mix of incomes with an emphasis on creating units designed for families who are having to move out of Central Square area as affordable options have become more difficult to find.



Many historical housing projects help give Central Square its character.



The Holmes trust building is one of a very few new housing projects built in Central Square in the last 20 years.

Over the last few decades, Cambridge has been pursuing many goals for housing, including promoting a variety of housing types for a diverse population, preserving and creating deed-restricted affordable housing, meeting the needs of the workforce employed in and supporting the city's technology-based economy, and placing housing near jobs to lessen auto dependence. With new housing likely coming to Central Square, the Committee discussed how that housing might be integrated into the surrounding neighborhoods in support of existing communities and the diverse mix of residents who call the area home. Expanding the supply of housing to meet the growing demand among middle-income households and families was seen to be a significant benefit which would help preserve the diversity residents appreciate about the area. The Committee discussed a range of incentives that might be considered to direct residential development toward this goal.

The Committee also spent considerable time discussing City-owned parking lots on Bishop Allen Drive. The lots are significant resources that could assist in achieving the mix of new development the Committee envisioned in Central Square while giving the community a strong say in how new development there shapes the broader area. The value of these lots could be leveraged for a mix of public benefits if they were made available for development. The Committee discussed mixed-use development of the lots with a strong residential component of larger units for families and significant components affordable to low, moderate, and middle-income households, and found this housing model to be a significant benefit that might be unlocked through development of these parcels.

The Committee's recommendations seek to find that balance by providing development incentives linked to the creation of middle-income affordable units, continued creation of housing for low and moderate-income households under the Inclusionary Ordinance, and by reducing barriers to new development such as parking. The Committee also expressed its desire that the City-owned surface parking lots be used to spur the type of development envisioned for the area with middle-income and affordable housing for families as one of the community benefit objectives of any development there.

ECONOMIC DEVELOPMENT

Central Square is most like a traditional downtown of any place in Cambridge, with its mix of institutions, offices, ground floor retail, and residential uses. This results from the historical patterns of development in the city, with each square having its own role in the economy, and Central Square being literally “central” in the city fabric. In the introduction to this report, the C2 Committee expresses its worries about vacancies and a persistent sense that the Square has never completely rebounded to the economic strength that it had in the early twentieth century, before the downturn in the 1950s.

The Evolving Character of Business in the Square

Over the last 20 years or so, there has not been much obvious physical change due to economic development of the kind that has occurred in Harvard Square, or like the complete redevelopment of the former Simplex site into University Park, or like the burgeoning high tech development in Kendall Square. There have been very few new buildings, and those are mostly housing with some ground floor retail, such as Church Corner and the Holmes Block. However, there have been changes in the kind of economic activity that is happening within the buildings that line Massachusetts Avenue in Central Square.

The tenancy has been changing from more traditional office users to companies in the emerging high tech and cultural economy market, and these new users are sometimes paying higher rents. Because it is centrally located in Cambridge, halfway between MIT and Harvard with good multi-modal access, Central Square is uniquely well-positioned to bridge technology and culture. The lively mixed-use character and proximity of great neighborhoods also contribute to the area’s appeal.

The recent arrival of Workbar co-working space, as an example, is a particularly current event—the company was drawn to the idiosyncratic character of Square, preferring that to the more corporate character of other high tech locations. Other indicators of change are the relatively high sales prices of sites such as the block at the corner of Mass Ave and Essex Street and the former Quest properties near Lafayette Square. When one considers economic issues and opportunities for the coming years in the Square, although there may not be a lot of obvious physical change, there are new development dynamics. The Red Ribbon report states, “Central Square should not be an office park.” The C2 Committee shared this concern, and hopes for a balance in the likely continued growth of commercial development coupled with the desire for continued diversity in housing, cultural, and retail offerings.

Retail Trends in the Square

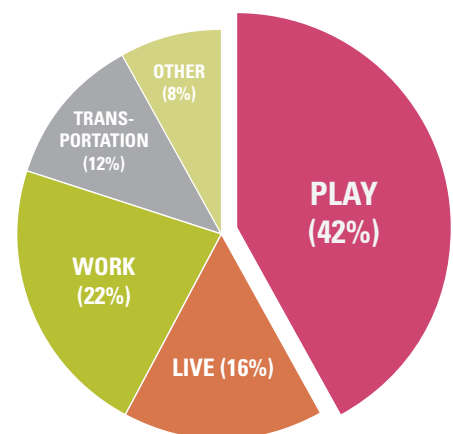
With regard to retail, every committee that has looked at Central Square in the last 20 years (The Mayor's Commission to Promote and Enhance Central Square Now!, the Mayor's Commission on the Delights and Concerns of Central Square, and the most recent Central Square Advisory Committee: 2011/2012) has spent a great deal of energy thinking about the mixed-use character of the Square and most pointedly the character of retail. Retail is experiencing growth and change, with the establishment of the Cultural District and all the energy that brings, and the coming of the H Mart food shopping, complementing the other grocery offerings including the Farmers' Market that are very important to the community. Retail in Central Square has momentum.

While it may be accurate that Central Square used to serve citywide retail needs from the 1850s to as recently as the 1950s, today most of its users are drawn from the surrounding neighborhoods. This is consistent with Central Square's retail mix, which suggests more of a local draw. Most of its retail anchors, Harvest Co-Op, Walgreens, and CVS, for example, specialize in "convenience" goods that tend to pull customers mostly from nearby. The City's 2009 Customer Intercept Survey also supports this claim. Many residents and workers were found to be coming to Central Square for daily needs such as banking, post office, pharmacy, coffee shops, and grocery shopping, all of which cater to the large daytime transient population. On the other hand, there are some individual businesses which attract patrons from beyond the trade area such as:

- High culture anchors like the Central Square Theater and the Dance Complex
- Upscale restaurants like Rendezvous, Craigie on Main, and Salts
- Live music venues such as The Middle East restaurants and nightclub, TT the Bear's Place, and Cantab Lounge
- Nightclubs and bars such as the Middlesex Lounge, Brick & Mortar, and Phoenix Landing.

The population for the Central Square trade area is estimated at roughly 48,000 people (according to the 2011 population estimate by Nielsen-Claritas). A trade area of this size is viewed as a Community Business District, which is larger than a Neighborhood Business District, but smaller than a Regional Business District (according to the International Council of Shopping Centers system).

The **Customer Intercept Survey** provides an approximate demographic profile of the trade area. When respondents were asked about their primary purpose for being in the Square, the largest percentage of people (22%) responded that they came to work in the Square. Other common responses included: shopping (18%), dining (13%) and transportation (12%). Such purposes could be classified into the three main themes used throughout K2C2 study: Live, Play, Work.



Primary Purpose for Being in Central Square

Although the resident population might not have been captured to the full extent (e.g., a person living in Central Square who also comes to the Square for restaurants might have said dining is their primary purpose for being in the Square), it is evident that many people visit Central Square for entertainment/dining purposes. This demographic characteristic can become an important guide for fostering future businesses in the Square.

Market retail rents in Central Square are not cheap. The typical storefront is said to cost approximately \$35-45 per square foot with rates lowering in the cases of larger floor-plates and side-street locations. This rent range makes Central Square more expensive than most of its nearby competitors. For example, Kendall Square, Inman Square, and Davis Square all charge in the range of \$30-40 per square foot. It is only topped by Harvard Square, which can range from \$100 to \$120 per square foot for well-located, high-profile space—among the highest in Greater Boston—to \$40-50 on side streets.

Most landlords of retail space not only opt for highest bidders but also the ones with the most “creditworthiness,” which are more likely to continue paying the rent for the entire lease term. This is primarily the reason why the most heavily trafficked streets of Central Square have many larger chains. Yet, in the C2 process and in the City’s Customer Intercept Survey, 70% said that the presence of independent business is “very important” to them. In response to an open-ended question that asked the respondents what they would like to keep in Central Square, the top two responses were independent businesses (25%) and diversity (21%).

One means of dealing with this disconnect between the preferences of landlords and uses is the recruitment of so-called “chain-lets.” Chain-lets are concepts with just a small number of locations, typically concentrated in a particular metropolitan area or region.

There are a number of successful chain-lets already in the area, which seem to strike the right balance for business districts like Central Square. Such stores might not be unique, but they still provide some of the local flavor and distinctiveness that many users are seeking. While they may not have an AAA credit rating, they do have a successful track record in which a landlord can have some confidence.

Examples of local chain-lets in Central Square

- 1369 Coffeehouse
- Boomerangs
- Central Bottle + Provisions (Multi-Concept Operator)
- Central Kitchen/Brick and Mortar (MCO)
- Expressions
- Flour Bakery + Cafe
- Harvard Square Eye Care
- Harvest Co-Op
- India Pavilion/Indian Food & Spices (MCO)
- Life Alive
- Miracle of Science/Middlesex Lounge (MCO)
- Tavern In The Square (MCO)
- The Asgard (MCO)

When respondents in the City’s Customer Intercept Survey were asked what kinds of businesses they would like to see more of in Central Square, apparel (women’s, men’s, and children’s) topped the list, with more than 80% saying that more of these types of stores were needed. Shoe stores were rated third at 68% and gift/jewelry stores fourth at 67%.

Nevertheless, Central Square sits at a rather risky location to become a shopping destination for comparison goods, in that it is “triangulated” by three formidable competitors: Cambridgeside Galleria mall, Harvard Square, and Newbury Street. The definition of comparison goods is that they specialize in goods for which customers typically prefer to “comparison-shop.” Therefore, customers are likely to be drawn to destinations where there are a number of alternatives on the basis of factors such as price, quality, and style. A retailer of comparison goods prefers to locate where consumers already comparison-shop rather than in a location where the store would be largely responsible for generating its own foot traffic. In the absence of a new anchor store, Central Square’s chances of becoming a major destination for comparison goods shopping are low.

However, the retail consultants for the Study suggested that Central Square could still benefit from taking advantage of smaller niche opportunities. As one of the options for strengthening the comparison goods market, they have recommended “cheap-chic” apparel stores such as Forever 21 that could appeal to the broad range of income groups that are present in Central Square and could also become an anchor tenant.

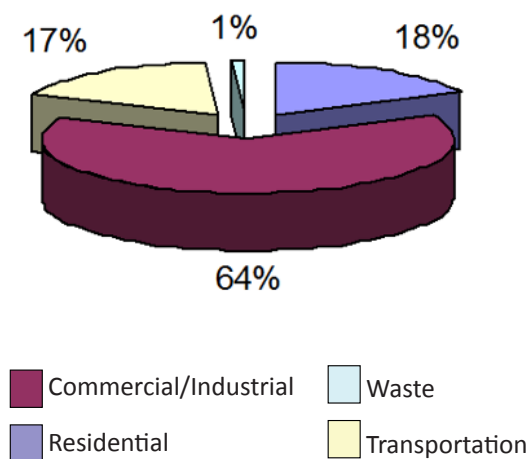
The second-most desired type of business in Central Square was affordable, sit-down restaurants. The retail consultants recommended that one means of elevating a student-oriented retail mix is “fast-casual” dining like Chipotle Mexican Grill, which has moved in to the heart of the Square recently. For future retail businesses, it would be important to investigate whether or not such “fast-casual” dining options relieve some of the demand for affordable, sit-down restaurants.



ENVIRONMENT & STORMWATER

The topic of environmental sustainability interfaces with several other topics discussed in this chapter, such as transit oriented development density, fostering a mix of land uses to meet the multiple needs of people who live within walking or biking distance, and transportation demand management to discourage driving and encourage sustainable modes of transportation.

About 80% of Cambridge greenhouse gas emissions come from building energy consumption in existing buildings and 66% of that is from the commercial and institutional sectors. It is therefore important that buildings target greater energy efficiency and reduce consumption of non-renewable energy.



Over the last few years Cambridge has tackled the issue of building energy use by adopting a green building requirement for large new construction and the Stretch Energy Code. However, given what a large component of the City’s energy use and greenhouse gas emissions originate from buildings, it is important to consider strengthening energy performance for both existing and new construction.

In recent years, the City’s efforts to encourage and require green building development has been assisted by the market demand for sustainable construction, especially in the commercial sector. Businesses are competing to attract the best and brightest talent to

their companies and demonstrating leadership as a sustainable, cost-efficient place to do business could connect environmental and economic sustainability. A recent report on green buildings states that “More than 90 percent of respondents reported a greater ability to attract talent, and more than 80 percent reported greater employee retention (81 percent) or improved worker productivity (87 percent). Seventy-five percent saw improved employee health, and 73 percent reported operational cost reductions.” Source: CoStar Group Newsletter 2008.

Stormwater Management

Filled tidal land in the eastern parts of Cambridge, including Area Four and the Osborn Triangle are flat and prone to flooding, since there is limited provision for stormwater management. Three important environmental considerations are the quality of the runoff, the quantity of water to be handled, and the rate at which it is discharged. Key priorities include peak runoff management, flood storage, groundwater recharge management, phosphorus management, and suspended solids management. Parts of the storm sewer infrastructure date from the late 1800s. There is a lot of hardscape with limited permeable surfaces where water may infiltrate, and the high water table also complicates the potential for infiltration.

While major storm events are relatively infrequent, they can have significant impacts on above ground roadway infrastructure, basements and first floors of buildings. Cambridge is improving the functioning of its sewer system throughout the city by separating sanitary and stormwater sewers. The Department of Public Works is engaged in systemwide improvements to enhance flood protection, combined-sewer overflow control, and water-supply protection, including a plan to build sub-grade retention facilities close to the Osborn Triangle/Central Square area beneath municipal parking lots. The City is also working to implement Massachusetts DEP's approach to "pollutants of concern."

Sustainable practices to control stormwater quality and quantity is the surest way of improving the area's stormwater handling and must be prioritized. All large developments in the city are subject to the Department of Public Works stormwater management requirements and future development in Central Square and Osborn Triangle should continue to meet these requirements. The municipal parking lots in Central Square are seen as a potential area to build below-grade stormwater storage. Any future redevelopment of surface parking lots must address stormwater management goals using a combination of structural controls and low impact development (LID) principles such as green-roof systems, retention basins, rain gardens and bioswales to control and treat stormwater.



(top) Broadway: July 10, 2010.

(middle) Constructed wetland, North Point

(bottom) Green Roof at the Robert W. Healy Public Safety Facility in East Cambridge.

TRANSPORTATION

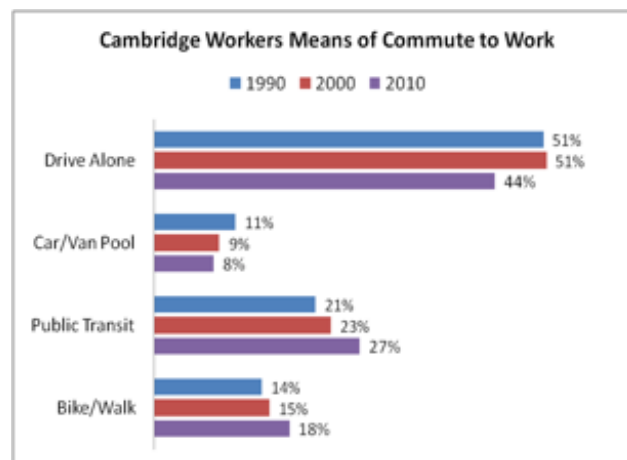
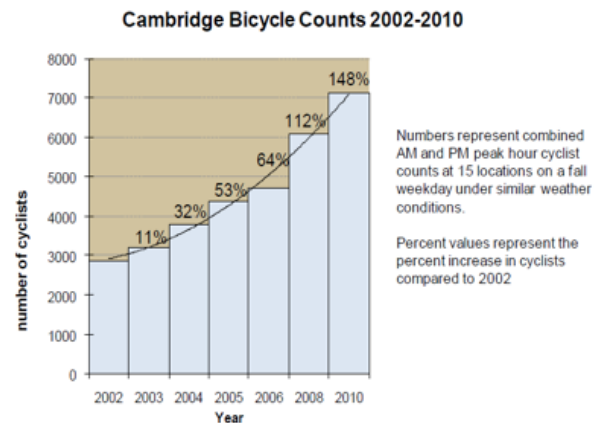
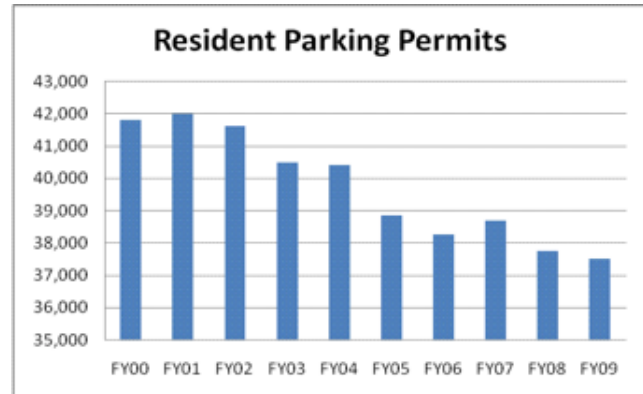
The C2 Plan proposes density near transit nodes and includes a mix of residential, commercial and retail land uses. This mix of uses, combined with transit availability and robust walking and biking infrastructure, enables people to live, work, learn, and play in the same area and reduces traffic generated by new development.

Travel Trends

Travel trends show that transportation management in Cambridge is benefitting from positive changes. Auto ownership is declining: households without a vehicle grew from 28% to 32% from 2000 to 2008, according to the American Community Survey. 50% of Cambridge households within ¼ mile of an MBTA station have no car.

The popularity of walking and bicycling here has been reflected in several kudos, including being twice named “America’s most walkable city” by Prevention Magazine. Bicycle growth is strong: the number of bicycles on the road during rush hour tripled between 2002 and 2010. Cambridge received the highest Bike-score in the nation and is the only city east of the Mississippi awarded a Gold rating by the American League of Bicyclists. The launch in Cambridge of Hubway, the highly successful regional bikeshare system, further increases the potential for growing the percentage of trips taken by bike.

Additional positive trends include mode shifts away from people driving alone in “single occupant vehicles” or SOVs. Between 2000 and 2010, the percentage of SOV users overall in Cambridge reduced from 51% to 44% at the same time an additional four million square feet of development was built. At 38%, the SOV rate for new development is significantly lower than the overall average. Also, public transit use grew from 21% to 27% and the percentage of bicycling and walking commuters is now up to 18%. An increasing while still small percentage of people work at home.



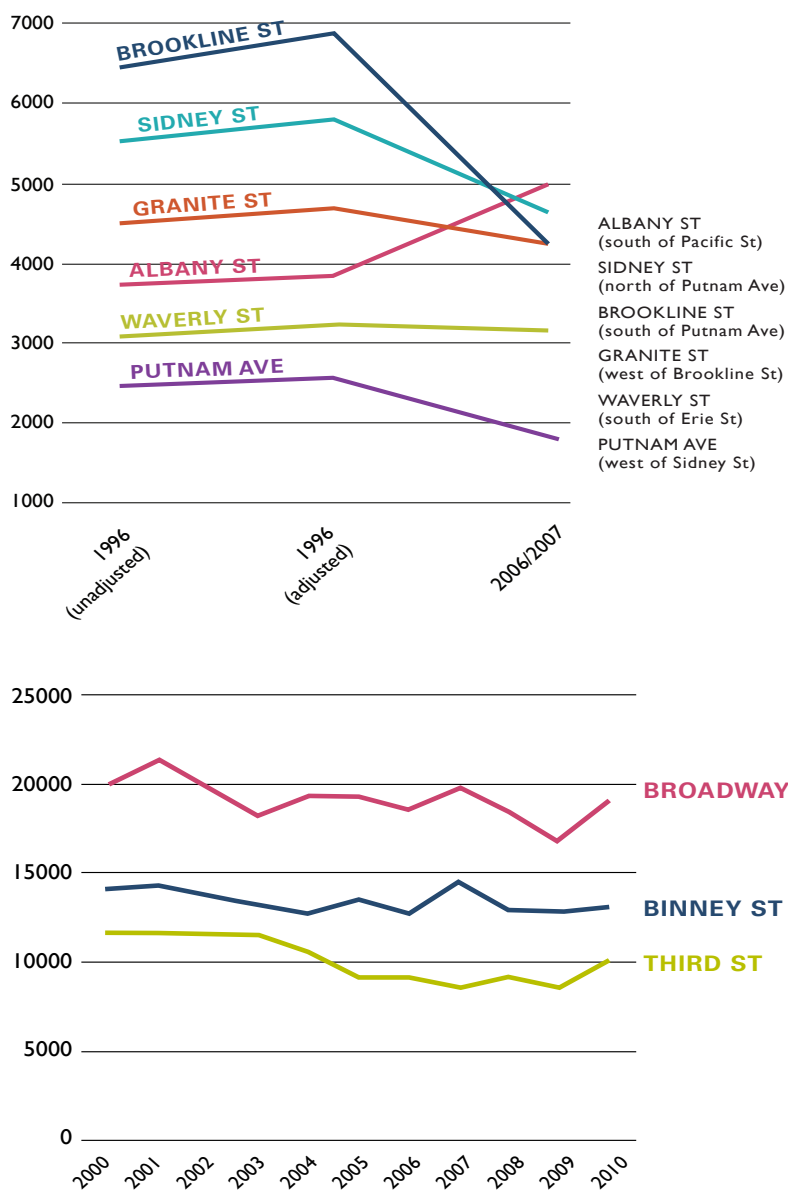
(top and middle) City of Cambridge CDD and TPT Departments
(bottom) US Census and American Community Survey

Daily traffic volumes in Cambridgeport, adjacent to Central Square, remained consistent or declined in the decade between 1996 and 2006, despite significant development activity in the University Park district. Further, generation of traffic by the University Park development itself was significantly less than predicted when the project was permitted. The percentage of people who walk, bike or take transit for all purposes has been increasing over the decade.

The same trend is evident in the Kendall Square district, where about 4 million square feet of development was added in the decade between 2000 and 2010 at the same time that daily traffic volumes either remained consistent or declined.

The City's Parking and Transportation Demand Management (PTDM) ordinance, which is triggered by construction of new parking spaces and requires employers to implement comprehensive demand management programs, has played a significant role in reducing single-occupant vehicle trips from new construction. The ordinance requires measures to encourage walking, biking and transit use and includes a provision for annual monitoring of effectiveness of the program. In addition, more people seek to live, work and play in the same area, significantly reducing the need and desire for automobile ownership. Cambridge has benefitted from this change in preferred lifestyle.

Central Square & Kendall Square Average Daily Traffic Trend Lines



(top) Central Square Average Daily Traffic Trend Lines

Source: City of Cambridge. The "adjusted" 1996 figures refer to adjustments made to account for seasonal fluctuations in traffic. The adjusted figures are higher to eliminate winter weather and school vacation schedules.

(bottom) Kendall Square Average Daily Traffic Trend Lines

Source: Cambridge Redevelopment Authority

Transit

A high percentage of employees commute to Central Square by transit. That percentage is expected to increase from 38% in 2010 to 42% in 2030 for office and R&D uses. Detailed analysis was undertaken as part of the Central Square Study to understand the relationship between current transit capacity and both current and future transit demand on buses and the Red Line.

The percentage of residents and retail customers who drive is also expected to decline as a result of dense, mixed-use development which creates more destinations within walking and biking distance.

Central Square is well served by the Red Line, 8 MBTA buses and several private shuttles that are open to the public.

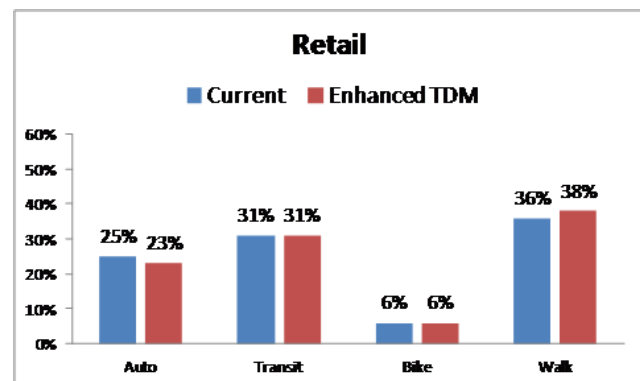
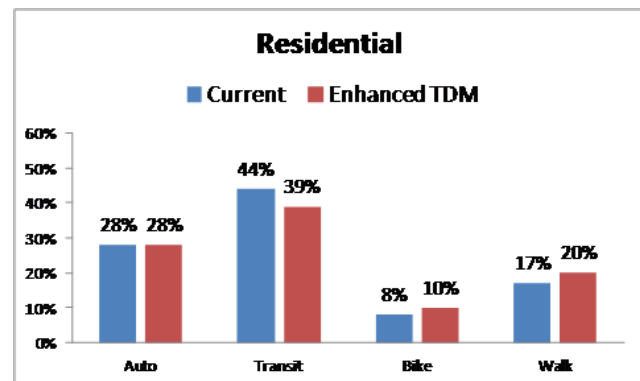
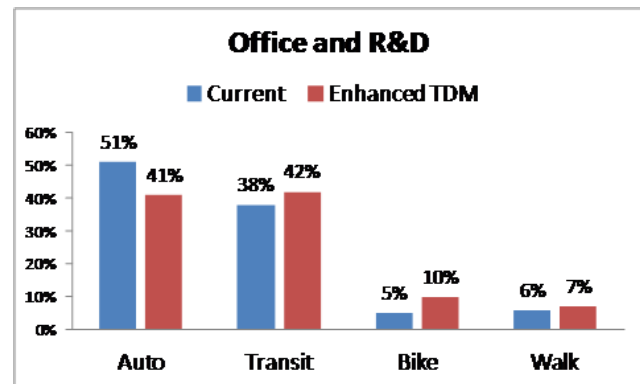
MBTA bus routes provide direct connections to:

- Harvard Square
- Back Bay
- Sullivan Square, Somerville
- Kenmore Square
- Longwood Medical Area
- Boston Medical Center
- Union Square, Somerville
- Allston
- Brookline
- Watertown/Waltham

Shuttles

- MASCO – Harvard Square-Longwood Medical Area via MIT
- EZ Ride – North Station – Cambridgeport via Lechmere and Kendall

About 14,000 passengers either get off or board buses at Central Square. This represents about 30% of the total number of public transportation trips in Central Square per day, while the Red Line carries about 70% of daily transit trips.



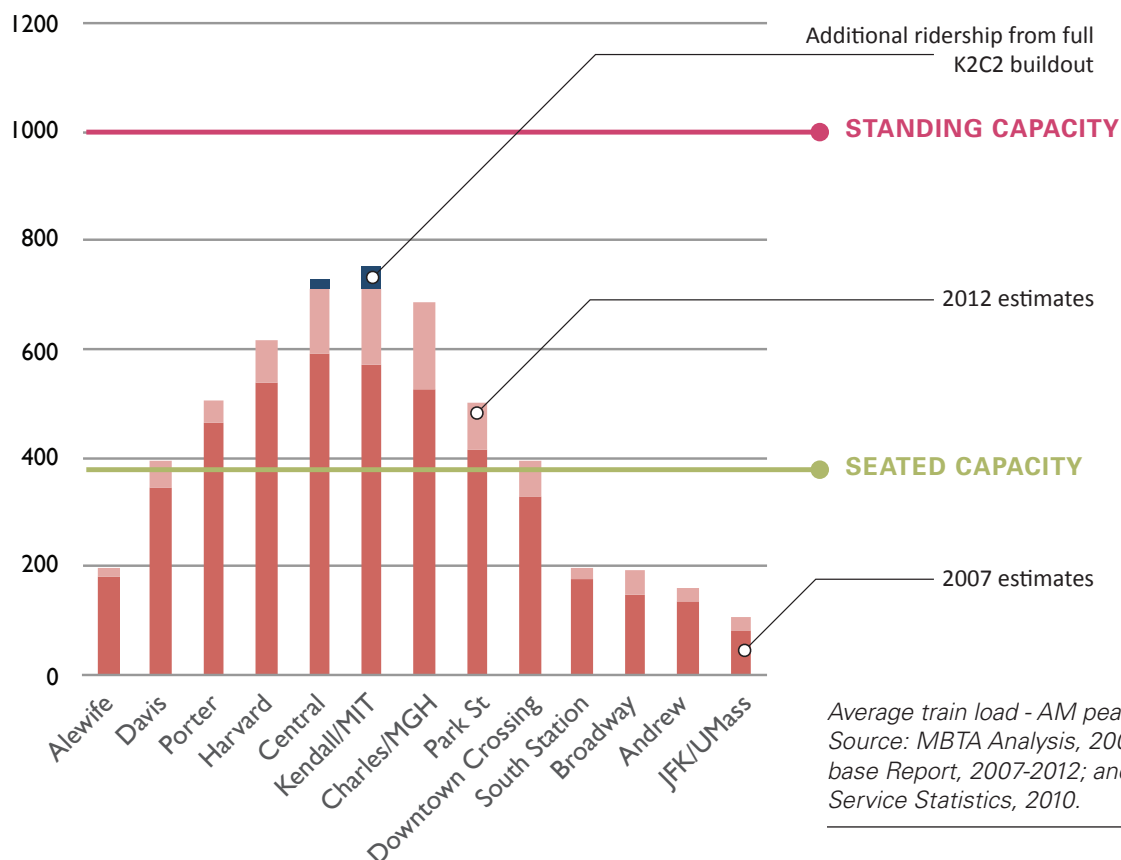
Bus Route	Daily on/off
#1	3,900
#70	3,600
#70A	1,600
#47	1,500
#83	1,100
#CT1	1,000
#91	900
#64	610
TOTAL BUS	14,000
RED LINE	32,000

The EZ Ride operates high-frequency service during weekday peak hours and is funded by participating businesses and the City of Cambridge. EZ Ride ridership has been growing at 4% each year since its start in 2002 and now exceeds half a million passengers per year. The closest stops to Central Square are on Brookline Street at Erie Street and Landsdowne Street.

The number of daily Red Line boardings at Central Square is about 14,500, or 7.5% of the Red Line total. Central is the 3rd busiest Red Line station after South Station and Harvard Square according to the 2010 MBTA Ridership Statistics. The Red Line runs at high frequency, every 4.5 minutes during the peak and every 6.5 minutes mid-day. Of note, 12.5% of all transit trips to Central Square are only one stop and start at either Harvard or Kendall stations. Extending bus lines from Central Station to these locations and converting more of such trips from transit to biking could serve to reduce peak hour congestion.

While there is still adequate capacity on average during the peak hour, the Red Line is experiencing peak congestion on some trains, especially in the AM peak hour. This results in passengers having to wait for the next train before boarding during rush hour periods. New development in Central and Kendall Squares will add to the peak loading, but housing and job growth anticipated in the greater region, including the Longwood Medical and Seaport districts in Boston, will add significantly more to Red Line ridership than growth in Cambridge. Significant investments in the existing transit infrastructure and in transit expansion are necessary to accommodate anticipated growth throughout the Metro Boston area.

Average train load - AM peak toward Boston





The Urban Ring project, a circumferential bus rapid transit line envisioned to connect Cambridge with Somerville, Everett and Chelsea to the north and Boston to the south, remains the transit expansion project that could benefit Cambridge the most. While in planning for almost two decades, the project has currently been put on hold by MassDOT.

Parking

Parking in Central Square includes on-street, metered parking plus multiple public and private lots and a large municipal garage at Green Street. There are 1,281 parking spaces available to the public in Central Square compared to 1,741 spaces in Harvard Square and 2,755 spaces in Kendall Square.

Public lot use is highest in the evening reaching as high as 98% occupancy, compared to 73% during the day. The lots primarily serve retail, restaurants and clubs. Green Street garage use is highest during the day, except occasionally Friday and Saturday nights when the garage is full. The City lots with higher rates per hour and meters in effect until 10 PM have higher turnover rates.

Private parking spaces, which are typically for employees, are less utilized during the work day. About 40% (230 spaces) of the private spaces are not being used during the peak demand time. The cost to park in the City's public spaces is lower than the private spaces open for public use.

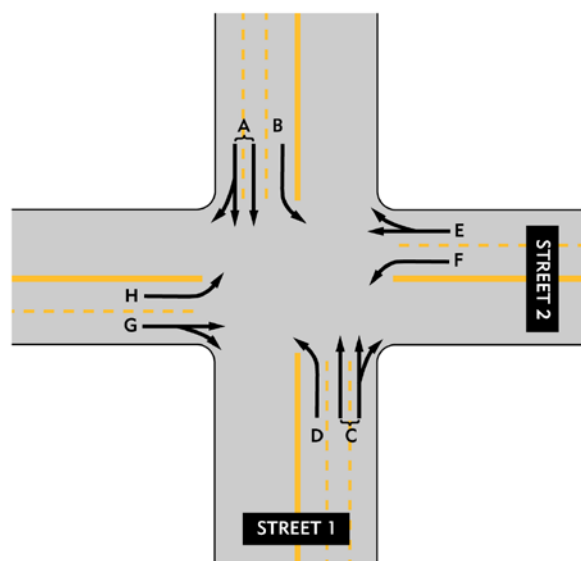
Auto ownership rates in Central Square average less than one car per household. A survey of 12 housing developments with 719 units built between 1900-1999 documented an average of 0.8 off-street spaces provided per unit (ranging between 0 and 1.1 depending on the building). The average auto ownership rate in these developments was 0.5 autos per unit. The analysis showed a clear link between auto ownership and number of off-street spaces, i.e. buildings that provided more spaces per unit showed higher rate of autos owned per unit.

While parking utilization has gradually decreased over time parking serving development projects has tended to be overbuilt in Cambridge in general. Both parking minimums and maximums have been too high and there has been little incentive to engage in efforts to share parking between uses whose peak demand occurs at different times. Parking ratios could be lowered to meet the lower demand for parking which results from an increased emphasis on parking demand management and taking advantage of shared parking wherever possible.

Analysis of traffic impacts

The Central Square study included detailed analysis of future roadway traffic volumes including daily and peak hour traffic and an analysis of anticipated impacts at the intersection level, also known as Critical Sums Analysis, to assess the impact new development would have on existing road capacity. Critical Sums Analysis is a planning tool used to evaluate build-out scenarios by comparing how different levels of build-out impact specific intersections in a general way. The process is based on methodology previously used by the City of Cambridge for the 2001 Eastern Cambridge Planning Study, the 2001 Citywide Rezoning, and the 2005 Concord-Alewife Plan.

"Critical movement volume" at an intersection is defined as the sum of all conflicting traffic movements, expressed in vehicles per hour. For a north-south street, the conflicting movements are the combination of either the northbound left-turn and the southbound through/right-turn volume per lane or the southbound left-turn and the northbound through/right-turn volume per lane, whichever is greater. Similarly, for an east-west street, the conflicting movements are the combination of either eastbound left turn and the westbound through/right-turn volume per lane or the westbound left-turn and the eastbound through/right-turn volume per lane, whichever is greater.



Street 1: $(A / 2) + D$ or $(C / 2) + B$, whichever is more
Street 2: $E + H$ or $G + F$, whichever is more

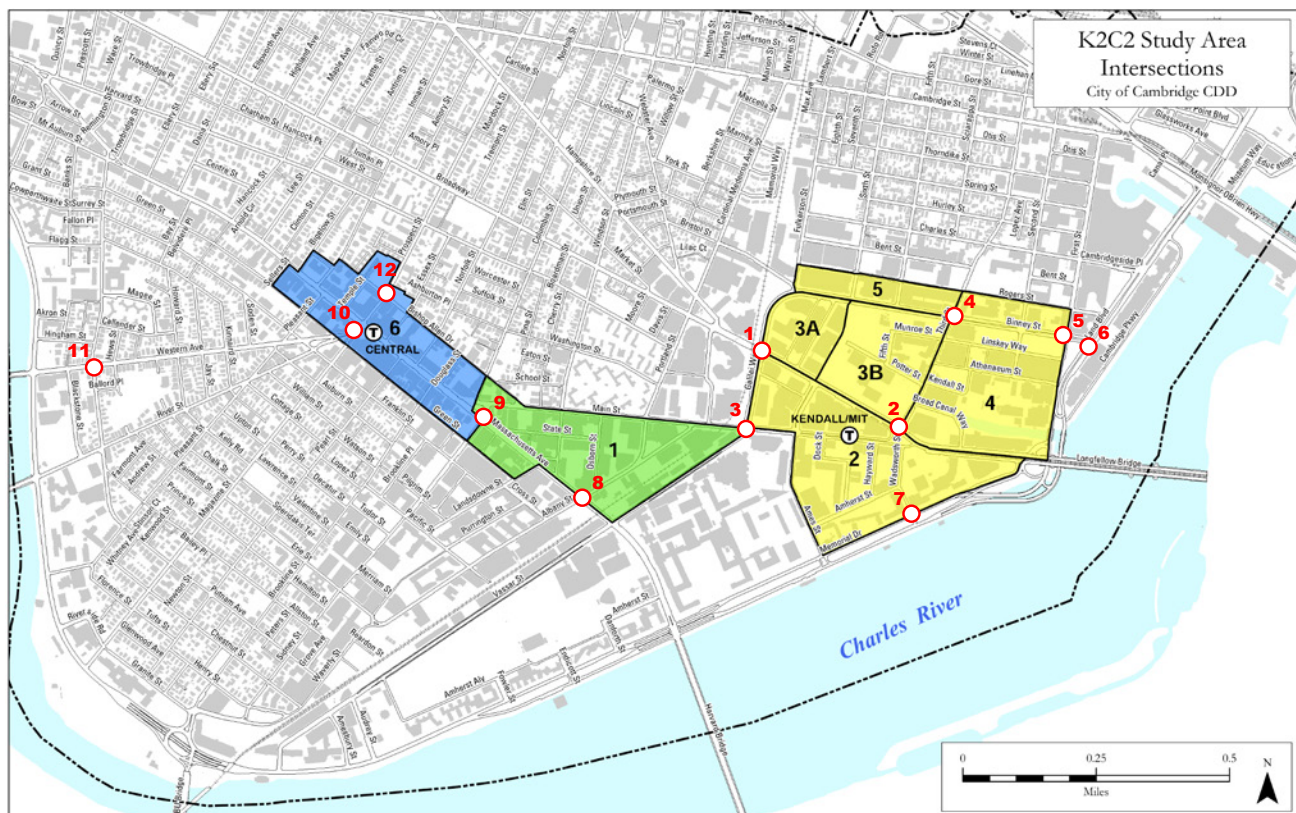
Critical Sum = Result of Street 1 + Street 2

Thresholds for performance are based on total intersection capacity. The 1994 Highway Capacity Manual recognized that the maximum operating volume had increased from 1,800 to 1,900 per hour. This higher volume indicates that an appropriate threshold for intersection performance would be 1,500 or fewer vehicles per hour. An intersection at or below this threshold is considered to operate adequately, i.e., motorists will wait no more than two light cycles to get through the intersection. Once these thresholds are exceeded, drivers start to experience exponentially longer wait times.

The analysis produced the following results for the five intersections studied in Central Square:

- Projected increases in total intersection volumes of about 18% under current zoning scenario, 20% under proposed K2C2 development, and 16% under proposed K2C2 development with enhanced transportation demand management (TDM) measures.
- None of the five intersections in the C2 study area are projected to reach the 1,500 critical movements threshold in the preferred build-out scenario.

It is notable that in the 2001 ECaPS process, the analysis projected that four intersections would exceed the 1,500 critical movements threshold in 2020. However, direct measurements since that time have revealed that none of the intersections are approaching that threshold, despite new development in the area.



But there are some limitations to the Critical Sums methodology. Additional Level of Service (LOS) traffic analysis was done for the Mass/River/Western/Prospect intersection as this intersection is not well understood through Critical Sums analysis given the left-turn prohibition for vehicles and the unusually high number of pedestrians at the intersection. This location experiences especially high amounts of traffic as the River/Western/Prospect corridor is part of the north-south regional traffic network. As a result, this intersection is one of the most sensitive to impacts from additional development.

The zoning code requires development projects to do a detailed traffic study during project permitting and also requires mitigation of traffic impacts — through strategies that reduce driving or through operational strategies such as designing project access and egress in ways that avoid adding traffic to more congested intersections. Cambridge has over the past two decades experienced a significant increase in the percentage of trips taken by foot, bike and transit with the result that long-term traffic growth proved to be much less than anticipated. This leaves open the possibility that projections for future traffic impacts included in this analysis overestimate vehicle traffic impacts for 2030.

	2010		2030 Buildout		2030 Buildout		2030 Buildout	
	Existing Conditions		Existing Zoning		K2C2		K2C2 with TDM	
	Total Volume	Critical Sum	Total Volume	Critical Sum	Total Volume	Critical Sum	Total Volume	Critical Sum
1. Broadway / Galilei	2292	768	2732	897	3022	1045	2906	999
2. Broadway / Third	1964	1111	2437	1333	2787	1510	2641	1440
3. Main/Galilei / Vassar	1764	711	2183	986	2389	1069	2285	1007
4. Binney / Third	2007	742	2597	982	2929	1112	2768	1044
5. Binney / First	1311	590	1983	682	2182	749	2024	722
6. Binney / Land	2382	654	3019	917	3162	967	3018	903
7. Memorial Drive / Wadsworth	1361	680	1638	802	1677	812	1615	785
8. Mass Ave / Albany	1850	807	2210	1026	2159	1013	2110	978
9. Main / Mass / Columbia / Sidney (Lafayette Sq)	1460	762	2053	1098	2180	1145	2063	1082
10. Mass / Prospect / River / Western (Central Sq)	1912	825	2285	1017	2385	1069	2309	1027
11. Putnam / Western	1737	1004	1801	1068	1812	1079	1800	1067
12. Bishop Allen Dr / Prospect	1488	1008	1594	1114	1571	1091	1558	1078

DEVELOPMENT TOOLS AND STRATEGIES

In the C2 committee discussions, several trade-offs were considered to achieve the desired public benefits—including housing for middle income families, transit oriented smart growth, improved public spaces, and support of local, independent businesses and the cultural and non-profit institutions that make Central Square unique. The concept of allowing increased height and density to leverage private development to achieve public benefits is a major underpinning of the overall strategy chosen for bringing new energy to the Square.

The platform for decision-making would be through the special permit process. Hearings would be required at the Planning Board so that the full range of community opinions could be heard and incorporated into the Board's deliberations. It will be essential that a carefully crafted set of criteria accompany the zoning, so that the trade-offs are very clear, and the Board has a framework for making an approval that is consistent with the many goals expressed in the C2 process.

Goal	Current Tools	Expanded Special Permit Criteria	Increased Value and Public/Private Partnerships
Public Places to Build Community	<ul style="list-style-type: none"> Sidewalk dining Parklets 	<ul style="list-style-type: none"> Plazas Streetscape enhancements 	<ul style="list-style-type: none"> Tap value to fund larger plazas, winter garden, expanded programming, public art etc.
Retail and Non-Profit Diversity	<ul style="list-style-type: none"> Special permit can require ground floor retail Façade improvement matching grants 	<ul style="list-style-type: none"> Dedicated affordable space (fit-out, reduced rents) Small retail spaces Space convertible to retail 	<ul style="list-style-type: none"> Tap value of increased development to subsidize more retail/non-profit space Write down cost of public parking lots as subsidy Business Improvement District
Housing and Diversity	<ul style="list-style-type: none"> Inclusionary housing policy Increased density in return for 15% affordable units 	<ul style="list-style-type: none"> Expand to middle-income family housing (limited funding potential) 	<ul style="list-style-type: none"> Tap value of increased housing unit count to subsidize middle-income family units Write down cost of public parking lots as subsidy
Neighborhood Walkability and Livability	<ul style="list-style-type: none"> Design guidelines 	<ul style="list-style-type: none"> Active uses along side streets 	<ul style="list-style-type: none"> Parking lot infill with active uses, improved streetscape

Development Economics

The following series of illustrations gives a sense of the kinds of heights and densities that could be considered to enable the community to obtain developer assistance in providing the desired benefits.

The following three examples show how community benefits might be captured by allowing density bonuses for a site on Massachusetts Avenue, using a special permit process for reviewing how well the project meets all of the community goals. There is a trade-off between the impacts of more height and density and the benefits derived from the increased values. The Committee was willing to see greater heights on Massachusetts Avenue, in particular, in exchange for a range of benefits.



Option 1: existing zoning heights+ FAR

Benefits:

- Inclusionary housing (15 units)
- Small plaza
- Ground floor retail



Option 2: +2 floors, +20% FAR

Benefits:

- Inclusionary housing (15 units)
- Large plaza
- Ground floor retail
- Middle-income housing (5 units)



Option 3: +3 floors+35% FAR

Benefits:

- Inclusionary housing (15 units)
- Large plaza
- Ground floor retail
- Middle-income housing (5 units)
- Affordable retail/non-profit space (12,500sf)

The following four images, successively higher and denser, show how the tool for capturing economic benefits by allowing density bonuses could play out on a site at the corner of Bishop Allen Drive and Norfolk Street. The first image on the upper left shows the existing condition, where a corner of the parking lot is visible, with the Odd Fellows Hall in the far background. The image on the upper right shows a building on the corner with a 55-60 foot high cornice, with greater height up to 80 feet set back, using a 45-degree setback plane. The image on the lower left shows the greater height up to 120 feet, and the densest image on the lower right illustrates a building at 140 feet.



The following three images illustrate some sample scenarios for how the organization of new buildings and open space at the corner of Norfolk and Bishop Allen Drive could yield different results—the first is the existing condition. The second shows a small green square at the corner, with a building beyond—housing with ground floor retail that would animate the square; there is also some open space within the site. The third shows a housing edge along Bishop Allen Drive, with active uses on the ground floor.



CHAPTER 3

GOALS & RECOMMENDATIONS

GOALS:

1. PUBLIC PLACES TO BUILD COMMUNITY

Enrich the Square's public realm to invite community interaction at many levels from meeting a friend to citywide festivals.

2. RETAIL, CULTURAL AND NON-PROFIT DIVERSITY

Celebrate the mix of old and new, venerable and funky, culture and business and other sources of diverse activities that make the Square a great Main Street and Cultural District.

3. INCREASE HOUSING STOCK AND PROMOTE RESIDENTIAL DIVERSITY

Support a diverse community through more and varied housing choices.

4. CONNECTING PEOPLE TO THE SQUARE

Enrich neighborhood walkability and livability with safe, green streets and improved access choices.

5. A SUSTAINABLE FUTURE FOR CENTRAL SQUARE

Enhance the Central Square environment by making "green" development choices.

Central Square is Cambridge's downtown and a center for nearby neighborhoods; a vibrant cultural district; a sustainable urban environment that invites people from all walks of life to shop, live, enjoy entertainment and the arts, find community together; and more.

The architect Jan Gehl's assertion "First life, then spaces, then buildings: the other way around never works" captures the Square's character and the spirit of planning for its future...

First life... is about welcoming the diversity of the people who use Central Square: a spectrum of incomes; children and retirees and every age in between; people of many races and ethnicities; techies, students, and artists; Cantabrigians and tourists; residents and workers, retailers nonprofits and other businesses; lifelong residents and newcomers; people who use the Square to connect to myriad other destinations and as their "living room" to hang out. People from every walk of life have a stake and can contribute to the Square's vitality.

Then space... is about enhancing Central Square as a downtown whose mix of uses and character invites and expresses diversity: changing character by location; home to long-term and new local businesses along with childcare centers, arts collaborative, and late night music venues; respected and beloved educational and cultural institutions; public spaces that celebrate the arts and technology; streets intended for transit, walking, biking, and festivals as well as cars; a public realm marked by green lawns, trees, and flowers and the lively sidewalks of Massachusetts Avenue; parks and squares that invite quiet conversations between friends and the buzz of everybody's downtown. This rich mix brings the Square to life.


Then buildings... express this mix with variety that reinforces both the vitality of a downtown and the livability of adjacent neighborhoods: an emphasis on housing for a diversity of people and households; a love of innovation and a commitment to preserve a rich heritage; blocks that mix taller structures with shorter ones; buildings that step down to a quiet residential face toward nearby neighborhoods and up to a vibrant mixed-use face toward Massachusetts Avenue. A variety in massing and design can invigorate the heart of the Square and respect its neighbors.

Celebrating this rich mix presents a unique opportunity. Nurturing it is a responsibility shared by the entire community.

A large, diverse crowd of people is gathered on a city street, likely for a community event or festival. In the foreground, a woman with short dark hair and large hoop earrings is looking towards the right. Behind her, a man in a white shirt and a police officer in a white uniform with a peaked cap are visible. The crowd extends into the background, where more people are walking and talking. Several police officers in dark uniforms are also present. The street is lined with brick buildings, some with multiple stories. A black lamppost with two white globe lights stands prominently in the foreground. The sky is blue with scattered white clouds. A sign on the left side of the street reads "RIGHT LANE MUST TURN RIGHT".

GOAL 1

PUBLIC PLACES TO BUILD COMMUNITY



Central Square, from Massachusetts Avenue all the way to Main Street, should work as a great public space. This corridor is the defining space for the Square, and should be made into a continuously lively and attractive “Main Street.” As a corollary, it would be important to add new publicly accessible open spaces, and to improve existing public spaces to invite a broader range of community activities.

This expansion of activity should include the intensification of programming in public spaces within the Central Square Cultural District to provide opportunities for community activity, celebrating cultural diversity and the arts. For successful activation of the Square, creation of any new public gathering spaces should be accompanied by efforts to expand the “public” using them, through associated creation of housing, as well as retail, cultural and/or office space drawing more people to Central Square daily.

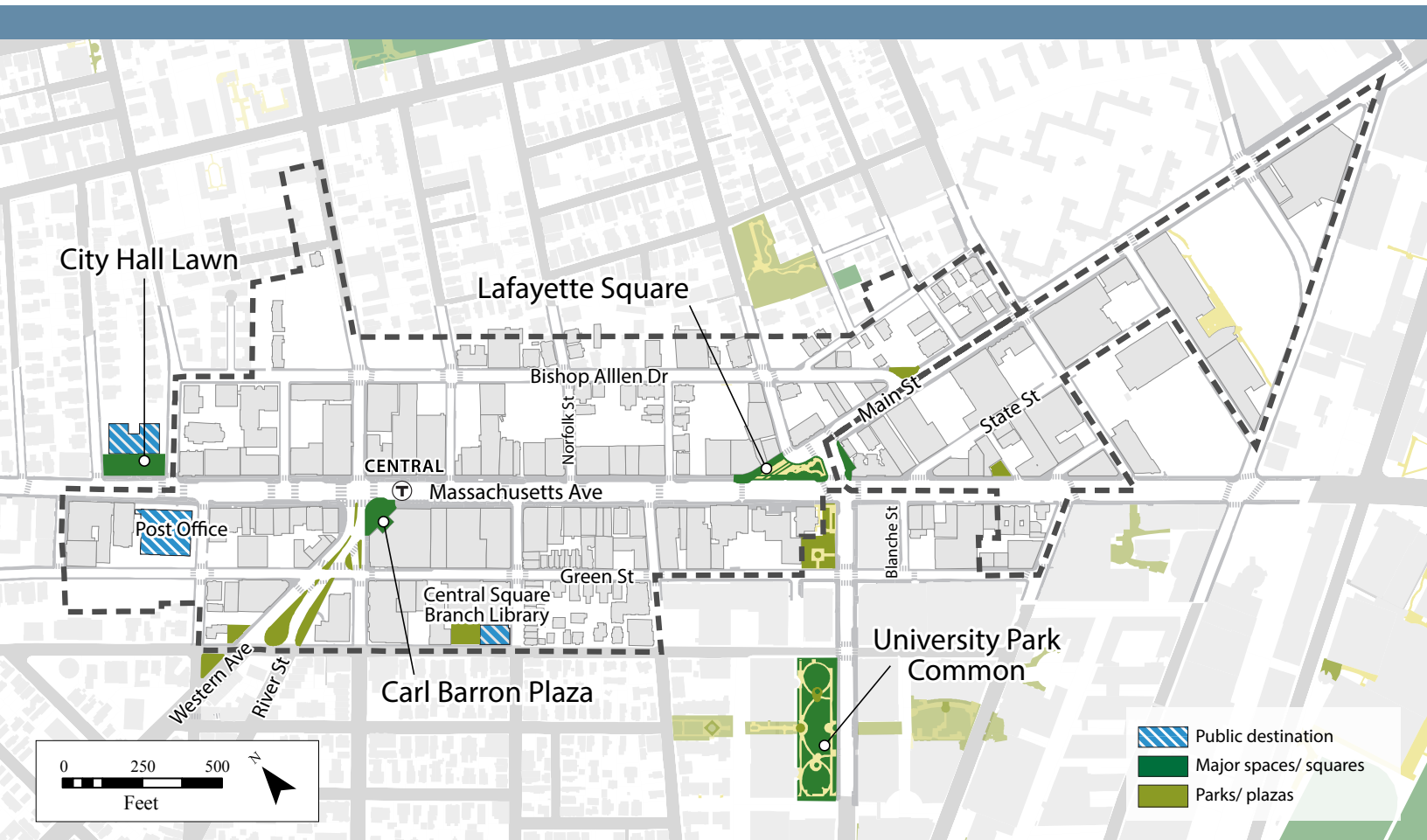
A Encourage creation of new outdoor and indoor public gathering spaces in conjunction with future private developments.

Use of height and density bonuses for private sites is recommended in return for creation and programming of new outdoor and indoor public gathering spaces. If development includes redevelopment of sites adjacent to existing public spaces, careful consideration to integrate and program the existing public space is needed.

Key locations and initiatives include:

Small plazas/pocket parks

- Create pocket parks along Bishop Allen Drive as part of the conversion of current city parking lots. Alternative program concepts for further exploration may include a pedestrian court connecting Bishop Allen Drive and Massachusetts Avenue and/or a children's play space.
- Create small plazas along the sunny, north side of Massachusetts Avenue in conjunction with redevelopment projects. Emphasize opportunities for outdoor dining and seating, taking advantage of good access to direct sun.



- Enhance the small plaza at Bishop Allen and Main, and create a publicly accessible courtyard at the Novartis development.
- Create a pocket park at Green and Blanche Streets as part of adjacent redevelopment. Ensure new development includes occupied ground floor spaces facing park.

Western Avenue/River Street improvements

- Proceed with planned improvements to Western Avenue/River Street park spaces, for coherence and usability.

New connections in the Osborn Triangle

- Incorporate green elements into new street/access connection between Main and Mass Ave enabled by redevelopment. Consider incorporating ground floor retail, visible from Massachusetts Avenue and/or Main Street, as part of this connection. Consider opportunity for permanent or periodic pedestrian streets in the Osborn Triangle (e.g. portions of Front, State and/or Village Street).

Indoor public gathering space

- Encourage establishment of a 'Public Room' and/or public market in association with property redevelopment or adaptive reuse, especially of a public building or parking lot. To ensure retail marketability and significant public use, locate the facility near areas of heavy pedestrian traffic such as the Red Line station and make sure it is well connected to existing and proposed residential areas and public spaces.



This indoor plaza was developed in conjunction with private real estate development. The plaza is open to the public and is valued as a venue for public and private events. (Waterhouse Pavilion in Miller Plaza, Chattanooga)



This newly developed block in Washington D.C. has created a public alley through the development connecting with public streets. This alley creates a needed connection activated by outdoor dining. (Cady's Alley in Georgetown, Washington DC)

Rooftop gardens

- Rooftop restaurants and publicly accessible rooftop gardens in areas that are away from dense residential neighborhoods.

Central Square branch library

- Consider an alternative location for the Central Square branch library that is located on Massachusetts Ave and focuses on technology, art, and culture.
-

B Improve existing public spaces through enhanced programming, improved adjacent uses, and physical improvements, if needed.

The list below includes conceptual ideas that would need to be refined for each location to maintain universal access and work with other desired elements such as Hubway bike share stations.

Key locations and initiatives include:

Post Office sidewalk as an extension of City Hall Square:

- City Hall lawn offers a wonderful public space for passive use, particularly in summer. There is potential to similarly activate the wide sidewalk space across Massachusetts Avenue, along the Post Office building, through creation of a parklet to make this a useable and recognizable space.

Carl Barron Plaza:



The long and complicated process leading to the creation of Lafayette Square (1983 concept to opening in 2008) has helped make a place that is rare in C2—one in which people are comfortable lingering, which provides space for outdoor dining, and one that links previously disconnected parts of the square.



Until recently, University Park Common has been somewhat isolated from the activity of nearby Lafayette Square and the broader Central Square scene. Currently, Forest City is working with the community and the Central Square Business Association to bring more people to the Common through sponsoring events and providing more moveable furniture.

- Working with the Central Square Business Association (CSBA), businesses, and adjacent property owners, introduce more event programming, beginning with quickly implemented smaller events and if appropriate, building toward larger events.
- Connect with adjacent property owners to tenant vacant space to a use that would help animate the plaza.
- Consider redesign of Carl Barron Plaza to organize the space to better separate circulation from seating, create improved spaces for people to linger, and accommodate the possibility of programming such as music performances and buskers.

Jill Brown-Rhone Park / Lafayette Square:

- Introduce more active ground floor retail and residents near the park to take advantage of expanded programming opportunity.

University Park Common:

- Enhance perception of public access through such means as removing perimeter fencing, adding programming for children, and continuing to host public and neighborhood events.
- Improve wayfinding and signage to connect to Mass Ave.

Massachusetts Avenue:

- Enhance existing public spaces as noted above, create new public space interventions and introduce whimsical public art and performances to support the Central Square Cultural District and transform Massachusetts Avenue into a great street that serves as an important public space for Central Square.



This overview shows Carl Barron Plaza in the foreground, and the Mass Ave corridor leading towards Lafayette Square/Jill Brown-Rhone Park and MIT. Rethinking Carl Barron Plaza to make it a more hospitable place is a key concern of the C2 Committee. Simplifying the ground plane to allow more flexible seating and better possibilities for performances are ideas to pursue.

C Install parklets to create high-impact, low-investment public space on underutilized sidewalk areas. Partner with business/property owner/organizational programs.

Parklets offer important short to medium-term opportunities for public space.

Possible locations include:

- Post Office plaza (consider USPS and/or Cambridge Senior Center as partner). Coordinate with adjacent Hubway station.
- Carl Barron Plaza and/or Western Ave opposite the Plaza (consider interactive information/arts theme including real-time transit information; with MIT Media Lab, CAC).
- Mass Ave opposite Norfolk Street (consider Dance Complex, with dance/healthy play theme, as partner).
- Mass Ave opposite Jill Brown-Rhone Park (consider Central Square Theater, CCTV, Salvation Army, Forest City and/or Cambridge Fire Department as partner).

D Use City resources to maintain fully public nature of public spaces and provide clear information about the level of openness of privately owned spaces open to public use.

- Create a mechanism to record, update, and monitor public benefits commitments by developers that are transparent and easily accessible to the public. Implement measures to monitor compliance and enforcement.
- In considering alternative means of reaching a goal, for example creation of publicly beneficial space in a new development, select the means that retains the most control for the City.

E Programming

Farmers Market

- In the event of redevelopment of the current City parking lot, accommodate the Central Square Farmers Market at or near its current site, Jill Brown-Rhone Park or other suitable location.

Partnerships

- Work with any interested business or organization to enable their assistance in programming appropriate use of public spaces. Assistance may include design, funding and management.

Consider feasibility and impacts on businesses of expanding free, public wifi in Central Square.

F Require active ground floors to establish Mass Ave and Main Street as great public spaces.

Active ground floor uses along Massachusetts Avenue and Main Street are desired, as lively pedestrian flow from Central Square to Kendall Square is anticipated to connect the two Squares. Active ground floors include retail space or space designed to accommodate retail in the future. Lobby spaces might be allowed in limited areas.

1. Develop/adapt buildings to include active ground floor uses.
2. Key locations include the following
 - Extension of Sidney Street at Lafayette Square e.g. through replacement of the existing frame residential building. Retain historically/culturally significant structures.
 - One or both sides of Sidney Street from Mass Ave to and along University Park Common.
 - City parking lot edges, and other large parking lot frontage along streets/sidewalks.
3. Install green “biowalls” or public art where parking structure walls abut sidewalks, in particular along south-facing portions of the Green Street and Quest parking structure on Bishop Allen Drive.
4. Encourage the use of technology-based ideas for signage, wayfinding, and providing information on events and transit.



This image of a well-designed parklet illustrates the positive impact of creating temporary public space in underutilized curbside parking spaces. Several locations on sections of the sidewalk in Central Square have been identified as having potential for such intervention. (San Francisco)



The Central Square Improvements project in 1997 added five feet of space to the sidewalks on both sides of Mass Ave. In the photo, one can see the newer row of trees now planted in the five feet of additional space. Opportunities for outdoor dining like this one help make the Square an appealing place to be.

A photograph of a man and a young boy interacting with a large, abstract, metallic sculpture. The man, on the left, is wearing a light green blazer and is smiling as he holds the boy's hands. The boy, on the right, is wearing a blue hat with a feather and a grey sleeveless shirt, and is also smiling. They are standing in front of a red brick building. The sculpture is made of large, curved, metallic pieces. In the background, other people are visible, including a man carrying a baby. The text "GOAL 2" is overlaid in a red box in the top left corner, and "RETAIL, CULTURAL, AND NON-PROFIT DIVERSITY" is overlaid in large white letters across the center of the image.

GOAL 2

RETAIL, CULTURAL, AND NON-PROFIT DIVERSITY



A major goal for C2 is to expand retail and entertainment opportunities while celebrating and nurturing the mix of old, new, venerable and eclectic businesses and cultural institutions. In growing the Square this way, it is important to reinforce the Central Square Cultural District as a vibrant retail and cultural destination for nearby neighborhoods and the city.

To avoid the issues associated with vacant storefronts, businesses and owners need to support an attractive and vibrant walking environment by keeping retail storefronts continuously occupied with active uses that engage the public realm. The community wants locally-oriented enterprise, so every effort should be made to enable valued businesses and non-profit organizations to get started and maintain a long-term presence in the study area.

A Require retail and other active ground floor uses, particularly along Massachusetts Avenue between City Hall and Jill Brown-Rhone Park and the Osborn Triangle to encourage lively mixed-use activity in Central Square.

- Require ground floor retail along Massachusetts Avenue.
- Require active ground floor uses along Main Street.
- In other areas, design ground floors to be converted to retail. Considerations include adequate ceiling height, accessibility, services, capacity to accommodate venting for restaurant use.
- Exempt ground floor retail floor area from counting toward density limits with dimensional constraints to provide diversity of retail and support local businesses
- Where retail has limited market potential, exempt floor area of uses such as child care, arts uses, non-profit office space and similar community-serving uses from counting toward density limits; consider also allowing an equal amount of floor area as bonus density.
- Permit and encourage second floor retail.
- Create incentives to encourage housing and expand the number of people supporting retail and cultural enterprises.

B Work with CSBA, Cambridge Arts Council (CAC), and property owners to expand opportunities for occupancy of temporarily vacant storefronts.

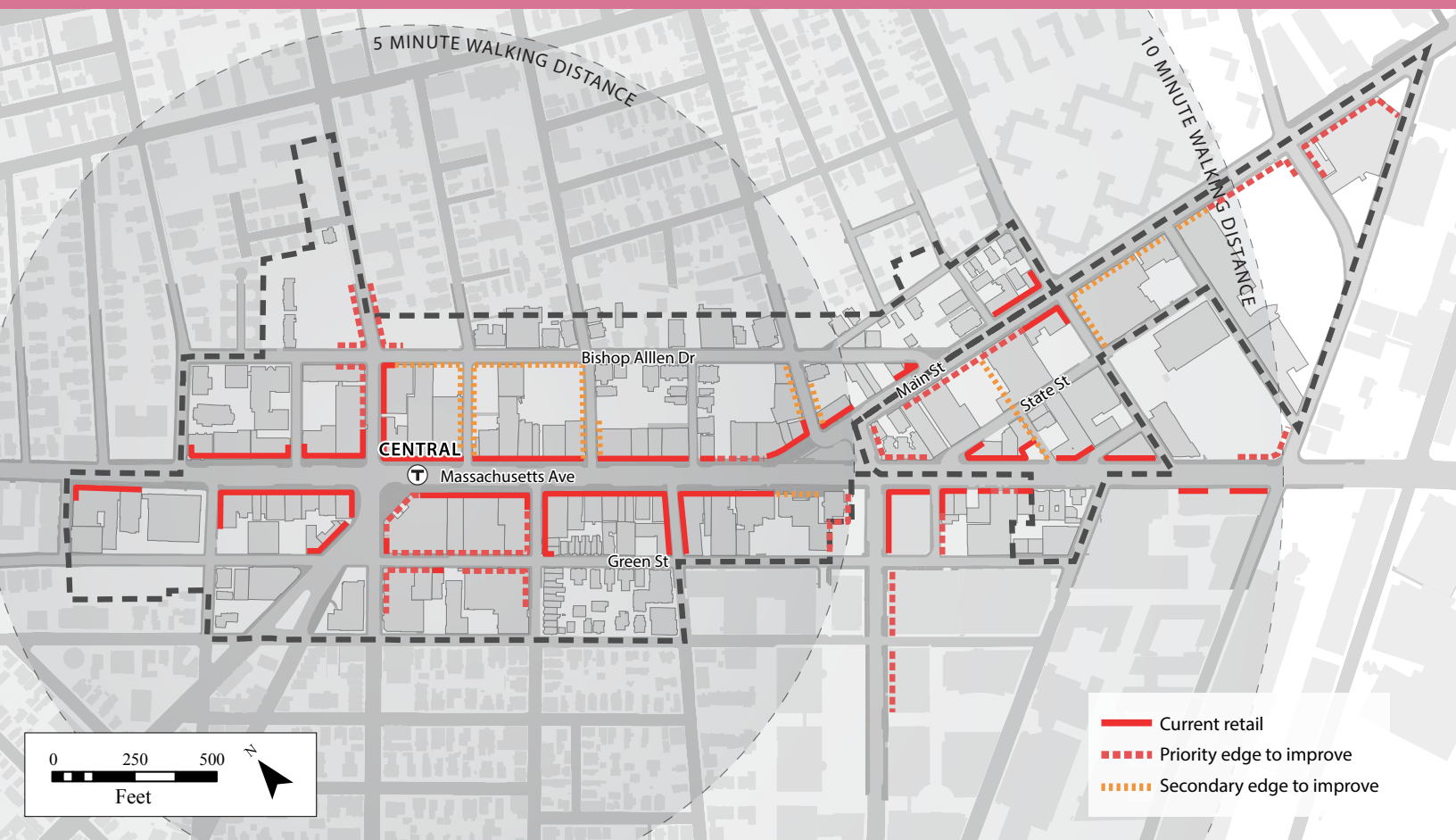
- Proactively work with owners of vacant spaces to suggest opportunities for installation of public art, temporary or “pop-up” retail, or other uses that contribute to the overall economic prosperity and character of the Square.
- Establish convenient mechanisms to help temporarily fund insurance, utilities and/or related costs that may impede short-term occupancy.

C Consider requiring creation and management of market stalls, in return for bonus density or as a condition of city parking lot redevelopment.

- Verify costs and feasibility of rental of small market stalls (indoor and outdoor, including mobile cart opportunities).
- Locate any market stalls in a highly visible, marketable area with significant passing pedestrian traffic such as adjacent to a major public plaza or public room.

D Encourage expression of creativity in the public realm

- Partner with CSBA, business and property owners to create interesting and fun public art that adds to the vibrancy of the Square.
- Consider an annual storefront award program to encourage and recognize creative storefront displays.
- Consider relaxing signage control in the Central Square core to encourage creativity and foster a graphically interesting landscape.



This plan shows “occupied retail” in red, “priority edges to improve” in dashed red, and “secondary edge to improve” in dashed orange. The goal is to make the active, retail-oriented experience as continuous as possible. Continuous retail at the ground floors of buildings in C2 is a necessary condition to be able to achieve vibrant life on the sidewalks and adjacent public places.

E Support local businesses such as retail and restaurants.

- Publicize database of available retail and office spaces to help market spaces to potential tenants.
- Continue CSBA and City's work to recruit and match desired retailers for available space.
- Encourage tourism through measures such as accommodations for parking tour buses.
- Remove fast food cap in Central Square. Instead, create new regulation to limit formula businesses, and limit use of disposable, non-compostable serveware.



Local businesses play an extremely important role in creating the character of Central Square. Many of the cafes and restaurants in the Square are locally-owned, and are part of this special community.

F Offer incentives for providing community benefits, such as affordable space for retail and non-profit organizations.

- Allow modest density and/or height increases where appropriate.
- Consider requiring, in return for bonus density or as a condition of city parking lot redevelopment, a one-time up-front subsidy such as waived rent (e.g. for 6-12 months) or free fit-out of space for eligible businesses. As possible, invest the fit-out subsidy in building elements that would also have value for a future tenant should the first tenant fail within a limited time period (e.g. HVAC, kitchen facilities). Criteria for eligible businesses may include:
 - Limitation on floor area of subsidized space
 - Non-eligibility of formula retail formats associated with national chains (i.e. fast food)
 - Limit on total number of outlets of eligible businesses

G Promote the identity of Central Square and the Central Square Cultural District.

In 2013, the City of Cambridge secured the highly competitive state-designated title of MA Cultural District for the Central Square Cultural District (C2CD). This designation highlights the unique character and activity of this area of the city, focusing on the mix of small, eclectic, independently-owned shops, creative start-ups and larger, well-established corporations. The city is committed to supporting the Cultural District as a way to celebrate the vibrancy of Central Square, engage positively with residents and visitors and collectively establish a local economic engine that will attract high-level creative sector workers, businesses, makers and regional and national cultural tourism. The district designation is formally in effect for a period of 5 years and ties together these diverse communities through a unified message emphasizing and celebrating the unique mix of business, art, entertainment and food in the Square.


H Encourage further engagement of cultural organizations, neighborhoods and other stakeholders, as well as businesses, in CSBA initiatives to expand capacity for and participation in Central Square management.

I Support the CSBA as it explores the feasibility of a Business Improvement District (BID) or other mechanism to enable sharing of resources and to expand management and funding capacity for initiatives such as marketing, cultural/community events, communications and tenanting support, fielding “ambassadors” in the Square, cleanliness, adding and maintaining plantings etc.

GOAL 3

INCREASE HOUSING STOCK AND PROMOTE RESIDENTIAL DIVERSITY





The C2 Committee has stated that the most important thing that can be done to preserve the diversity of the Square is to increase the supply of housing. Furthermore, it is important to add housing with special attention to affordable and middle-income choices to support community diversity and cultural and economic activity. In this endeavor, both expansion of the housing stock and increasing the range of housing choices to serve a broad spectrum of incomes, ages and household sizes are essential goals.

Central Square and the Osborn Triangle can have a significant impact on providing housing opportunities in Cambridge within walking distance of employment, retail, and amenities. New housing would include units affordable to low and moderate income residents as required by the City's inclusionary housing requirement. Citywide, inclusionary zoning has helped create more than 700 units of affordable housing since its inception in 1998. If parking lots and other sites with significant untapped zoning capacity in Central Square and the Osborn Triangle are redeveloped, as many as 100 or more additional affordable and/or middle-income housing units could potentially be created.

A Facilitate appropriate infill development and adaptive reuse by reducing or eliminating minimum parking requirements.

Update parking requirements so that existing developments may request reduced minimum parking requirements as part of development proposals (including adaptive reuse, infill development and/or more comprehensive redevelopment). Minimum parking requirements associated with existing development in some cases require property owners to maintain more parking spaces than are actually needed to meet typical demand. Reducing these requirements, consistent with the reduced parking requirements the City has typically applied in recent development proposals in response to increased use of transit, walking and biking, would discourage traffic growth in the study area and help create potential for higher-value uses serving community goals of the C2 Plan.

B Incent development of middle-income family housing and additional affordable housing through all possible means, including density bonus and conditions of city parking lot redevelopment.

- Continue to apply Cambridge's established inclusionary zoning program, which provides an incentive for developers to include affordable units in new development projects.
 - Offer bonus density and/or height, beyond that offered by the inclusionary affordable housing policy for the development of middle-income housing. Any bonus density must be subject to the design guidelines.
 - Consider making development of middle-income family housing a condition of sale of the City parking lots for redevelopment.
-

C Encourage development of housing in the Osborn Triangle, particularly along Main Street facing the Area 4 neighborhood, as well as on the block contiguous with Jill Brown-Rhone Park.

- Enable transfer of housing density within the Osborn Triangle area. Maintain existing 55' cornice height limit and 45 degree upper floor setback plane at Main Street, while considering bonus height in the direction of Massachusetts Avenue.
- Create a housing incentive in Osborn Triangle along Main Street.
- Take special note of Newtowne Court's proximity to the Osborn Triangle; ensure community input to development plans, especially along Main Street; ensure that any Main Street development responds positively to the Newtowne Court adjacency.

D Remove zoning and permitting barriers to allow "micro-unit" development.

Encourage development of "micro-units" where appropriate to provide diverse housing choices. However, do not allow these to count toward family unit goals.




In spring 2013, the long-vacant YWCA pool building was demolished to make way for affordable housing on the site. In addition, the YWCA is being significantly renovated, helping to support its longstanding mission of service to the community.

A woman with short grey hair and glasses, wearing an orange sleeveless top and a long olive-green skirt, is walking across a brick-paved crosswalk. She is carrying a white bag over her shoulder and wearing sandals. The background shows a green house with white trim and a white picket fence. The scene is brightly lit, suggesting a sunny day.

GOAL 4

CONNECTING PEOPLE TO THE SQUARE



To keep Central Square viable, it is essential to maintain and improve a variety of good transportation choices, including most importantly the MBTA facilities and services.

Enriching neighborhood walkability, bikeability, and livability with safe, green streets and improved access choices is a key priority. This requires a focus on enhancing the street network to make walking and biking more convenient, safe, and fun. To connect people to the Square, adding plantings and green infrastructure, where possible, would encourage a healthier and more pleasant environment.

The trend in Cambridge has been towards increased use of non-auto modes of transportation and automobile ownership has been declining. Parking requirements in zoning should be updated to reflect utilization and to optimize parking supply to match anticipated demand.

A Establish and improve pedestrian connections to create better walking environment — within the square and to the neighborhoods (See Central Square Design Guidelines 2013).

- Enhance residential street edges and accessibility.
 - Activate side streets with appropriate retail and active uses.
 - Widen sidewalks where widths are inadequate to accommodate pedestrian flow. Specifically, widen the Magazine Street sidewalk at Carl Barron Plaza and adjacent bus stops as much as possible without impeding bus operations.
 - Improve pedestrian street lighting to increase safe and convenient access to evening cultural and dining destinations.
 - In the Osborn Triangle west of Windsor Street, encourage activity and a sense of neighborhood around Jill Brown-Rhone Park and discourage the dominance of commercial uses that are not pedestrian-oriented in the area.
 - Break up large blocks in the Osborn Triangle by creating pedestrian connections, covered or open, which enhance community connectivity. e.g. Village Street extension, which would create a connection between Mass Ave and Main Street.
-

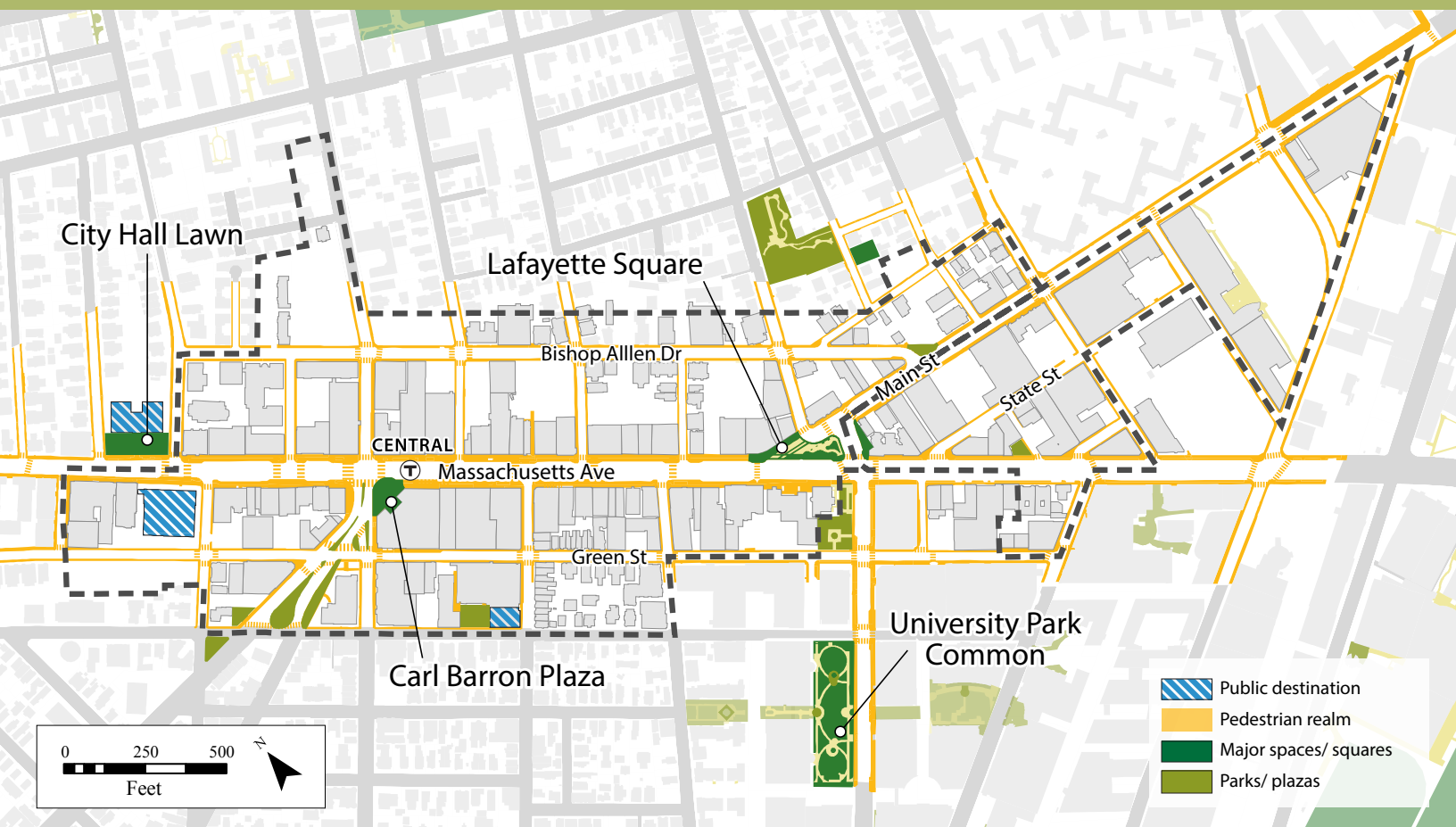


In the Osborn Triangle, State Street is not well connected to Main Street (in the background of this photo).

Large blocks should be designed to make better pedestrian connections throughout this area.

B Develop real-time transit information service.

- Work with the MBTA to introduce real-time transit information service signage at bus stops in and near Carl Barron Plaza and Red Line station entrances. This should include bus schedule information.
- Collaborate with the CAC, MIT Media Lab and/or other partners as well as the MBTA to make information a signature experiential/identity element as well as a practical one.



This plan shows, in dark green, the key open space destinations: City Hall green on the left, Carl Barron Plaza at Mass Ave and Prospect, Jill Brown- Rhone Park at Main and Mass Ave/Lafayette Square, and University Park Common south of Lafayette Square. Achieving the goal of Connecting People to the Square means looking at the entire set of streets and sidewalks that knits together the neighborhoods, these open spaces, and the largest open space that is Mass Ave itself.

C Encourage transportation modes other than driving when visiting Central Square.

- Identify and eliminate policies that subsidize automobiles.
 - Reduce outdated minimum parking requirements to enable appropriate infill development and adaptive reuse, which will create continuous street edges.
 - Define fixed parking maximums and flexible minimums (based on analysis and as approved by Planning Board) for all uses.
 - Accommodate shared parking where feasible.
 - Coordinate among different transportation modes while discouraging automobile use.
 - Enforce traffic ordinances to minimize conflict between vehicles, cyclists and pedestrians.
 - Monitor pedestrian and vehicle flow/conflict impacts of new development in critical locations, such as at Magazine Street and Mass Ave.
 - Review all signage at Mass Ave/Prospect/River/Western Ave to provide better guidance to vehicles.
 - Review parking meter/parking lot payment policies to provide consistency.
 - Evaluate adoption of technology-based payment solutions including credit card and pay by cellphone.
-



Central Square Station, one of the busiest in the MBTA system, is complemented by several bus routes that make Central Square an important transportation node for the surrounding neighborhoods and for the city as a whole.

A group of four cyclists are riding on a city street. They are wearing helmets and casual clothing. In the foreground, a cyclist in a blue shirt and dark pants is riding towards the camera. Behind him, three other cyclists are visible. To the right of the cyclists, a white bus is partially visible. The background shows a city street with trees and buildings. The text "GOAL 5" is overlaid on a teal background in the top left corner.

GOAL 5

A SUSTAINABLE FUTURE FOR CENTRAL SQUARE



All changes in C2 should contribute positively to the City's goals for enhanced sustainability. To this end, smart growth through a mix of uses, with special emphasis on housing within a half mile of the MBTA station, is essential.

Future buildings should achieve high sustainability in building design and energy and water management. Central Square shows higher temperatures than surrounding green areas due to heat island effect. Measures to increase vegetation both in the public realm and on private sites are important to address this phenomenon.

Also fundamental is to encourage people to walk, bicycle, and take transit rather than automobiles, and to support options such as car-sharing and bike-sharing so that Central Square residents can live comfortably without owning a car.

A Proposed sustainable development measures (to be updated, as needed, to reflect advancement of state-of-the-art sustainability strategies and achievements):

- All commercial development within the study area that is subject to Sec. 22.20 (Green Building Requirements) of the Cambridge Zoning Ordinance must meet LEED (Leadership in Energy and Environmental Design) criteria at the Gold level. Residential buildings are encouraged to meet this threshold as well.
- Commercial buildings must track energy using Energy Star, Labs21, or LEED-EBOM tools and methodologies and must report energy use to CDD on an annual basis for 5 years after the building is occupied. Residential buildings are encouraged to follow these steps as well.
- (Re)development must meet the Cambridge Department of Public Works standard for water quality management and the retention/ detention of the difference between the 2-year 24-hour pre-construction runoff hydrograph and the post-construction 25-year 24-hour runoff hydrograph. Low impact development strategies are particularly encouraged as a means to meeting this standard (existing DPW standard to be included in zoning).
- Development proposals in the Osborn Triangle must include a study of the technical and cost feasibility of utilizing the district steam system to provide heating energy for new or existing buildings in the PUD.
- Planning Board may allow dimensional or other zoning relief to allow co-generation and other energy systems that allow developments to utilize waste heat and other shared solutions to minimize energy loss.
- Enhance property owner awareness of incentive programs for insulation, historic restoration and other means of achieving better environmental performance with existing buildings.

B Use future buildings, site planning, and public realm design to reduce heat island effect.

- Require cool roofs (green or white).
- Encourage green walls.
- Encourage trees, greenery throughout, both in public space and as part of private development.

C Encourage advancement of green building criteria by revising standards as better tools become available to match advancements in technology and application.

D Encourage transportation modes other than driving when visiting Central Square (See Goal 4: Connecting People To The Square for more detail).

E Add stormwater retention and infiltration infrastructure where appropriate to address flooding and water quality challenges.

- Create a stormwater facility near Jill Brown-Rhone Park, coordinated to accommodate associated development and/or public open space on-site.
 - Where appropriate, utilize measures (e.g. pervious pavement and rain gardens) along streets where they can effectively aid stormwater management. Encourage adjacent property or business owners to help maintain rain gardens.
 - Increase on-site retention and cleansing of stormwater in new development and adaptive reuse through encouragement of green roofs, cisterns, tanks, rain gardens and/or related strategies as appropriate.
-

An aerial, high-angle photograph of a busy city street, likely in New York City. The street is filled with cars, buses, and trucks, moving in both directions. On either side of the street are various buildings, including older brick structures and modern high-rise apartments. In the background, a dense urban skyline is visible under a cloudy sky. A semi-transparent grey box is overlaid on the upper left portion of the image, containing the title text.

RECOMMENDATIONS FOR ZONING

The following zoning recommendations flow from the C2 Goals and Guiding Principles. The overall approach for achieving the community goals is to allow density and height incentives for desired uses only if benefits laid out in this plan are provided.

OVERALL APPROACH: Take bold steps to achieve a melding of longstanding community aspirations and emerging opportunities.

1. Expand the supply of housing for a wide spectrum of incomes (from low to market rate) and household types (from family-sized to micro-units)
2. Vary the mix of uses, heights, and massing to reinforce the specific character of each part of the Square:
3. Allow the greatest variety of heights, massing and mix of uses along “downtown” Mass Ave and the Osborn Triangle, except for Main Street.
4. Support a mixed-use neighborhood character along Main Street.
5. Maintain lower heights, traditional setbacks, more residential focus in the areas abutting neighborhoods.
6. Transform the Square’s public spaces (including Mass Ave and other streets) into a connected system extending from University Park to the City Hall lawn, designed, programmed and managed to accommodate a wide spectrum of people and activities..
7. Preserve and expand the variety of types and scales of retail.
8. Emphasize transit, bikes, and walkability over cars.
9. Reduce parking requirements for housing where possible.

TOOLS: Capture increased economic value and leverage future development to create community benefit.

1. Use height and density bonuses for private sites to incentivize creation of mixed-income housing, affordable retail and non-profit space, a variety of public space, and other community benefits.
2. Allow use of Transfer of Development Rights (TDRs) in return for community benefits
3. Exempt area of ground floor retail or other permanent active use from counting toward density limits in return for a variety of retail types and sizes.
4. Tailor height and density bonuses and related community benefits to meet specific goals for the Osborn Triangle, Mass Ave “downtown” and other areas.
5. Waive upper floor façade setbacks along Mass Ave/Main St façade frontage and requiring upper floor setbacks on side streets, with streetwall heights transitioning from higher Mass Ave/Main St elevations to lower neighborhood streetwall precedents.

ZONING RECOMMENDATIONS

Portions of Central Square have been subject to different ownership and development dynamics throughout the last three years since the study began and some of the recommendations below have been adopted at the time of writing. First, the Novartis site on Massachusetts Avenue, across the street from their existing corporate facilities, was rezoned in 2011, early in the K2C2 process, with input from the project team. Then, the former All-Asia block was rezoned, with input from the project team, through a petition by Forest City Commercial Group for Millennium Pharmaceuticals in February 2013. The following discussion of zoning strategies is related to the four major goals of the plan with regard to the entire remaining C2 area to be considered for rezoning.

A CENTRAL SQUARE OVERLAY DISTRICT

BOUNDARIES: Expand the Overlay District to encompass the Heart of Central Square, Osborn Triangle, and Neighborhood Edge areas shown on the diagram.

The character of these sub-areas are very different now and are expected to continue to be different over time.

- Heart of Central Square serves as Cambridge's downtown business and retail center
- Osborn Triangle area serves as a complex mixed use connective tissue between the technologies focused office and lab development in Kendall Square/University Park/Novartis and the Area 4 residential neighborhood as well as the Heart of Central Square commercial downtown area. It is expected that this area will evolve to include a mix of uses including residential, office and lab uses, with active ground floors. (Re)development in this area will have a higher burden of placemaking through creating active ground floors in key locations, new connections, and incorporating public realm improvements.
- Neighborhood Edges are areas adjacent to the traditional Cambridge low-scale residential neighborhoods and future development in these areas should pay particular attention to transition, in terms of use, scale, and building/site design.

BASE ZONING DISTRICTS: No Change

OVERLAY DISTRICT PROVISIONS: Available by Special Permit from the Planning Board

FAR

- Non-Residential: Retain at 2.75
- Residential: Increase to 4.0

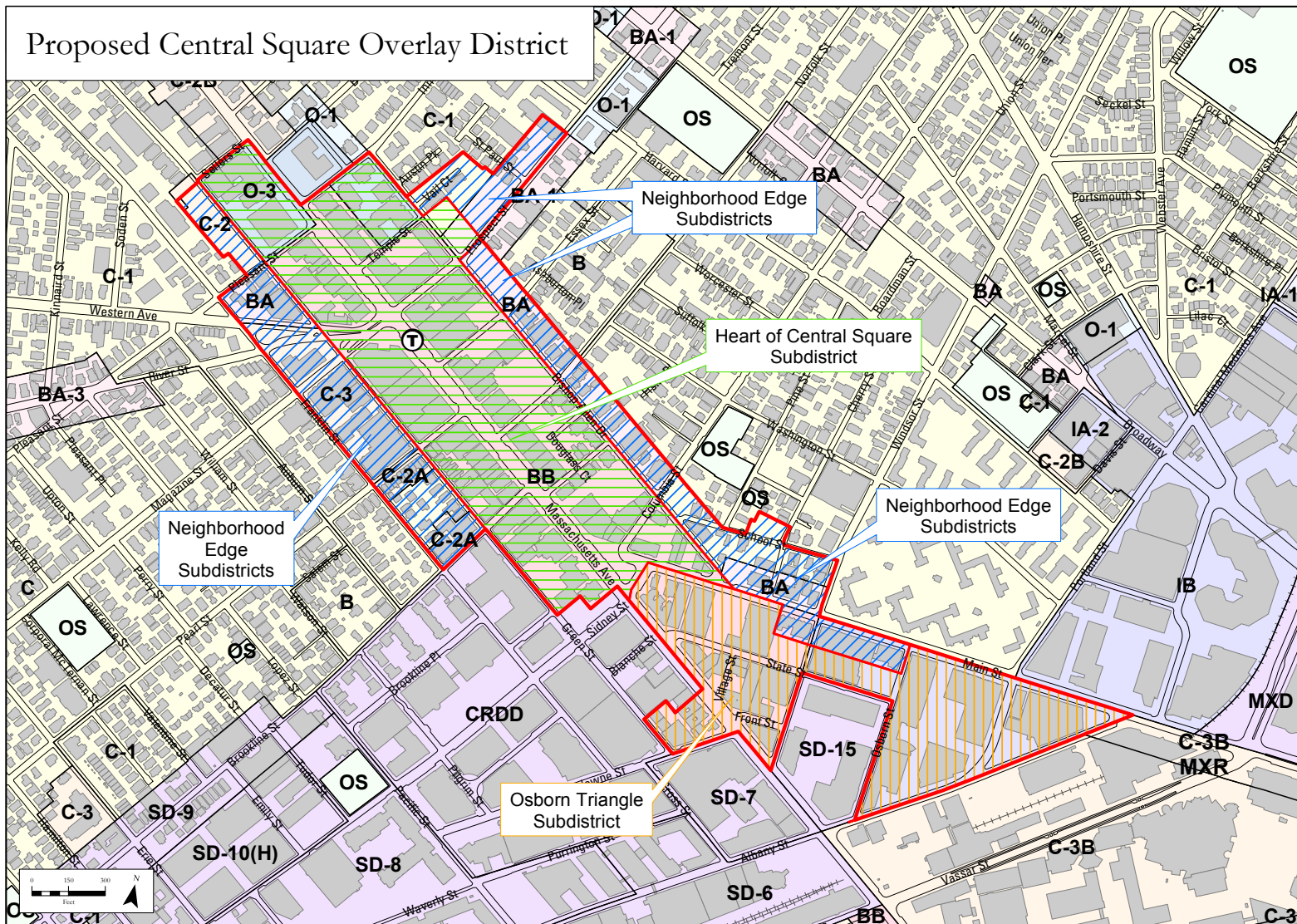
PUBLIC BENEFITS to be emphasized during special permit considerations

- Active ground floors
- Diverse retail – designed to appeal to independent retailers rather than large chains

- Increase housing stock – focus on middle income housing including family size units
- Encourage creation of public plazas and parklets
- Encourage office space appealing to (and affordable to) non-profits e.g. second floor space

ENHANCED PUBLIC BENEFITS Key considerations for the City Council when considering additional density and height over and above these recommendations on a case by case basis:

- Impact on neighborhood edges & residential neighborhoods
- Nature/amount of benefits e.g.:
 - Significant public space (indoor/outdoor),
 - Increased middle income and/or affordable housing
 - Enhanced retail support e.g. fitout assistance/reduced rents for min. time period
 - Reduced rents for non-profits



B MAXIMUM HEIGHT

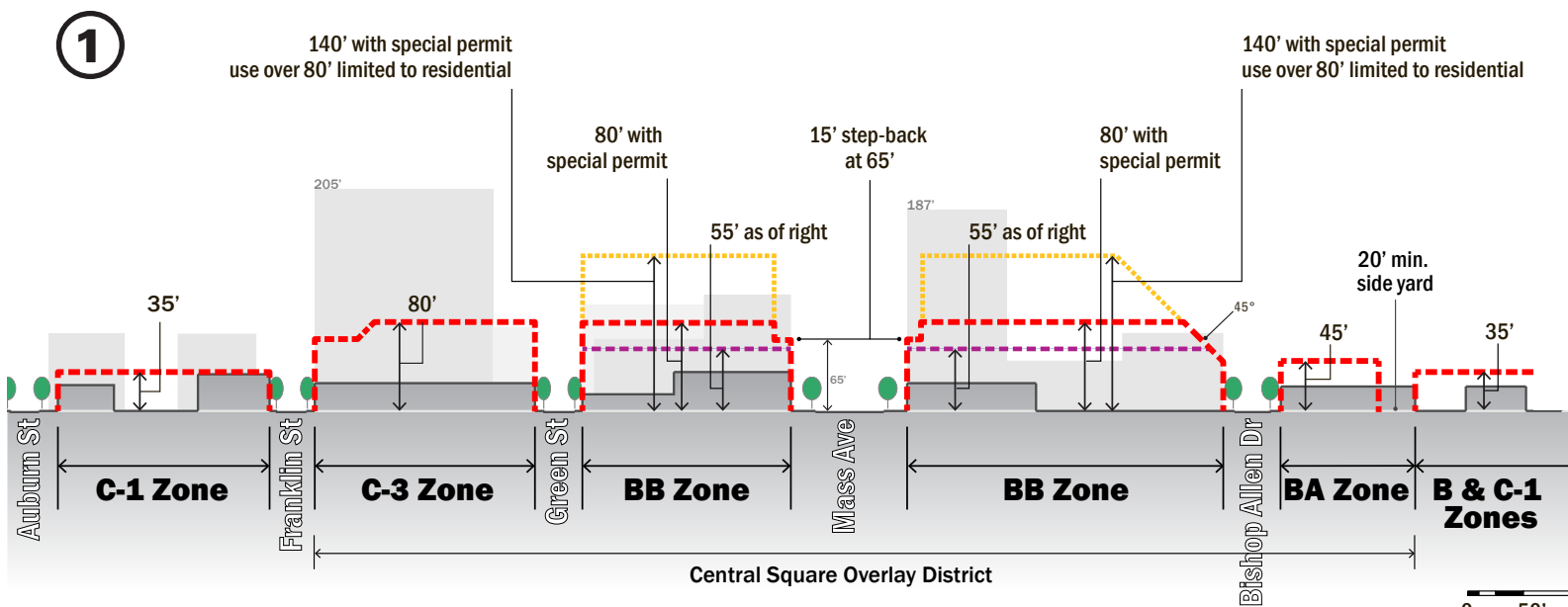
- Heart of Central Square: Non-residential: 80' Residential: 140' with floorplate above 80' limited to 10,000 sf*
- Osborn Triangle: Non-res: 100'** Residential: 160' with floorplate above 100' limited to 10,000 sf*
- Neighborhood Edges: Maintain FAR and heights as under current zoning and overlay provisions.
- Maintain 45' height abutting residential districts and 45 degree bulk control plane for all uses, to begin at parcel line

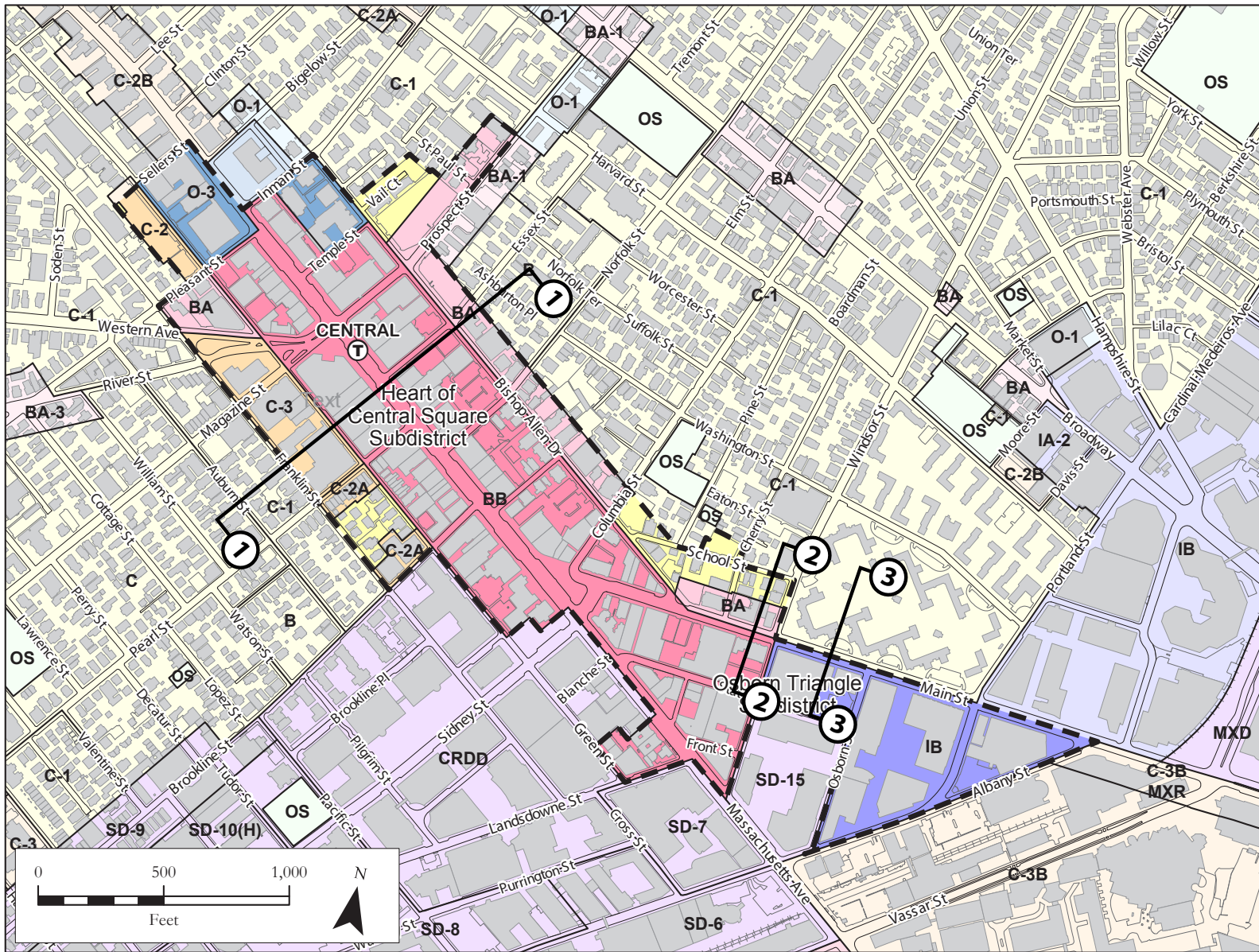
* (1) Middle-income component required (2) On sites over 40,000 sq. ft., height over 80'/100' limited to 25% of site area

** In parcels with IB base, non-residential development to 120' may be permitted

C HOUSING

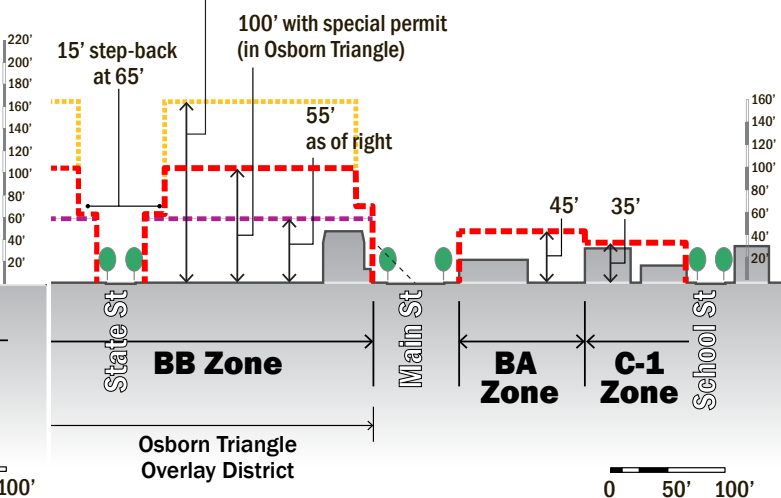
- Encourage housing creation throughout the area, with emphasis on middle-income housing
- Only housing permitted at heights above:
 - 80' in Heart of Central Square
 - 100' in Osborn Triangle
 - 120' in portions of the Osborn Triangle with IB base district
- 25% of residential units above the base FAR and heights noted above to be dedicated to middle-income. Generally family units (2-3 BR) are preferred in this category, unless incompatible with remaining building use.





②

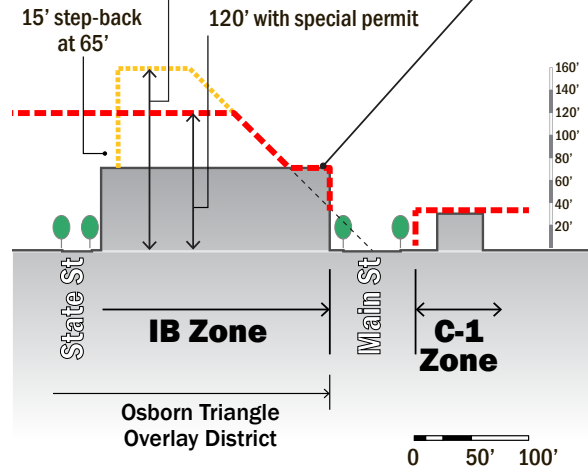
160' with special permit ;
use over 100' limited to residential



③

up to 160' with special permit ;
use over 120' limited to residential

45° step-back plane
(for portion rising above
more than 20' in addition to
the height permitted in
the abutting residential zone)



D TRANSFER OF DEVELOPMENT RIGHTS (TDR)

Mechanism

- Allow GFA transfer from Neighborhood Edge to Heart of Central Square and Osborn Triangle, and among sites within Heart of Central Square and Osborn Triangle
 - Would require special permit from the Planning Board showing plan for both the donating and receiving parcel.
 - Transfer of partial GFA may be permitted
 - If 100% of the GFA permitted on a site is being transferred, then use on donating lots may be public open space or middle-income housing at 0.75 FAR (within BB or IB base districts) or 0.5 FAR (all other districts)
- Allow additional 20 ft. height to accommodate transferred GFA in Heart of Central Square and Osborn Triangle

E RETAIL DIVERSITY AND NON-PROFIT SPACE

- Require ground floor retail along Mass Ave and active ground floor uses convertible to retail along Main Street
- Exempt ground floor and basement retail and ground floor daycare, non-profit space and public space from counting as GFA (within Overlay District) if:
 - Min. 30% GFA must be floorplates of 1,500 sf. or less
 - Max. 30% GFA may be floorplates of over 5,000 sf. or larger
 - For buildings with frontage greater than 50', 60% of the frontage must be devoted to storefronts with an average frontage of 30 ft. (not including ATMs in the calculation)
 - Relax criteria to accommodate daycare, indoor public room, public pedestrian/bike connections, non-profit space, and retail and retail-support (e.g. storage) space in the basement
 - Planning Board to have flexibility to approve variations if they meet the spirit of these criteria
- For storefronts vacant for 6 months or more, property owners must work w/ City, CSBA, local non-profits to provide short-term popup, arts, cultural, non-profit, or community uses
- Encourage affordable office space along remaining streets to cater to non-profits and small businesses
 - Bishop Allen Drive,
 - Green Street
 - perpendicular streets within a block of Mass Ave
- Encourage live-work housing models on ground floor along Bishop Allen Drive
- Remove impediments to new retail
 - Eliminate fast food cap; instead, create new regulation to limit formula businesses
 - Pay particular attention to limit use of disposable, non-compostable serveware

RECOMMENDATIONS FOR MUNICIPAL PARKING LOTS



RECOMMENDATIONS FOR MUNICIPAL PARKING LOTS

While public parking may be necessary to support the business uses in the Square, it does not animate the urban environment, nor is it an ideal neighbor for the variety of housing that surrounds it. While redeveloping the lots with more housing and ground floor retail may be a worthy goal, the increased density might be a concern for neighbors near to the site. In the coming years, much discussion will be needed to sort out the conflicting points of view so that businesses do not suffer a loss of necessary parking, while more positive use of the parking lots brings better community benefits.

With these concerns in mind, the C2 Committee discussed public benefits that might be considered for redevelopment related to the parking lots:

1. Creative, new public space that fosters community and supports arts and programming — outdoor (e.g. plaza, park) or indoor (public room/gathering space, public market, possible uses such as relocated Central Square library).
2. Mixed income housing — including a significant component affordable to middle income and low/moderate income residents, including 2-3 bedroom units designed for families.
3. Affordable retail and non-profit space especially focused on arts and culture.
4. Other goals indicated in the C2 Plan.
5. Redevelopment should improve public edges along streets and sidewalks and enhance walkability and connections between the Square and adjoining residential neighborhoods.
6. Redevelopment will require accommodation of short-term public parking either as part of the redevelopment on each site or evaluation of short-term public parking needed to support the Square based on creating a consolidated parking facility — below grade or above grade, faced with active edges at street level if this is needed to release the remaining lots for desired redevelopment. Traffic impacts of such consolidation and optimal amount of parking spaces to be replaced must be evaluated at the time such a solution is contemplated to match supply to need based on changing behavior over time.

This rendering is looking west down Bishop Allen Drive at the corner of Norfolk. On the right is the existing neighborhood. On the left is a suggestion for how the municipal parking lot could be used to make a better relationship to its setting. A small plaza is shown on the corner, with new housing, reflecting the scale of the existing neighborhood along the Bishop Allen Drive frontage.

TRANSFORMING SURFACE PARKING INTO A TRUE PUBLIC ASSET

The images on these pages show examples from elsewhere that are relevant to the Committee's goals for how to transform the City's surface parking lots. These are meant to be inspirational, but are not literally suggested as solutions for Central Square itself.



An interior or semi-enclosed space like the one pictured here could help meet the community's need for a gathering space.



Continuing the farmers market is a goal that has virtually unanimous support.



Outdoor plaza space could encourage spontaneous music as part of the life of the Cultural District.



People in the community expressed interest in a new library that would be much more visible than the existing branch library. This example is very glassy, and makes its presence as a library very visible.



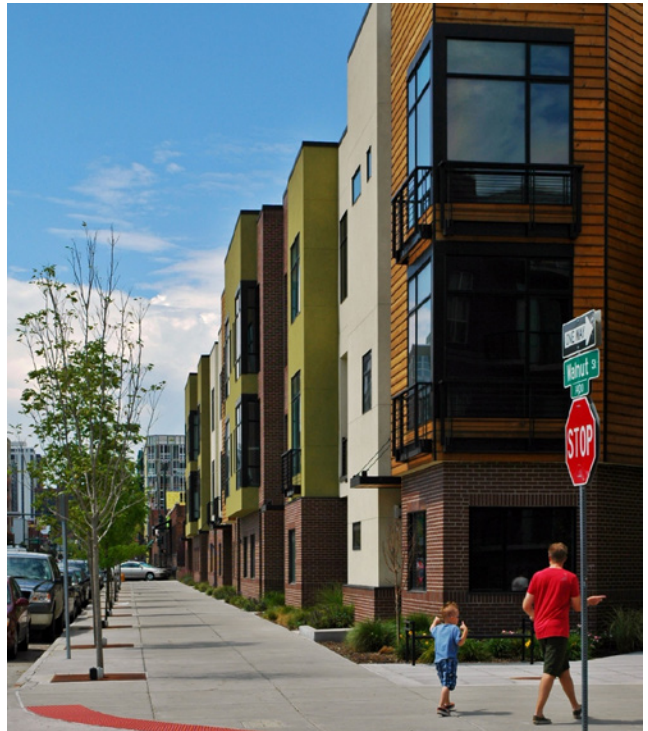
Vendors that spill onto passageways like this one could easily be imagined in redevelopment on and around the City lots in Cambridge.



Paley Park in Manhattan is a famous example of a small open space that creates a soothing oasis by the sound of its waterfall.



In addition, landscaping to replace on-grade parking can be an extremely positive transformation.



Housing on the parking lots should be carefully designed to have a human scale that relates well to the surrounding neighborhood.



RECOMMENDATIONS FOR TRANSPORTATION

GENERAL RECOMMENDATIONS

A CHARACTER AND STREETScape

Issue

- Reduce Mass Ave character as a thoroughfare.
- Need grand vision and cohesive design strategy. Need more trees/green - feels barren and unpleasant to walk.
- Cars dominate – Central Sq should be a place, not a jumble of cars.
- Streets parallel to Mass Ave shouldn't feel like alleyways.

Recommendation

- When Mass Ave is reconstructed consider interventions such as reallocation of ROW to strengthen peds, bikes, and transit facilities.
- Refer to Design Guidelines for additional information on street/sidewalk environment.

Long-term

Short to
long-term

B CONFLICTS AMONG ALL MODES

Issue

- Can we separate the various transportation modes to enhance safety and improve flow?

Recommendation

- When Mass Ave is reconstructed consider interventions such as reallocation of ROW to strengthen peds, bikes, and transit facilities.

Long-term

C OFF-STREET PARKING REQUIREMENTS

Issue

- Define fixed parking maximums and flexible minimums (based on analysis and as approved by Planning Board) for all uses
- Accommodate shared parking where feasible
- Require shared parking study for mixed use projects
- Investigate ways to remove regulatory impediments (City and State) to reduction and sharing of existing parking

Recommendation

	min	MAX
Commercial	Based on analysis	0.8 sp / 1000 sf ft 0.9 sp / 1000 sf ft 0.5 sp / 1000 sf ft
Residential	0 space/dwelling unit (DU) for studio/ micro units 0.5 space/DU for 1-BR or larger units*	0.75 space/DU

(*Several committee members recommend that the minimum should be 0 for all residential use)

D TRANSIT

Issue

- Improve MBTA Red Line and bus transit capacity and frequency to continue to accommodate growth in Cambridge and the broader region.
- Increase effectiveness of the bus network -- ridership, rider experience, and efficiency. Evaluate creating a bus depot.
- People waiting for buses on the sidewalks reduce space available for open space and pedestrian circulation, especially at key pinch points. Decrease impact of buses and bus stops on public space and sidewalks.
 - Move stops off Mass Ave, move stops off Green/Magazine corner.
 - Bus only streets without cars.
 - Crowded sidewalk at bus stop waiting area by Convenience Store.

Recommendation

- City, business association, residents and all stakeholders must advocate for continued MBTA systemwide infrastructure improvements, with special emphasis on enhancing Red Line capacity.
- Based on preliminary evaluation, bus depot is not recommended.
- Work with MBTA and property owners to have next bus info being displayed at the bus stops and/or in nearby stores.
- Work on a study with the MBTA to look at routing, layover and stops changes for the Central Square buses. One goal would be to look at ways to reduce the crowding from people waiting for the bus on narrow sidewalks. The City is interested in having the route 70 and 70A buses extended to Kendall Square.

Ongoing

Short to
medium-term

Medium-term

E SUPPORT NON-AUTO MODES OF TRANSPORTATION

Recommendation

- Continue to improve bicycling infrastructure by moving towards an environment where bicycles and vehicles are on equal footing (with a specific focus on Mass Ave from Inman Street to Portland Street).
- Continue to improve signage for both bikers and pedestrians.
- Evaluate the feasibility of closing some side streets to vehicular traffic during high-congestion hours to encourage alternative bike routes and prevent neighborhood cut-throughs by automobiles.

F ENFORCEMENT

Issue

- Roadway users do not travel carefully and cause conflicts. Among the issues:
 - motorists not yielding to pedestrians/bicyclists while turning;
 - motorists not yielding to peds at crosswalks;
 - motorists running red lights; motorists opening car doors;
 - pedestrians jaywalking;
 - cyclists not yielding to peds in crosswalks;
 - cyclists on sidewalk; and
 - cyclists running red lights.

Recommendation

- Stricter enforcement
 - Automobile moving violations
 - Ticket bicycles and peds at signals and unsignalized crosswalks.
 - Ticket jaywalkers.
- Combine enforcement with education via a variety of media.
- Cars run red lights -- could be addressed with camera enforcement.

Ongoing

G ILLEGAL PARKING

Issue

- Illegal parking in general, such as delivery trucks in bicycle lanes, non-residential parking in resident-only areas at night.

Recommendation

- Enforce at hot spots and evaluate problem areas for curb regulation changes. Examples include providing additional loading zones where warranted to prevent delivery trucks in bicycle lanes. Also work with businesses on delivery schedules and locations.

Ongoing and
short-term

H TRUCKS

Issue

- Oil tankers are not compatible with Central Square character

Recommendation

- River, Western, Pleasant, Mass Ave, and Main St are designated regional truck routes. City can not restrict trucks without State approval as part of a regional plan. City has been unsuccessful in finding alternate routes that will satisfy regional requirements.

I NON-MBTA TRANSIT

Issue

- Longwood Medical Area (LMA) shuttles are loud and not energy efficient.

Recommendation

- City has conveyed this concern to the Medical Area Scientific Community Organization (MASCO) which operates shuttles. New buses would be required to address noise concern.

J SIGNAGE

Issue

- In general, the environment feels cluttered with too many signs, and this creates confusion. In particular, the special signs installed at Mass/River/Western are confusing.

Recommendation

- Review Central Square signage and identify opportunities for reducing/improving signage. Note that many of the signs are there because of requests from the public and businesses who want them there.

**Short to
medium-term**

LOCATION SPECIFIC RECOMMENDATIONS

Issue	Recommendation	Schedule
<p>A Mass Ave</p> <ol style="list-style-type: none"> 1. Bicycling on Mass Ave is difficult due to: <ul style="list-style-type: none"> • illegal parking in bicycle lanes; • dooring; • buses stopping in bicycle lanes rather than pulling to curb; and • trucks, buses and cars pulling into and out of the bicycle lanes. 2. At Mass Ave and Prospect St pedestrians conflict with right turning vehicles on Mass Ave east side crosswalk. 3. Route 1 bus too slow and too crowded. 	<ul style="list-style-type: none"> • Long-term reconstruction should create a separated bicycle facility/cycle track. • Increase enforcement of illegal parking in bike lanes. 	<p>Long-term Short-term</p>
<p>B Mass Ave @ Pleasant St</p> <p>Pedestrians crossing at Pleasant Street/through cyclists on Massachusetts Avenue conflict with motorists coming from Inman Street to Pleasant. Westbound stop line on Mass so far back that cars running the yellow conflict with the pedestrians crossing with the walk light.</p>	<ul style="list-style-type: none"> • Evaluate potential signal or crosswalk changes to reduce or eliminate conflict. • TP&T work is underway to add a signal head so that the stop bar for westbound Mass can be moved to Inman St. Eastbound bicycle lane to be marked through the Pleasant St intersection. 	<p>Short-term</p>
<p>C Mass Ave @ Inman St</p> <p>Mass crossing at 26 seconds feels too short; Inman crossing is twice as long.</p>	<p>Mass Ave is the major roadway and has longer green time than Inman Street, which permits additional pedestrian crossing time of Inman Street. Time for pedestrian crossing of Mass Ave was extended in 2011 in coordination with the Senior Center, and currently provides more pedestrian crossing time than national standards require.</p>	<p>Ongoing</p>
<p>D Inman St @ Bishop Allen Dr</p> <p>Can we add a crosswalk for the people going to and from the Food Pantry?</p>	<p>This is not recommended. The addition of a crosswalk at this location would either eliminate the loading zone for the Food Pantry or eliminate 2 resident permit spaces depending on which side of the intersection it was placed on.</p>	

Issue	Recommendation	Schedule
E Temple St Pedestrian crosswalk east of Temple Street is difficult to see at night.	Highlight this issue to be addressed in lighting plan for Central Square as part of the City's LED conversion.	
F Pleasant St @ Western Ave This feels like a hazardous crosswalk; seems safer to jaywalk mid block.	Plan for improvement created through Western Ave planning process.	Short-term
G Green St @ River St & Western Ave Awkward pedestrian crossing of River and Western on south side of intersection.	When construction is scheduled for the intersections, signal changes in combination with infrastructure changes will be possible to improve this intersection for pedestrians. Actual change would have to be designed.	Medium to long-term
H Western Ave & Franklin St Lack of crosswalk on southern leg of Western Avenue at Franklin Street.	Lack of crosswalk on southern leg of Western Avenue at Franklin Street.	Project Underway
I Green St @ Magazine St Motorists ignore stop sign and don't yield to pedestrians at this intersection. Poor snow clearance at Green and Magazine for peds.	It is extremely difficult to get all cars to stop at the stop sign at Green/Magazine when the signal at Green/River is green, given the short distance between the stop sign and the signal. Work with DPW and property owners to improve snow clearance on sidewalk.	Medium to long-term Ongoing
J Green St Garage Green St garage is not popular with motorists and is sub-optimal in its connection to the street and public realm.	Consider full range of options including <ul style="list-style-type: none"> • Tear it down to accommodate other possible uses needed to streamline bus operations or other amenities for Central Square. • Enlarge to consolidate parking for Central Square – this poses structural issues and may require demolition and reconstruction; traffic impacts on Green St will also need to be evaluated. 	Long-term
K Pearl St between Mass & Franklin <ul style="list-style-type: none"> • Narrow sidewalks and lack of shade on Pearl Street. • Poor pedestrian environment due to blank walls and limited ground floor activity. 	Create new frontage at library	Long-term

Issue	Recommendation	Schedule
L Green St @ Pearl St Crowded sidewalk at bus stop on Green Street at Pearl waiting for 70 and 70A.	The City will be working on a study with the MBTA to look at routing, layover and stops changes for the Central Square buses. One goal would be to look at ways to reduce the crowding from people waiting for the bus at this location. The City is interested in having the route 70 and 70A buses extended to Kendall Square.	Medium to long-term
M Pearl St @ Mass Ave <ul style="list-style-type: none"> • Pedestrian crossing Pearl/through cyclists conflict with left turning cars. • Vehicles cut through from Norfolk to Pearl. • So many things happening it is hard to know where to look. Can we ban left turn into Pearl? 	No changes to this location have been identified. The traffic move from Norfolk to Pearl provides an option for residents crossing Central Square that is strongly supported. TP&T will review the crash history at this location.	
N Pearl St & Upper Brookline Ave <ul style="list-style-type: none"> • Illegal parking on Pearl Street prior to loading zone blocks buses. • Loading activity on Brookline Street obstructs travel lane. 	<ul style="list-style-type: none"> • Create enforcement priority hot spots. • Review Green Street signage. 	Short-term
O Essex St & Norfolk St Limited greenery and narrow sidewalks make unattractive pedestrian connections between Area 4 and Central Square.	Work with the City Arborist to find additional appropriate locations for trees and other green elements to improve pedestrian environment.	Short to medium-term
P Essex St @ Bishop Allen Dr Unattractive surface parking lots.	TP&T will work to improve aesthetics in City lots, which currently have murals and landscaping.	Medium to long-term
Q Brookline Ave @ Mass Ave Ped crossing in the middle of the Brookline to Douglas intersection conflicts with vehicles.	The current location of the crosswalk has been found to be better than alternative locations which would either lead to higher levels of conflicts or the loss of highly used, short-term parking spaces in front of businesses.	Short-term

	Issue	Recommendation	Schedule
R	Unsignalized Crosswalk by Salvation Army Lack of yielding by motorists	Yield to peds sign has been placed in the center of the roadway. Salvation Army responsible for maintaining yield barrel.	Ongoing
S	Columbia St & Lafayette Square <ul style="list-style-type: none"> • Very long crossing of Sidney Street extension for pedestrians. • Lack of yielding at Columbia Street and Lafayette Square. • Desire for street space for special events. • Main St bike lane leads bikes in Lafayette Square, conflicting with park users. 	<ul style="list-style-type: none"> • Would need to rebuild the intersection. • Install bicycle box and mark left turn movement for bicycles on Main Street west-bound onto Sidney St. Extension. 	Long-term Short-term
T	Main St, Front St & Windsor St <ul style="list-style-type: none"> • Windsor Street sidewalk is narrow. • Lack of pedestrian connection between Main Street and Massachusetts Avenue from Windsor Street to Sidney Street extension. 	<ul style="list-style-type: none"> • Novartis project will improve walkability of Windsor Street. • Design guidelines to encourage connection – implemented via project review. 	Ongoing Short to long-term
U	Blanche St Unattractive pedestrian environment.	Design guidelines for streets and sidewalks and potential future development on adjacent parcels.	Short to long-term
V	Albany St & Portland St The intersection is awkward for all users and has a poor connection to the railroad crossing to Vassar Street.	New design (approved by the City) will be implemented as part of the 610-650 Main Street development project.	Short to long-term



CAMBRIDGE
CDD@344

COMMUNITY DEVELOPMENT DEPARTMENT
344 Broadway



*Photo credit:
Maryellen Carvello*