



Mayors Letter

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Table of Contents

- **EXECUTIVE SUMMARY I**
 - **BACKGROUND 1**
 - **PUBLIC PROCESS 2**
 - 5 BIG IDEAS 3
 - THE PLAN 4
 - **MOBILITY 5**
 - **ECONOMICS** 6
 - **IMPLEMENTATION 7**



EXECUTIVE SUMMARY

5 BIG IDEAS

1

BUILD GREAT NEW PLACES (THAT ARE COMPATIBLE AND RESPECTFUL OF CONTEXT)

Design matters: Buildings and streets should come together as a cohesive whole to create places people can enjoy. Human-scaled buildings should front the public realm while still accommodating large footprint buildings like life science complexes. Public spaces like streets and greens should be proportioned like outdoor rooms that are open to all and available to all. Blocks should be designed to a walkable scale. Complete the neighborhood with community needs.



2

INCREASE ACCESS TO NATURE AND BUILD SUSTAINABLY

Create a string of high quality parks and public spaces that connect throughout Assembly Square. Celebrate the river and connect to the regional trails systems. New buildings should be built green and sustainably. Explore District-wide energy goals. Improve air quality and water quality. Encourage taller buildings by the highway to block pollution from residential areas and public spaces. Recognize the vulnerability of the site in an era of increased flooding.



3

DEMAND SAFE, COMFORTABLE, AND INTERESTING STREETS AND PATHS AND INCREASED TRANSIT AVAILABILITY

Increase mode split of transit, cycling, and walking. Balanced street spaces to provide a mix of mobility and placemaking. Increase transit access and investment with increased Orange Line frequency and additional bus routes. Understand the appropriate uses of the frontage, clear path and furnishing sidewalk zones to better plan for pedestrian comfort. Four-way zebra crosswalk at intersections. Create a ring of infrastructure cyclists and low-speed mobility.



4

GROW REVENUE-GENERATING USES FOR SOMERVILLE

Expand the city's non-residential tax base which allows property taxes to remain manageable. Enhance the site's current strengths such as the Mystic River, Draw Seven Park, the Orange line, and a strong business cluster. Encourage life-sciences. Work with developers to achieve the city's goals. Develop new catalytic niches like investments from CSR programs and the arts. Update land development regulations to encourage desired development of the highest quality standard.



5

CONNECT PHYSICALLY AND SOCIALLY TO SOMERVIL AND CULTIVATE THE ASSEMBLY COMMUNITY

Connect physically to surrounding areas (Fellsway more crossable, Kensington Connector, cross the river, and more transit options. Connect socially (business improvement districts, main street associations, neighborhood and neighborhood groups). Brand the overall neighborhood, not individual projects. Grow the residential population with a wide variety of housing options for a wide variety of people. Make space for small, local, independent businesses.



THE PLAN

1

Middlesex Corridor

Middlesex Avenue is located in the western portion of the Assembly Square neighborhood. It serves as a critical connection between Fellsway and Mystic Avenue. It lies adjacent to the elevated I-93 viaduct and can create a physical barrier between the highway and the rest of the neighborhood with taller buildings. This is an ideal location for life science and workplace uses. It also houses the courthouse which can be expanded. Middlesex Avenue itself should be rethought as a main connection with a balance between accommodating cars, low speed vehicles like bike, and pedestrians.



2

Assembly Marketplace

The Assembly Marketplace site is the largest single-owned redevelopment opportunity in the Assembly Square Neighborhood. The vision for the future extends the mixed-use residential character from Assembly Row across Grand Union Boulevard. An interconnected network of streets creates a fine-grained network of walkable blocks with connected civic spaces at the heart of the neighborhood. Mid-size buildings at the center of the site transition to taller buildings along Grand Union Boulevard and Middlesex Avenue with green roofs at the edges.



3

Assembly Square South

Currently the Assembly Square South area features aging, suburban, auto-oriented development. Some sites are currently vacant while others are occupied by businesses continuing to prosper. Underutilized parcels can redevelop with office uses, visible from the I-93 and more residential uses closer to Grand Union Boulevard and creating an urban edge to the Barrow Micro District. Uses should be diversified to serve a full range of daily needs and increase its vitality. Over time, other uses parcels can redevelop.



4

Barrow Micro District

The southern portion of Assembly Square has a very different character from the rest of the site, the land is owned by multiple property owners. The existing buildings have smaller sizes and are mostly occupied by makers and smaller businesses. The Barrow design concept is appropriate for this area. This area can become a vibrant micro district supporting uses such as arts and crafts, maker space, local restaurants, etc. Shared streets that prioritize pedestrians fronted by new and refurbished buildings can create a lively unique area.





MOBILITY

AREAS OF PRIORITY

Eight areas of priority were chosen within the Assembly Square Neighborhood to demonstrate how changes within the right-of-way can help provide greater options for pedestrians, bicyclists, and transit riders. The focus of these proposals is to:

- 1. Ensure that current and future streets within Assembly Square allocate more space for pedestrians, bicyclists and transit riders.
- 2. Address the barriers to greater connectivity between Assembly Square and the surrounding neighborhoods in the design of Fellsway and I-93.

STREET NETWORK

The guiding philosophy of these ideas are to center on pedestrians, bicyclists and transit users while also reducing single-occupancy vehicle use. The following mobility principles are to be taken into consideration for future developments and changes to the right-of-way:

- 1. Create a compact and dense street network that connects with the existing streets and with adjacent neighborhoods to the south and west.
- 2. Encourage the design of mixed-use streets streets that encourage multimodal activity.
- 3. Everyone should have safe places to walk, safe places to ride bikes, and safe places to drive.

MODE SPLIT

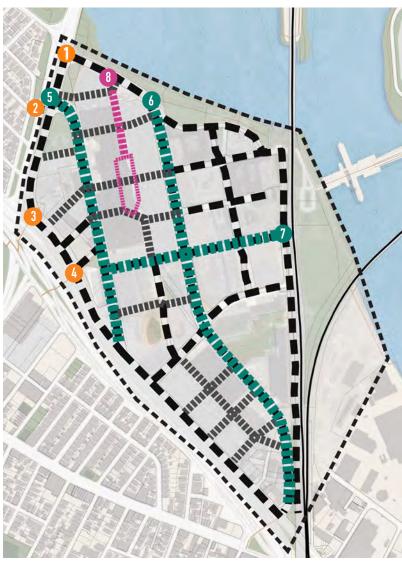
The aspirational goal is to have 75% of trips to, from, and within the Assembly Square neighborhood to be trips that do not involve a single-occupancy vehicle. The current mode split has a significant number of walkers and bikers with retail meeting the aspirational goal. With appropriate mix of uses to meet all needs, limited parking, increased transit options, and multimodal streets, the City can affect the transportation mode shift.

Increased Transit

First, the MBTA Orange Line should have increased frequency to this neighborhood. In addition, multiple additional bus options have been explored to connect Assembly Square to Porter Square and to Union Square with its planned Green Line extension.

Transportation Demand Management

Assembly Connect assists in transportation demand management for the neighborhood. New users should assist by providing employees with transit passes and discouraging parking onsite.



Gateways

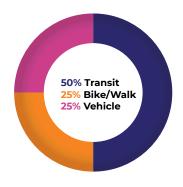
- 1 Grand Union Boulevard
- 2 Middlesex Avenue
- 3 Fellsway
- 4 Kensington Connector

Corridors

- Middlesex Avenue Corridor Street Section
- 6 Grand Union Boulevard Corridor Street Section
- 7 Foley Street Corridor Street Section
- New Shared Street Corridor Section



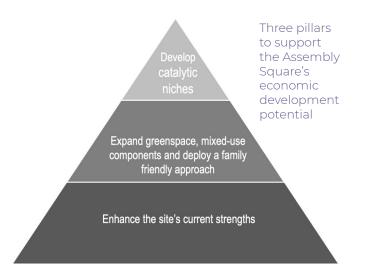
Bike Lane in Somerville



ECONOMICS

ECONOMIC DEVELOPMENT STRATEGIES

Assembly Square's economic development can be summarized in a three-tiered conceptual framework that includes enhancing the site's current strengths, expanding emerging and existing trends towards greenspace use, mixed-use components and being family-friendly, and lastly (at the margin) focusing on bringing new life to the area using catalytic niche opportunities.



THREE PILLARS TO SUPPORT THE SITE'S ECONOMIC DEVELOPMENT POTENTIAL

0

Enhance the site's current strengths.

Assembly Square has already proven that it has a strong business cluster effect through key research and laboratory anchor tenants, a strong established retail base and a growing residential footprint. Now the goal is to expand and deepen these effects by broadening the neighborhood's economic and commercial and office offerings through coordinated branding, and conscious cluster development (attracting complementary enterprises of all sizes, diversity, class and type).



2

Expand greenspace, mixed-use components, and a family-friendly approach.

Assembly Square has a large portion of Somerville's one mile of river waterfront access and shoreline. This rivers edge space has the potential to become an even more vibrant waterfront park that serves the local community and draws regional visitors year-round. Priority actions include waterfront programming, inventive sustainability and resiliency projects that also enhance recreation opportunities, increasing workforce housing and a wide variety of housing types for a wide variety of people and family structures.



3

Develop new catalytic niches that complement the commercial footprint.

While commercial space is key to tax revenues, balancing the neighborhood needs more "soft-power" investments that can bring net gains to the local and city economy. Priority actions include the promotion of investments in attracting education and the arts community, small foot-print markets and doing more through corporate social responsibility programs and other similar community investments.



Background

Assembly Square is a unique neighborhood within Somerville that has a lot of potential for change. This chapter lays out what Assembly Square is today and some of the forces shaping its future.

1. Background

ASSEMBLY SQUARE VISIONS

ASSEMBLY SQUARE HISTORY

Greater Boston is a region of quality neighborhoods. The metropolis is composed of multiple cities and towns with complete, compact, and connected neighborhoods which are physically and socially distinct. When it came time to develop the last neighborhood of this great metropolis, Assembly Square in Somerville, anti-urban, suburban forces pushed in the direction of a single-use commercial pod of big box retailers and parking lots, and Somerville pushed back. The city wanted to see Assembly Square become a neighborhood as mixed in uses, diverse in people, distinct in character, and rich in social, recreational, and economic opportunity as any in the region.

Assembly Square is just 2.5 miles northwest of Downtown Boston and surrounded by the historic neighborhoods of Somerville, however, Assembly Square is separated like an island from the rest of the city by Interstate 93 and the Mystic River.

The site was home to a Ford Motor Company assembly plant, which gave this neighborhood its name, closed in 1958 and left the roughly 150-acre site empty and ready to develop. In 1979, Somerville declared the Assembly Square Revitalization Plan. The former auto plant became Assembly Square Mall, a 360,000 square foot shopping center with a Kmart and a Jordan Marsh as anchors, a straight hallway in between with smaller retail stores, and a food court in the middle. A big box Home Depot located southwest of the mall in 1992. When in 1999 the Swedish home furnishings store, IKEA, purchased two waterfront industrial sites to place another behemoth big box it seemed that the fate of Assembly Square was decided: Assembly Square would be a suburban district at the very heart of the Boston metropolis.

The residents of Somerville had other plans, however. In 1998, the Mystic View Task Force, a citizens group, created a vision for Assembly Square that was very different. The Task Force wanted to see a lively pedestrian-oriented mixed-use development. The City of Somerville initiated an extensive planning process that produced the 2000 Planning Study for Assembly Square. The plan proposed a

24-hour mixed use district with residential, retail, office, cinemas, restaurants, hotels, and recreational space. Assembly Square was rezoned to promote the mixeduse concept and design guidelines and a design review committee were created to further the citizen vision.

In 2005, Federal Realty Investment Trust (FRIT), a Maryland-based real estate investment trust and developer, purchased the dying Assembly Square Mall and in 2006, Somerville Mayor Joseph Curtatone worked with IKEA to swap its centrally located waterfront parcel with an internal parcel to allow FRIT to create a waterfront mixed use development. With the additional of a hard sought MBTA (Massachusetts Bay Transit Authority) orange line station in 2012 and the construction of Assembly Row and Mass General Brigham, the outlook for this neighborhood has drastically changed.



Mystic River and East Somerville in 1870



Ford Assembly Plant



Old Ford Assembly Plant: Assembly Square Mall



Aerial view of Assembly Row

ASSEMBLY SQUARE TODAY

In 2020, after 20 years of working to achieve the citizen vision, the City of Somerville commissioned a team led by Dover, Kohl & Partners to update the 2000 Planning Study and plan Assembly Square's ultimate state as a walkable, attractive, livable, and sustainable part of Somerville's interconnected fabric. Somerville wants Assembly Square to become a real neighborhood and this led to a conversation on what it means to be a real neighborhood.

Assembly Square suffered from Pinocchio Syndrome. Pinocchio is the fairytale character who was made by a man named Geppetto out of wood to look like a real boy in size, shape, and features. Pinocchio could walk and talk but was still made of wood, he wasn't a real boy, and he wanted more than anything to become a flesh-and-blood mortal boy. Pinnochio wanted a soul. Pinnochio became a useful metaphor for the challenge Assembly Square faces.

Assembly Square wasn't quite a neighborhood to begin with, it was the site of an Edsel Factory, an enormous automobile plant for the Ford Motor Company. Ford Motors invented the assembly lines used in large scale manufacturing and dominated production of the automobile for 50 years with its Model T, but then Ford's power began to wane as competitors won market share, Ford pinned all its hopes on the Edsel model. When the Edsel was introduced in 1958 after three years of obsessive, singular focus by Ford Motors, the car was found to be over-hyped, unattractive, and low quality.

After twenty years of urban planning wins and losses Assembly Square was a curious mix. It was home to a shopping center with chain stores and big box retailers surrounded by asphalt prairies of parking; however, it was also hosted a high-quality mixed-use main street called Assembly Row. Assembly Row has shopfronts, tree-lined sidewalks and enviable, award winning, urbanism. Assembly Square's had a residential population; however, the units were typically rented by single occupants, and many only lived in Assembly Square part-time during the work week. During COVID, while many shifted to working remotely, Assembly Square's residents returned to their real homes elsewhere in the lovely neighborhoods of Massachusetts' North Shore or the historic towns in the western part of the state. Unlike every other neighborhood in the Greater Boston area, Assembly Square lacked a single business association, main street association, neighborhood association, or even a homeowner's association.

Even the landmark art feature in Assembly Square, three gateways made of iron I-beams harking back to the site's industrial past, is, ultimately, a mechanistic corporate art. "If you've ever wanted to live in shopping a mall, then you're in luck" wrote the Boston Globe of Assembly Square. Assembly Square lacked a soul.

The transition from industrial area to mixed-use development has occurred at Assembly Square. But what will it take to make Assembly Square one of the great Somerville neighborhoods.



Caffè Nero in Assembly Row



Assembly Row Streetscape



Amphitheater at Baxter Park



Public space at Assembly Row

EXISTING CONDITIONS ANALYSIS

EXISTING SITE CONDITIONS



Access Points





2. Revolution Dr







Parking Garages



1. Great River Garage



2. Artisan West Garage



Artisan East Garage



5. Partners Garage

Parking Lots



1. Christmas Tree Shop



2. Middlesex Ave



4. 5 Middlesex



Loading/Service







Micromobility



1. Background

IMPORTANT TRENDS

POPULATION TRENDS

Somerville is anticipated to grow. The latest Metropolitan Area Planning Council projection shows an increase of 15% in population between 2017 and 2030. Many new residents are moving to Somerville, especially young professionals. The city's population rose 7% from 2010 to 2017. The number of residents aged between 25-34 years old increased by approximately one third of Somerville's entire population. However, the number of residents aged 18 and under have dropped almost 20%. Somerville's population has seen a high turnover rate. Assembly Square should be encouraged to create a range of housing sizes and typed in order to allow more people to potentially relocate within Somerville as their households and housing needs change.

HOUSING TRENDS

Somerville's close proximity to the schools and industries of Boston and Cambridge, in addition to the robust and vibrant community life, makes the city a highly desirable destination. The population increase between 2017 and 2030 corresponds to approximately 5,500 new housing units that have to be built just to satisfy the new growth.

The SomerVision 2040 plan identifies six main housingrelated challenges facing the city: the rising cost of housing, the lack of affordable housing, forced displacement, chronic homelessness, an insufficient diversity of housing stock, and an inadequate condition of the existing housing stock.

Only about 10% of units in Somerville are currently deed restricted affordable. For comparison, Boston has 19% and Cambridge has about 15%. The minimum requirement for inclusionary zoning was raised to 20% after SomerVision 2030. As new housing is built in Assembly Square, it is required to have 20% of the units affordable which will help to increase the overall supply.

MOBILITY

The density of urban development in Somerville facilitates efficient mobility among neighborhoods. However, Assembly Square is cut off from other neighborhoods due to I-93, Fellsway, the Orange Line, and the Mystic River. The orange line stop plus bus route 90 help to connect Assembly Square to the rest of the City and greater Boston area. Somerville has set a target that 50% of new trips should be via transit, bike, or walking as part of an equitable plan for access and circulation to and through the City. Movement within Assembly Square should be balanced between all travel modes.



Growth in **POPULATION** by 2030



PORTION OF COST BURDENED LOW INCOME **POPULATION**



24-44 YEAR OLD HOUSEHOLDS GROWTH



24-44 YEAR OLD HOUSEHOLDS GROWTH





17% MODERATE -INCOME

35-40%

LOW-INCOME

POPULATION ARE RENTERS

45 to 54

Source: Sustainable neighborhoods working group recommendations report December 2015



44% 16% Auto Walk or WALK SCORE **Bike**

3%

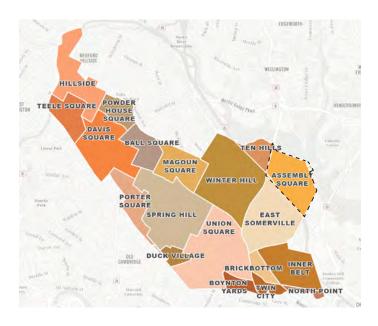
Work From Home

CITY ANALYSIS MAPS

The following maps present a snapshot of the regional and citywide existing conditions, as well as brad initiatives that affect Assembly Square. These analysis maps provide an in-depth look, or x-ray view, to illuminate the dynamics of the neighborhood. Key takeaways by topic for each of these maps are summarized below.

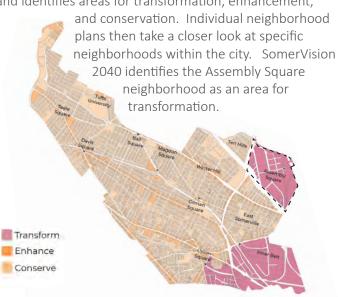
CITY OF NEIGHBORHOODS

Somerville is a series of neighborhoods, each with their own identity. Assembly Square is the newest neighborhood in the city, previously being an industrial and commercial area. The riverfront park and retail shops are attracting more people to Assembly Square to both visit and live.



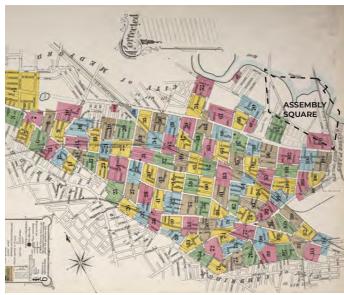
SOMERVISION PLAN

SomerVision 2040 is an update to the City of Somerville's comprehensive plan. The original plan was created nearly 10 years ago, and the update checks in on the progress made to date and extends the planning horizon an additional 10 years into the future. SomerVision sets the overall vision and framework for the city as a whole and identifies areas for transformation, enhancement,



1900 SANBORN MAP

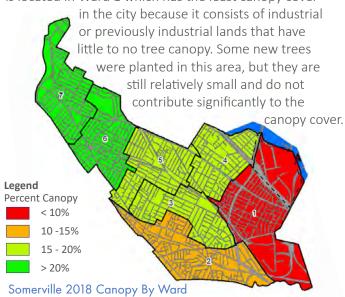
This Sanborn Map for Somerville is created in 1900 by Sanborn Map Company. The historical street network is mostly preserved in the current street pattern. The site of assembly square was undeveloped when the map was first published. The map also shows the historical river course of Mystic River. A significant portion of the current Assembly Square land is achieved through reclamation.



1. Background

URBAN FORESTRY

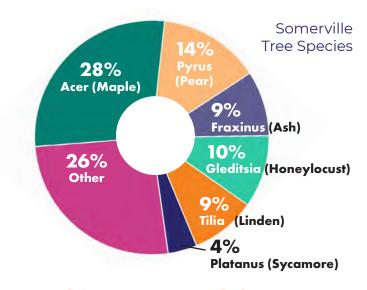
Somerville has been a Tree City USA community for 25 years. Somerville's tree canopy covers 14.6% of the city. The Tree City USA community members need to have a tree ordinance, maintaining a proper budget for tree-related expenses, and celebrate Arbor Day. The City of Somerville is divided into seven wards. Assembly Square is located in Ward 1 which has the least canopy cover



MYSTIC GREENWAYS

The Mystic Greenway Initiative will connect 25 miles of trails. The plan can improve numerous parks and engage community members from Mystic Lake to Boston Harbor. The greenway runs through the Assembly Square site and can enhance the connection between Assembly Square and adjacent neighborhoods.





14.6%
TREE CANOPY
COVERS

77.6%
IMPERVIOUS
SURFACE

13,604
TOTAL PUBLIC TREES

\$1,047,466
ANNUAL BENEFITS OF STREET TREES

Source: Draft Urban Forest Management Plan

DRAW SEVEN PARK

Assembly Square has a nice waterfront park called Baxter Park with an amphitheater, child's play park, and views of the Mystic River. But when residents walked just south along the waterfront they found themselves lost in a grassy, blighted urban waterfront called Draw Seven State Park. A renovation effort for Draw Seven State Park ed by the Department of Conservation and Recreation is underway. The proposed design will create a series of new pathways and gathering spaces. The project will also restore ecological habitat and incorporate freshwater wetland and saltwater living shoreline. The proposed typography can accommodate anticipated sea level rise and storm events.



SITE ANALYSIS MAPS

The following maps present a snapshot of the existing conditions in Assembly Square. These analysis maps provide an in-depth look, or x-ray view, to illuminate the dynamics of the neighborhood. Key takeaways by topic for each of these maps are summarized below.

FIGURE-GROUND PLAN

Assembly Square is shaped by I-93 (an elevated highway), Fellsway/State Route 28 (a six-lane highway), and MBTA's Orange Line and Haverhill commuter rail line which are all barriers to other neighborhoods. There are vast surface parking areas throughout the neighborhood. Assembly Row development begins to create a walkable block structure around large footprint buildings.



PROPERTY OWNERSHIP

There are several large properties under single ownership that may be divided into multiple blocks and large floor plates. The two areas along I-93 to the north and south end of the site are split among more than a dozen smaller property owners allowing for the possibility of finer grained development. The riverfront green spaces in Assembly Square are owned by the state and MBTA.



CURRENT LAND USE PLAN

Commercial centers and Office are the dominant land uses in Assembly Square. Some of the parcels east of Grand Union Boulevard fall in the mixed use commercial and mixed use residential categories. The Somerville Courthouse's parcel is designated as civic facilities.



1. Background

ZONING

Assembly Square Mixed-Use District is a special zoning district with the intent to redevelop underutilized areas within close walking distance to the Assembly Square T-station with mixed-use, mid-rise and high-rise, transit-oriented development that will support the transformation of Assembly Square into an urban commerce center.



TRANSIT ACCESS

Most of Assembly Square is within a 5 minute walk of the MBTA's Orange Line transit station with the rest within a 10 minute walk. The neighborhood is also served by MBTA's route 90 bus. There are 3 access point to Assembly Square from I-93, from Grand Union Boulevard, Fellsway, and a narrow pedestrian sidewalk underneath the viaduct connecting Kensington Ave to Mystic Ave.



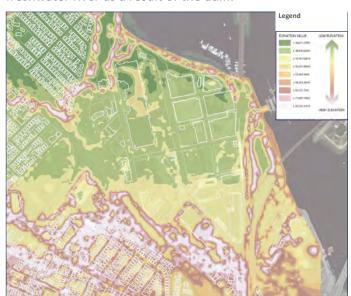
PUBLIC OPEN SPACE

SomerVision 2030 sets an ambitious target of 125 new acres of usable open space. 94.9% of residents can access to parks within a 5-minute walk. Somerville is 4 square miles, and the limited land area is a challenge for creating new open space. Assembly Square, a transformational area with new development, has a possibility in creating more open space through privately owned public spaces.



TOPOGRAPHY

Assembly Square is generally flat with elevations about 5 to 10 feet above sea level. The Amelia Earhart Dam was constructed in the 1960's. The dam stabilized the water level of upstream Mystic River and eliminated the tidal activities. The lower Mystic River along most of the Assembly Square district was also converted into a freshwater river as a result of the dam.



HISTORIC SHORELINE

The area of Assembly Square originally consisted of tidal flats and estuaries. They are filled during the 19th century in order to serve railroad and industrial users.

Legend 1903 time course 1906 tyraned 1908 tyraned

LOW LYING AREAS

Assembly Square's existing stormwater drainage system is designed to handle 4.8 inches of rain in 24 hours. Fairly frequent rain events larger than that threshold can overwhelm the drainage system.



FEMA FLOOD MAP

FEMA flood maps show most of Assembly Square as Flood Zone X, or having a 0.2-percent-annual-chance (or 500-year) flood. A portion of Baxter Park is considered Zone AE, or having a 1% chance of flooding in any given year. The Amelia Earhart Dam, built in 1966, creates a floodway upstream of the dam as it controls floodwaters downstream of the dam.



SEA LEVEL RISE POTENTIAL IMPACT

Assembly Square is likely to experience impacts from sea level rise and storm surge by 2070 according to the Climate Action Plan. The Amelia Earhart Dam (AED) was built just east of the Assembly Square neighborhood to protect the surrounding areas from storm surge impacts. As seas rise, the AED will not offer the same level of protection as today and flooding will likely become a larger problem.



1. Background

REQUIRING RESILIENCE AT ASSEMBLY SQUARE

The world has seen a rise in sustainable building in the last few decades, and while part of the trend is thanks to customers asking for more sustainable structures, most of the achievement can be attributed to higher standard building regulations at the municipal level. When Somerville approved its new zoning ordinance in 2019, it raised the environmental standard for new construction higher than neighboring communities, including the city of Boston, and the development community pushed back.¹

As our firm began working on the plan for Assembly Square, prospective developers of Life Science buildings told us that Somerville had raised the bar too high and it would cost the city the high-paying jobs and tremendous tax revenue that the world-class, multi-story, multi-block Life Science research labs, administrative offices, and campuses would provide. We were told that Somerville was still an untested market and that developers would simply build in Cambridge, Brookline, Quincy, or one of the other emerging Life Science markets in farther-flung Watertown and South Boston.

The specific issue is that Somerville's zoning ordinance requires developments over 50,000 square feet to achieve LEED Platinum certification. Earlier drafts of the ordinance established the requirement at LEED Gold to match sustainability standards in Boston and Cambridge.

"No one can build an all-electric building on this site," we were told by one of the property owners that hoped to sell to a Life Science developer. Life Science laboratories are especially energy-consumptive and the owner felt that nothing short of an all-electric building, powered by solar panels, would produce enough points to meet the LEED Platinum requirement.

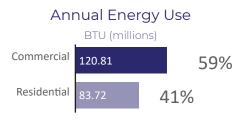
The reality is that there are many paths to LEED Platinum Certification. Somerville has also given property owners and the development community plenty of notice of the change in standard. In November of 2018 Somerville adopted its Climate Forward Plan with the goal of producing only as much carbon as the City consumed by 2050. The plan proposed reducing emissions from buildings, among other actions. It made sense that the code update that followed the Climate Forward Plan would mean higher LEED standards as a condition of awarding a building permit.

So far, the development of Life Science buildings has not been slowed by the new regulations. The XMBLY Business Campus is the latest large project proposed for Somerville's Assembly Square and it includes over one million square feet of Life Science offices for pharmaceutical and technology companies in addition to 500 luxury residential units with restaurants on the ground floor. The XMBLY project alone would mean over 4,000 construction and permanent jobs for the city.²

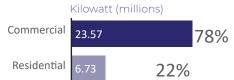
The communities which have climate adaption within their locally approved plans are the ones that will see the biggest gains in resilience. There will be a cost to the public and private sectors, but as the 2018 Somerville Climate Forward Plan makes clear, the threat is dire, and the cost is worth it.



² Boston Real Estate Times. June 15, 2020. Retrieved from https://bostonrealestatetimes. com/biomed-realty-to-acquire-somerville-property/







77.2 BTU (MILLIONS)
ANNUAL ENERGY USE
PER HOUSEHOLD

Note: Data from Urban Footprint/ESRI/ AMERICAN COMMUNITIES SURVEY(ACS)

The LEED v4.1 BD+C guidelines, the latest version of the standards developed by the U.S. Green Building Council, provide a framework for green building and construction based on a wide variety of factors including the land's proximity to public transit and bicycle facilities, water efficiency, light pollution, rainwater management, and renewable energy.

CLIMATE CHANGE PLANNING

In Somerville the climate and resilience conversation is quite advanced and the commitment to new rules and investments is very strong. How can the Assembly Square Neighborhood Plan help that effort?

In 2015 Somerville Mayor Joseph Curtatone committed to the Compact of Mayors, a global coalition of city leaders dedicated to reducing their greenhouse gas (GHG) emissions and making their communities more resilient to climate change.¹ Following that commitment, Mayor Curtatone pledged to make Somerville carbon neutral, or having a net-zero release of GHG emissions, by 2050. What followed was a series of plans to achieve carbon neutrality and adaptation goals including the city's Greenhouse Gas (GHG) Inventory (2016), Carbon Neutral Pathways Assessment (2017), the Somerville Climate Change Vulnerability Assessment (2017), and the Somerville Climate Forward Plan (2018). The plans envision:

- Net zero and resilient new building standards,
- Adapting buildings to flooding and heat,
- Improving energy performance in existing buildings,
- Improving equitable low carbon mobility including improving bus reliability and expanding bicycle infrastructure,
- Transitioning the city's fleet to electric vehicles,
- Updating stormwater management to consider new flooding events caused by the Mystic River,
- Expanding the urban canopy with resilient trees, and
- Reducing waste.

Climate solutions must be home-grown because many of the climate initiatives that work in one place don't work in others given the availability of solar, wind, and geothermal energy and local climatic variation in elements like soils, precipitation, and tides. At the same time, cities like Somerville still look up to cities like San Francisco, Portland, Seattle, and Vancouver in one way: plan implementation. West coast cities are ahead when it comes to leading by example, advocating at the state level for carbon neutrality and the de-carbonization of electricity, and creating a culture of climate action.

And so that's the job of plans like the Assembly Square Neighborhood Plan: making climate preparedness a goal for leadership on every level, from the city council and planning commission to the residential building managers and local business owners. Our job is to educate locally on resilience with our public process and in our plan, and in this way, we push community climate action.

The Assembly Square Neighborhood Plan will be the first neighborhood plan for Somerville since the adoption of the Somerville Climate Forward Plan, and the first to incorporate the plan's recommendations. We can imagine a neighborhood that is net zero, but, going further as urban designers, we can imagine a neighborhood that is far more self-sufficient, a neighborhood in which people could walk to daily needs despite a hotter world and the potential for regular flooding. As educators we can go even further than that and imagine a neighborhood with the common value of resilience at all levels. We have done our job well if neighborhood residents and business owners understand the climate threat like no one else and they advocate for mitigation and adaption at the local, state, and even federal level like no other community in the greater Boston area.





¹ City of Somerville, somervillema.gov. Retrieved from: https://www.somervillema.gov/news/mayor-curtatone-signs-compact-mayors-address-climate-change

2 Public Process

The Assembly Square
Neighborhood Plan was
created out of ideas
generated from the
residents and stakeholders
of Assembly Square and
Somerville. This chapter
details the process for
receiving the community's
ideas.

PUBLIC PROCESS

The Assembly Square Neighborhood Plan is a master plan and zoning recommendations report that will set the path for growth in the neighborhood for the future. The process for creating this plan is unique and involved the public, property owners, civic groups, stakeholders, and residents.

The City of Somerville and the design team wanted to ensure that all segments of the community were able to participate and actively engage in the process, even while social distancing. A process for interactive online engagement was created through the City's SomerVoice website, stakeholder meetings, and an interactive virtual charrette. People could engage with the City, the design team, and fellow residents from the comfort of their homes in a series of public workshops, presentations, meetings, surveys, questionnaires, polling and one on one conversations to help define and establish the vision for the future of the Assembly Square Neighborhood.

VIRTUAL SITE VISIT AND ANALYSIS

The Assembly Square Neighborhood is a dynamic, unique area within Somerville that has its own challenges not present elsewhere in the city. A once industrial area, the image of the area has drastically changed in the past ten years with the development of Assembly Row and changes that have occurred at the Assembly Market Place. It is an emerging Bio-tech center and residential area. The design team took time to learn about all of the forces at play in the area as well as to talk to large property owners and individual residents to understand the dynamics at play.

A virtual site visit with a web-based virtual reality app was created drawing on the teams knowledge of the area online sources. The link to the app was shared on the SomeVoice project website to enable the public to tour the project site remotely as well.

A residential survey was sent to residents that live within the Assembly Square Neighborhood to ensure the voices of renters and owners within the neighborhood were heard and to better engage what brings people to and keeps people in the neighborhood.

Stakeholder Meetings

Starting from August the consultant team has conducted ongoing meetings, phone calls, and interviews with a variety of stakeholders in Assembly Square to learn how current efforts, concerns, and future goals might be included as a part of the plan. These groups included:

- Property Owners
- Community & Residents
- Engineering & Utility
- Mobility
- Sustainability & Environment
- Planning & Zoning
- Economic Development
- Public Space & Urban Forestry
- Parks and Recreation
- Mystic View Task Force
- Youth Voices

INTERACTIVE ONLINE ENGAGEMENT

SomerVoice and Somerville By Design were used as a virtual hub and connection to all project activities. It began as a point to start engaging the public but was also a place to learn more about the project, watch videos, take a virtual site tour, and connect to online meetings throughout the virtual charrette.

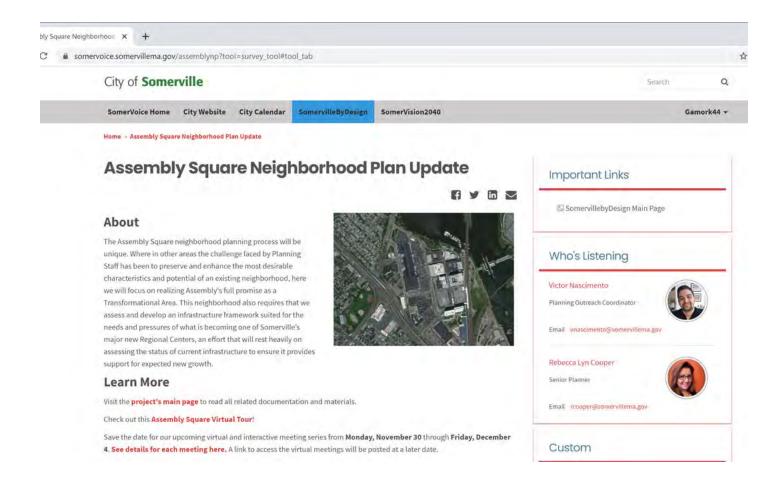
A series of surveys and open ended questions posted on the SomerVoice website began to shape the concepts of the plan. 5,080+ WEBSITE VIEWS

630+ DIGITAL COMMUNICATIONS, SURVEY PARTICIPANTS, INTERACTIVE TOOLS, SOCIAL MEDIA LIKES & FOLLOWERS

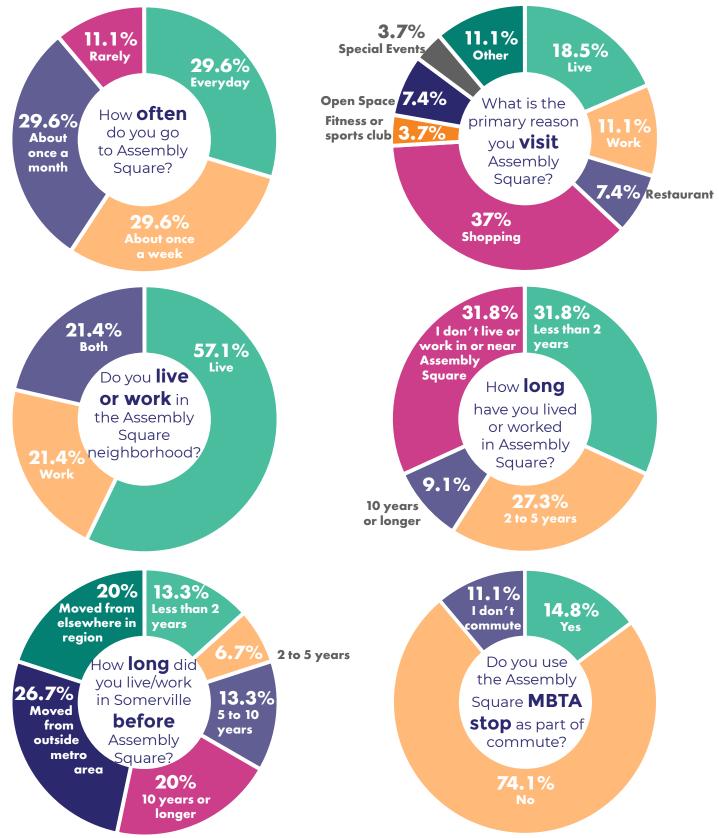
370 ONLINE POLL RESPONSES

550+ VIEWS OF THE YOUTUBE FILMS

12,000+ TRACKABLE MEDIA IMPRESSIONS







How would you rate the availability of the following at Assembly Square?

- 1 Restaurants
- 2 Shops
- 3 Apartments
- 4 Playground/Green space
- 5 Professional offices
- 6 Grocery store
- 7 Housing
- 8 Medical services
- 9 Other
- 10 School / Daycare
- 11 Drug store

Others: Hotel, affordable housing, green corridor for wildlife, affordable options

How excited are you about bringing more of the following to Assembly Square?

- 1 Cyclist & pedestrian safety
- 2 Increased non-car travel
- 3 Places for recreation
- 4 New places to shop & eat
- 5 Enhance character
- 6 Adding to the tax base
- 7 New job opportunities
- 8 Other

Others: Improving green space near the dam, green corridor for wildlife, affordable options, I'd like it to be nicer to walk around certain area

What would you like to see more of at Assembly Square?

- 1 Playground/Green space
- 2 Drug store
- 3 School / Daycare
- 4 Other
- 5 Grocery store
- 6 Medical services
- 7 Restaurants
- 8 Housing
- 9 Professional offices
- 10 Shops
- 11 Apartments

Others: Green corridors & native plants, aerial yoga, outdoor grills in parks, dog park, affordable housing, walking connection with Encore Casino Services (senior, food, etc), arts/community space More Small Businesses

What is your preferred mode of travel in and around Assembly Square?

- 1 Walk
- 2 Transit (subway)
- 3 Bike
- 4 Private Car
- 5 Transit (bus)
- 6 Rail
- 7 Carpool

How concerned are you about the following at Assembly Square?

- 1 Walkability
- 2 Connect to neighborhoods
- 3 Green Space
- 4 Traffic
- 5 Affordability
- 6 Noise
- 7 Safety
- 8 Density
- 9 Parking
- 10 Other
- 11 Schools

Others: The insane amount of paved space and lack of trees, limit cars in shop area to residents and delivery, There is too much parking, wasted space

PRELIMINARY SCENARIOS

A series of diagrammatic scenarios were created to gain an understanding of the development potential for the neighborhood and to facilitate early conversations about what the Assembly Square Neighborhood could be.

The purpose of this exercise was not to pick a scenario but to identify what strategies to lead with and what elements people liked or did not like. The vision plan is a composite of these elements (a mix-and-match) using both strategies in unison.

Initial polling of the scenarios revealed a preference for different scenarios as noted.



3. Central Green



More **GREEN** in the next phases

More **URBANISM**

in the next phases

(walkability & placemaking)



Continue the Assembly Row "formula" in the next phases





5. Somerville Barrow



VIRTUAL PUBLIC CHARRETTE

The Virtual Public Charrette was held from Monday, November 30, 2020 through Friday, December 4, 2020. Members of the consultant team engaged the community in a series of public meetings, workshops, and events.

Kick-Off Presentation & Breakout Room Sessions

The virtual charrette week began with a kick-off presentation and breakout room sessions on Monday, November 30, 2020 held virtually over Zoom. The meeting began Mayor Curtatone setting the stage for the evening and telling participants to dream big, remembering that dreaming big in the past helped to bring the Orange Line T stop to Assembly Square when everyone said it was impossible as well as the successful Assembly Row development.

During this event, the design consultant team presented initial findings based on the existing conditions in Assembly Square including connectivity, mobility, infrastructure, urban design, and economics.

Following the Kick-Off Presentation, participants broke off into smaller groups for a hands-on design session. Participants were asked to discuss and document on the digital maps what are most important issues to address and what is missing from Assembly Square Neighborhood now that could improve their quality of life. At the end of their session, each table was asked to distill their solutions and identify their "Big 3 Ideas" to present to the larger group. As the groups presented, potential subjects for consensus and key design ideas emerged.

Virtual Charrette Events

November 30, 2020

Kick-Off Presentations
Small Group Discussions

December 1- 3, 2020

Technical Meetings
Open Design Studio

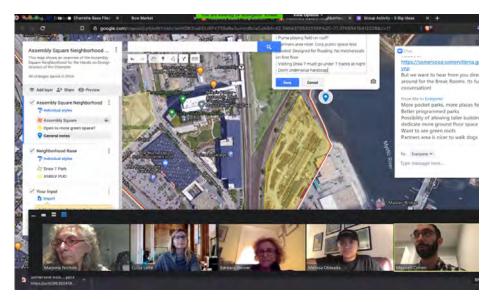
December 4, 2020

Work-in-Progress Presentation

70+
ATTENDEES

11 TABLES

SMALL GROUP DISCUSSIONS



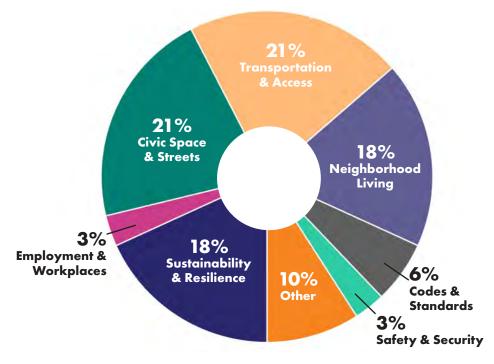




Screenshot of the Kick-off meeting and small group discussions

3 Big Ideas

Each group categorized the main theme of each of the big ideas. Of all of the ideas discussed transportation, access, streets, and civic spaces were of the largest concern, followed closely by both neighborhood living and sustainability and resilience.



One Word Answers

As part of the live keypad polling participants were asked One Word that comes to Mind about the Assembly Square Neighborhood

NOW



IN THE FUTURE



Additional responses were captured online for

One Word that comes to Mind you'd like to see **IN THE FUTURE**

Walkable trees LOCAl Waterfront Jobs Green Iransitive Crafts Resilient Festival Recreation Equitable Connected Revenue

The larger a word appears, the more people responded with that word.

Open Design Studio & Technical Meetings

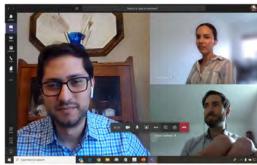
Following the Kick-Off Presentation and Break-out Sessions, the design team began working on potential solutions to the themes and concerns that emerged during the table workshops. To begin, a synthesis map is created summarizing the ideas from the table discussion on Monday. During the week each member of the planning team studied specific areas in Assembly Square to illustrate ideas about how the design could best address community concerns.

The public was encouraged to attend any of the 9 online open design studios scheduled at 10 am, 2 pm and 6 pm on Tuesday, Wednesday, and Thursday to see the work as it was being produced, engage in discussions about the potential solutions, and bring additional suggestions. During the Open Design Studio times, JJ Zanetta of Zanetta Illustrations was available to draw peoples ideas in real time with them. These sessions were known as Veduta with JJ.

Throughout the week various technical meetings were held to discuss the details of the plan as they emerged and to ensure that the vision plan was implementable and to discuss any concerns. Technical meetings topics included mobility, economic development, planning and zoning, engineering and sustainability. In addition, a meeting with the influential Mystic View Task Force allowed the team to hear concerns from a group of interested citizens that have been pushing for better development and results that are appropriate for the Assembly Square Neighborhood for over a decade.

240+ VIRTUAL STUDIO VISITORS & MEETING ATTENDEES









Pictures of the open design studio

"Work-in-Progress" Presentation

The week culminated in a "Work-in-Progress" presentation on Friday, December 4, 2020 to summarize the week's events, engagement results, preliminary designs and policies, and to confirm the initial vision for the future of the Assembly Square Neighborhood.

Topics that were discussed included the illustrative plan, mobility, infrastructure, and economic development. Polling was used to measure responses for various design concepts and draft policies.

Next Steps

Following the Virtual Public Charrette the draft ideas presented at the work-in-progress presentation were further refined and detailed to create the Assembly Square Neighborhood Plan. Additional conversations with technical experts, Mayor Curtatone, and City staff continued to push the plan to be big and bold. The resulting ideas and policies are encompassed within this report.

Did you **ATTEND** any of the charrette events this week? (open studio, kick-off meeting, etc.)

Yes 8% Do you **LIVE** in the Assembly Square Neighborhood?

26% Yes 74% No

What do you **THINK** of this idea?













Do you think the DRAFT plan presented tonight is **ON THE RIGHT TRACK**?

90% Yes Not Sure yet 10% No 0%

Not sure yet

3.5 Big Ideas

The five big ideas came from conversations held with the Assembly Square community. Although specific details may change as the plan is implemented, the "Five Big Ideas" should remain intact.

- 1. Build great new places (that are compatible and respectful of context)
- 2. Increase access to nature and build sustainably
- 3. Demand safe, comfortable, and interesting streets and paths and increased transit
- 4. Grow revenue-generating uses for Somerville
- 5. Connect physically and socially to Somerville and cultivate the assembly community

1. BUILD GREAT NEW PLACES

(THAT ARE COMPATIBLE AND RESPECTFUL OF CONTEXT)

Design matters: Buildings and streets should come together as a cohesive whole to create places people can enjoy

An essential distinction of vibrant, pedestrian-oriented districts is that the whole public space which businesses, residences, and workplaces front is designed as an ensemble. The ensemble includes auto elements (such as travel lanes, parking and curbs), public components (such as trees, sidewalks and lighting) and private elements (such as shopfronts, awnings, and colonnades). These elements should be coordinated to create a unified outdoor space, just as rooms are designed to achieve a unified, comfortable space.

Buildings

Assembly Square can feature human-scale development which addresses the public realm while still accommodating large-scale buildings like life science complexes that often require floor plates as wide and deep as an entire block. There is a place at Assembly Square for everything, but design is key. Large-footprint buildings can be integrated into the urban fabric. Active uses such as retail and restaurants should be encouraged along the ground floor of major pedestrian thoroughfares, not blank walls. Towering structures should be located away from the pedestrian core and adjacent to highways.

Blocks

Block sizes are the number one factor for walkability. Pedestrians will rarely walk if they do not feel that there is a relatively direct path between their origin and destination and a walk time no longer than five minutes. At the same time, a connected street network is essential for distributing traffic. Streets are a city's circulation system and its main public space. Undoubtedly projects that involve closing rights-of-way and creating superblocks will be proposed at Assembly Square. However, rights-of-way should not be vacated. The loss of connectivity will stunt economic vitality.

Blocks should be designed to a walkable scale. The length of a single block face should be no more than 600' and ideally not more than 450'. Where this isn't possible, mid-block passages carefully designed as safe, interesting spaces for pedestrians can preserve the walkable scale of the neighborhood.

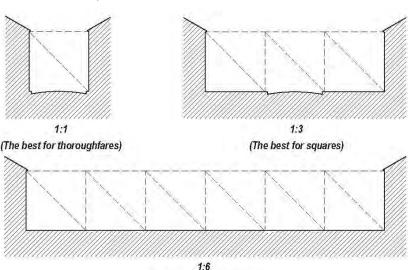
Scale of Public Spaces

While the ground floor of buildings should be designed in proportion to pedestrians, the perceived height of buildings should be designed in proportion to the street or public realm. The preferred building to street ratio is 1:1 to 1:3 which creates a sense of enclosure and can feel like an outdoor room. This is important because in urban environments, the public realm —the space between buildings—becomes the public's living room and the height to width ratio creates that essential quality of safety and enclosure.

Height-To-Width Ratio

The height-to-width ratio is the proportion of spatial enclosure. If the width of space is such that the cone of vision encompasses less street wall than open sky, the degree of spatial enclosure is slight. As a general rule, the tighter the ratio, the stronger the sense of place.

The ratio of 1:6 is the perceivable maximum. The ratio of 1:3 is best for public spaces. The ratio of 1:1 creates pedestrian paseos. Note that the ratio is not based merely on the curb to curb measurement but instead on the entire right-of-way and including building frontages, from building face to building face. In the absence of spatial definition by facades, disciplined tree planting is an alternative. Trees aligned for spatial enclosure are necessary on thoroughfares that have substantial front yards.



(The perceivable maximum)

Excerpted from The Lexicon of New Urbanism

Welcoming Public Spaces

City-building involves centers of mixed uses and shared activity — places to gather, shop, work, socialize and more. A key component in public spaces is that they feel open and available to all. During the Virtual Charrette, the public often remarked that although recent development projects fulfilled open space requirements, these spaces often felt privatized. Residents did not feel comfortable using certain spaces despite the fact they were neither gated nor had any signage that told people to "keep out."

New development should avoid the perception of corporate campuses with internal open spaces fronted by private uses. Public spaces should be open to a street with multiple entrances from public thoroughfares. By fronting spaces with streets, outdoor space feels less private or tied to adjacent building and benefits from a sense of shared ownership by all.

The Elements of a Neighborhood

In addition to public open spaces, there is a need for public amenities that can be used by Assembly Square and Somerville residents alike. During the Virtual Charrette multiple uses were proposed including a performing arts space, a library, and a fire station. Other community needs include a grocery store, a late-night pharmacy, a dog park, and places for children to play.

When residential uses are added, playgrounds and tot lots should be distributed so as to be within a five-minute walk of most households. Each will usually be less than a half-acre in size and the typical neighborhood should feature several. Playgrounds contain play equipment, soft surfaces, benches and ample shade. Parks provided for and maintained by a municipal parks department are preferable to those funded through neighborhood associations or business associations.

Going Forward

The City must continue to make the relationship between buildings, streets, and pedestrians part of the approval process. Development review should continue to evaluate new projects for their relationship to their urban context and create more specific standards for quality development as redevelopment occurs. New buildings and additions to existing buildings should be positioned and architecturally equipped to form agreeable streets and public spaces. Likewise, the rights-of-way themselves should have certain elements with proper dimensions. Build-to lines, regulated front and back orientations and street trees all lead to an improved design. Large-footprint buildings should be subject to intense development-approval scrutiny on a site specific, case-by-case basis. Such uses should not be a pre-permitted use allowed as-of-right, but as a conditional use subject to review and approval.

DESIGN MATTERS

There are many design considerations when developing a neighborhood, ranging from the street layout to the color of a new building. Those that are most important and have the greatest impact on the community are those related to urban design — the design of the streets and public spaces and how buildings relate to those spaces.

Fronts and Backs

Buildings and lots have fronts, sides, and backs and how these relate to one another forms the neighborhood character. Fronts of buildings ideally face the fronts of other buildings, and sometimes face the sides of buildings. However, the front of a building should never face the back of another.

Streets

Streets should be designed as public spaces and thoroughfares for mobility. Street lighting and trees are vertical elements that help to define the public realm while also making the pedestrian feel safer and more comfortable. Trees, even in winter, add a sculptural quality and interest to the streetscape.

Building-to-Street Relationship

The physical and functional relationships between buildings and public spaces are essential to creating safe, comfortable, and attractive places. Building Frontage design can create walkable streets that are lined with the fronts of buildings with doors and stoops that activate the spaces and provide natural surveillance for the neighborhood.

Building Standards

These are the rules related to building placement and massing (such as Setbacks, Build-to Lines or Zones, and Building Height).

Parking

Parking is necessary, but by locating it in mid-block locations and behind buildings on a lot, it can remain out of view from the street and the interface between the building and sidewalk is not interrupted by parking.

2. INCREASE ACCESS TO NATURE AND BUILD SUSTAINABLY

Create high quality parks and public spaces in Assembly Square

Somerville is a densely populated city and this is both an attribute when it comes to economic and social vitality and a feature in need of some mitigation: Somerville needs open, green, sunlit spaces. At the same time, the land for parks and public spaces is precious and necessarily restricted. Parks must be strategically placed, deliberately designed, and multi-use.

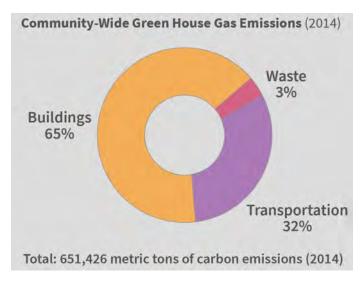
SomerVision identifies Assembly Square as an important transformational area. There is potential for creating new parks and public spaces as development occurs. The public space should not only function ecologically providing natural services such as stormwater capture but also should accommodate the social needs of the community such as gathering and recreation. Public space is a crucial element for a vibrant neighborhood. The parks and open spaces within the site should be well connected to promote walkability.

Celebrate the connection to the river

An interconnected open space system promotes walkability and connectivity. Several proposed projects can enhance the connection between Assembly Square and other neighborhoods such as the trail connection between Draw Seven Park to Route 99 in Sullivan Square and a bike/pedestrian bridge connecting to the other side of the Mystic River. Signage and wayfinding systems should clearly guide users to the riverfront trails. Different gathering and seating areas can be placed along the green network to accommodate a variety of uses. Trees should be planted along all trails to provide shade. Native plants are highly encouraged because they provide valuable food sources and habitat for pollinators and wildlife.

Build sustainability

The burning of fossil fuels and carbon emission are key driving factors for climate change. Green buildings that apply sustainable materials and practices can greatly reduce carbon emissions. New buildings in Assembly Square should be built green and sustainably. With the recently passed land development regulations it is required for all the new buildings in Assembly Square to achieve LEED (Leadership in Energy and Environmental Design) Platinum certification. Buildings can achieve zero net energy goals by utilizing on-site renewable





In net-zero energy buildings, renewable energy is generated on-site to provide for the building's total annual energy demand, such as through solar arrays.



Public space should be designed to be welcoming and accessible

energy resources such as solar panels and ground source heat pumps. Green roofs can enhance environmental performances. A system of heat energy transfer can potentially harness the existing wastewater infrastructure that runs under Assembly Square.

Transportation in the form of gas powered engines are responsible for a large share of carbon emissions. Single occupancy vehicles are the biggest culprit. Creating a walkable neighborhood and increasing the transit services offered can reduce the vehicle miles travelled from private vehicles in and around Assembly Square. Walkability and bikability should be a design priority for the street network and building configurations.

Assembly Square's energy production and carbon reduction goals should be measured district-wide instead of on a project-by-project basis to allow design flexibility, especially for the owners of smaller properties where onsite renewable energy generation may not be possible.

Improve air and water quality

The Wellbeing of Somerville Report (2017) highlights air pollution as an issue with serious health implications. The neighborhoods adjacent to I-93 have the most direct impacts. Recent studies show that the ultra fine air particles emitted from traffic are associated with multiple diseases. New residences or parks should not be located adjacent the highway. The buildings close to the highway should be taller to help block particulate matter and have central air purification systems integrated with the HVAC facilities. The requirements that reduce energy consumption can also improve air quality and water conservation because of the potential reduction of on-site use of fossil fuel.

Most of Somerville currently has a combined sewer system, however the city is working on separating the stormwater and sewer systems. There will be an increasing need to improving the stormwater quality as it would be released without wastewater treatment. The stormwater infrastructure standards are evaluated with current rainfall events rather than future projection. The City's Climate Vulnerability Assessment (2018) shows that the present 25-year storm will likely to be the 10-year storm by 2070. New development projects in Assembly Square can use drainage design criteria that reflects future projections. The application of green infrastructure practices such as infiltration beds, rain gardens, and porous pavement should also be encouraged.



An example of rain garden



Tree wells can be used as a green infrastructure device to capture stormwater



Native plants require less water, fertilizer, and maintenance than many traditional garden plantings.

3. DESIGN SAFE, COMFORTABLE AND INTERESTING STREETS AND PATHS AND INCREASE TRANSIT AVAILABILITY

Increase "mode split"

Do not prioritize the car above other modes of travel and seek to split the mode choice more evenly among various options including transit, cycling, and walking. Assembly Square is a mix between urban and suburban development with a great deal of space dedicated to cars and their storage. It is a goal for Assembly Square to become less car-centric (while still providing parking to visitors from other neighborhoods). Achieving a more balanced mode split is as much about providing streets that are complete, with multimodal facilities, as coordinating land-use planning and transportation planning

Assembly Square should aspire to see 75% of trips to and from the site become trips that do not involve a single-occupancy vehicle. Another goal would be to design the neighborhood in such a way that no internal trips are ever taken by car. With appropriate development parameters and transportation interventions, the City can affect the mode split. Reliable transit service, in combination with comfortable, interesting, and safe streets for walking and biking, and an Assembly Square where a diversity of uses, places, and people are in close proximity to one another, can help achieve the community goal of increased mode split and lessen the need for additional parking.

Balanced street spaces

Assembly Square's streets should be designed for everyone. This includes pedestrians and those with disabilities, cyclists, transit riders, freight and deliveries, motorists, and those ride sharing. Streets must always provide a mix of mobility and placemaking. They need to provide access to businesses and residences. They must also be spaces for socializing, commerce, dining, gathering, vending, and celebrating. In Assembly Square, the quick travel function of a street is not the main priority and should take a backseat to its placemaking function with less focus on moving people through the neighborhood and more on being in the neighborhood.

While some streets, like Grand Union Boulevard, will need to accommodate vehicles and moving them through the site, others can be more balanced toward pedestrians and cyclists. Some streets and areas like the Barrow can have more of a European feel with streets that are narrower and give a priority to pedestrians. A paseo could extend from the northern to southern end of the site (like La Rambla in Barcelona). And Middlesex Avenue can be rebalanced from a wide back street to be a complete street fronted by buildings.

Transit access

An efficient and reliable transit system is essential to providing safe and convenient options connecting Assembly Square to the rest of Somerville, other destinations, and the broader Boston Region that will make people choose transit over a personal vehicle. The Orange Line Station in Assembly Square is a huge achievement for Somerville and exemplifies that dreaming big can result in real changes. However, the MBTA is packed during peak (trains are

"The design of cities begins with the design of streets. To make a good city, you need good streets, and that means streets where people want to be."

- John Massengale Street Design: The Secret to Great Cities & Towns



A shared street rendering

Parking is an essential element of modern society and its impacts and cost are not insignificant. However, an effectively managed parking system can also contribute greatly to health, vitality and image of any community; and within the realm of parking management, one of the biggest elements of an effectively managed system is the development of effective strategies and policies.

full as they come in from Medford). Increasing the Orange Line frequency is needed. In addition, other transit option in and out of Assembly Square should be explored. A new bus route linking Assembly Square to the Green Line and other Somerville destinations should be explored along with alterations to Bus Route 90. Routes across the Mystic River should also be explored such as the addition of a water taxi.

Streets for pedestrians

In Assembly Square streets should be designed for people. A special focus should be placed on the design of sidewalks, both as a space for travel and as a place for social and economic activity. Streets should be safe, comfortable and interesting for the pedestrians with continuous street walls with lots of windows and doors, shopfronts and awnings.

Assembly Square's sidewalks can be divided into three primary functional zones, the Frontage Zone, the Clear Path, and the Furnishing/ Landscape Zone. The purpose of each zone remains the same across the neighborhood, but the actual design and dimensions will vary depending on the unique character of each street and block.

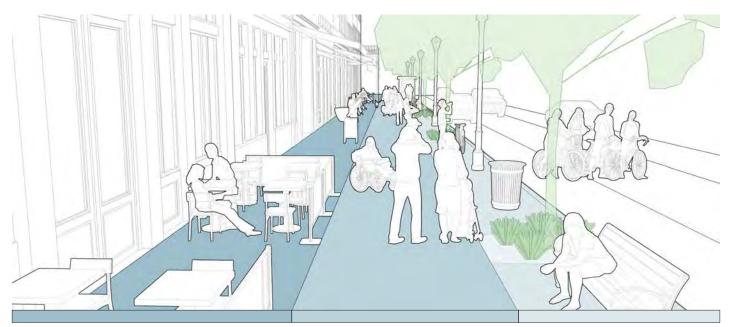
When pedestrians do cross a street, highly visible fourway zebra crosswalks should be used.

Streets for cyclists and low-speed mobility

Bike infrastructure for commuting and recreation should be expanded throughout Assembly Square. Ideally a full ring of bike infrastructure should be created through the neighborhood that connects to the larger regional bike network. Ideally bikes should be accommodated above the curb level or at least be parking protected bike lanes.

Ensuring ample, secure, and convenient bike parking is a critical step for encouraging bike use and helping Assembly Square reach its mode share target for bike trips. Provisions for bicycle parking within Assembly Square should including sidewalks, on-street, within parking lots, and in parking garage facilities.

The development of low-speed, motorized mobility offers significant potential benefits for Assembly Square, but presents safety challenges as well. Scooters and e-bikes should not be allowed to operate on sidewalks, as they negatively impact pedestrian safety and convenience, but also do not necessarily belong in vehicular travel lanes. They echo the challenges of providing for safe cycling and, in fact, are more compatible with cycling than with any other travel mode. Assembly Square will plan for low-speed mobility modes by incorporating them into the planning for bicycle lanes and other bicycle facilities.



Frontage Zone

This space extends a buildings' activities. It is the location for seating, signs, retail displays, and landscaping.

Clear Path

The clear path is dedicated to pedestrian travel. It must be accessible and free of physical obstructions to allow for the movement of people.

Furnishing/Landscape Zone

This spaces primary purpose is to separate the clear path from motorists and provide a location for street furniture, trees, and utilities.

4. GROW REVENUE-GENERATING USES FOR SOMERVILLE

Expand the City's non-residential tax base

Assembly Square's current contribution to Somerville's tax base is significant and the neighborhood is well on its way to vastly expanding its market values and tax revenues. Expanding the tax base is about creating more assets on the city's tax rolls in the form of new or improved business properties to spread the cost of municipal operations across more entities. The result is more money to enhance government-funded community features that add to Somerville's quality of life.

Growth at Assembly Square allows residential property taxes elsewhere in the city to remain manageable. Property taxes are the main tax supporting local education, police, fire protection, government, roads, and infrastructure like sewers, bridges, street trees, and street lights. Somerville is a largely residential community and it must optimize its mixed-use places.

A diversity of uses includes office, retail, restaurant, entertainment spaces, hotel, and residential which are planned, under construction, or entirely foreseeable. During the Virtual Charrette participants recommended allowing just enough residential uses to ensure eighteen-hour street activity. The plan recommends continuing the effort to attract a diverse portfolio of revenue-generating uses with an emphasis on offices and labs, especially.

Enhance the site's current strengths

One of Assembly Square's strongest assets is its proximity to the Mystic River. Assembly Square hosts nearly one mile of waterfront and shoreline access. This space at the river's edge should become an even more vibrant waterfront park that serves the local community and draws regional visitors year-round. Priority actions include expanding the depth of the waterfront park when possible, additional waterfront programming, inventive sustainability and resilience projects that also enhance recreation opportunities. The

enhancements of Draw Seven Park should also be supported by increasing access with better signage by Artisan Way and a new entrance over the rail line by Revolution Drive.

In addition, Assembly Square has already proven that it has a strong business cluster effect within the Boston area. Now the goal is to expand and deepen these effects by broadening the neighborhood's economic, commercial and office offerings through coordinated branding of the entire neighborhood, and consciously attracting complementary enterprises of all sizes, diversity, class and type.



Assembly Square has the ability to have something for everyone. The land development regulations should enable the uniqueness possible for each portion of the neighborhood.

Encourage life-sciences

At Assembly Square, innovative office developers who specialize in providing high end office, retail, and lab space are successfully attracting investment. As a result Assembly Square is emerging as a life-science center and has a healthy and growing mix of offices for health care services, technology, and life science research, but must compete with established centers elsewhere in the Boston metropolitan area. Continue to help Assembly Square compete by taking a cue from the life sciences incubator model. Assembly Square should offer a market space where businesses scale and grow – where metro neighbors, students, entrepreneurs, artists, and tourists come to create a community they can shape and call their own. Creating a real neighborhood will help to attract businesses, employees, and residents. Such trends bode well for the site's long-term occupancy and job creation and ultimately population and family growth.

Work with developers

The site's developers and Somerville's planners bring a substantial body of experience with economic development program design. For Assembly Square in particular, they have focused very well on achieving and maintaining a new avenue of economic growth for Somerville that pays for itself and contributes to the city's overall budget commitments. The neighborhood residents, planners and other key stakeholders within the city's business ecosystem are broadly concerned with improving livability and equity for residents through policies that support human-capital development, sustainable growth, and productivity improvement across everything they do. Continue the "good" relationship with developers (but more neutral development review before hard votes would help).

Develop new catalytic niches

While commercial space is key to tax revenues and developers, balancing the neighborhood needs more "soft-power" investments that can bring overall gains to the local economy. Attracting and promoting investments in the arts community, along with small foot-print markets will help to create a fully rounded and uniquely local neighborhood. Seek out monies and investments from corporate social responsibility programs and other similar community investments. Look to benefit from local cultural assets by creating new and unique experiences such as uncurated visible stacks. Find and encourage activities that will bring more people into the community either for the day or to live.

Build well and build for everyone

The Somerville community has high standards, which is an asset. The city is in a position to demand the best from every development. Assembly Square is not a "sacrifice zone" that must do whatever it can to be filled. The real estate in Assembly Square is a unique opportunity where multiple large sites are ripe for redevelopment that is economically positioned in close proximity to the center of the Boston region. New development and new businesses must still be of the highest quality place that meets the needs, demands, and aspirations of the community. LEED standards and on-site energy generation should be met. Expanded greenspaces and parks should be created. A complete neighborhood with a range of uses and needs for the community should be met including a grocery store or late night pharmacy for everyday needs. New development will create new workforce housing along with more larger units that could be appropriate for larger households.

Update land development regulations.

The land development regulations should reflect and encourage development that is in line with the community's vision for the Assembly Square neighborhood. Whether that be done by adjusting the existing code or creating additional form-based standards should be explored.

It is important to note that not all of Assembly Square should look the same. There are places by the highway that should be taller and not allow residential uses. There are places that should be lower and create a comfortable outdoor room. There are places that should encourage larger footprint buildings to accommodate lab and office spaces, while there are others that have smaller lots that should allow low-scale incremental development. The code should reflect the nuance of the vision while also allowing flexibility to ensure that the right kind of development is encouraged.

5. CONNECT PHYSICALLY AND SOCIALLY TO SOMERVILLE AND CULTIVATE THE ASSEMBLY COMMUNITY

Connect physically

Assembly Square can feel disconnected from the rest of Somerville because it is bounded by large transportation facilities and the Mystic River. The plan recommends establishing more physical connections such as the Kensington Connector, making Fellsway easier to cross on foot or bike, and adding a bike/pedestrian bridge which crosses the river.

Transit provides a connection to Assembly Square and new and enhanced transit may be possible. In time, the site will have a large enough residential population and host a sufficient number of destinations to become a candidate for Bus Rapid Transit, increased local bus service, and more frequent service on the Orange Line.

Draw Seven Park can improve its access by constructing a connection over the rails near the Orange Line station by Revolution Drive. Every effort should be made to increase connections and access to Assembly Square.

Connect socially

Assembly Square is a relatively new neighborhood in a region of established neighborhoods. It was not until the development of housing at Assembly Row and the relocation of Mass General Brigham, a major employment center, to Assembly Square that the area became more than an industrial and commercial hub. The social connections we see in established neighborhoods is still lacking, however. The social infrastructure of business improvement districts, main street associations, neighborhood and homeowner associations specific to Assembly Square are just beginning to form and need support. Spaces with civic uses, or spaces for NGOs and non-profits would also make Assembly Square a hub of live social and political activity.

Public art can be present in various forms, such as murals, sculptures, large scale installations, or music. A good piece of public art can enhance and transform a public space, creating a sense of place and community. The culture and traditions of Somerville can be condensed in a piece of public art work, manifesting to the residents and visitors about the unique stories of the community.



A central greenspace can connect the neighborhood and provide space for the neighborhood to come together.

Enhance the Assembly Square neighborhood identity

Most people in the Greater Boston Region think exclusively of Assembly Row and the Assembly Marketplace when they think about Assembly Square. Assembly Row and Assembly Marketplace have both done an excellent job making their brands and identity well known. But as more development occurs, the identity of the neighborhood will need to be broader and more indicative of the entire area. New development should strengthen the community's identity and character, while at the same time aid in building a complete center. This is done by ensuring that there is cohesion and flow between the buildings and within the public realm. Whether that is in street design, furnishings, or wayfinding signage, Assembly Square needs to find its unique identity.

Arts and culture reflect the spirit and soul of a place, create identity, and help facilitate a sense of belonging. Incorporating public art into a community is valuable because it promotes economic growth and sustainability, cultural identity, local artist involvement, social cohesion, and health and belonging. Providing spaces for art, and incorporating art into the streetscape and public spaces allow artists to connect to the neighborhood and make authentic spaces that are artistic and chic, and completely unique to Assembly Square.

Cultivate the Assembly Square community

As the mixed-use development at Assembly Square grows more residential development will be created and these residential opportunities should include a healthy mix of rental and ownership opportunities. To accommodate the needs of everyone, build the Assembly community, and make the neighborhood one for all ages, there needs to be a variety of housing options for a wide variety of people.

People seek authenticity in food, drink, art, music, and place. People want to visit and live in authentic places. People often choose independently owned establishments like breweries, barbers, tea houses, bistros, and bike shops because of a connection with the business owner or operator. A locally-owned business is more likely to express a unique vision and is less likely to adopt uniform aesthetics. A healthy neighborhood has a mix of both corporate chains that can bring in new people, and small local businesses that can become locally loved. Beyond authenticity and uniqueness, micro-chain, family-operated, and startups are key to a resilient local economy.

Make space for small, local, independent businesses

Residents at Assembly Square talked about how the neighborhood lacked some of the more unique, independent, and locally-owned establishments that are common in the greater Boston metropolitan region. Federal Realty, one of the site's principal property owner, talked about how attracting small business retailers is a major responsibility for the company's development team. They pushed back against the perception that their portfolio, or the portfolio of any major shopping center today, is just chain stores. According to Federal Realty, over 10% of their tenants at any given time are "momand-pop" operations.

Federal Realty described how it works to achieve the right mix of national retailers to provide a regional draw, and local businesses to provide uniqueness. Business development teams will often even attend small craft fairs and farmers' markets with the goal of providing temporary spaces, carts and kiosks to smaller businesses. While it is difficult for a small business to compete with major chains because the cost of occupancy, the rent, is lower for tenants seeking a ten-year lease than small businesses that tend to prefer one year leases, Federal Realty described how it often offers reduced rents to "mom-and-pop" operations in order to achieve local distinctiveness.

During the Virtual Charrette, attendees asked whether it was possible to require affordable spaces for businesses in the same way affordable housing is required, and while this is an interesting idea worth exploring this is not an idea that is clearly supported by state statues, one that has been widely implemented nationally, or one that has been tested in state courts. Ideally, some spaces should be rented at below-market prices (with public subsidy) to help establish and grow homegrown retail and businesses.

4. The Plan

The Plan chapter lays out the vision for the Assembly Square Neighborhood by showing what the neighborhood could look like in the future by implementing the plan concepts.

ILLUSTRATIVE PLAN

The Plan for the Assembly Square Neighborhood addresses the current needs of Somerville, while planning big for the future. This means envisioning *great new places that are compatible and respectful of context* which is shown in each of the focus areas. The Illustrative Plan shows how these places might develop by depicting the proposed streets, buildings, alleys, parking locations, and open spaces of a full future build-out of the Assembly Square Neighborhood. Understanding that complete change will not happen overnight, the plan is designed to be implemented one piece at a time, as opportunities arise. Although some plan details may change over time to meet physical, regulatory, or market constraints, the main concepts contained in the illustrative plan should be adhered to.

The plan calls for *growing revenue-generating uses for Somerville*, which means increasing the commercial tax base in order to keep property taxes manageable. This is accomplished by showing new development where existing land is not being used to its highest and best use. This is shown in the Assembly Marketplace and Assembly Square South focus areas where large single-use retail uses accompanied with large surface parking areas are re-imagined as mixed-use, mid-rise developments that serve a diverse set of needs for the neighborhood. Assembly Square is emerging as a life-science center with labs and offices which are proposed for the Middlesex Corridor with higher density offices and lab spaces west of Middlesex Avenue.

In looking at how Assembly Square evolves in the future, there is a call to recognize the vulnerability of the site in an era of increased flooding and implement climate mitigation strategies through *increase access to nature and building sustainably*. This includes reducing the carbon footprint by becoming less car centric and increasing the amount of green space and urban canopy. This plan shows new mixed-use, LEED Platinum buildings with green roofs and additional green civic spaces that can be utilized for storm water management.

As Assembly Square attracts new development, workers and residents will demand safe, comfortable, and interesting streets and paths and increased transit to get to and around Assembly Square. The plan shows more streets connecting existing development across the entire neighborhood. A center street between Middlesex Avenue and Grand Union is planned as a pedestrian alternative to the more car-centric parallel streets. This street connects several different civic spaces to create interesting spaces along one's journey through Assembly Square. The plan also proposes several shared streets that would create safe, comfortable, and interesting spaces that prioritize the pedestrian and can even be closed to traffic for community events.

Lastly, as Assembly Square grows to meet the needs of its residents and builds great new places to attract more people, its needs to *connect physically* and socially to Somerville and cultivate the Assembly Square community. Cultivating the Assembly Square community includes investing in branding the neighborhood to create an identity, adding more art to enable an uniqueness, and creating civic spaces that foster and build human connections. The plan lays out different character areas to drive the form that the neighborhood takes, but the focus areas show how unique identities can be created in different locations to meet the needs of the diverse residents of Somerville.

FOCUS AREAS:

1 Assembly Marketplace

See more on page 4.8

2 Middlesex Corridor

See more on page 4.12

3 Assembly Square South

See more on page 4.17

4 Barrow Micro District

See more on page 4.20

FOSS PARK

ILLUSTRATIVE PLAN LEGEND City Boundary

Neighborhood Boundary

79

9

7

50

Primary Ped Network

Proposed Buildings

Under Construction

Existing Buildings

Proposed Green Space

Existing Green Space

Proposed Plaza Space

Existing Plaza Space

Shared Street

Blocks

River

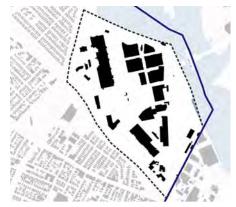


GENERAL PLAN CONCEPTS

The Assembly Square Neighborhood Plan envisions different character areas to meet the different needs of the neighborhood. This is not planning policy or zoning, but a vision for the built character and use in the future. The plan shows redevelopment and infill throughout the neighborhood which is distilled in the figure ground diagrams to the right.

PROPOSED BUILDING HEIGHT

A large deciding factor of the character of Assembly Square will be building height. The existing building heights east of Grand Union Boulevard are 6 stories or less with an additional 12 story towers in some areas; with much lower, single story commercial buildings west of Grand Union Boulevard. With new development, buildings located closer to I-93 and the Fellsway will have more height. Heights will be at a medium level along Middlesex Avenue and Grand Union Boulevard, with buildings stepping down in height or have setbacks closer to civic spaces to provide sunlight.



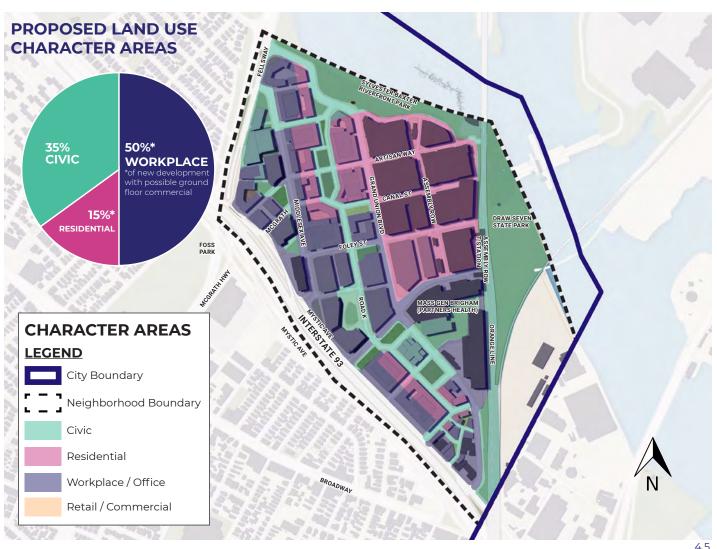




LAND USE CHARACTER

While the Assembly Square Neighborhood will remain mixed-use, some areas will take on a particular character based on the dominant use. Currently, the neighborhood consists of a residential and retail character in Assembly Row, workplace character around Mass General Brigham and to the south, and largely retail around the Home Depot and Assembly Marketplace. In the future, it is assumed retail will occupy the ground floors while the dominant use of residential or workplaces will occupy the upper floors. Based on the existing residential dominance and market demand studies, this plan proposes 50% of new development being workplace dominant, with residential uses located around new civic spaces. By identifying these general character areas, planning decisions can be made around policies and zoning that reflect the needs of each character area.





CIVIC SPACES

The plan for the Assembly Square Neighborhood envisions a variety of civic spaces that together will allocate 30% of land for public use. The plan calls for a variety of civic space types to serve wide a range of functions. This is important to provide space to get fresh air and for recreation, to hold events, to gather and to maintain a healthy environment. The following are the primary strategies for creating a connected network of civic spaces in the Assembly Square Neighborhood:

1

Redevelop Draw Seven State Park

The redevelopment of Draw Seven State Park is encouraged to create a large modern waterfront park along the Mystic River for residents and visitors. The park's location to the east of several rail lines reduces its visibility and access from the rest of the neighborhood. Creating an entrance to the park that can be accessed from the Assembly T-Station near Foley Street or Revolution Drive over the rail lines (for transit riders and the general public) can significantly improve access to the park. Improved wayfinding and visible access to Draw Seven State Park along Great River Road will strengthen the connection to Sylvester Baxter Riverfront Park and encourage more people to visit.

2 Connect Sylvester Baxter Riverfront Park

Sylvester Baxter Riverfront Park is one of Assembly Square's Regional Parks. The park is directly adjacent to the Assembly Row development and the development proposed in this plan. The park can be further integrated into the neighborhood by transforming Great River Road into a shared street.

3 Expand Sylvester Baxter Riverfront Park

Realigning the northern stretch of Grand Union Boulevard can allow for a additional waterfront park space.

4

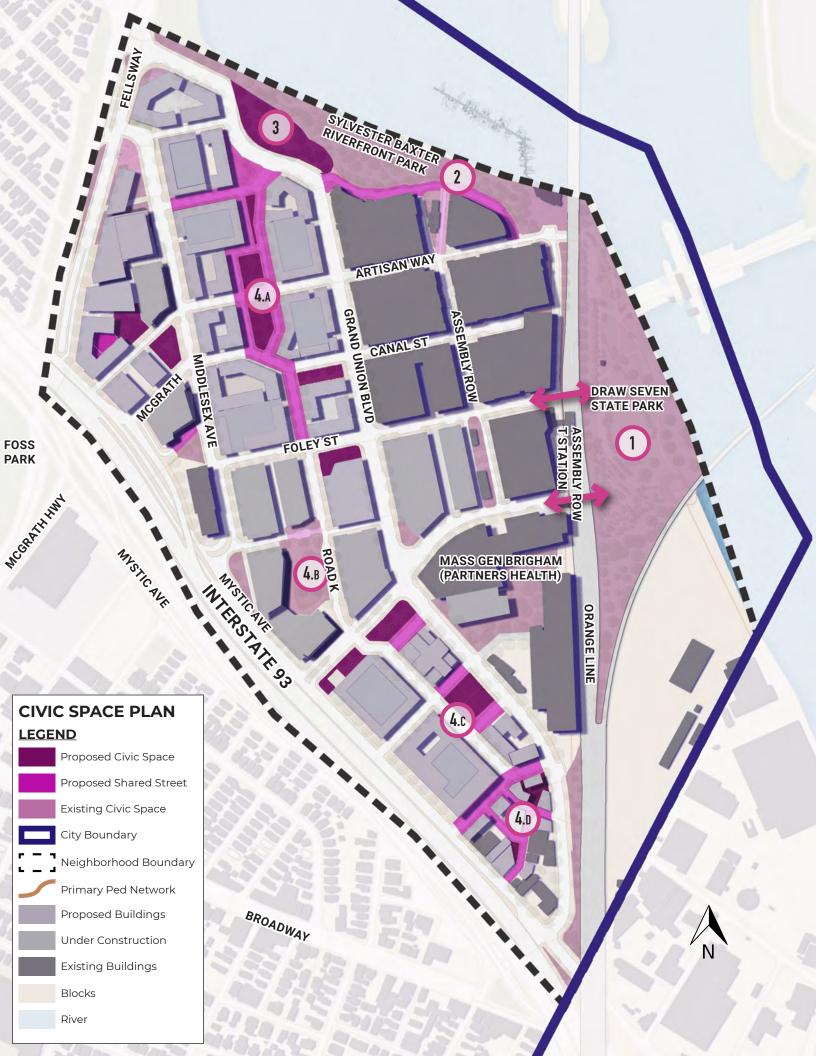
Create the Central Commons

The centerpiece of the master plan is Central Commons, a chain of civic spaces linking the expanded Sylvester Baxter Riverfront Park in the north to the Barrow Micro-District in the south. The Central Commons will take on different forms as it traverses the neighborhood.

- At the heart of the Assembly Marketplace is the new Assembly Central Green surrounded by shared streets, around which new residential development is oriented in the area flanked by Grand Union Boulevard and Middlesex Avenue. This Central Green can host community events like art fairs, farmer's markers or food truck rallies.
- **4.B** From here, the Central Commons continues south in the form of shared streets and plazas as it passes through the XMBLY development.
- It then evolves into a tree lined street with wide sidewalks and sidewalk dining in the Assembly Square South area, where it joins to a square that fonts a civic building.
- Finally, as it reaches the Barrows Micro-District, the Central Commons once again becomes a shared street that intermittently widens into plazas for various social and community events.

SHARED STREETS AS CIVIC SPACE

The Assembly Square neighborhood should reclaim the street in how the public realm looks, functions, and feels. This plan champions Shared Streets as the place for the community to take back the street as civic space. Shared Streets prioritize walking over all other movement, while providing spaces for bikes and allowing vehicles limited access at low speeds. This is often cued by a curbless textured or permeable pavement that reinforces the pedestrian priority of the space. These streets should be designed to adapt to different civic functions—like closing the street for community events like farmers markets or food truck events.

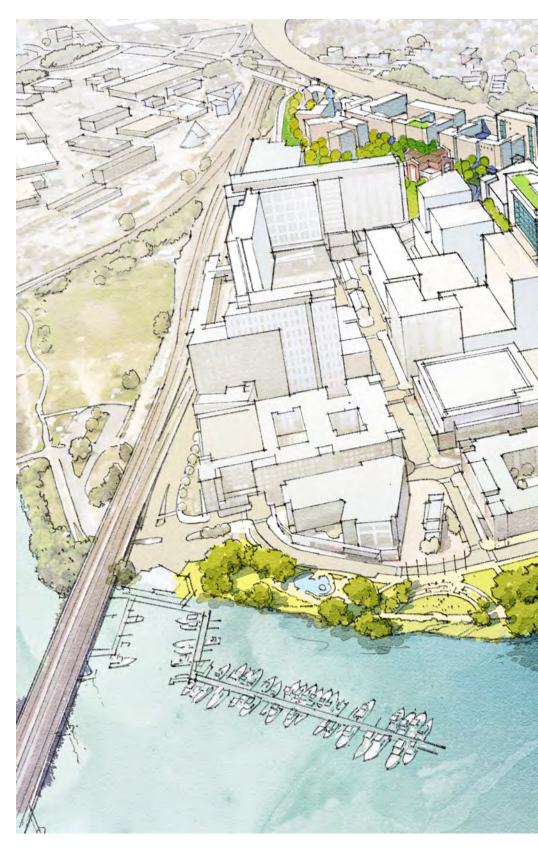


ASSEMBLY MARKETPLACE

MARKETPLACE REDEVELOPMENT

The Assembly Marketplace site is the largest redevelopment opportunity in the Assembly Square Neighborhood. The site currently consists of one large retail building fronted by surface parking. The vision for the future extends the mixed-use residential character from the east side of Grand Union Boulevard. An interconnected network of streets create a finegrained network of walkable blocks with a series of civic spaces at the heart of the neighborhood. Mid-size buildings at the center transition to larger buildings with green roofs at the edges.

- Public civic spaces form the heart of the neighborhood, and create space for community events.
- A natural park at the northern edge connects Baxter
 Riverfront Park and brings nature in to the neighborhood
- A network of small walkable blocks creates a pedestrian-friendly district.
- Buildings along the wider streets (Grand Union Boulevard and Middlesex Avenue) should have buildings that are approximately 12 to 15 stories and create a 2:1 ratio height to width ratio.
- Buildings around the central green space should be between 4 to 8 stories and ideally create a 1:3 height to width ratio.



Proposed Redevelopment



CENTRAL COMMON

The vision for the Assembly Marketplace puts civic space at the heart of the neighborhood. A series of formal civic spaces run through the center of the marketplace blocks, which are flanked by shared streets. Commercial ground floors and residential upper floors all look out onto these civic spaces.

The block sizes in Assembly Marketplace are smaller than those on the other side of Grand Union Boulevard and a few strategically located angled streets create a more informal urbanism for a neighborhood form more reminiscent of older neighborhoods in the area. The plan for the Assembly Marketplace also creates a series of distinct spaces with unique character and carefully curated views, enticing people along to "see what's around the next corner." However, each street maintains its primary cardinal direction of either going north to south or east to west, so the area remains easy to navigate.

Several blocks are slightly larger in order to accommodate parking garages that are lined on all sides by habitable buildings with doors and windows facing the streets.

- Buildings with doors and windows hiding mid-block parking garages
- 2 Strategically located angled streets create a more informal urbanism and distinct spaces
- 3 Shared streets surround the Central Green







Central Commons





MIDDLESEX AVENUE CORRIDOR

Middlesex Avenue is located in the western portion of the Assembly Square Neighborhood. It serves as a critical connection between Fellsway and Mystic Avenue. To the west is Mystic Avenue and the elevated I-93 viaduct, the edge of the neighborhood and a barrier to the surrounding neighborhoods.

The redevelopment plans from the early 2000s focused their attention on the larger parcels located east of Middlesex Avenue where the simplified parcelization and larger sizes promoted the large-scale change envisioned. In the decades since, Assembly Square has successfully rebranded and is attracting new residents, workers, visitors, and increasing attention from developers. The smaller parcels located along the western side of Middlesex Avenue are now the sites of several proposed projects for office/lab/research and development (R&D) space. This corridor is ideally positioned to become the premier location for the life sciences in the city.

The Corridor Today

The corridor today stands in stark contrast to Assembly Row, seemingly untouched by the burgeoning urbanism underway just around the corner. The eastern side of Middlesex Avenue is lined with Assembly Marketplace's back of house, a large expanse of blank wall stretching for over 1,000 feet that prevents the excitement of Assembly Row from spilling over onto Middlesex Avenue. On the west are smaller parcels with a mix of parking lots and buildings with various uses. Several small streets intersect with Middlesex Avenue but offer little in the way of connectivity due to their termination at the interstate. The northern end of the corridor is marked by the Somerville District Court building. The street itself reflects its current surroundings. A wide stretch of unmarked pavement, the street maintains its industrial character, including wide lanes, no street trees, intermittent sidewalks, and limited crosswalks.



Aerial image of the Middlesex Avenue corridor today







1 Projects in the Works

Upcoming projects along Middlesex Avenue, including Xmbly, Brickyard at Assembly, and EDGE Assembly Square, may bring hundreds of thousands of square feet of office, lab, and R&D space to the neighborhood.

Re-Imagining Middlesex Avenue as a "Complete Street"

Transforming Middlesex Avenue into a great urban street with wide sidewalks, regularly spaced street trees, cycle tracks, and on-street parking will allow it to provide a wide range of mobility options while also allowing the activities within the buildings to spill out onto and enliven the sidewalks.

A Premier Research Corridor

Taller buildings housing office, lab, and R&D space will be located closest to the interstate, gradually decreasing in height towards the center of the neighborhood.

(4) Courthouse Transformation Options

The Somerville District Court building is an existing civic use in the neighborhood that's future is yet to be determined with options to remain the same as it is now, to expand the current building, or to be relocated to a different part of the city.

5 New Connections

The neighborhood's east-west streets will extend westward past Grand Union Boulevard, creating new blocks where the Assembly Marketplace is currently located and will connect the Middlesex Avenue Corridor to the rest of the neighborhood.



Illustrative plan showing the envisioned future of the Middlesex Avenue Corridor

A Growing Premiere Research Corridor

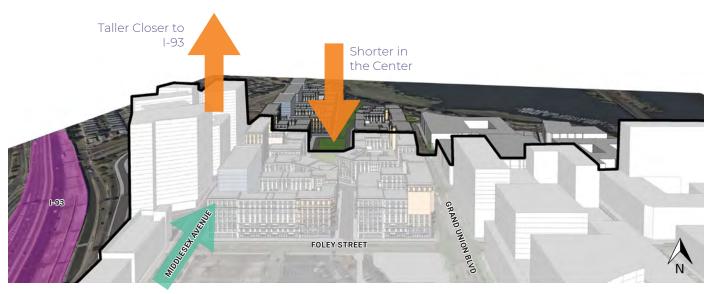
The 2000 Assembly Square Planning Study outlined a vision where the predominant use of the district would be office and R&D with active retail at street level. This plan continues to support that vision and recommends changes to further support office/lab/R&D development in Assembly Square focused along the Middlesex Avenue corridor.

Properties along Middlesex Avenue are beginning to undergo a transformation, largely driven by the region's demand for life science lab and office space. Three large mixed-use projects along Middlesex Avenue have recently been approved or are far along in the process, including Xmbly, Brickyard at Assembly, and EDGE Assembly Square. Each is proposed to contain a large amount of office, research and lab space with building heights of up to 275 feet.

With connections to I-93, Fellsway and Mystic Avenue as well as being within a 10 minute walk of the Assembly T-Station, the corridor has relatively good access given the constrained nature of the neighborhood. With proximity to the interstate comes noise and air pollution, making the area west of Middlesex Avenue less suitable for residential uses and green space. During the public design charrette, participants frequently mentioned building taller closer to I-93, in contrast to a desire for more moderate heights elsewhere, to create "a wall of buildings" to mitigate noise and air pollution reaching the interior of the neighborhood.

Taller permitted building heights closer to I-93, tapering to a more intimate scale in the residential heart of the neighborhood, can accommodate modern office. research, and lab space with greater floor to floor heights. The zoning ordinance for the Assembly Square Mixed-Use District ("ASMD") regulates building height by distance from the MBTA Orange Line station entrances. With a distance of more than 1,000 feet from a station entrance, building height is limited to 125 feet (approximately up to 8 stories for office/lab/R&D) within the corridor. A more nuanced approach to height regulations is needed recognizing that nearly the entire neighborhood is within walking distance of the MBTA Orange Line station, the overall need for housing, and accommodating a growing industry and tax base. The Middlesex Avenue corridor should permit taller buildings of 18 stories on the western side and 12 to 15 stories on the eastern, tapering down to 4 to 8 stories along the Central Commons.

The bottom portion of these buildings should define the street wall and pedestrian experience with streetoriented architecture. Active and engaging ground floor uses should front Middlesex Avenue to create an interesting pedestrian experience. Civic spaces should be inviting to the public, avoiding isolated or inward focused spaces catering to the building's tenants only.



Taller buildings will be located closer to I-93 while a more intimate scale forms the residential center

Re-imagining Middlesex Avenue

As Assembly Marketplace redevelops and streets like Artisan Way are continued through to Middlesex Avenue, the corridor will become connected to the rest of the neighborhood. A new street design for Middlesex Avenue that embraces the public realm can help create a place where businesses want to locate with a desirable address on a great street. Slowing traffic speeds, creating opportunities to cross at regular intervals, and providing safe and comfortable options for all modes of travel will further knit together the fabric of the neighborhoods west of I-93 and Assembly Row.

The street as it exists today will be transformed into a vibrant and welcoming space, embracing the new uses alongside it. The expanse of pavement is organized into designated travel and curbside management lanes. Regularly planted street trees add a sense of formality and enclosure. Protected bike lanes are located adjacent to widened sidewalks. Buildings are brought closer to the sidewalk and create an engaging streetwall of shops, offices, and building entrances. While the specifics of the design from curb to curb may evolve to meet mobility needs, the key elements of a great urban street will carry through.



Middlesex Avenue today, looking north at the intersection with McGrath Hwy

- 1 Bioswales & Green Infrastructure
- 2 Regularly Spaced Street Trees
- Raised Protected Bike Lanes and Wide Sidewalks
- Curbside Management Lanes with EV Charging Stations
- 5 Engaging Street Fronts
- 6 Bikeshare Station



COURTHOUSE TRANSFORMATION OPTIONS

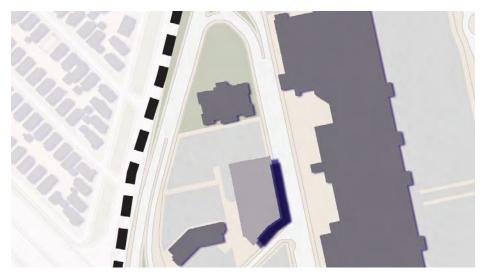
Somerville District Court sits at the intersection of Middlesex Ave and Fellsway, one of the major entrances to Assembly Square. The courthouse building is fronted with a triangular shaped green space and has surface parking at the back side. The are several future possibilities for the courthouse site: to remain the same as it is now, to expand the current building, or to relocate to a different part of the city.

Courthouse Expansion

The parking garages in the future development near the site can have designated parking spots for the courthouse users. This can alleviate the parking pressure from the surface parking lot. A building addition to the courthouse can occupy a portion of the existing parking lot with the remaining parking lot transformed into a civic space. The building addition can potentially create a more friendly frontage facing the Fellsway.

Courthouse Relocation

Relocating the courthouse would allow for a complete redesign of the site. In this potential new design, the civic space is framed by new buildings. The buildings along the Fellsway provide a buffer to the noise and particles from the highway. The new building configuration would also create a more active street frontage.



Courthouse Existing Conditions



Courthouse Expansion



Courthouse Relocation

ASSEMBLY SQUARE SOUTH

Currently the Assembly Square South area features aging, suburban, auto-oriented development. The single-use commercial development with large surface parking lots was designed to capitalize on visibility to motor vehicles passing by on highway I-93. Some sites are currently vacant while others are occupied by businesses continuing to prosper. A careful phasing plan can allow portions of the area to evolve as conditions permit.

Redevelopment Ideas

As Assembly Square South continues to evolve over time, the land can be used more productively. Uses should be diversified to serve a full range of daily needs. Multi-story buildings can be incorporated to bring more people to the area and increase its vitality.

A layer of office buildings, perhaps medical office or labs, could be built on the portion of the site closest to the highway. If taller and more continuous, these office buildings will help to screen the rest of the site from pollution and noise generated by motor vehicles on the highway. Office uses would also benefit from highway visibility.



Assembly Square South, existing auto-oriented conditions



Phased redevelopment focused on building complete civic spaces



Assembly Square South, growing more complete over time.

4. THE PLAN

At a distance of approximately 300 feet from the highway, uses could transition to include a variety of dwellings. Residential uses can be organized around a series of public green open spaces of various sizes, shapes and functions.

The mix of uses could include a commercial retail component, designed to complement the walkable format of the new residential and offices.

The site plan should accommodate implementation in phases, as older existing commercial buildings become ready for redevelopment. For example, the Circuit City site could be redeveloped first to complement the Barrow Micro-District while the Home Depot continues to operate. Redevelopment phasing should be organized to produce series of complete, 2-sided streets and civic spaces.

- 1 Playground
- 2 Cafe pavilion
- 3 Central lawn
- Naturalistic park



Grand Union Boulevard looking south, a focal vista.



Civic spaces can accommodate many activities, serving a diverse population.



A focal building site which could house a museum





New streets and civic spaces offer an opportunity to add a great deal of green to the currently highly-paved site. Street trees and other plantings should be used to increase pedestrian comfort throughout. Open spaces could feature a variety of landscape treatments, from formal lawns to naturalistic areas, playgrounds, treeshaded dining terraces and café kiosks.

A plaza cafe on the walk to the Assembly Transit Station.



...or a market hall, or many other potential uses.

THE BARROW MICRO-DISTRICT

Throughout the public process, participants expressed a desire for human-scale design and finergrained development represented by the Somerville Barrow scenario. While the street and block network of the Barrow scenario is not feasible for the needs of the entire neighborhood, it does match the fine grain character of one existing area. The southern portion of Assembly Square has a very different character from the rest of the site with small parcels and multiple property owners. The existing buildings have smaller sizes and are mostly occupied by makers and smaller businesses. The Barrow design concept is appropriate for this area. This area can become a vibrant micro district supporting a diverse range of uses such as arts and crafts, maker space, local restaurants, and residential.



Illustrative plan showing the vision for a new micro-district



Small museums



Maker space



Arts and Crafts



Local restaurants



Boutique hotel



Art installation

THE BARROW DESIGN

The design for the Barrow Micro-District reflects the existing property ownership pattern. Some existing buildings remain in the proposed design. North Union Street is maintained and extended as the main street. The width of the street varies. creating pockets of civic space along the way, culminating at a public plaza. The street's winding path creates a sense of mystery and discovery. Strategic infill development lines the main street with building facades and activity. The Barrow area in the future will offer residents and visitors with a unique and vibrant experience.

- Existing buildings to remain
- Green roofs on new development
- Solar panels on new development
- Strategic infill development







CIVIC SPACE IN THE BARROW

Civic space is an essential component of the Barrow Micro-District. Here, buildings will line civic spaces consisting of a shared street and two plazas. The character of these spaces can integrate work from the local artists and reflect the industrial heritage of the site. These space should also be flexible and multifunctional to support various uses throughout the day and seasons, such as special events, food trucks, outdoor dining, and market displays.



Civic Space Diagram



A possible civic space design for the Barrow

THE BARROW STREETSCAPES

Currently a portion of North Union Street is paved with yellow brick, the fine texture of which helps to create a sense of human scale. New street paving should have a consistent style and character. North Union Street is envisioned as pedestrian friendly main street for the Barrow Micro-District. Lighting fixtures and plantings are essential to create a comfortable and safe streetscape.

The outdoor furnishings should fit the character of the adjacent properties. The rendering looking south at existing buildings shows features that are in tune with small businesses such as maker spaces and art studios. The rendering looking north has a more formal streetscape design to match the architectural style of new development.

The right-of-way of North Union Street should have varying width, widening in some locations to become plazas, or other type of civic space, allowing room for outdoor dining and events.



A possible streetscape design for the Barrow, looking south



A possible streetscape design for the Barrow, looking north

5 Mobility

This chapter outlines the mobility recommendations proposed by the team. The following analysis shows how Assembly Square can develop walkable, transit served streets within its neighborhoods, while also helping to reconnect it with surrounding neighborhoods.

INITIAL FINDINGS

STREET NETWORK

Initial research identified an existing street network characterized by large blocks west of Grand Union Boulevard with a network of small streets to the east. The area is currently served by bike lanes on Grand Union Boulevard among other locations as seen below. One major theme of the analysis, and a frequent comment conveyed by the public, is that Assembly Square is cut off from surrounding neighborhoods due to I-93, Fellsway, and the Mystic River.

WHAT WE FOUND:

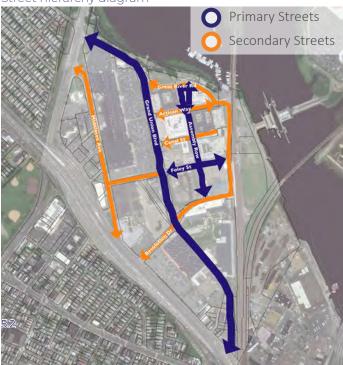
- Wide roads and long crossing distances that make the neighborhood seem less inviting for walking or biking.
- Large footprint highway infrastructure and elevational differences make connections with adjacent neighborhoods challenging.



Existing pedestrian facilities diagram



Street hierarchy diagram



Existing bicycle network diagram



STAKEHOLDER INPUT

There is major vehicle congestion on and around Assembly Square. Fellsway is particularly congested during the morning and evening peak times. This creates difficulty for those who would like to travel to the site, especially for residents of the rest of Somerville that find the traffic to be prohibitive in traveling to the neighborhood. The general lack of connection to Somerville for transit, biking and walking make Assembly Square an area that residents do not travel to often. Residents hope for the opportunity to have better access to Assembly Square. Vehicles traveling at high speeds and wide roadways make traveling as a pedestrian feel unsafe. Residents and stakeholders hope for more pedestrian and bicycle facilities that improve safety to and within Assembly Square.

VEHICLE ACCESS + PARKING + LOADING

Primary vehicle access points are on the northern and southern entrance of Grand Union Boulevard. Other access points include Revolution Drive and the northern and southern entrances of Middlesex Avenue.

Parking garages are located on the eastern side of Assembly Square and are primarily used for retail and residential parking with the exception of the Partners garage being used for office. All of these are pay access parking spaces. Parking lots are located on the western side of Assembly Square and are primarily used for retail trips for shopping and are free for the retail shops. The Marketplace has a maximum parking time of three hours. With free parking available, the Marketplace parking lot typically has higher occupancy than other parking lots.

Loading and service areas are located throughout Assembly Square. Loading areas within Assembly Row are typically located on the first floor internal areas of several buildings. Loading areas in the Marketplace and Middlesex Avenue are located at the rear of the buildings within the parking lot.

WHAT WE HEARD:

- "Lack of connectivity from the greater Somerville area."
- "Crossings into Assembly Square are unsafe and unreachable."
- "There are issues with speeding on Great River Road and Grand Union Boulevard and major vehicle congestion around the site's perimeter."

WHAT WE FOUND:

- Large city blocks and parking lots oriented to suburban travel.
- There are very few micromobility options in Assembly Square.
- There are 11 prominent loading areas throughout the neighborhood.
- Primary emergency access is on Fellsway.





Loading Areas

MICROMOBILITY + UTILITIES

There is one BlueBikes and one Zipcar location in Assembly Square. The BlueBikes station is located at the Assembly Square Orange Line stop and has 14 docks. The Zipcar parking spaces are located in the Canal Street Garage.

Emergency access is currently located along Fellsway from the fire station located approximately a half mile away. Fellsway is the primary access road to the Assembly Square Neighborhood.

Utilities stormwater considerations include low impact development techniques, utilizing best management practices, underground infiltration systems, porous surfaces and bioswales. All of these methods will be considered in the proposed stormwater management plan.

IMPORTANT NOTE:

• Stormwater infiltration is not allowed due to MassDEP requirements.







AREAS OF PRIORITY

Eight areas of priority were chosen within the Assembly Square Neighborhood to demonstrate how changes in the right of way can help provide greater options for pedestrians, bicyclists and transit riders. The focus of these proposals is twofold:

- 1. Ensure that current and future streets within Assembly Square allocate more space for pedestrians, bicyclists and transit riders, and;
- 2. Address the barriers to greater connectivity between Assembly Square and the surrounding neighborhoods in the design of Fellsway and I-93.

Gateways and Corridors

The areas of priority are divided into two main categories, gateways and corridors. The proposed recommendations for the Assembly Square gateways look at ways to improve connectivity into the neighborhood and create easier and safer ways for residents and visitors to reach their destinations. These changes might include tightening curb radii, right-sizing streets, and improving pedestrian visibility at crossings.

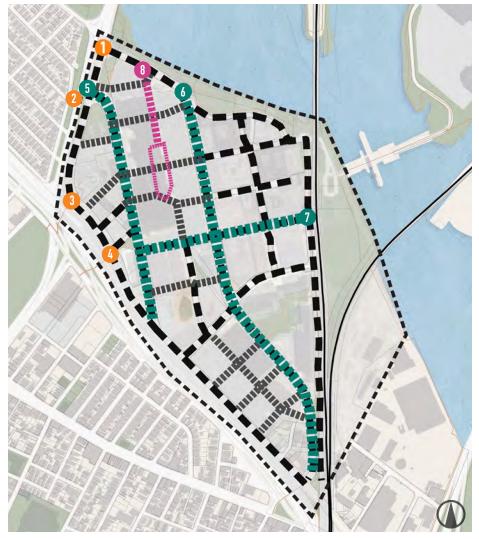
The areas of priority identified also include changes to the corridors as a whole and study short-term and long-term alterations to the street section. Instead of traditional auto-oriented design, the recommendations suggest that new roads be designed to generate walkable densities and land-use diversity along new corridors.

Gateways

- Grand Union Boulevard
 Gateway
- 2 Middlesex Avenue Gateway
- **3** Fellsway Gateway
- Kensington Connector Gateway

Corridors

- Middlesex Avenue Corridor Street Section
- 6 Grand Union Boulevard Corridor Street Section
- Foley Street Corridor Street Section
- New Shared Street Corridor Section

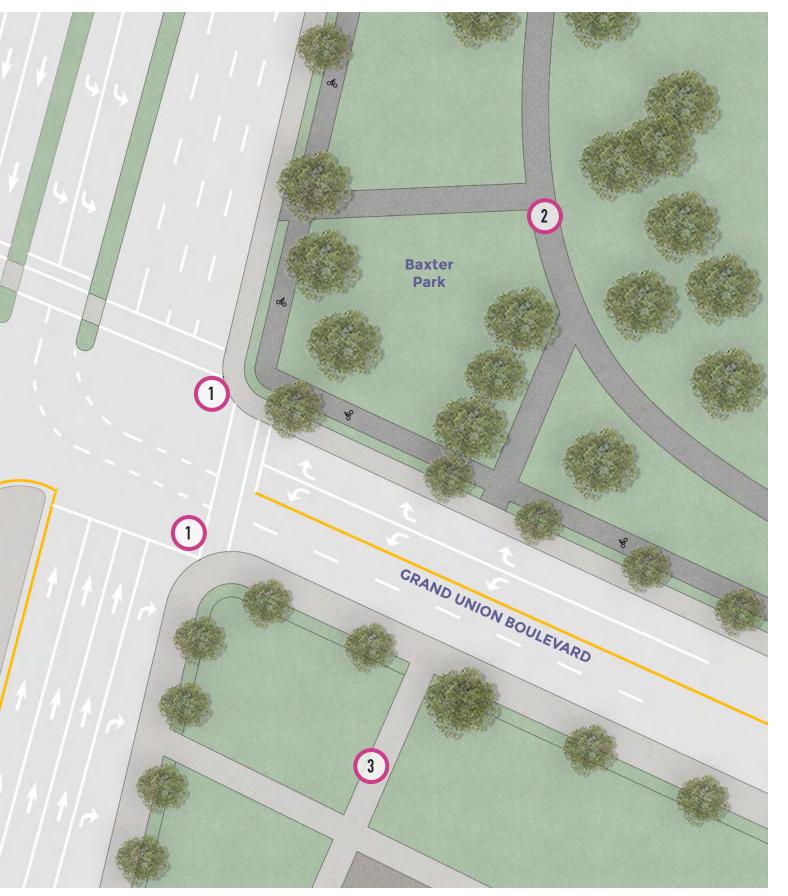


GATEWAYS

1. GRAND UNION BOULEVARD GATEWAY SHORT-TERM DESIGN

- The first proposal removes the right turn pockets and reduces the curb radii to discourage high-speed turning movements by motorists and expands the pedestrian area, creating shorter crossing distances. No reduction of lanes on the Fellsway occurs in this scenario.
- The proposal also adds enhancements to the pedestrian and bicycle paths within Baxter Park to increase the park's connections to and from Assembly Square.
- The new design removes surface parking lots from the perimeter areas and proposes tree-lined sidewalks and paths, promoting a walkable and accessible neighborhood.





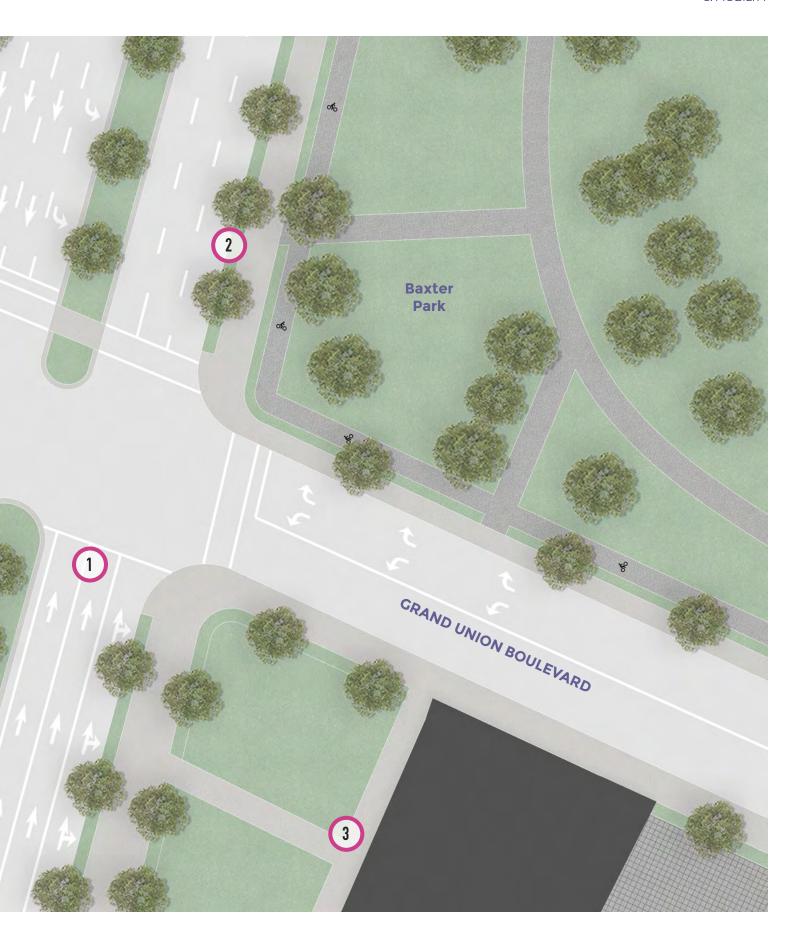
Proposed short-term intersection design

1. GRAND UNION BOULEVARD GATEWAY LONG-TERM DESIGN

- This scenario imagines a reduction in the number of lanes on Fellsway, and fewer accepting lanes on Grand Union Boulevard.
- This proposal envisions a more human-scale Fellsway with landscaped pedestrian crossing islands, a tree-lined boulevard, wide sidewalks, and shorter crossing distances.
- The plan encourages active urban edges and starts to envision the transition from Baxter Park into a more dense neighborhood to the South.

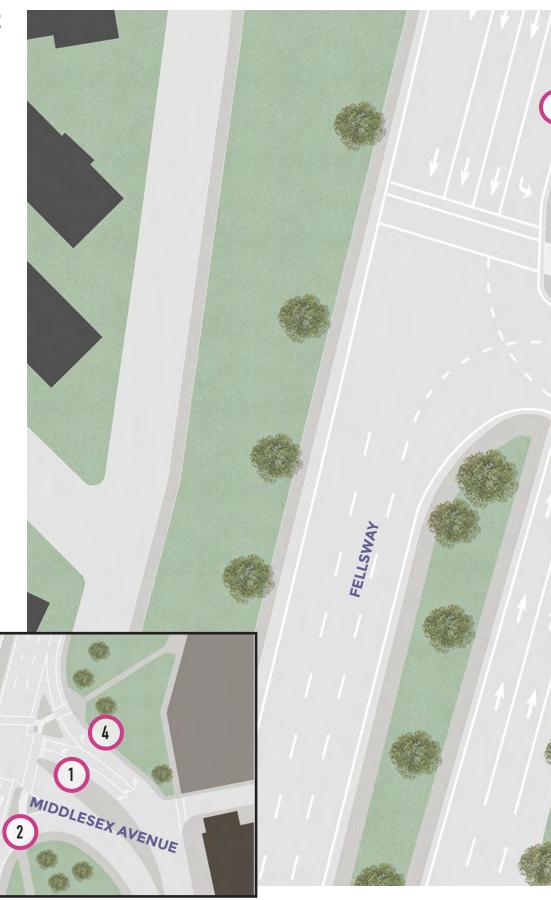


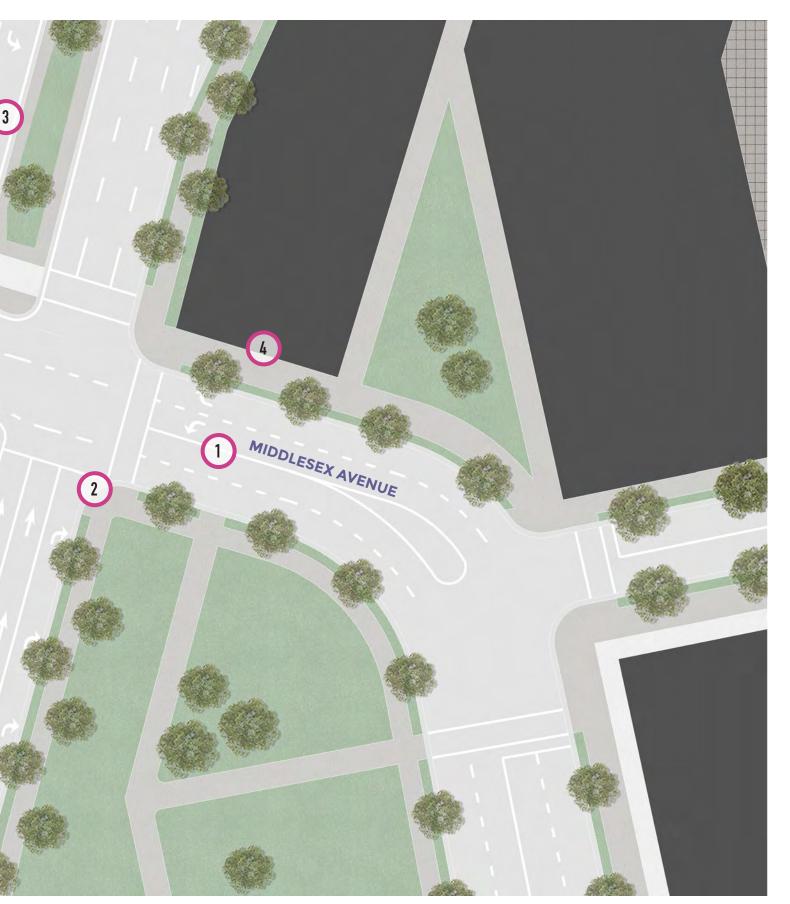
Proposed long-term intersection design



2. MIDDLESEX AVENUE GATEWAY

- The gateway at Middlesex is currently designed as a suburban mall entrance.
 This proposal seeks to bring urbanism to the edge of the Fellsway by removing the right turn pockets and raised median.
- 2 Crossing distances and curb radii have been reduced.
- The design consolidates surplus lanes on Fellsway and continues the boulevard-like design presented in the Grand Union Boulevard entry.
- The edge condition approaching Middlesex Avenue starts to become more urbanized while still accommodating for pedestrian paths and urban plazas.

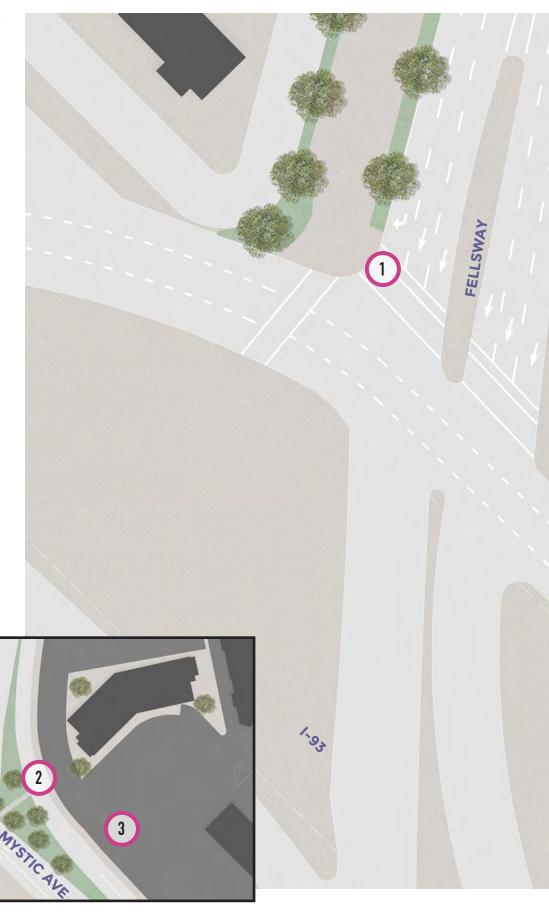


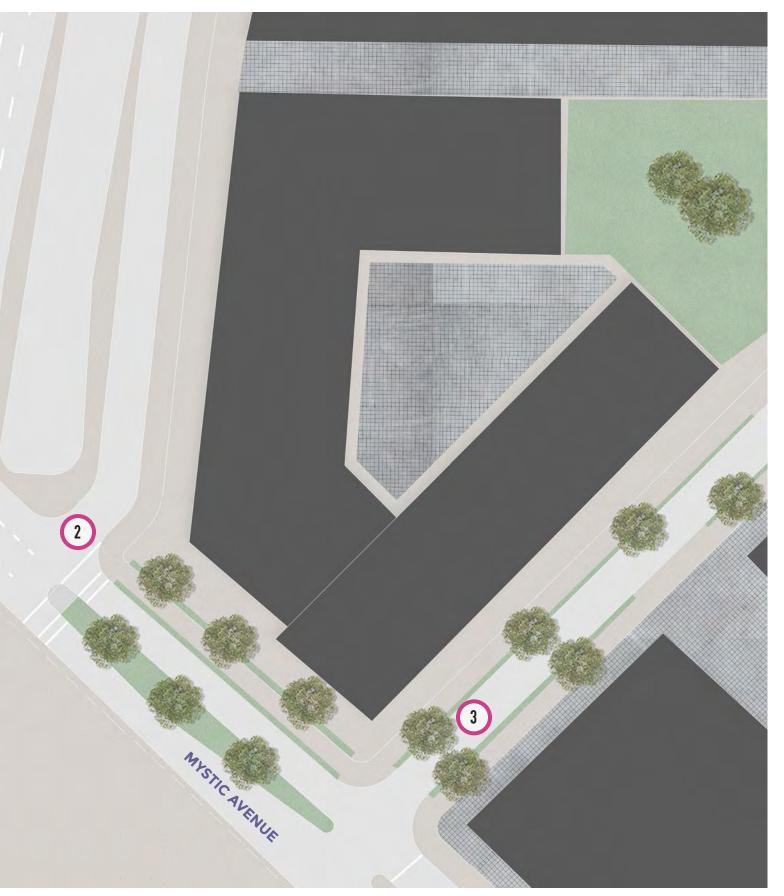


Proposed long-term intersection design

3. FELLSWAY GATEWAY

- This long-term design envisions the transformation of a busy highway intersection with limited access to Assembly Square into a safer and more inviting intersection, with tighter curb radii and shorter crossing distances.
- The design also provides two new vehicular access points into the neighborhood and breaks up the existing block size to create a more accessible street network.
- The new streets create more opportunities for urban edge conditions and eliminates large surface parking lots.

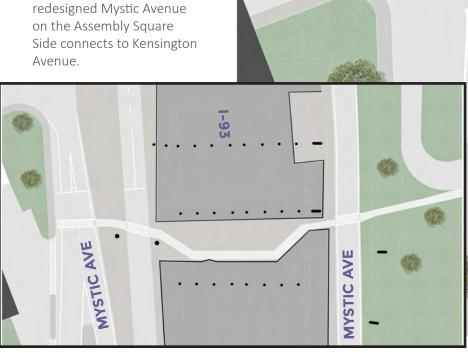


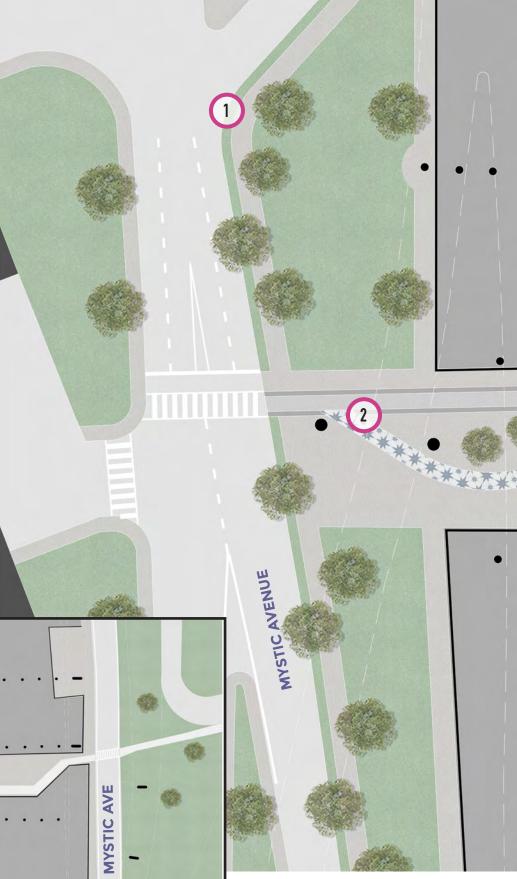


Proposed long-term intersection design

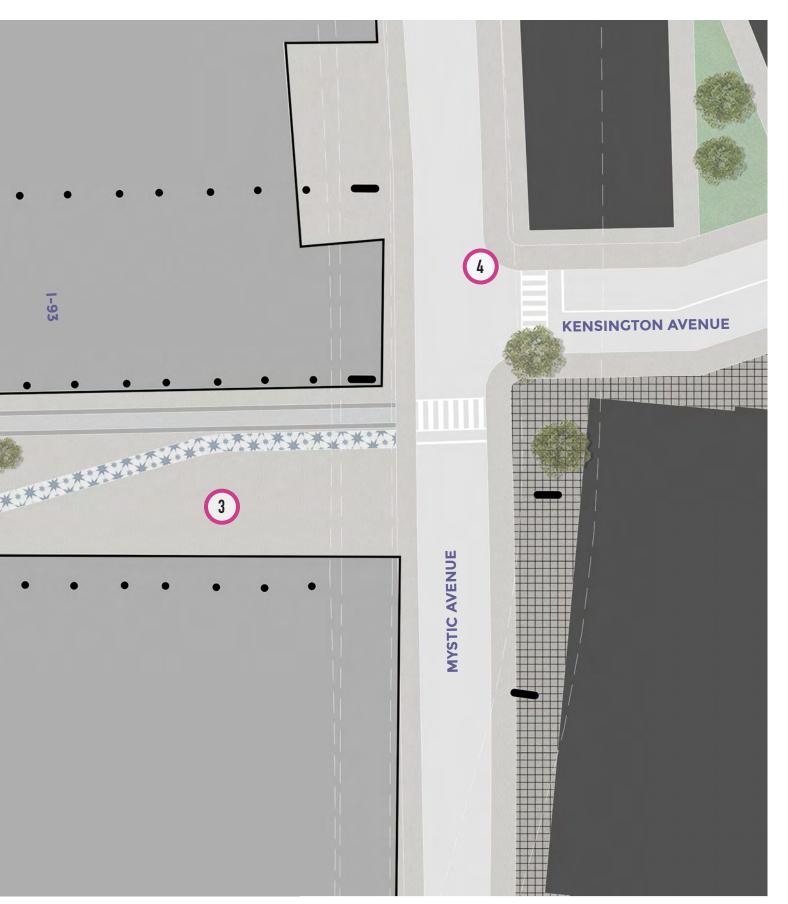
4. KENSINGTON **CONNECTOR GATEWAY LONG-TERM DESIGN**

- The proposed design for the Kensington Connector envisions a future consolidation of entry ramps and an overall reduction in the footprint of I-93.
- The design provides a direct path for cyclists and a path delineated with asphalt art for pedestrians to explore the public art pieces to be installed along the underpass.
- The design allocates space for a rotating public art program and will include opportunities for art on the fencing, the underpass structure, and placed around the pedestrian and bike path.
- Consistent with the proposal for Fellsway, a redesigned Mystic Avenue on the Assembly Square Avenue.





Existing intersection conditions



Proposed long-term connector design

STREET NETWORK

GENERAL APPROACH

The guiding philosophy of the ideas in the pages that follow is to center pedestrians, bicyclists and transit users in the design of the transportation network while also reducing single-occupancy vehicle use.

The team established the following mobility principles to be taken into consideration for future developments and changes to the right of way:

- 1. Create a compact and dense street network that connects with the existing streets within Assembly Square and with adjacent neighborhoods to the south and west.
- 2. Encourage the design of mixed-use streets streets that encourage multimodal activity.
- 3. Everyone should have safe places to walk, safe places to ride bikes, and safe places to drive.

The design team was inspired by streets that take the human scale into account and have undeniably proven that more space for people means more public life and an improved living quality. Such is the case for streets like Avenida Amsterdam in Mexico City or Las Ramblas in Barcelona. These examples were used as inspiration for the recommendations in each area of priority as they begin to propose streets and street networks that are designed with the safety and accessibility of all travelers in mind.



Sidewalk conditions at Assembly Row

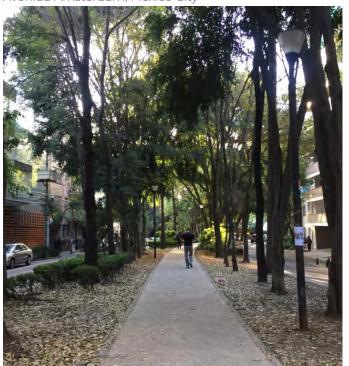


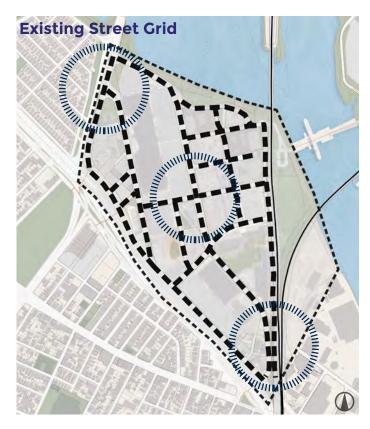
Current conditions at Grand Union Boulevard allows for room to accommodate wider sidewalks or separated bike lanes.

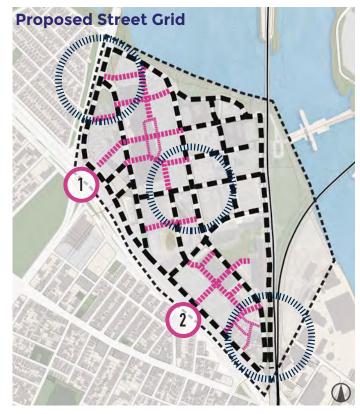
Las Ramblas. Barcelona



Avenida Amsterdam, Mexico City







Pedestrian Shed: area covered by a 5-minute walk edge to edge

IIIIIII Streets created by the proposed grid

- The new grid will create new entry points into the neighborhood
- By creating smaller blocks, Assembly Square will be more compatible with its surrounding context

STREET GRID RECOMMENDATIONS

Walkable street networks are characterized by direct pedestrian paths of travel that provide the shortest distance to transit stops, a high density of intersections, and continuous sidewalks connected by well designed crossings.

The new street grid proposal was born out of the idea that shorter blocks can contribute to great neighborhoods, preserve Somerville's heritage, encourage infill development, and promote a safe and walkable environment. The goal of these recommendations is to make it easy for people to walk, bike and take transit.

The proposed design is an extension of the existing urban fabric found in Somerville's historic core to the west of Assembly Square, an area with a walkable street pattern and historically and architecturally significant buildings. Its streets are well defined by trees, active building facades, and pedestrian activity. The new grid will allow the Assembly Square neighborhood to uphold this standard by eliminating physical barriers to pedestrian activity, providing more direct paths to destinations and generally paving the way for a more human scale environment.

BICYCLE AND PEDESTRIAN NETWORK IMPROVEMENTS OVERVIEW

Dedicated Bike Lane

Shared Lane Markings (Sharrows)

Bike Trail

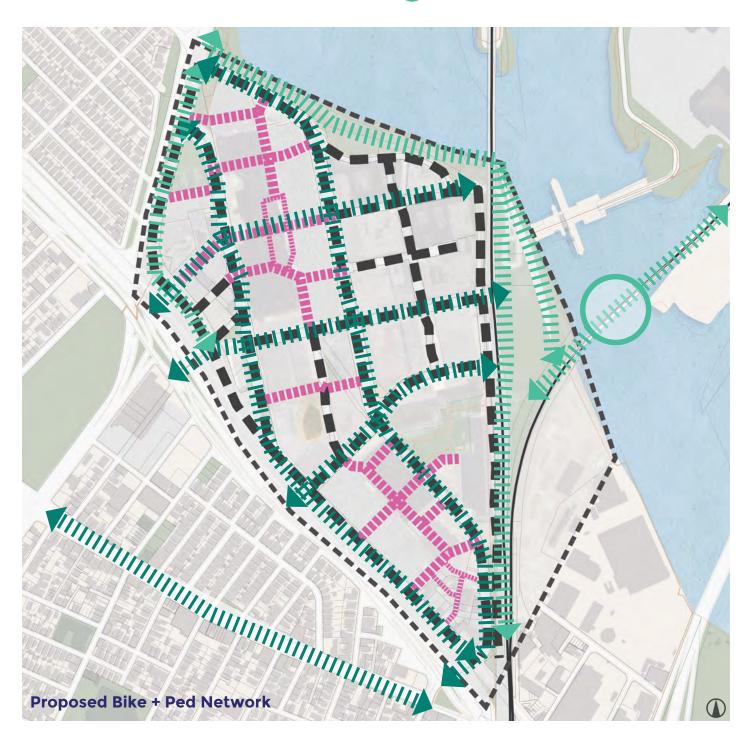


Dedicated Bike Lane

New Street Grid

Bike Trail

Planned Mystic River Bike/Ped Crossing



STREET SECTION

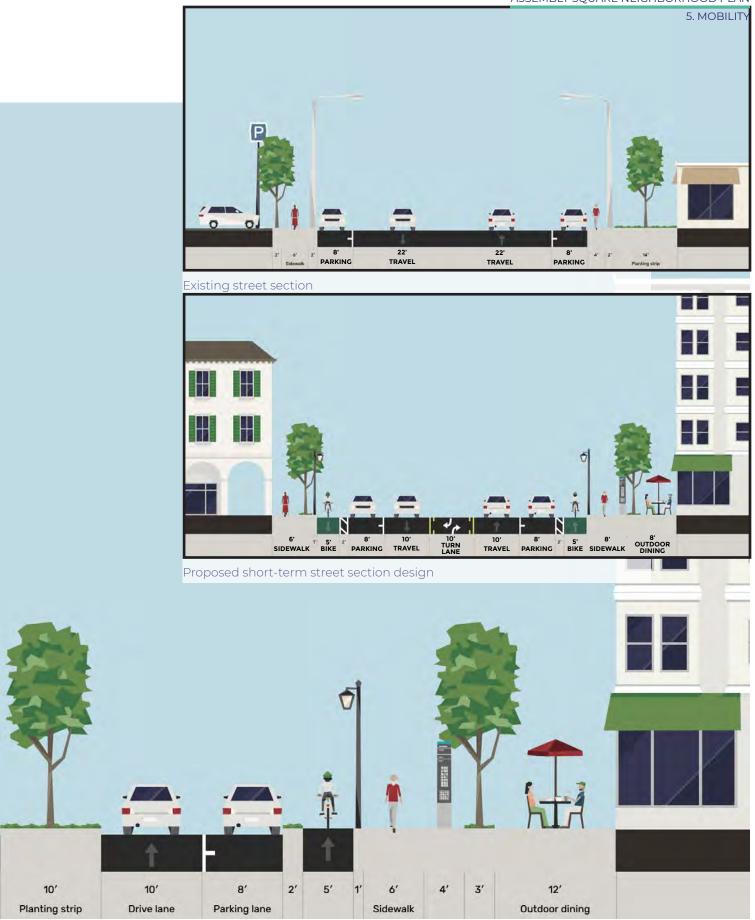
The following proposed street sections demonstrate how to reallocate existing roadway space to improve bicycle and pedestrian access and safety throughout the Assembly Square neighborhood.

MIDDLESEX AVENUE STREET SECTION

Both the short-term and longterm street section design recommendations for Middlesex Avenue propose the transformation of overly wide lanes and uninviting pedestrian facilities into a street with narrower lanes, on-street parking, and ample space for pedestrian and bicycle infrastructure. The long-term design also introduces a tree-lined median that can serve as pedestrian islands at intersection crossings or as a center turn lane when needed.



Proposed long-term street section design



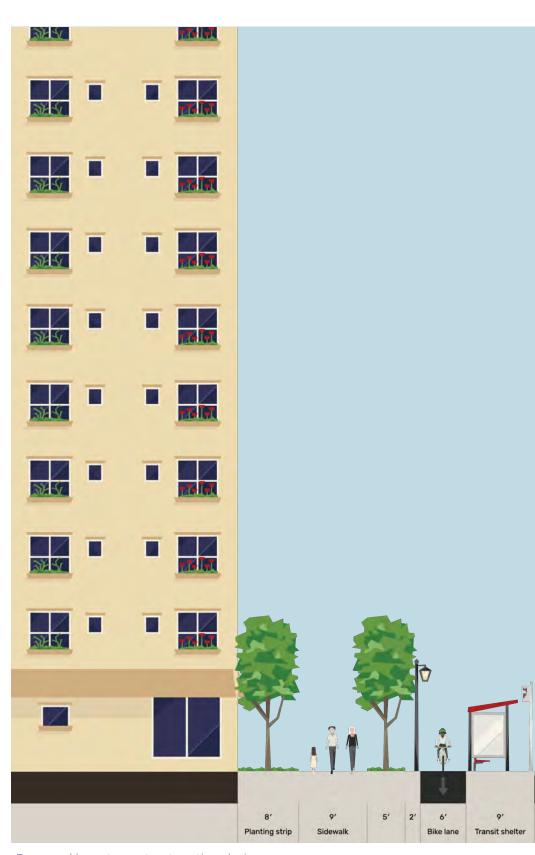
GRAND UNION BOULEVARD STREET SECTION

Grand Union Boulevard will remain one of the most important streets in the Assembly Square neighborhood network.

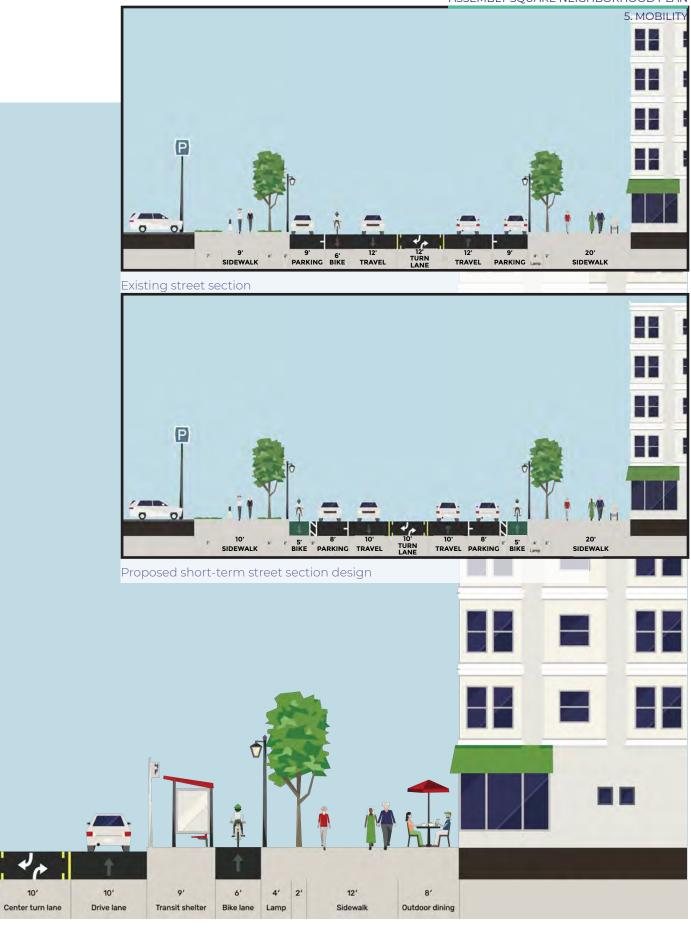
The Boulevard currently has a continuous turning lane, a 12' lane in each direction along with 9' onstreet parking stalls, and a bike lane in one direction.

The short-term street section design reduces travel lane widths to accommodate parking-protected bike lanes in both directions.

The long-term street section proposes a more formal design solution by incorporating the bike lanes into the sidewalk, adding street trees and including transit shelters for the local bus stops.



Proposed long-term street section design



10'

Drive lane

10'

FOLEY STREET SECTION

Foley Street currently has wide 15' travel lanes with cyclists sharing the lane with vehicles.

The short-term design proposal reduces the travel lane width and reallocates space for curbside protected bike lanes in both directions.

The long-term design envisions sidewalk-level dedicated bike lanes, and a variety of uses on the curbside lanes including parking, rideshare pick up zones, and bike corrals.



Proposed long-term street section design



10'

Drive lane

SHARED STREET SECTION

New shared streets begins to envision a new type of street within Assembly Square. It eliminates the traditional segregation of motor vehicles, pedestrians and cyclists to create a shared and more vibrant streetscape.

The shared street condition contains curb-free paving surfaces that are delineated using tactile paving patterns and provides pedestrians with the right of way. The materials chosen and space allocation will indicate that vehicles are guests on these streets.

In commercial areas, this street type contributes to the public space network as an area that can accommodate outdoor dining, public seating, public art and landscaping.



Proposed shared street section design



MODE SPLIT AND LOADING

MODE SPLIT

The aspirational goal is to have 75% of trips to and from the Assembly Square neighborhood be trips that do not involve a single-occupancy vehicle. The current mode split has a significant number of walkers and bikers with retail meeting the aspirational goal. With appropriate development parameters and transportation interventions, the City can affect mode shift from motor vehicles to walking, biking, and transit. The current and aspirational mode splits for trips to and from the Assembly Square neighborhood are below.

Bike Lane in Somerville

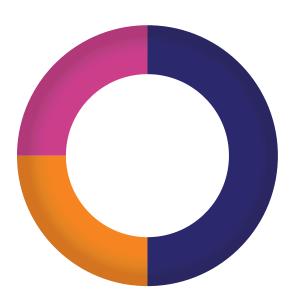
Current Mode Split

	VEHICLE	TRANSIT	BIKE/WALK
RESIDENTIAL	43%	47%	10%
RETAIL	50%	25%	10%
OFFICE	54%	36%	10%



Bluebikes Dock at Assembly Station

Aspirational Mode Split



50% Transit 25% Bike/Walk 25% Vehicle



Assembly Row Loading



NEW DAILY AVERAGE TRIPS

There will be new average daily trips associated with the density of development proposed within Assembly Square. Many community members and stakeholders expressed interest in having Assembly Square be a place where trips between different land uses are likely to be a significant part of trips generated by development at the site. These internal trips were included in the analysis of new daily trips to reflect these travel patterns.

LOADING

Assembly Square has many internal loading areas, primarily in the Assembly Row portion of the neighborhood. There are existing external loading areas on the west side of Assembly Square, primarily at the Assembly Marketplace and Home Depot sites, as well as businesses on Middlesex Avenue. As Assembly Square continues to develop, loading should be internal to all new buildings to improve the safety and comfort for all users. Several developments have already incorporated this into building plans.

	INTERNAL CAPTURE				
	MULTIFAMILY HOUSING (MID-RISE)	OFFICE BUILDING	SHOPPING CENTER	TOTAL	
AUTO (VPD)	2,250	10,878	14,002	27,130	
TRANSIT (PPD)	5,055	24,448	48,532	78,035	
WALK/BIKE (PPD)	2,528	12,225	24,267	39,020	

^{*} vpd = vehicles per day; ppd = persons per day

TRANSIT

Options for additional transit service connecting Assembly Square to Somerville were explored. Three bus routes are shown as possible alternatives for a new bus route that would provide a connection between Porter Square and Assembly Square. The routes shown in Options 1 and 2 could also include the possibility of modifications to the existing Route 90 to serve more of the Somerville area as well as remove any redundancies.

Option 1 (Orange)

This route would follow Somerville Avenue and Washington Street, similar to other existing bus routes, but provide a more direct east-west link across Somerville. This route would stop at Sullivan Square to connect to the Orange Line.

This route would also pass-through Union Square. With a new station being built at Union Square as part of the Green Line Extension, as well as all the new development proposed in Union Square, one of the added benefits of this route would be connecting Assembly Square with the Green Line and growth in Union Square.

Lastly, this route would cross the Fellsway Bridge to connect with the Wellington neighborhood at a more local level as the only connection across the Mystic River today is on the Orange Line.

Option 2 (Pink)

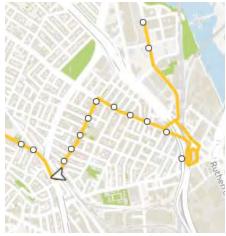
This route would also start out on Somerville Avenue and pass through the Union Square area, but go through the East Somerville neighborhood as it approaches Assembly Square. To maintain a connection with the Orange Line, this option would pass by Assembly Station instead of Sullivan Square Station. By going through the East Somerville neighborhood, this bus route would help residents that are adjacent to the Assembly Square development make a safe connection across I-93 and Mystic Avenue.

Option 3 (Green)

This route is a more local neighborhood option that passes through the Winter Hill area of Somerville via Broadway and Central Street. Connections with the Orange Line would be made at Assembly Station. The Winter Hill neighborhood currently has two buses running along Broadway which terminate at Sullivan Square; therefore, to reach Assembly Square they would have to make a connection. This route alternative would give residents an east-west connection across I-93 and Mystic Avenue. This alternative also circulates around the Assembly Square development providing access to more of the new buildings.



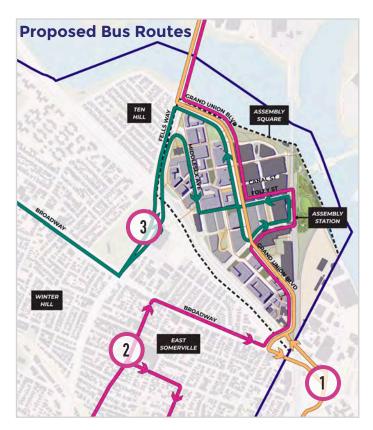
MBTA Route 90 Bus to Davis Square



Existing MBTA Route 90



MBTA Orange Line



- Route 1: Following Somerville Avenue and Washington Street
- Route 2: Somerville Avenue, through Union Square and East Somerville



- Route 3: Local route through Winter Hill via Broadway and Central Street
- Route 90 Modifications

ROUTE 90 MODIFICATIONS Option 1 (Orange)

This proposed modification would coordinate well with the proposed new route (1). If a connection between Sullivan Square and Assembly Square is made via the new proposed route, the existing Route 90 could cut out Sullivan Square and instead connect with the Orange Line at Assembly Station. Assuming the proposed new route is options (2) or (3), cutting Sullivan Square Station from Route 90 is less recommended as it provides at least one link between Sullivan Square Station and Assembly Square via the street network.

Option 2 (Pink)

This variation would work well if proposed in coordination with the new route options (1) or (2) that pass through East Somerville in order to serve different areas of Somerville. This route variation would be to provide some additional access to the Winter Hill neighborhood on select outbound buses during the day while still maintaining the existing bus Route 90 all other times. The variation would take Temple Street, Broadway, and School Street to get back on Highland Avenue in the outbound direction.

TRANSPORTATION DEMAND MANAGEMENT

Current development proponents are required to join Assembly Connect, Assembly Square's Transportation Management Association (TMA). Future development should also be required to participate in Assembly Connect with a designated coordinator to decrease reliance on single-occupancy vehicle use to the neighborhood. As a matter of department policy for the City of Somerville, all developments are required to have a Mobility Management Plan. Property owners of buildings with fifty thousand (50,000) square feet or more of commercial space and multi-tenant buildings where the tenants, in combination, have fifty or more employees are required to provide the following for their tenants:

- An on-site transportation coordinator for the building;
- An annual mobility management educational meeting for tenants and their employees;
- Posted and distributed mobility management information;
- Un-bundle parking (spaces rented, leased, or sold as an option rather than a requirement).

These owners must also require future tenants to provide the following through lease agreements:

- Qualified transportation fringe benefits for employees; and
- A guaranteed ride home program for employees.

Employers (future tenants) with fifty or more employees are required to provide the following:

- An on-site transportation coordinator for the business;
- An annual mobility management education meeting for employees;
- Posted and distributed mobility management information;
- Qualified transportation fringe benefits for employees; and
- A guaranteed ride home program for employees.

The property owner of a commercial parking facility is required to provide the following:

- Preferential parking locations for carpool/vanpool vehicles; and
- Posted mobility management information.

The property owner of a residential building with twenty or more dwelling units is required to provide the following:

- Posted mobility management information;
- Distributed mobility management information; and
- Unbundled parking.



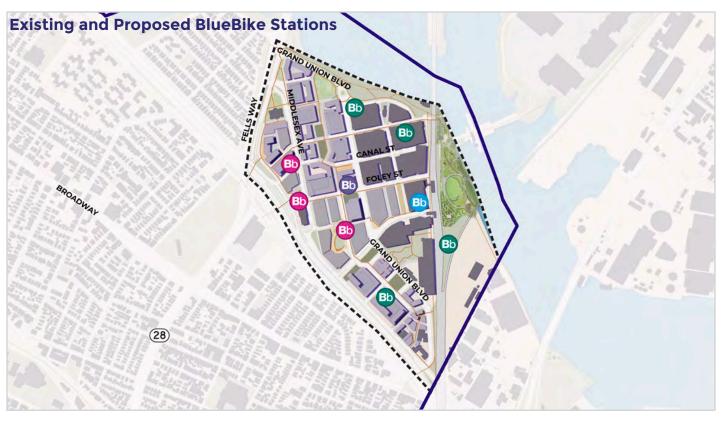
Existing Bluebikes Station



Character of the neighborhood



Transit Screens





Existing Bluebikes



Mitigation Commitments



Authorized by the TMA



Future Planning Options

MICROMOBILITY

The City of Somerville has already authorized and proposed Bluebikes locations within the Assembly Square neighborhood. The proposed locations offer the opportunity to incorporate future development plans into the locations of Bluebikes stations as Assembly Square continues to redevelop. Micromobility also includes the options for shared vehicles like ZipCar spaces or electric vehicle charging stations that could be included in development mitigation efforts.

PARKING

Primary travel to Assembly Square is currently is by vehicle. The greatest determinant of a drivers mode choice is free parking. Assembly Square currently has a substantial amount of free or inexpensive parking that is

open to the public. This encourages vehicle travel to the neighborhood. Several plans for continuing development in Assembly Square include additional off-street parking. Recommendations for retail and office development include increasing the price of parking to market rate to discourage vehicle travel to the neighborhood. Parking maximums should be continued with new development. Parking for residential development should be unbundled to encourage a shift to other modes of transportation. This also decreases the need for parking as some residents may not own a car and do not need a parking space. New development should contribute to Transportation Demand Management efforts required and suggested by the Assembly Square TMA. This includes electric vehicle parking, vehicle share/carpool programs, Bluebikes, and shared mobility programs.

UTILITIES AND STORMWATER

The first step in developing a utilities infrastructure master plan is to identify and assess the condition and capacity of the existing utilities and infrastructure. This assessment must be done in relation to existing buildings and loads that are already served by the utilities. As-built drawings, other documents, physical assessments on site, and coordination with the Somerville Department of Public Works (DPW) are all useful ways in gathering this information. Research required for an accurate assessment should not be limited to review of existing documents, records, and discussions. Therefore, on site surveys, cross checking of information through analysis, videotaping, and such other tools as may be applicable to the specific utility that is being evaluated, should also be considered. Depending on the situation, determination of existing loads could require some analytical effort, which might include computer modeling (pipe flow analysis), calculations, and estimations based on industry guidelines and standard practices.

	ESTIMATED SEWER FLOWS GENERATED (GPD)	USAGE BREAKDOWN ASSUMPTIONS
OFFICE (75 GPD/1,000 SF)	345,000	OFFICE = 4,600,000 SF
RETAIL (50 GPD/1,000 SF)	77,500	RETAIL = 1,550,000
RESIDENTIAL (110 GPD/BEDRM)	550,000	RESIDENTIAL = 2500 UNITS
TOTAL (GPD)	972,500	



North Grand Union Boulevard



Grand Union Boulevard



South Grand Union Boulevard





The next step involves evaluating the impact of each building addition, deletion, or renovation on each of the affected utilities. Based on estimated daily sewer flows laid out in the Massachusetts Department of Environmental Protection (MassDEP) State Environmental Code (310 CMR 15.00), we were able to calculate an approximate daily increase that will need to be accounted for based on the development option chosen. The proposed development will generate approximately 972,500 gallons per day (GPD) in additional sewer flow. As with sewer, the water requirements for each use will need to be further analyzed by a licensed plumbing engineer, and the capacity of the existing infrastructure will need to be analyzed in coordination with the Somerville DPW to determine if mains need to be replaced, upgraded, or added in certain locations. In terms of stormwater drainage, according to MassDEP regulations this area will not allow for infiltration in any extent due to former polluted soils, etc. Therefore, proposed stormwater piping will likely be required to convey roof and pavement runoff from these areas into the municipal pipe network to be discharged elsewhere.

6. Economics

Assembly Square is Somerville's largest commercial and industrial district (145-acres) and is among a short list of sites with the greatest potential for development in the Metro Boston Area.

ASSEMBLY SQUARE OVERVIEW

Assembly Square's location, less than 2.5 miles from downtown Boston and just two miles from Kendall Square in Cambridge, and existing transportation infrastructure make it one of the premier development sites in New England. In addition to a six acre riverfront park, Assembly Square is directly accessible from Interstate 93 and State Route 28. MBTA's Orange Line in Assembly Square station opened to riders in September of 2014. Assembly Square contains more than five acres of waterfront open space located along the banks of the Mystic River.

To capitalize on these strengths, the City has undertaken an aggressive planning and redevelopment effort designed to convert this former industrial district to a transit-oriented, mixed-use "urban village", using smart growth principles to maximize development potential.

The development at Assembly Row has been very successful. Eight development blocks have been built, generating 860,000 square feet of office space, 500,000 square feet of retail, restaurant and entertainment space and over 1,000 new residential units.

The development is anchored by the 750,000 square foot headquarters for Mass General Brigham (successor to Partners HealthCare), the largest health care system and employer in the state. In 2013, Partners announced its intention to consolidate a dozen facilities around Boston under one roof in a state-of-the-art, signature building at Assembly. Today, 4,500 employees work at the headquarters and the company has the opportunity to expand its presence and build a new, 400,000 square foot building at some point in the future.

From a municipal finance perspective, the project has been just as successful. To date, the DIF-captured increment has significantly exceeded debt service payment amounts with an anticipated fund balance of \$9 million by the end FY2020 to be used for infrastructure improvements.

The only issues that have surfaced during initial interviews with developers and residents (including online reviews of the neighborhood) are that there are few ownership options (just the Alloy development at 122 units, only 75% are owner-occupied) and the difficulty of raising school aged children to maturity in the neighborhood (for a variety of reasons: space, parks, social groups, schools, etc).

In a location that once housed a Ford Edsel automotive assembly plant, Assembly Row has transformed one of the state's largest brownfield sites into a thriving neighborhood.



Assembly Square ESRI Site Map with 2 minute, 5 minute and 10 minute drive times.

ASSEMBLY SQUARE RESIDENTS & OCCUPATIONS

Real GDP

Middlesex County has by far the highest Gross Domestic Product (a measure of the goods and services produced in the area) within the State of Massachusetts at \$157B USD. This engine will help the County and Assembly Square as they recovery and beyond.

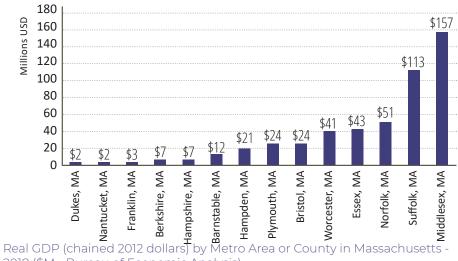
Change in Occupation

Somerville's economic development policies as well as its proximity to the broader economic engine of the Boston MSA have resulted in a shift towards the "knowledge industries" with a remarkable increase in jobs in business management, computer and sciences and financial services.

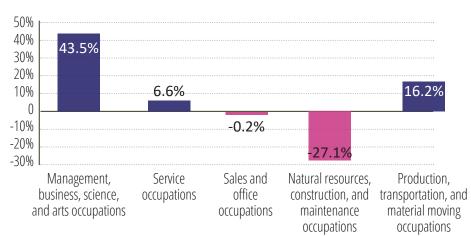
Median Income

Median incomes both now and projected into 2025 are high (\$113,000 in 2020 and \$130,000 in 2025) show how different the Assembly Square population is likely to be from the average within Somerville. Even with Somerville's recent gains in income growth, Assembly Square is already becoming a relatively wealthy enclave within the city. Local retail amenities in the area will likely reflect their tastes and income levels more than other residents in the city. Average income estimates are as of 2018, but at \$93k, remain higher than the Somerville average as well.

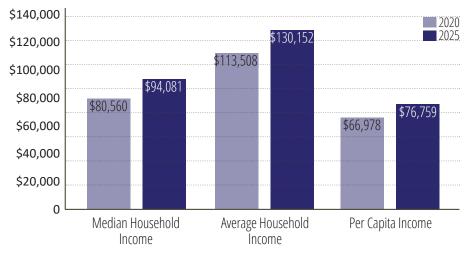
people live within a 15 minute drive of Assembly Square



2018 (\$M - Bureau of Economic Analysis)



Change in occupation by civilian employed population: cumulative change 2010-2018 (US Census ACS)



Estimates of changes to income in Assembly Square: 2020-2025 (ESRI)

POLICY REVIEW

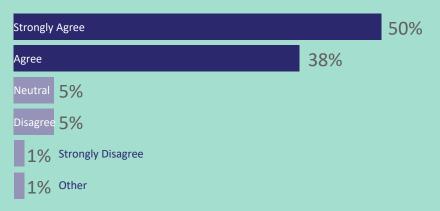
February 2021 will mark nearly one year of closures and job losses and deep economic pain for many due to the pandemic. The pandemic sharply interrupted our everyday lives—how we work, commute, study, shop, socialize with friends and family, and play sports. These changes will likely impact how the site evolves in the short-run. The return to normal economic activity especially in a commercial setting will depend on how fast and deep the vaccine program unfolds, as well as the course of the virus' infection patterns.

As we slowly emerge from the shutdown and move into the recovery phase, some trends will return to pre-pandemic norms, and other trends will linger and shape a different future for our built environment and neighborhoods. This flux presents an opportunity to use economic development priorities, tools and objectives to further shape the neighborhood. One objective of this plan is to enhance Assembly Square's livability and integrate it more into the urban fabric of Somerville. In fact, our resident survey results show that Assembly Square is already seen as a distinctive neighborhood that both renters and owners are broadly satisfied to live in.

In a year where fundamentals for many real estate products are undergoing reevaluation, the sectors represented at Assembly Square: offices for health care services, technology, and life science research, have been a welcome outlier. Regionally and at the site, established developers who specialize in providing high end office, retail and lab space are doing well with new tenants, attracting both investment capital and innovative office developers. Such trends bode well for the site's long-term occupancy and job creation and ultimately population and family growth.

Assembly Square's developers and Somerville's planners bring a substantial body of experience with economic development program design and implementation. This focus has demonstrated a commitment to achieving and maintaining a proven avenue of job growth and demand drivers from health care, bio-medical and life sciences as well as general technology investments

How likely are you to **recommend** Assembly Square to your friends and family as a place to live?



Results from Assembly Square Resident Survey

STRENGTHS

Assembly Square's inherent strengths will serve it well as development continues and during the recovery phase following the pandemic.

Brokers and investors convey that the following four points bode well for greater economic development over the next decade:

- 1. Half the city's residents are young (although median age is creeping upwards) and highly educated in key sectors;
- 2. Public transit access to Boston/Cambridge and sufficient parking;
- 3. Increasing urban amenities (Assembly Row), and
- Real estate price discounts for all real estate segments and classes relative to its nearurban peers.

Somerville enjoys some inherent characteristics that translate into competitive long-term strengths for the real estate sector:

- 1. A continuous deepening of the knowledge worker cohort as residents
- 2. A diversified mix of knowledge industries, including life sciences/pharmaceuticals/research, software, medical services;
- 3. Proximity to clients and tenants that have limited access to new land or expansion options at their current locations; and
- 4. Access to a wide range of housing types and price ranges.

to drive economic growth for Somerville that pays for itself. The neighborhood residents, planners and other key stakeholders within the city's business ecosystem are broadly concerned with improving livability and equity for residents through policies that support human-capital development, sustainable growth, and productivity improvement across everything they do.

Assembly Square's current and future contribution to the tax base is significant. Somerville is well on its way to expanding commercial tax revenues and market values with Assembly Square leading the way – through contributing 860,000 feet of office space, 500,000 square feet of retail, restaurant, and entertainment space and more than 1,000 new high-end residential units and another 300,000 feet of HQ space under construction. Other projects include a new 180-room hotel and 210 unit residential building by Assembly Edge and a planned 1.4-million-square-foot mixed use development by XMBLY. The broadened tax base from this development is already making Assembly Square a critical commercial and residential tax engine for the city as a whole.

Assembly Square has so far escaped most of the negative real estate forces that are already deeply and negatively impacting the commercial real estate market in many parts of the country. To maintain this level of competitiveness both locally and regionally, it can enhance its positioning as an attractive destination for raising families or starting businesses. While the economic recovery from COVID-19 impacts are unclear, it is never too early to formulate post-pandemic recovery policies that can help retain existing businesses, attract new ones, increase employment, and reduce inequality.

The rapid shift to working from home has greatly disrupted the commercial real estate sector and has led companies to reevaluate their post-pandemic workplace requirements. There is not enough economic data to make definitive observations on how the pandemic is changing the attractiveness of cities. However, there is an increased expectation that the impacts of the pandemic on the workplace—including telecommuting becoming more acceptable—will linger for some time.

OPPORTUNITIES

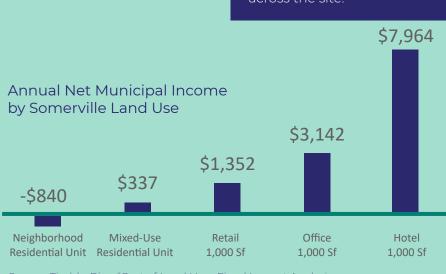
- COVID's impacts on retail are real and deep - future growth may not look like the past;
- Assembly Square's real estate use mix is successful
 but including new options will make the destination
- even more attractive;Assembly Square works well for its core markets, but

could work for more people;

- · Balancing job creation and housing units, especially family-sized units is important;
- · Given the location in Somerville and within the greater Boston area, arts and culture could be much more deeply interwoven into the area's economy and lived experiences; and
- Environmental effects

 impacts from cars,
 traffic and concrete can
 be softened through
 thoughtful work both at the
 edges of the area and as
 part of additional modes of
 transportation within and
 across the site.





Source: TischlerBise, "Cost of Land Uses Fiscal Impact Analysis www.thesomervilletimes.com/archives/92309

ECONOMIC DEVELOPMENT STRATEGIES

From the foregoing analysis, economic data synthesis, stakeholder consultations, and public input, Assembly Square's economic development can be summarized in a three-tiered conceptual framework that includes enhancing the site's current strengths, expanding emerging and existing trends towards greenspace use, mixed-use components and being family-friendly, and lastly (at the margin) focusing on bringing new life to the area using catalytic niche opportunities.

THREE PILLARS

- 1. Enhance the site's current strengths. Assembly Square has already proven that it has a strong business cluster effect within the Boston area through key research and laboratory anchor tenants, a strong established retail base and a growing residential footprint. Now the goal is to expand and deepen these effects by broadening the neighborhood's economic and commercial and office offerings through coordinated branding, and conscious cluster development (attracting complementary enterprises of all sizes, diversity, class and type).
- 2. Expand greenspace, mixed-use components, and a family-friendly approach. Assembly Square has a large portion of Somerville's one mile of river waterfront access and shoreline. This rivers edge space has the potential to become a vibrant waterfront park that serves the local community and draws regional visitors year-round. Priority actions include waterfront programming, inventive sustainability and resiliency projects that also enhance recreation opportunities, increasing workforce housing and family sized housing options.
- **3. Develop new catalytic niches that complement the commercial foot-print.** While commercial space is key to tax revenues, balancing the neighborhood needs more "soft-power" investments that can bring net gains to the local and city economy. Priority actions include the promotion of investments in attracting education and the arts community, small foot-print markets and doing more through corporate social responsibility programs and other similar community investments.

The three conceptual categories of strategies address both current and future opportunities, while providing policies and methods to address growth challenges using the city's existing and emerging strengths in residential and retail establishments, community fabric, historic areas and a relatively diversified industrial and service base, and growing life sciences clusters.

These strategies can be taken as a group or individually depending on the current status of the city's comprehensive plan, budgeting processes, and leadership preferences.

THE EXPECTED OUTCOMES FROM THIS ACTION INCLUDE:

- 1. Increasing new market entrants in Assembly Square and providing a supportive environment to allow for a doubling of smaller scale business on site.
- 2. Doubling the number of permanent residents on site and creating a plan to attract different household types and families by offering larger units.
- 3. Increasing the number of employed persons by at least 5% every year, drawing from both unemployed persons and those out of the workforce.
- 4. Increasing satisfaction as measured by a consistent tool by at least 10% annually among citizens and businesses when doing business with the city.
- 5. Improving the city's competitiveness standing (e.g., investment, opportunities, talent, livability, affordability) each year over the prior year using a custom-developed competitiveness measurement tool.

Expand greenspace, mixed-use components and deploy a family friendly approach

Enhance the site's current strengths

Three pillars to support the site's economic development potential as part of the Assembly Square neighborhood plan

PILLAR 1: ENHANCING THE SITE'S CURRENT STRENGTHS

Pillar One aims to maximize existing trends in place within Assembly Square and promote the general continuance of those factors that have made it such as dynamic location for business and retail within Somerville.

Maximize business cluster effects

With Mass General Brigham, Puma Boston HQ and XMBLY already established, such anchors can promote clusters- more interconnected companies, startups, specialized vendors, service providers, and also education players. Clusters already represent an important organizing principle for the metro region economic development organizations and offer a framework and a context to support business competitiveness.

- Develop a short-term plan to attract smaller scale businesses in key focus areas: biotech, health services and sports and related creatives (integrate into city wide post-COVID recovery plan);
- Review and strengthen city-led attraction efforts targeting biotech, laboratory and the broader health and science sector; and
- Enhance cluster effects through strengthening of efforts to attract and retain supply chain participants for the main corporate anchors already on site.



Assembly Row



Partners Health

Lead a branding effort to define the area as more than retail

While retail forms a backbone for the site, there is so much more than national brands that can thrive here – local and regional market concepts are an easy win to build a broader, more inclusive brand for the site. The site's visibility, access to the waterfront, history and commercial attributes can also be emphasized.

• Establish a working group that includes broader stakeholder representation to create and promote an area-wide brand that can be used in specific branding

efforts to support overall site and long-term neighborhood vision.



XMBLY



Baxter Park Events

Increase the use of financing tools (DIF/ TIF, property tax abatements, etc) to support social goals

There are an increasing number of options for developers and investors to take advantage of as they plan new projects; these can be coupled with clear social and community objectives. These objectives could include transportation, housing, environmental quality, energy and sustainability.

 Collate all available incentives and offer a web-based tool that developers are able to estimate the impacts on proposed projects using these tools at the outset.

Use of Floor Area Rations (FAR) or similar area measures to promote tradable development rights Consider additional "PPP's" that align city and private goals

Transfer of Development Rights (TDRs) allow social goals, such as parks and open spaces, to be more easily met because developers can buy and sell excess development rights to one another as needed for specific developments. The sellers of TDRs in areas that are desired to remain (or become) green spaces can be paid by buyers who need additional development rights on their specific parcel, thus creating or maintaining green spaces in perpetuity and allowing developers to better utilize their sites with additional density.

- Create a working group to evaluate the mechanics and policy framework for Assembly Square TDRs.
- Establish seller (sender) and buyer (receiving) zones and the actual policy framework for use.

Consider additional "Public Private PartnershipsPPP's" that align city and private goals

City owned assets and the city's ability to provide non-traditional financing mechanisms can be used to achieve social goals through Public Private Partnerships. Such projects could include providing city assets at low or reduced rates, including land, access points and transportation options to improve community outcomes across a broad range of activities. These partnerships provide flexibility to developers and tenants, while allowing the city to selectively experiment with how best to use its limited resources to affect the outcomes that best align market realities with social goals.

- Allow city-owned land to be leased at a discount to market rate to tenants who bring both a high development concept and a credible plan to reach social goal, such as affordable housing, educational partnerships, innovation projects or retail development;
- Experiment with using tax increments to pay for the difference between market and affordable rents, as a variation of a Master Leasing concept, whereby the city acts as the Lessee and guarantees payment to the building owner, while paying only the difference between market rents and tenant rents for a fixed period;
- Leverage CSR commitments into a dedicated fund to act as loan-loss reserves (or similar) that can indirectly support larger affordable housing initiatives and "owner operated" enterprises.

Take into account the revenue generation potential of projects in Assembly Square

The neighborhood is key to contributing to the city's long-term funding goals through tax generation. Keeping a well-balanced mix of uses will be key to ensuring this objective. All future developments should estimate net tax revenues to the city as part of their permitting, as per the existing legal agreement, to strengthen the tax base and add to the area's employment. base.

- Require new development projects to estimate their net tax contributions (total taxable increases to the area less assumed city service provision);
- Maintain a potential net taxable contribution summary for undeveloped or underdeveloped parcels to estimate the remaining possible net tax generation available under current zoning.

PILLAR 2: EXPAND GREENSPACE, MIXED-USE COMPONENTS & A FAMILY-FRIENDLY APPROACH

Pillar two aims to expand nascent trends within Assembly Square that can create a more nuanced neighborhood with both broader appeal to all types of residents and visitors and a heightened competitive advantage as a place that offers a truly mixed use offering that fully incorporates the waterfront and other uses that are community inclusive, flexible, and support a year round neighborhood culture within Somerville.

Expand and bring into the economy the waterfront and park lands; showcase sustainability

Feedback from the community was unanimous that the waterfront could be exploited more – from a design perspective as well as creating a more comprehensive catalog of activities. Some ideas include more recreational options, education, sustainability demonstration opportunities and more. A deeper commitment to a waterfront park would be desirable – such as bioedges, rain gardens, and demonstration stream gauges.

- Embrace designs that enhance greenspaces;
- Promote and support sustainability projects with clear environmental impact reduction objectives, e.g., energy, environment, flood control/resiliency, parks and recreation;
- Emphasize waterfront profile in branding efforts;
- Establish a Waterfront Programming working group to facilitate regular activation of the waterfront parks and activities/offerings to cover all 4 seasons, e.g., ice skating in winter;
- Consider allowing small-scale (cart or bicycle or similar) retail within the waterfront parks.

Build out site with attention to health effects and sustainability

One concern is the site's proximity to major highways resulting in more airborne pollutants (e.g., PM 25) and decreases in overall air quality indicators. Also, climate related impacts (water level rise and potential flooding impacts) may impinge on the site. In addition to promoting standards such as LEED, integrating adaptation and mitigation options at scale, e.g., energy and water use, will be key to a manageable environmental footprint. Such an approach would support business competitiveness and also differentiate the area from other similar regional sites.

- Assess and account for air quality impacts from transport related to I-93 and other major thoroughfares;
- Consider promoting net-zero buildings as demonstration sites and continue to promote LEED standards with particular emphasis on indoor air quality aspects.
- Limit or restrict residential development along Middlesex Avenue near I-93/M-28 and promote those uses that are more commercial, e.g., laboratory and bio-tech, bio-medicine and other advanced science uses.

Experiment with affordable housing financing tools for workforce or middle-income housing

The site's residential development footprint is currently small, generally considered as serving the luxury market and likely to expand. As Somerville has become more affluent, workforce housing needs are lagging, and these needs were clearly articulated by the community. Typically, workforce or middle-income housing is affordable to households earning between 80-120 percent of area median income (AMI). Workforce housing targets middle-income workers which include professions such as police officers, city workers, firefighters, teachers, health care workers, retail clerks, and similar jobs. Examples of activities that can better target this segment include creating a dedicated work-force housing trust fund; repurposing vacant land and underutilized retail/commercial space; giving more flexibility as part of the inclusionary zoning mandates, and if needed, updates to development codes.

- Work with affordable housing department and developers to bring more
 workforce housing into new developments using tax increments, specific
 bond issuances or an area-wide housing trust fund that can offset the
 development cost gap inherent in affordable housing;
- Experiment using non-traditional funding approaches for public policy goals, such as using a master leasing structure to allow for lower cost retail market entry for local artists or entrepreneurs.

Encourage a broader range of residential units (both size and tenure)

For the Assembly Square neighborhood to be more appealing to more types of residents, from families with children to middle income households, students and others) there needs to be a broader diversity of units that allow a variety of unit sizing, bedroom counts and ownership possibilities. Units with more bedrooms and overall square footage would draw in families with children and would also help round-out the site's demographic concentration and contribute to a less transient environment on-site. In addition, the introduction of more family-oriented units will allow for other mixed uses to take root: education, day care, and parks.

- Work with developers to increase the quantity and availability of three and four bedroom units in Assembly Square so as to attract different household types including more families (market rate and affordable/workforce AMI targeted).
- Encourage developers to provide additional for- sale residential units.

PILLAR 3: DEVELOP NEW CATALYTIC NICHES

Pillar three brings together catalytic activities that add economic dynamism to the area while enhancing a sense of distinctive community and belonging.

Attract areas artists, vendors, and small-scale, inventive retail

Somerville has the highest number of resident artists of cities in New England – estimates of as much as five percent of all city residents are artists. As the Assembly Square neighborhood matures it can reflect this rich legacy of arts practitioners across many avenues – galleries, studios, public art, and markets. Similarly, there are a plethora of small, independent, micro retail, seasonal makers that could benefit from access to workspace, markets and loyal customers. Creating flexibility for rentals or ownership options would be useful. Generating tourist-friendly (Instagramable) public art and art walks could link artists to the built environment in ways that not only enhance Assembly Square, but provides a differentiated look and feel to the area.

- Partner with Boston area and local arts organizations to support connecting artists to city programs and to bring new ideas to city officials;
- Allow / enhance the ability of small vendors to sell from pushcarts, food trucks, temporary sales areas;
- Identify target areas within Assembly Square for public art initiatives;
- Consider competitions and other mechanisms to increase public participation in the design process;.
- Experiment with affordable retail spaces that are distributed across new developments and work hand-in-hand with additional financial support to them;
- Treat local business (particularly non-chain and micro-businesses) as targets for affordable support to allow artists and other entrepreneurs to access the market through fixed locations;
- Build / expand existing business incubator functions that provide small businesses with support for their growth, through advice and links to others for marketing, branding, accounting and overall business strategy.

Create an educational and cultural asset theme with an educational anchor, museum open stacks, shops and curation in a visitor-friendly format

The Boston metro region is among the world's richest in terms of educational and cultural institutions and many of these are seeking ways to be more relevant to their audience across several dimensions: content and programming, education, access and job creation and retention. Assembly Square could serve as a useful location for one or more of these institutions to act as an anchor to an entirely new educational and cultural cluster. The metro region's educational, museums and arts organizations already store, conserve, and perform retail operations, but much of their holdings and functions remain inaccessible to the public. Assembly Square could provide experimental mini-satellite spaces given transit access, common areas, daytime density and proximity to other parts of Somerville and north suburbs.



Visible Storage, Victoria & Albert Museum



Bow Market

6. ECONOMICS

- Engage with area major educational and cultural institutions to promote Assembly Square as a satellite location, e.g., annex functions like conservation, storage, education outreach;
- Engage with one or more education centers to promote Assembly Square as a satellite location for classrooms, studios, temporary or seasonal workspaces;
- Explore the ability to blend cutting edge technology with existing assets and underserved educational niches (such as childhood education) to bring a completely unique offering to the area.

Use smaller footprint retail to mirror successes

Many of Somerville's (and the regions) food halls and local markets are proven winners in the fiercely competitive retail environment and created premier local destinations for unique food, drinks, and purchases. Assembly Square can use similar smaller footprint market models and apply a different twist to the formula. Taking a cue from the life sciences incubator model, Assembly Square could offer a market space where businesses scale and grow — where metro neighbors, students, entrepreneurs, artists, and tourists come to create a community they can shape and call their own. Experimental kitchens, established businesses from East Somerville, and retail concepts that are looking to move from the micro-market into a more permanent retail space could each provide exciting options for residents and visitors alike.

- Engage with retail and marketplace developers on how best to integrate the arts and small-scale inventive retail into their plans, e.g., annex functions like conservation, storage, education outreach;
- Consider a full or partial "arts overlay district" for Assembly Square;
- Work with existing community programming to expand activities/offerings to cover all 4 seasons, e.g., ice skating in winter etc.

Pursue Corporate Social Responsibility ("CSR") funding for Assembly Square's arts and cultural programming

As the site matures and development continues apace, it may be possible to convince industry leaders of large area businesses to assign some portion of their current Corporate Social Responsibility ("CSR") budget to Assembly Square. Whether it be for greenspace improvements, climate adaptation, diversity and inclusion initiatives or the arts generally, there are large pools of corporate money that are looking to make an impact. Assembly Square's development could provide a showcase of how to maximize CSR impacts for both the corporate sponsors and area recipients.

- Directly reach out to major Assembly Square commercial interests, as well as local and city-wide corporate and other business interests (e.g., family office and area philanthropic groups) with the objective of directing some of their CSR funding to support the Assembly Square neighborhood plan project ideas;
- Solicit a pipeline of CSR projects from various on-going initiatives that can be fed into the city Economic Development Departments' public policy goals.

. Implementation

Implementation outlines the next steps and actions for the City to undertake to realize the vision for the Assembly Square neighborhood outlined in this plan.



IMPLEMENTATION PROCESS

This plan lays out the framework for a coordinated approach to development for the Assembly Square neighborhood based on the vision for the area created during the virtual charrette process. Much of what the plan entails is to be carried out by both public and private entities as individual properties are developed over time. In the short term, within three to five years, the plan calls for public sector strategies and action items to be implemented to establish the groundwork and create the development regulations in which private development will occur and be shaped by.

The plan is also flexible. The illustrative plan is just an example of what could be done following the design strategies which is intended to help realize this vision. As properties develop, the property owner will be able to refine the plan for their parcel to meet their needs and account for changing economic conditions and market demand overtime. For these reasons, the plan will not be implemented exactly as it is drawn, but the important characteristics of a walkable, mixed-use, transit-oriented and urban neighborhood will be.

In the study of communities, we find that two types of actions have been crucial to achieving desirable outcomes: long-term planning and a willingness to reconsider one's values. Communities work to identify values and then let those values guide action. When a community's energies are guided by a plan, every new public and private investment is more likely add to quality of life and not detract from it. Always have a plan, but recognize that the conversation, the act of planning itself, is the most important part.

IMPLEMENTATION MATRIX

The following implementation matrix organizes strategies and actions by the Five Big Ideas. Each action is accompanied with additional information.

Action	Description of policy, program or action that should be taken	
Lead Agency	The organization(s) leading or coordinating the implementation of the action item.	
Timeframe	Describes the anticipated timeframe and/or duration for implementation for each actiem, defined as:	
	 Ongoing: immediate / continuous Immediate: within the first year following plan adoption Near-Term: 1 to 5 following plan adoption Long-Term: 5 years or longer 	

1. BUILD GREAT NEW PLACES

Strategy /	Activity	Lead Agency	Timeframe
Strategy 1.1: Create Human-scale and Pedestrian-oriented Buildings and Blocks			
Action 1.1.1	Active uses such as retail and restaurants should be encouraged along the ground floor of major pedestrian thoroughfares.	City	Ongoing
Action 1.1.2	Require the length blocks to be no more than 600' and ideally not more than 450'. Where the length requirement is not achievable, a mid-block passage should be designed for pedestrians.	City	Immediate
Action 1.1.3	Continue to include the evaluation of the relationship between buildings and streets as a part of the approval process.	City	Ongoing
Action 1.1.4	Update the zoning code to permit and encourage the nuanced development desired in the different portions of Assembly Square.	City	Near Term
Strategy 1.2: Create Welcoming Public Spaces and Amenities			
Action 1.2.1	Require new public spaces in Assembly Square to be open to a street with multiple entrances from public thoroughfares. The design of new public spaces should create a shared sense of ownership for all.	City	Immediate
Action 1.2.2	Encourage, reserve or otherwise acquire land for public amenities such as performing art space, library, fire station, grocery store, late-night pharmacy, dog park, and play spaces within the Assembly Square neighborhood.	City	Near Term
Action 1.2.3	Require new residential developments to include playgrounds and tot lots within a five-minute walk of most households.	City	Immediate



2. INCREASE ACCESS TO NATURE AND BUILD SUSTAINABLY

Strategy /	Activity	Lead Agency	Timeframe
Strategy 2.1: [Develop Sustainable Buildings and Infrastructure		
Action 2.1.1	Assess existing utilities infrastructure throughout Assembly Square.	City	Immediate
Action 2.1.2	Perform a comprehensive analysis of existing utility loads based on building uses.	City	Immediate
Action 2.1.3	Evaluate the impact of each building addition, deletion, or renovation on the affected utilities.	City Private	Ongoing
Action 2.1.4	Coordinate with Somerville Department of Public Works and licensed plumbing engineers to determine if mains need to be maintained, upgraded, or added throughout the development.	City	Near Term
Action 2.1.5	Design additional drainage infrastructure to convey roof and pavement runoff from the development into the existing drainage system to be discharged elsewhere due to MassDEP's concern with infiltrating into polluted soil beneath the project area.	City Private	Ongoing
Action 2.1.6	Continue to require all the new buildings in Assembly Square to achieve LEED Platinum certification.	City	Ongoing
Action 2.1.7	Encourage new developments to achieve net zero energy goals and utilize on-site renewable energy resources.	City	Ongoing
Strategy 2.2: I	ncrease Access to Parks		
Action 2.2.1	Establish a trail network that connects the parks and open spaces within Assembly Square.	City Private	Immediate
Action 2.2.2	Create pockets of green space for gathering and seating along the trail network.	City Private	Near Term
Action 2.2.3	Require trees and native plants along all trails to provide shade and create habitat for pollinators and wildlife.	City	Long Term
Strategy 2.3: S	Set Proper Energy Goals and Design Criteria		
Action 2.3.1	Set district-wide energy and carbon reduction goals instead of on a project-by-project basis to allow design flexibility.	City	Near Term
Action 2.3.2	New development projects in Assembly Square should use drainage design criteria that reflects future projections and climate change trends.	City	Near Term

3. DESIGN SAFE, COMFORTABLE AND INTERESTING STREETS AND PATHS AND INCREASE TRANSIT AVAILABILITY

Strategy /	Activity	Lead Agency	Timeframe
Strategy 3.1: Build Streets that are Safe, Comfortable and Interesting			
Action 3.1.1	Remove the right turn pockets and reduces the curb radii between Fellsway and Grand Union Boulevard/ Middlesex Avenue to discourage high-speed turning movements by motorists and expands the pedestrian area, creating shorter crossing distances.	City	Near Term
Action 3.1.2	Reduce the number of lanes on Fellsway, and reduce accepting lanes on Grand Union Boulevard.	City	Long Term
Action 3.1.3	Improve the Kensington Connector with public art and lighting.	City	Near Term
Action 3.1.4	Adopt and implement the street sections in the Assembly Square Neighborhood Plan.	City	Near Term
Action 3.1.5	Explore the reduction of the I-93 footprint by clearing up the entrance and exit ramps.	City	Long Term
Action 3.1.6	Explore the removal of the Fellsway tunnel under I-93 footprint by clearing up the entrance and exit ramps.	City	Long Term
Strategy 3.2:	Prioritize Bicycling		
Action 3.2.1	Incorporate dedicated bicycle lanes / cycle tracks on all major streets.	City	Near Term
Action 3.2.2	Install Bluebikes facilities at the authorized and proposed locations within the Assembly Square Neighborhood Plan.	Bluebikes	Near Term
Action 3.2.3	Adopt new bicycle parking requirements for all new construction.	City	Near Term
Strategy 3.3:	Expand and Improve Transit Services		
Action 3.3.1	Increase frequency of the Orange Line and Route 90 Buses.	MBTA	Near Term
Action 3.3.2	Add additional bus services connecting Assembly Square to other parts of Somerville.	МВТА	Near Term
Action 3.3.3	Modify Route 90 to incorporate more stops within Assembly Square.	МВТА	Near Term
Strategy 3.4:	Increase Transportation Demand Management		
Action 3.4.1	Continue to require future development to participate in Assembly Connect program with a designated coordinator to decrease reliance on single-occupancy vehicle use to the neighborhood.	City	Ongoing
Action 3.4.2	In addition to the baseline requirements for transportation demand management, new development should also provide: • Subsidized transit passes for all employees, • Parking provided shall be public parking offered at market rate prices, and • Employees shall be charged directly for parking at market rate prices.	МВТА	Near Term
Action 3.4.2	Add additional bus services connecting Assembly Square to other parts of Somerville.	МВТА	Near Term
Action 3.4.3	Modify Route 90 to incorporate more stops within Assembly Square.	МВТА	Near Term



4. GROW REVENUE-GENERATING USES FOR SOMERVILLE

Strategy /	Activity	Lead Agency	Timeframe
Strategy 4.1: Enhance the Site's Current Strengths			
Action 4.1.1	Enhance the wayfinding signage and add a new entrance over the rail line by Revolution Drive.	City	Immediate
Action 4.1.2	Create a more vibrant waterfront park with community events programming and sustainable projects at the river's edge that serve the local community and regional visitors year round.	City Private	Immediate
Action 4.1.3	Expand the area of the waterfront park to increase event capacity.	City Private	Near Term
Action 4.1.4	Continue to work with the site's developers with economic development program design that maintains and achieves a new avenue of economic growth. Consider additional "Public Private Partnerships PPP's" that align city and private goals	City Private	Near Term
Action 4.1.5	Adjusting the existing code or create additional standards to reflect the community's vision for the Assembly Square neighborhood.	City	Immediate
Action 4.1.6	Increase the use of financing tools (DIF/TIF, property tax abatements, etc) to support social goals. Use of Floor Area Rations (FAR) or similar area measures to promote tradable development rights.	City	Near Term
Strategy 4.2: E	xpand the City's non-residential tax base		
Action 4.2.1	Include a diversity of uses at Assembly Square and expand the City's non-residential tax base.	City Private	Ongoing
Action 4.2.2	Enhance business cluster effects by broadening the neighborhood's economic, commercial and office offerings through coordinated branding of the entire neighborhood, and consciously attracting complementary enterprises of all sizes, diversity, class, and type.	City Private	Ongoing
Action 4.2.3	Create a market space that serves as an incubator where businesses can grow and scale. The entrepreneurs, residents, students, and artists can come together to shape the future of the community.	City	Near Term
Action 4.2.4	Enhance Assembly Square as a life-science center by creating a real neighborhood to attract businesses, employees, and residents.	City	Ongoing
Action 4.2.5	Increase the price of parking and create a pricing structure for parking at all Assembly Square parking locations.	City	Immediate

Strategy /	Activity	Lead Agency	Timeframe	
Strategy 4.3: [Strategy 4.3: Develop New Catalytic Niches			
Action 4.3.1	Attract and promote investments in the arts community, along with small foot-print, inventive retails.	City	Near Term	
Action 4.3.2	Seek out monies and investments from corporate social responsibility programs and other similar community investments.	City	Near Term	
Action 4.3.3	Partner with Boston area and local arts organizations to support connecting artists to city programs and to bring new ideas to city officials.	City	Near Term	
Action 4.3.4	Identify target areas within Assembly Square for public art initiatives. Consider competitions and other mechanisms to increase public participation in the design process.	City	Immediate	
Action 4.3.5	Experiment with affordable retail spaces that are distributed across new developments and work hand-in-hand with additional financial support to them.	City Private	Ongoing	
Action 4.3.6	Treat local business (particularly non-chain and micro-businesses) as targets for affordable support to allow artists and other entrepreneurs to access the market through fixed locations.	City Private	Ongoing	
Action 4.3.7	Build / expand existing business incubator functions that provide small businesses with support for their growth, through advice and links to others for marketing, branding, accounting and overall business strategy.	City	Near Term	
Action 4.3.8	Engage educational and cultural institutions to promote Assembly Square as a satellite location.	City	Near Term	



5. CONNECT PHYSICALLY AND SOCIALLY TO SOMERVILLE AND CULTIVATE THE ASSEMBLY COMMUNITY

Strategy /	Activity	Lead Agency	Timeframe
Strategy 5.1: S	Strengthen Physical and Social Connection		
Action 5.1.1	Support projects that enhance the physical connections between Assembly Square and adjacent neighborhoods such as improving the Kensington Connector, and making Fellsway easier to cross on foot or bike.	City	Ongoing
Action 5.1.2	Add a bike/pedestrian bridge to cross the river.	MBTA City	Near Term
Action 5.1.3	Improve the access to Draw Seven Park by constructing a connection over the rails near the Orange Line station by Revolution Drive.	MBTA City	Near Term
Action 5.1.4	Support the social infrastructure of business improvement districts, main street associations, neighborhood and homeowner associations specific to Assembly Square.	City	Near Term
Strategy 5.2:	Enhance the Assembly Square Neighborhood Identity		
Action 5.2.1	Provide spaces for art, and incorporating art into the streetscape and public spaces allow artists to connect to the neighborhood and make authentic spaces that are artistic and chic, and completely unique to Assembly Square.	City	Near Term
Action 5.2.2	Ensure that there is cohesion and flow between the buildings and within the public realm in street design, furnishings, and wayfinding signage that help Assembly Square to establish its unique identity.	City	Near Term
Strategy 5.3:	Cultivate the Assembly Square Community		
Action 5.3.1	Encourage a broader range of residential units in both size and tenure.	City	Near Term
Action 5.3.2	Encourage locally-owned, micro-chain, family-operated, and startup businesses in Assembly Square. Allow short-term leases or reduce rents to operations that help achieve local distinctiveness.	City Private	Ongoing
Action 5.3.3	Allow / enhance the ability of small vendors to sell from pushcarts, food trucks, and temporary sales areas.	City	Immediate
Strategy 5.4: E	experiment with affordable housing financing tools		
Action 5.4.1	Work with affordable housing department and developers to bring more workforce housing into new developments using tax increments, specific bond issuances or an area-wide housing trust fund that can offset the development cost gap inherent in affordable housing.	City Private	Near Term
Action 5.4.2	Experiment using non-traditional funding approaches for public policy goals, such as using a master leasing structure to allow for lower cost retail market entry for local artists or entrepreneurs.	City Private	Near Term