



MAKING BRICKBOTTOM

2015 NEIGHBORHOOD PLAN



BRICKBOTTOM-MCGRATH NEIGHBORHOOD PLAN

MIT DEPARTMENT OF URBAN STUDIES AND PLANNING
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AUTHORS

Adriana Akers
Kassie Bertumen
Katie Blizzard
Brian Bowen
Alex Brady
Lee Dwyer
Evan Easterbrooks-Dick
Kara Elliott-Ortega
Ross Karp
Andrew Lai
Nupoor Monani
Chris Van Alstyne

FACULTY ADVISORS

Terry Szold - Adjunct Professor of Land Use Planning
Susan Silberberg - Lecturer in Urban Design and Planning

Prepared for the City of Somerville's Planning Division
George Proakis, Director of Planning

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Department of Urban Studies and Planning
School of Architecture + Planning
Massachusetts Institute of Technology
Cambridge, MA

dusp.mit.edu



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Sarah Spicer, Senior Transportation Planner

MIT's Department of Urban Studies and Planning

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Terry Szold, Adjunct Professor of Land Use Planning

Susan Silberberg, Lecturer in Urban Design and Planning

Others in the department:

Eran Ben-Joseph, Professor and Head of the Department of Urban Studies and Planning

Ezra Glenn, Special Assistant and Lecturer in Urban Design and Planning

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Danny LeBlanc

Stephen Mackey

Peter Marquez

Molly Rubenstein Maxwell

Louise Olson

Ron Quaranto

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Introduction

Timeline and Process	1
Community Outreach Summary	3
History	7
Somerville Current Context	9
Related Planning Initiatives	10
Surrounding Neighborhoods	14

Existing Conditions

Land Use and Activities	19
Barriers	22
Street Conditions	23
District Character	25

Vision

Framework Plan	29
Visualizing the Plan	34
Public Realm	35
Catalyst Site	43

Recommendations

Public Realm	47
Transportation and Circulation	51
Housing	59
Economic Development	63
Zoning and Land Use	71
Summary of Recommendations	82

Conclusion

Phasing	87
A New Future for Brickbottom	90

Appendices

Bibliography	93
Figure Credits	95
Interview Protocol	97
Projected Jobs and Housing Units	99

Making Brickbottom: 2015 Neighborhood Plan is a comprehensive strategy to manage the future growth of the Brickbottom/McGrath neighborhood of Somerville, Massachusetts. Developed by a team of graduate students in the Department of Urban Studies and Planning at the Massachusetts Institute of Technology, the plan is the product of several months of on-the-ground study of the Brickbottom neighborhood within the larger context of Somerville and greater Boston, as well as significant public feedback and participatory outreach. It builds upon priorities already identified in Somerville's guiding city plan, *SomerVision*, adding neighborhood-specific objectives and recommended strategies for implementation.

The team's work was sparked by the City of Somerville's Planning Division, as it prepares for two major public-works projects in the Brickbottom area: the replacement of McGrath Highway's McCarthy Overpass with a ground-level boulevard and the construction of the Washington Street Station, as part of the Green Line Extension. This plan projects significant new development in the coming years, driven by the strong demand for transit-oriented development within Somerville and by general market forces of greater Boston. To meet this demand, the plan recommends steps to add significant new residential, commercial, fabrication, and arts-related space. At the same time, a central goal is to protect and improve existing light industrial activities and jobs in the neighborhood, one of the few remaining centers of manufacturing and craftwork in the region. This plan promotes a vision of Brickbottom as a vibrant, mixed-use, walkable, live-work neighborhood that builds upon its valuable industry and artistic community.



INTRODUCTION



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Timeline and Process

Over the fall 2014 semester, the City of Somerville engaged a team of graduate students in MIT's Community Growth and Land Use Planning workshop, co-taught by Adjunct Professor Terry Szold and Lecturer Susan Silberberg, to prepare a comprehensive plan to guide future development in the Brickbottom area of the city. The impetus of the project stemmed from two large public works projects currently underway: the de-elevation of McGrath Highway's McCarthy overpass into a ground-level boulevard and the construction of the Washington Street Station for the Massachusetts Bay Transportation Authority's (MBTA) Green Line Extension.

Eager to develop a plan that both responds to the critical needs of the community and follows Somerville's longstanding tradition of community-driven planning, the MIT team employed numerous public participation efforts to solicit the diverse voices and ideas of the community. The findings and recommendations of this plan are based on a rich analysis of related plans, design concepts, and neighborhood data, as well as numerous visits to the study area, class lectures, and input from two public meetings. To the greatest extent possible, this plan reflects the shared values and visions of

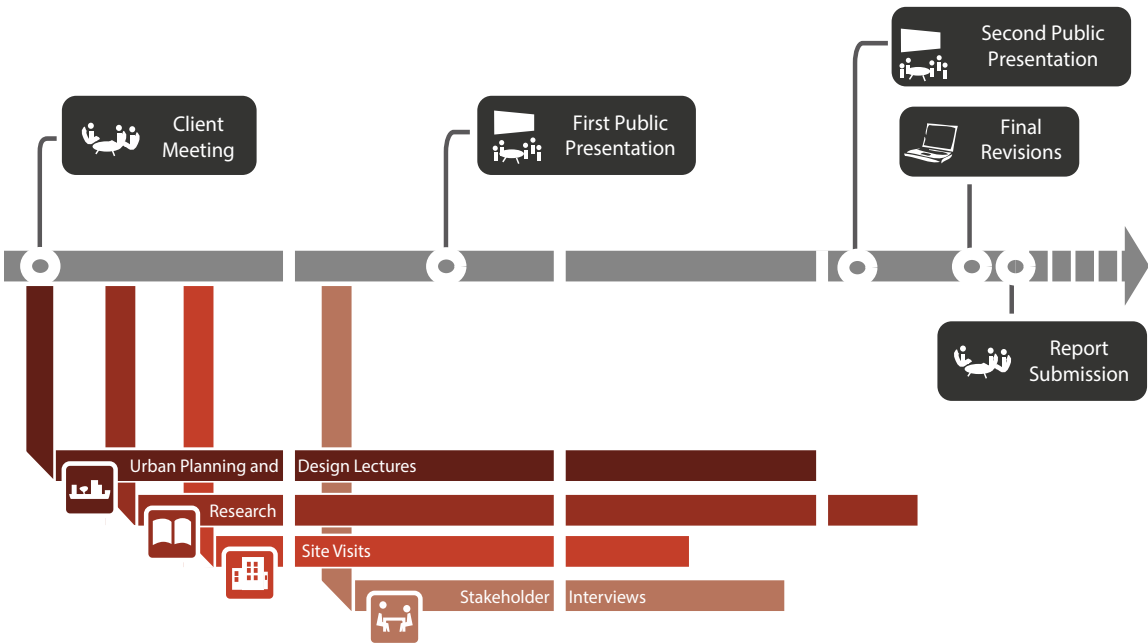


Figure 1-1: Diagram of timeline and process

community members, business owners, and other stakeholders who willingly volunteered their time to help inform this plan.

Background Research

The planning process for this plan began with an extensive review of Brickbottom's history and numerous plans — namely, *SomerVision*, *Grounding McGrath*, the Green Line Extension plan, and plans for the Somerville Community Path. Additionally, we consulted ongoing plans for the area surrounding Brickbottom

— notably in Union Square, Inner Belt, and NorthPoint — recognizing that these efforts have significant implications for the Brickbottom study area. We also examined the area's zoning, economic trends, road structures, and parcel ownership. Finally, to build a comprehensive vision for what the area could be, we examined case studies of adaptive re-use, focusing on cases that incorporated best practices on the co-mingling of diverse uses, urban design features, and innovative zoning mechanisms.

Study Area Visits

To better understand the study area's current conditions, we made multiple visits to Brickbottom. We documented the area's current land uses, urban design and built form, transportation and circulation, occupancy levels, and connections to adjacent neighborhoods. To ensure that we understood the area's overall usage and storm water implications, we visited the study area on weekdays and weekends, at various times of the day, and when it rained heavily. We documented our observations in both notes and photographs.

Stakeholder Interviews

To supplement our observations, we conducted a series of formal and informal conversations with community stakeholders, including Somerville aldermen, Somerville Planning Division staff, business owners, residents at the Brickbottom Artists Building, and artists at Joy Street Studios, among others. Stakeholders spoke broadly about the area's history, what they perceive as its greatest strengths and weaknesses, and their hopes and concerns about its future. We also solicited specific ideas regarding the most desirable land uses and critical features for Brickbottom's future success.

The team garnered rich information about the businesses and residents in and around the area, how they use the area, what works and what does not work for everyday business and personal needs, and what specific changes can be made to make the area a better place to work and live. Through these conversations, we gained a good sense of what community members value for Brickbottom.

Public Meetings

We convened two public meetings in accessible locations to solicit community input on our preliminary findings and initial proposals.

The first meeting, held in late October at the Argenziano School, gave us the opportunity to share our initial findings and solicit feedback on preliminary concept ideas. The second meeting, held at the Brickbottom Artists Building in early December, provided another opportunity to share a more complete vision, to propose strategies for implementing the vision, and to obtain feedback that helped us refine our plan. About 50 community members attended this meeting.

At each of these meetings, we organized small break out groups and interactive stations for participants to share their ideas and concerns.



Figure 1-2: Presenting the team's vision and recommendations at the second public meeting

Community Outreach Summary

As described above, through the support of Somerville's Office of Strategic Planning and Community Development (OSPCD), we were able to employ an extensive community engagement strategy. Engaging stakeholders early in the process enabled us to learn about the study area's past and present conditions from the perspectives and experiences of civic leaders; public and nonprofit entities interested in improving social, economic, and physical aspects of the area; and business owners and residents who currently operate and live in Brickbottom. It also allowed us to set the foundation for a sustained partnership between the City and members of the community. We used the information gathered through our interviews to inform our overall vision and



Figure 1-3: Group discussion and SWOT analysis at the first public meeting

objectives for Brickbottom.

During our interviews, we asked community members to assess the area's strengths, weaknesses, opportunities, and threats (SWOT) and to complete a questionnaire about the most crucial elements for Brickbottom's success, and the most and least desirable land uses. The following section summarizes some of the common themes we heard.

Strengths

There was resounding consensus that Brickbottom's location is its major asset. This included its location in a "world class urban core," serving as a "gateway" to Somerville and a "nexus" among Somerville, Cambridge, and Boston, as well as its close proximity to revitalizing neighborhoods — Union Square, NorthPoint, Inner Belt, and Boynton Yards — and to Boston Logan International Airport.

Another critical asset is its strong artist presence with anchor institutions like Brickbottom Artists Building and Joy Street Studios and the sense of community among artists, residents, and existing business owners.

Its mix of existing uses is another important quality. Numerous stakeholders described how

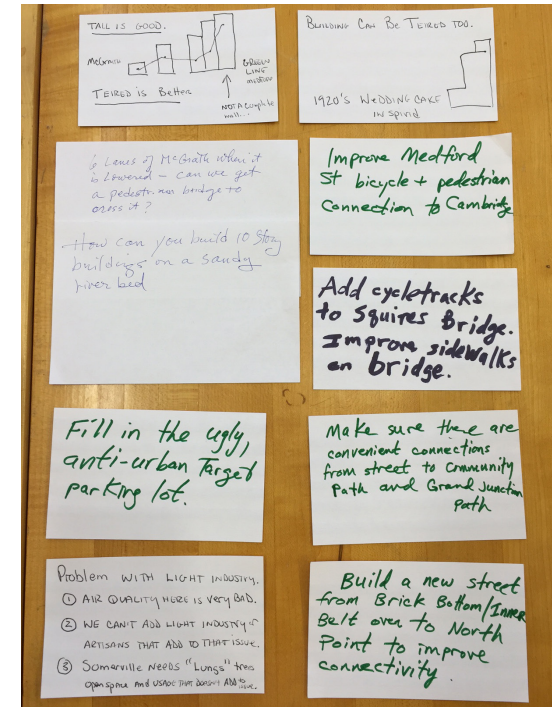


Figure 1-4: Completed response cards from the second public meeting

the co-mingling of industrial, auto, commercial, and residential uses — including the clustering of artistic, production, and fabrication uses in Joy Street Studios — contributes to the area's character, not to mention providing critical services for the city.

Lastly, with the Green Line Extension, community members are enthusiastic about the potential for development and, in particular, the opportunity to increase affordable housing,

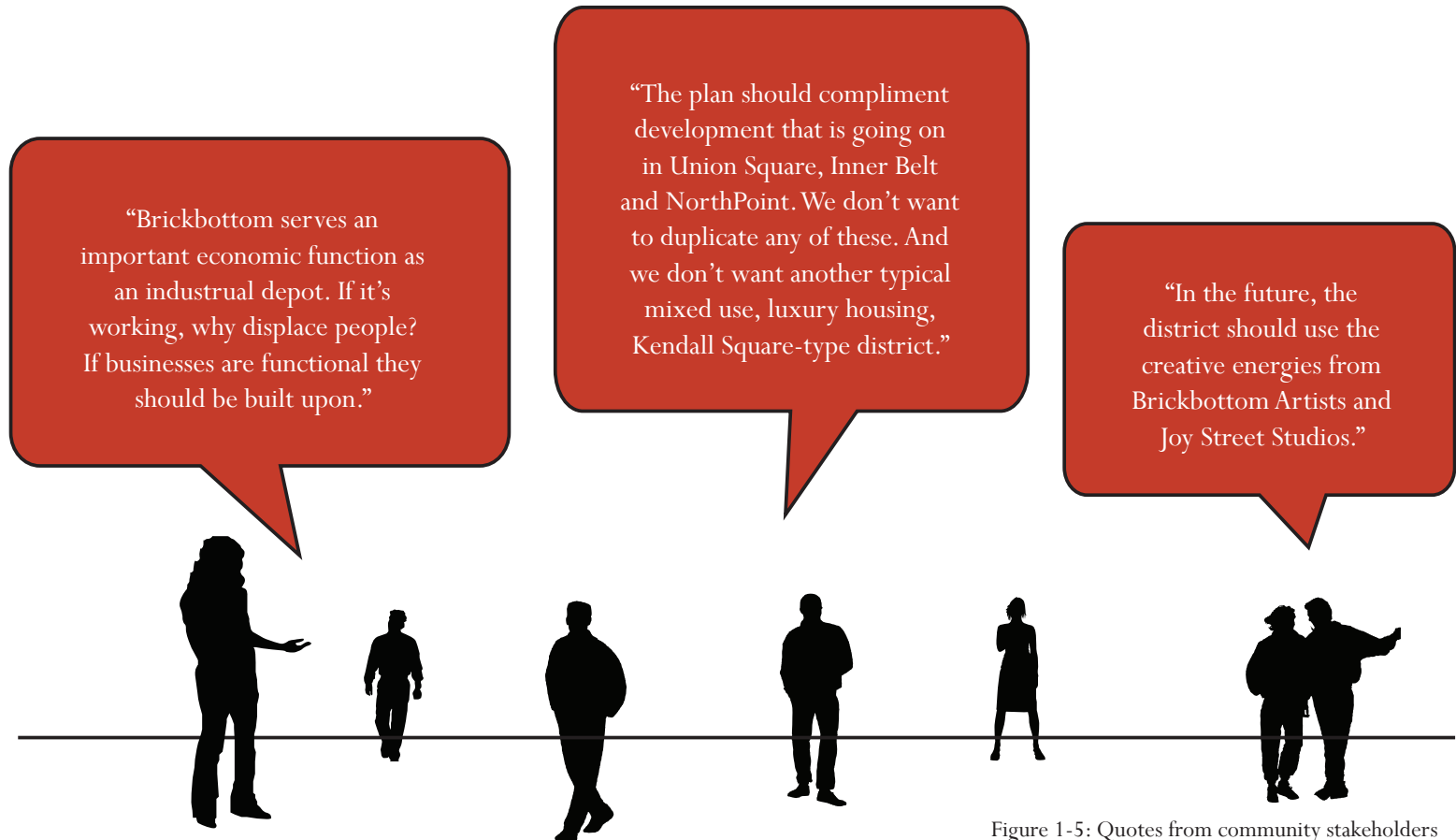


Figure 1-5: Quotes from community stakeholders

jobs, and public open space. One stakeholder described Brickbottom as Somerville's "last development frontier."

Weaknesses

Nearly all of the weaknesses and challenges

of this area were related to transportation and circulation. Community members described the existing transportation as "horrible," "hideous," and "[a] disaster" — noting how there are tremendous accessibility challenges and safety problems for all modes of transportation — vehicular, cycling, and

pedestrian. Several stakeholders referenced the barrier that McGrath Highway creates, which makes Brickbottom, as one stakeholder commented, "[an] inaccessible island." Finally, there were concerns regarding possible environmental contamination.

Opportunities

Community members offered myriad ideas for Brickbottom’s future development. One recurring theme was to build on the existing mix of uses by creating more artist and industrial spaces, and adding in multi-family residential, dining, and open space. One specific idea was to create a “social innovation” district that connects arts, urban agriculture, and social goods — and specifically connects with nearby artist clusters at Artisan’s Asylum and the forthcoming Millbrook Lofts.

Similarly, several people shared the idea of activating Brickbottom with a mix of daytime, nighttime, and weekend life by introducing activities like farmer’s markets and arts and cultural events as well as creating some permanent performance and entertainment space. Another shared idea was increasing public open space, not just on the ground level, but also on rooftops, to maximize views of Boston.

In terms of transportation and circulation, most respondents felt that future development should capitalize on the de-elevation of McGrath Highway and the Green Line Extension. Some specific ideas included creating designated bike lanes and storage facilities; making connections

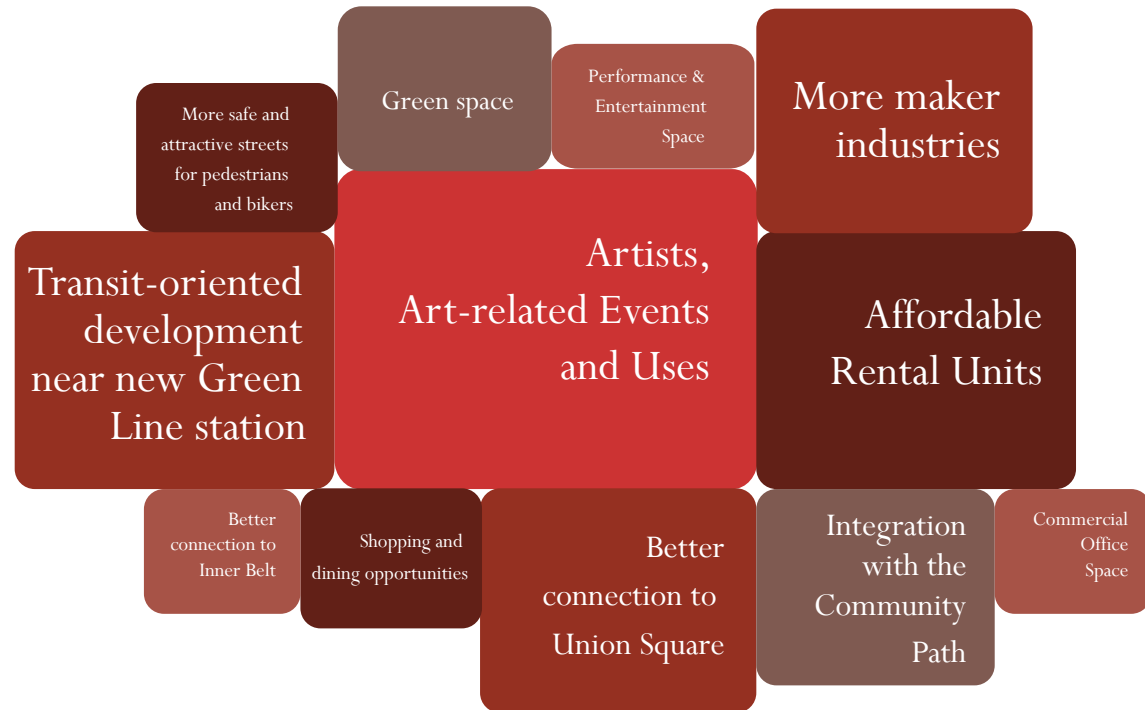


Figure 1-6: Word cloud summarizing community responses on crucial elements

to Union Square, Inner Belt, and the Community Path; and cutting up blocks with interior alleys to allow for off-street access.

Threats

The most prevalent concern centers around displacement. Many community stakeholders fear that existing businesses and artists may be priced out of Brickbottom and forced to leave. Similarly, many are concerned about the loss

of housing affordability for those living in and around Brickbottom. Other concerns include the loss of cultural identity — specifically among artists, immigrants, small businesses, and industrial uses that currently occupy the area — and an overeager development process that does not foster coordinated development, placemaking, or consideration of existing businesses and residents. There was also opposition towards certain types of development. Several community stakeholders

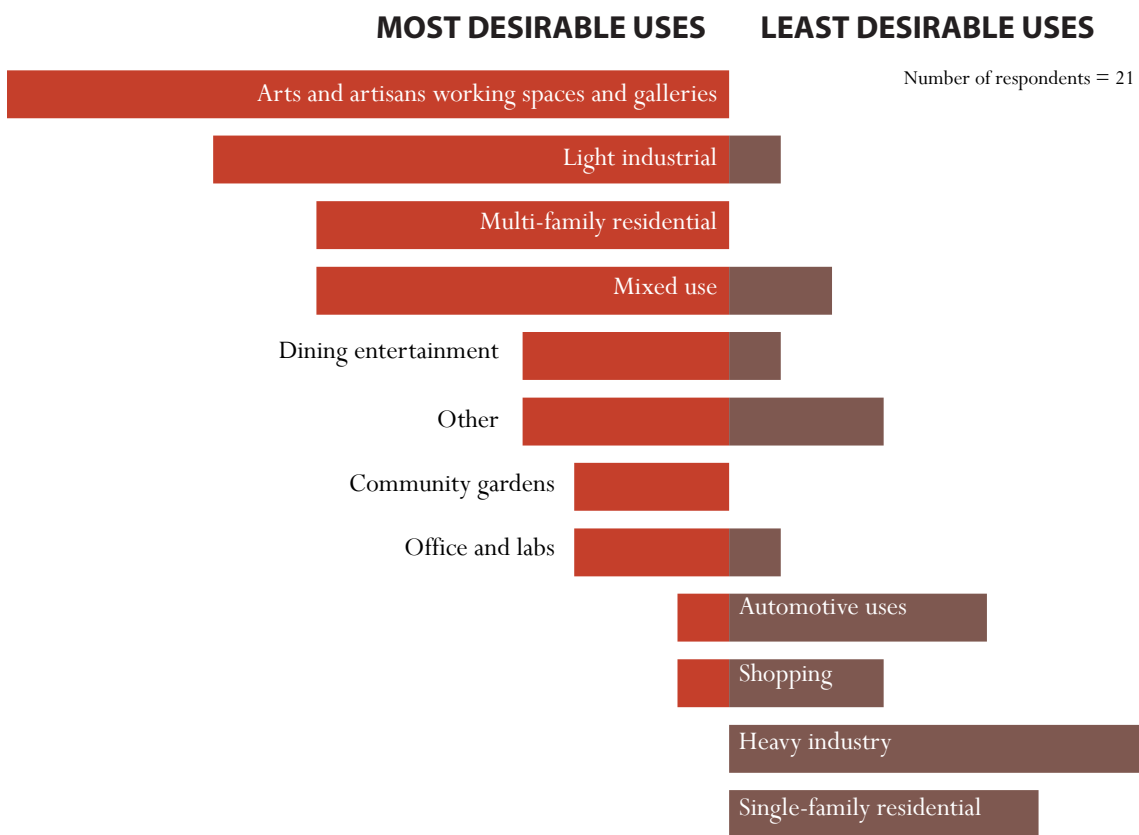


Figure 1-7: Summary of community responses regarding land use

shared that they did not want “typical mixed use” — described as residential on top of a CVS — or another “Assembly Square” or “Kendall Square,” which tend to be dominated by corporate chains and lack any sense of historic or existing character.

Questionnaire

For our survey, we received over 20 completed questionnaires. A summary of respondents’ answers are shown in the word cloud (Figure 1-6) and bar chart (Figure 1-7). See Appendices for the questionnaire.

Overall, most respondents felt that arts-related uses, transit-oriented development, affordable rental housing, and maker spaces were crucial



Figure 1-8: Community members and team members at the second public meeting

for Brickbottom’s success.

Similarly, when asked about the most desirable and least desirable land uses, the arts, light industry, and multi-family residential were highly favored. Heavy industry and single-family residential were among the land uses that seemed least appropriate or desirable for the future of Brickbottom.

History of Brickbottom

Somerville is located north of Boston and is surrounded by the communities of Medford, Malden, Everett, Arlington, and Cambridge. Topographically, Somerville is bounded by the Mystic River to the north and the Alewife Brook to the west. Brickbottom lies in the southeastern portion of the city; since Somerville's earliest days, it has been a nexus of change and a center of industry and trade. Situated along a former riverbed, Somerville's first "highway" (now Washington Street), and at the crux of two major railways, Brickbottom has changed along with the city's growing population and its economy. Today, it appears on the verge of yet another period of rapid change.

When Somerville first separated from Charlestown in 1842 to become an independent municipality, it was an agrarian community of little more than 1,000 people. Ringed by the Mystic River to the north and Miller's River to the south, the city was considered a rural refuge from Boston and Charlestown. During the 1800s, dairy farming was such a big part of the city's economy that the thoroughfare now known as Somerville Avenue was called Milk Street or Milk Row. The largest built structure in the Brickbottom area was also a

place of sanctuary: McLean Asylum, which was then located on the former "country" estate of Joseph Barrell in what is now the Inner Belt neighborhood.

Brickbottom takes its name from the clay-filled soil found along its southwestern edge, where Miller's River once flowed. The soil from the marshlands was used to kiln bricks, contributing to Somerville's largest non-agricultural industry through its first several decades. At the time, Somerville bricks were known as the "best in the Eastern market."

The river area also became crowded with industry of another kind — meatpacking plants and slaughterhouses. With the rise of the meatpacking industry and installation of the city's first sewers, which drained into Miller's River, the neighborhood was soon marked by an overpowering stench.

During the 1800s, the city used dirt from the tops of Cobble and Prospect hills to fill in Miller's River, slowly but surely alleviating the river's pollution problem and making way for new development. Meatpacking plants,



Figure 1-9: 1852 map of Somerville

including New England Dressed Wool and Meat (which was located where Target is today) and John P. Squires, would remain active in Somerville until the 1950s.

Brickbottom's history has also been deeply tied to changes in transportation. In 1842, the Boston and Lowell Railroad was extended through East Somerville along Brickbottom's eastern edge. A station was constructed at Washington Street near Joy Street. Commuter rail tracks are in the same location to this day, and the former station site will be the home of the new Washington Street Green Line station.

By 1890, Somerville had swelled to more than 40,000 inhabitants, and burgeoning industry had begun to overtake the bucolic agrarian lifestyle. By 1896, the growth of the railroads and the smoke of brick kilns had spurred McLean Hospital to seek quieter surroundings in Belmont, MA. By that point, dozens of small cottages and frame tenement row houses had cropped up along the main roads within Brickbottom, including Linwood, Chestnut, Joy, and Poplar streets.

At the turn of the century, the neighborhood became home to immigrants from Ireland, Italy, Lithuania, and Greece. Ties were particularly strong within the Greek community, as

Linwood Street became the center of the Somerville Greek Colony in the early 1900s. Notable residents included George Dilboy, the first Greek American to receive the Congressional Medal of Honor. Dilboy served as a Private First Class in the U.S. Army during the First World War, and a statue of him stands in front of Somerville City Hall. The City's George Dilboy Memorial Stadium was also named in his honor.

In 1896, James A. Kiley established a wagon building shop at the corner of Linwood and Fitchburg streets. As automobile travel replaced horse-drawn wagons, Kiley adapted to the times, offering auto body repair and painting services in Brickbottom through the mid 20th century. Kiley's shop remains in operation today as one of the leading firms in the "design and manufacture of telephone and power company truck bodies."

In 1907, the Somerville municipal incinerator was built near the intersection of Poplar and Linwood Streets, marking a turn toward heavy industry and municipal services in the area. The construction of the "Northern Artery," which would become known as McGrath Highway, began in 1925, creating a permanent seam between East Somerville and the eastern edge of Winter Hill. This seam was further

exacerbated in the 1950s, when large sections of neighborhoods were demolished to make way for a new elevated highway called the McCarthy Overpass. According to *Beyond the Neck*, an architectural history of the city, by 1950s, "all of Brick Bottom's houses were removed for the redevelopment of the area into an industrial park."

Much of the land was left cleared or underdeveloped in anticipation of the construction of an "Inner Belt" highway that never materialized. In 1988, the establishment



Figure 1-10: Joy Street circa 1955

of the Brickbottom Artists Association marked the return of residents to the neighborhood for the first time since the 1950s. The association purchased two semi-abandoned buildings at the southern end of the neighborhood that were originally erected in the 1920s as the cannery and bakery of A&P stores. Today, the building consists of nearly 150 condominium spaces and galleries for artists and residents.

With the demolition of the city's waste transfer station in 2013, the planned grounding of McGrath Highway, and the imminent arrival of the Green Line, Brickbottom seems poised for a new chapter in a long and storied history.

Somerville Today: Current Context

Today, Brickbottom is a largely industrial district within the densest city in New England. One of the densest cities in the country since the beginning of the 20th century, Somerville currently counts a population of 77,739 in just over four square miles.

Demographics

Somerville is characterized by a very diverse population in a number of ways. In terms of race and ethnicity, the city has a higher proportion of Asian (10%), Black (7%), and

Latino (11%) residents than the state average. More than 50 percent of Somerville adults have at least a bachelor's degree, but less than 2 percent of households earn more than \$100,000 in income. At the same time, the median income for the city is \$65,110, which is less than the state median of \$66,135, and 15 percent of Somerville residents are below the

poverty line. In terms of the age of Somerville residents, there are far fewer persons under 18 than the state average, but the city's over-65 population has declined by nearly 25 percent over the past ten years.

There has been a strong history of immigrant residents in Somerville, and this tradition

Somerville Demographic Data	
Total Population	77,739
Population Density (per sq. mile)	18,886
Age	
Under 25 Years	27%
25 to 34 Years	31%
Over 34 Years	42%
Race/Ethnicity	
White Alone	76%
Black or African American Alone	7%
American Indian and Alaska Native Alone	0%
Asian Alone	10%
Native Hawaiian and Other Pacific Islander Alone	0%
Some Other Race Alone	4%
Two or More races	3%
Hispanic Or Latino	11%
Foreign Born	23.90%
Median Household Income	\$65,110
Vacancy Rate	4.10%
Median Gross Rent	\$1,432

Table 1-1: Somerville demographic data, American Community Survey 2011-2013

continues today. The 2011-2013 American Community Survey estimated that 24 percent of Somerville residents are foreign born, compared to 15 percent statewide. The two largest immigrant groups are from Asia and Latin America, composing 30 percent and 39 percent of the foreign born population respectively. This diversity is part of what makes Somerville so unique, and is something that the team tried to capture while considering the future of Brickbottom.

Housing Challenges

The diversity and uniqueness of Somerville make it a desirable place to live, and this is clearly reflected in the housing market. In 2011, the median home value in Somerville was \$435,600, compared to the statewide median of \$325,800. At 33 percent, the homeownership rate is relatively low compared to the state's. With the high median home values in Somerville, along with the higher than average poverty rate, affordable housing is a clear concern for city residents in the future.

Related Planning Initiatives

A number of major initiatives and projects occurring in Somerville will have a profound

impact on the city and its community, including Somerville's comprehensive plan, *SomerVision*. Additionally, several of these projects will have a direct impact on the Brickbottom area, including the extension of the Green Line, the extension of the Community Path, and the de-elevation of McGrath Highway. Another major effort that affects Brickbottom involves the revitalization of neighboring Union Square. Planning efforts in Brickbottom should take

into consideration elements of the *Union Square Revitalization Plan*, complementing and integrating any changes relevant to the Brickbottom neighborhood.

SomerVision

Beginning in 2009, Somerville residents and City staff entered into an extensive community planning process to shape the city's next 20

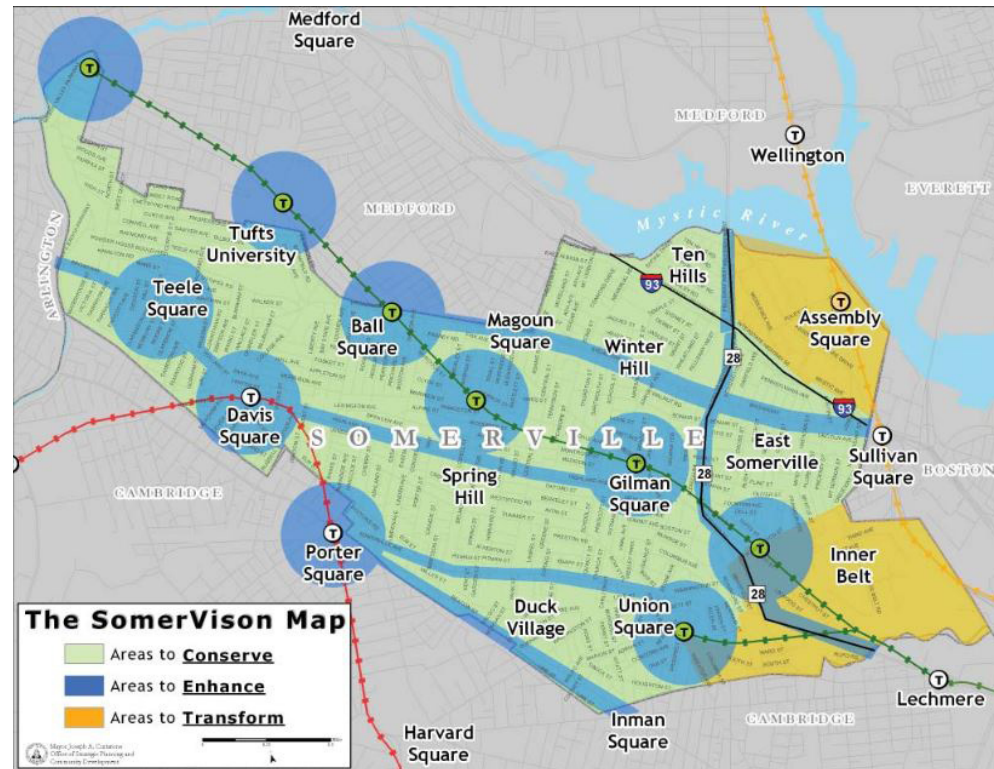


Figure 1-11: *SomerVision* target areas

INTRODUCTION

years of growth and development. The result of that process is *SomerVision*, a comprehensive plan adopted by the City in April 2012. Informed by thousands of hours of community engagement and active discussion among City staff and residents, *SomerVision* sets bold goals for job growth, open space allocation, housing units, public transit adoption, and new development.

The plan also acknowledges that development will occur at different rates throughout the city. Some areas will be preserved, others will be enhanced, and still others will be thoroughly transformed. The plan designated several neighborhoods, including Assembly Square, Inner Belt, and Brickbottom, as “Transformative Areas,” which are poised to become “dynamic, mixed-use and transit-oriented districts that serve as economic engines to complement the neighborhoods of Somerville.”

As a transformative area, Brickbottom is expected to account for 15 percent of the city’s overall growth by creating 4,500 jobs, creating 1.6 million square feet of new commercial space, and 750 new housing units spread across 822,000 square feet of residential development. According to the city’s plan, changes in Somerville’s transportation system will both drive this growth and facilitate it.

Green Line Extension

The Massachusetts Department of Transportation (MassDOT) and the MBTA are extending the Green Line from its current terminus at Lechmere Station to Somerville and Medford. The Green Line Extension will include a new Washington Street Station, in the

northeast corner of the study area. Specifically, the Washington Street Station will be located where the southern end of the Lowell Line Bridge meets Washington Street and will include bike parking as well as lighting and paving improvements. The station will also be designed to connect to the future Community Path Extension. The Washington Street Station

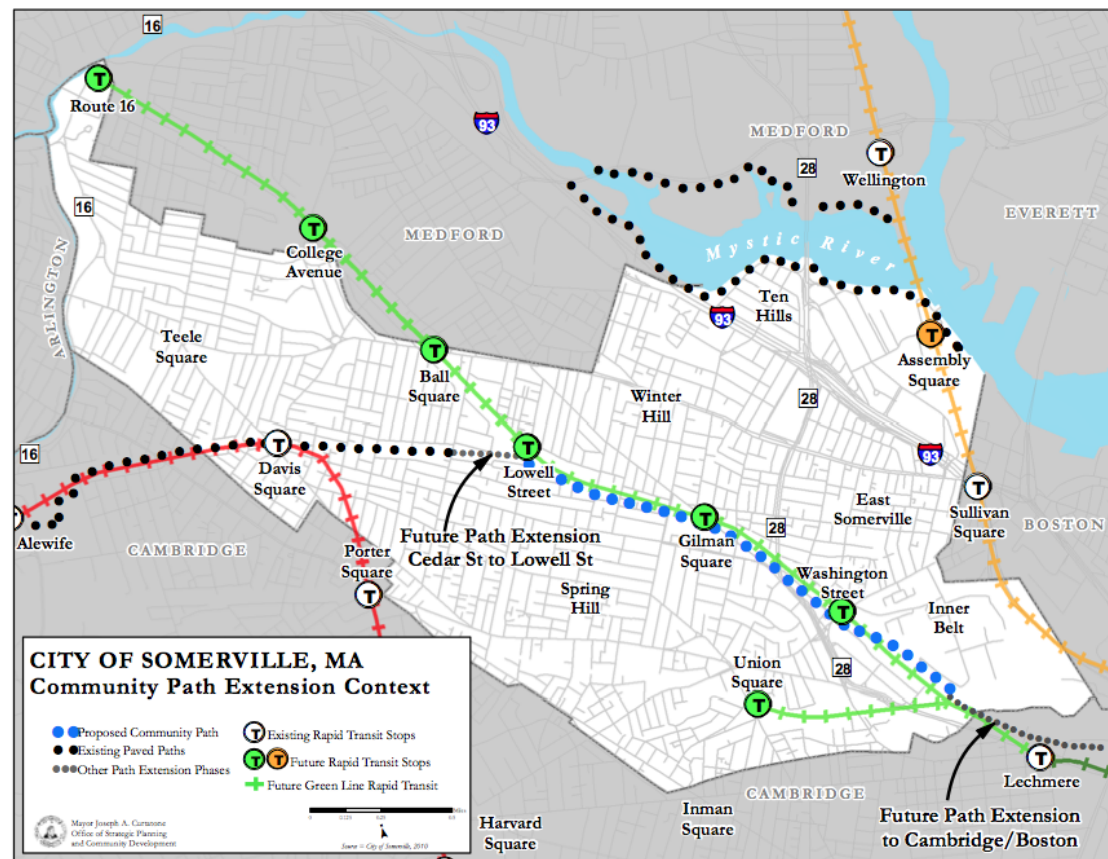


Figure 1-12: Green Line and Community Path extensions

is currently projected to open in 2017.

Community Path Extension

In anticipation of the Green Line Extension, the City of Somerville plans to extend the Somerville Community Path from the Davis Square area to the future Lowell Street Green Line station. The Community Path Extension will then run south along the Green Line Extension to the Somerville border, with the ultimate goal of connecting to Cambridge and Boston. The planned Community Path Extension runs along the eastern border of the study area from Washington Street past Poplar Street, but then crosses the future Green Line tracks. Ensuring safe and welcoming access to the Community Path Extension at Washington and Poplar Streets will be important for the future development of Brickbottom.

Grounding McGrath

The 2013 *Grounding McGrath* study by MassDOT demonstrates the various benefits of de-elevating McGrath Highway, including significant savings on the long-term costs of maintaining the McGrath viaduct, economic development opportunities, and numerous community benefits. The study then explores alternative alignments for McGrath once it is de-elevated, concluding with a recommended

alignment called the “Recommended Boulevard Alternative” (see Figure 1-13). This recommendation was based on both engineering analyses and community outreach. The Recommended Boulevard Alternative provides three travel lanes and one park lane in each direction along McGrath, as well as a cycle track that is separated from the highway by about 30 feet of unused right-of-way. The City of Somerville, however, has urged

MassDOT to consider reducing the number of travel lanes to two in each direction, thereby allowing for a more urban, pedestrian-friendly environment in the neighborhoods bordering McGrath. MassDOT has been receptive to this feedback and a redesigned Recommended Boulevard Alternative with two travel lanes in each direction is expected to be released in the near future.



Figure 1-13: Recommended Boulevard Alternative, *Grounding McGrath* study

Dimensions of Displacement

To understand the effects of the Green Line Extension on housing, the City of Somerville partnered with the Metropolitan Area Planning Commission (MAPC) and the Somerville Community Corporation (SCC) on the report *The Dimensions of Displacement*, which was released in early 2014. Chief among its findings were that residential rents near new transit stations are likely to see the largest increases in and greatest potential for displacement risk and the City will need to increase its housing goals in *SomerVision* by 50 percent to maintain affordability.

Informed by the findings of this research and building off of initial goals in *SomerVision*, the City developed a comprehensive affordable housing policy agenda, referred to as Sustainable Neighborhoods. Mayor Joe Curtatone presented the strategies under this plan in October 2014 to the Board of Aldermen's Housing and Community Development Committee. One key strategy is to update *SomerVision*'s housing goals from 6,000 to 9,000 new units, ensuring 1,800 (up from 1,200) are permanently affordable. Another strategy includes reforming several components of the City's zoning policy by: (1) expanding Inclusionary Zoning to require more affordable housing units and to broaden

income eligibility limits for middle-income households, (2) requiring more family housing in large-scale residential projects, (3) allowing for residential and commercial development in *SomerVision*'s transformational areas, with notable reference to the Brickbottom-Inner Belt area, and (4) establishing a new Maker and Artist District that would allow certified artists and makers to live in their work space.

Finally, a third strategy involves pursuing state legislation to create tax incentives for landlords who maintain affordable rent levels and to implement a local transfer tax on certain real estate sales — namely speculators flipping properties and realizing significant gains — and in turn use the tax revenue gained solely for the purpose of affordable housing development. The majority of these policies

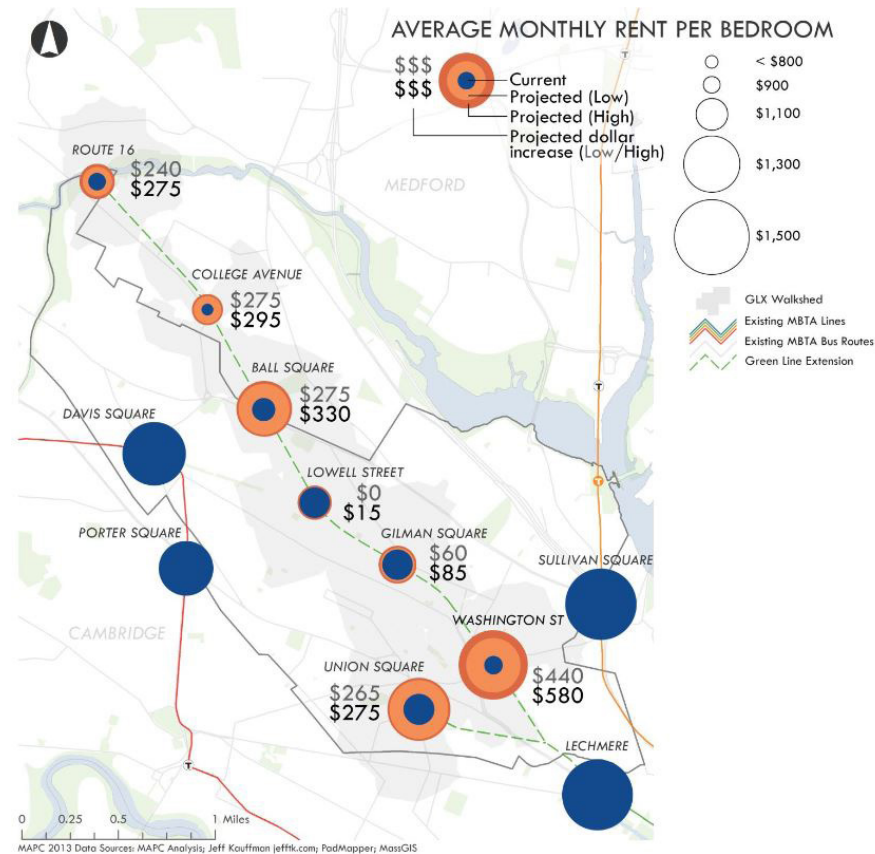


Figure 1-14: Average monthly rent per bedroom (2014) and projected rent growth, from MAPC's *Dimensions of Displacement* report

and action items are particularly applicable to the future housing plans of Brickbottom.

Surrounding Neighborhoods

Changes in and plans for surrounding districts — Union Square, Boynton Yards, NorthPoint, and the Inner Belt District — will have an impact on the Brickbottom study area.

Union Square

Located less than half a mile from the study area, Union Square is a vibrant, booming node of dining and drinking establishments, grocery stores, community institutions, and local businesses (including several start-up and co-working spaces). After decline set in after the removal of streetcars to Union Square and the postwar adoption of the automobile, Union Square has seen many changes in recent years, gaining a farmer's market, new commercial activity, streetscape improvements, and renewed regional attention. The area's influx of young, hip patrons recently earned it the moniker “hipster central” in the *Boston Globe*.

However, this growth has not come without some contention: the redevelopment of a former Boys' and Girls' Club building into mixed-income housing, for example, spurred opposition by some neighbors, who formed



Figure 1-15: Brickbottom and its surrounding neighborhoods

a group called “Union Square Rising” and eventually sued the City. In addition, in reaction to the future Green Line station in Union Square and its development, some local business owners, organizations, and residents have formed a coalition called Union United; this group has called for greater participation of the community in the planning process and a stronger focus on equitable development and community benefits. This community involvement will be important to keep in mind for future City-led planning processes in the Brickbottom area.

While some of the area’s issues remain unresolved, the City’s 2012 *Union Square Revitalization Plan* provides a good overview of the area’s history, challenges, and potential, as well as recommended goals for redevelopment and means for implementation. The team examined it, finding that while the plan only mentions Brickbottom once outside the appendices, it is still relevant given the plan’s generous spatial definition of the Union Square area, bordering Brickbottom.

The plan draws heavily on the *SomerVision* comprehensive plan and on Green Line Extension studies, which are also highly relevant for Brickbottom. Both areas face similar challenges, including “obsolete street patterns,”

the barrier created by McGrath Highway, suboptimal land uses, and an oversupply of parking space. The plan’s main objectives are to add thousands of jobs, boosting Somerville’s commercial base, while “existing side-by-side with the historic commercial core and low-rise surrounding core neighborhoods,” providing much-needed open space and environmental remediation, and improving local connectivity and circulation by cars, pedestrians, and bikes. These goals complement our vision for the Brickbottom area.



Figure 1-16: Union Square

NorthPoint

The NorthPoint mixed-use development of 45 acres lies within East Cambridge, north of Monsignor O’Brien Highway, and south

of the Lowell and Fitchburg commuter rail tracks. NorthPoint represents the last major undeveloped parcel within Cambridge and was originally a railyard for the Boston & Maine railroad. Around 2000, the decision was made to create a mixed-use development there.

The City of Cambridge’s goals for the NorthPoint development are to develop a mixed-use district with pedestrian connections to East Cambridge, including the creation of a new public park (NorthPoint Common). At completion, NorthPoint will contain 2,900 residences (about 3,000,000 square feet total); two million square feet of laboratory and office buildings, and 200,000 square feet of retail. The total square footage for the development will be 5.2 million square feet. In addition, Lechmere Station will be moved to the northern side of O’Brien Highway as part of the Green Line Extension project.

After a pause in building due to the economic recession and a change in developers, the NorthPoint project has resumed development with residential and commercial construction. At completion, the NorthPoint site will be a major residential and commercial center to the south of Brickbottom with significant levels of density. The team’s vision for Brickbottom to serve as a mixed-use district with an industry

and arts focus will serve as a complement and counterpoint to this large-scale commercial neighboring development.

Inner Belt

Somerville's Inner Belt district lies directly east of the study area, across the right-of-way that will host the Green Line and Community Path. The area was cleared for the construction of the "Inner Belt" expressway, which was ultimately canceled due to community opposition and activism. Subsequently, the Inner Belt district developed as a low-rise, low-density office district in a suburban style, served largely by private automobiles.

Recently, there have been significant new investments in Inner Belt, including a repositioning of the Bunker Hill Holiday Inn, the creation of the Inner Belt Gateway sign, the expansion and headquarters acquisitions of Triumvirate Environmental, the sale and repositioning of the 150-200 Inner Belt Rd. property, the corporate headquarters expansion of Grossman Marketing, construction of a mixed-use development at 90 Washington St., and the resurfacing of Washington Street.

The City of Somerville conducted a study in 2008, sponsored by Herb Chambers and the Kraft Group, that suggested that the Inner Belt

district could help meet Somerville's needs for more open space; Somerville has 1.7 acres of open space per 1,000 residents, compared to 4.9 acres in neighboring Cambridge. The plan also examined the possibility of a sports facility, possibly a professional soccer facility serving up to 20,000 spectators, as a catalyst site for the area.

Boynton Yards

Boynton Yards lies just south of the Union Square area between the Fitchburg rail corridor and the Cambridge city line. The area of approximately 30 acres developed shortly after the Civil War as a center for meatpacking and rendering industries; the last of these closed in 1992 and was taken over by the Somerville Redevelopment Authority by 1998.

Initially, the City's vision for Boynton Yards was to serve as a light-industrial zone, and the Somerville Redevelopment Authority was able to attract a number of businesses, the only one of which still here today is Royal Hospitality laundry. However, due to high-tech development pressure from Kendall Square, the potential for air-rights development, and the forthcoming Union Square Station, the 2012 *Union Square Revitalization Plan* now has a vision for Boynton Yards to develop into a "transit-oriented mixed-use district." The City hopes to see a 40,000 square foot park in the

center. Approximately three-quarters of the district was rezoned in April 2009 as a Transit Oriented District, ranging in height limits from 85 feet to 135 feet.

Currently, despite the transit-oriented vision for the district, Boynton Yards remains largely industrial and commercial. It is home to industries and small manufacturers including Gentle Giant Moving Company, Royal Hospitality laundry, Green Cab Company, Green City Growers, and Taza Chocolate. Within the Brickbottom context, the team considered Boynton Yards as an industrial area that is similarly slated to change to a mixed-use form of development.



Figure 1-17: Taza Chocolate Factory, Boynton Yards



EXISTING CONDITIONS



Existing Conditions

In contrast to the dense, mostly residential neighborhoods surrounding it, Brickbottom is characterized by low-density, low-intensity commercial and industrial land use. Eighteen medium to large businesses are currently located in Brickbottom, most of which center on storage, auto repair, auto sales, manufacturing, and dispatching services. However, Brickbottom is also home to some 300 residents. While currently zoned for industrial use, traditional manufacturing-based industry only accounts for a small share of land — less than 15 percent of total land use.

Activities

A range of activities and businesses have taken root in the neighborhood. Perhaps most recognizable is the headquarters of Herb Chambers Companies (Figure 2-1), the region's largest auto dealership group, which includes a large sales-floor and auto repair facility.

Due to its centrality, Brickbottom serves as a significant dispatching hub. NSTAR, the city's leading power and gas utility as well as the study area's largest landowner, has a significant storage, dispatching, and rapid response facility

that serves Somerville and points north.

Similarly, the site is home to Cataldo Ambulance Service, a private ambulance and emergency response company.

Much of the southern half of Joy Street is dedicated to storage operations, such as Iron Mountain, a records and shredding company, and vehicle storage for Eastern Bus Company and NSTAR. James A. Kiley Company, a family business with roots in Brickbottom dating back to the 1890s, is one of the few remaining manufacturers in Somerville, producing custom-built trucks for utility companies.

Joy Street Studios, a studio work space for local artists, occupies a refurbished turn-of-the-century warehouse that is one of the few surviving examples of the neighborhood's architectural roots.

Further strengthening the neighborhood's artistic life is the Brickbottom Artists Building. The only residential space in the site, it was originally renovated from a warehouse and bakery to provide live/work space to local artists. The complex is also home to the publicly accessible gallery for the Brickbottom Artists Association, which boasts a fine collection of artwork and hosts periodic events.



Figure 2-1: Herb Chambers corporate headquarters and Mercedes-Benz dealership



Figure 2-2: NSTAR facility



Figure 2-3: Brickbottom Artists Building

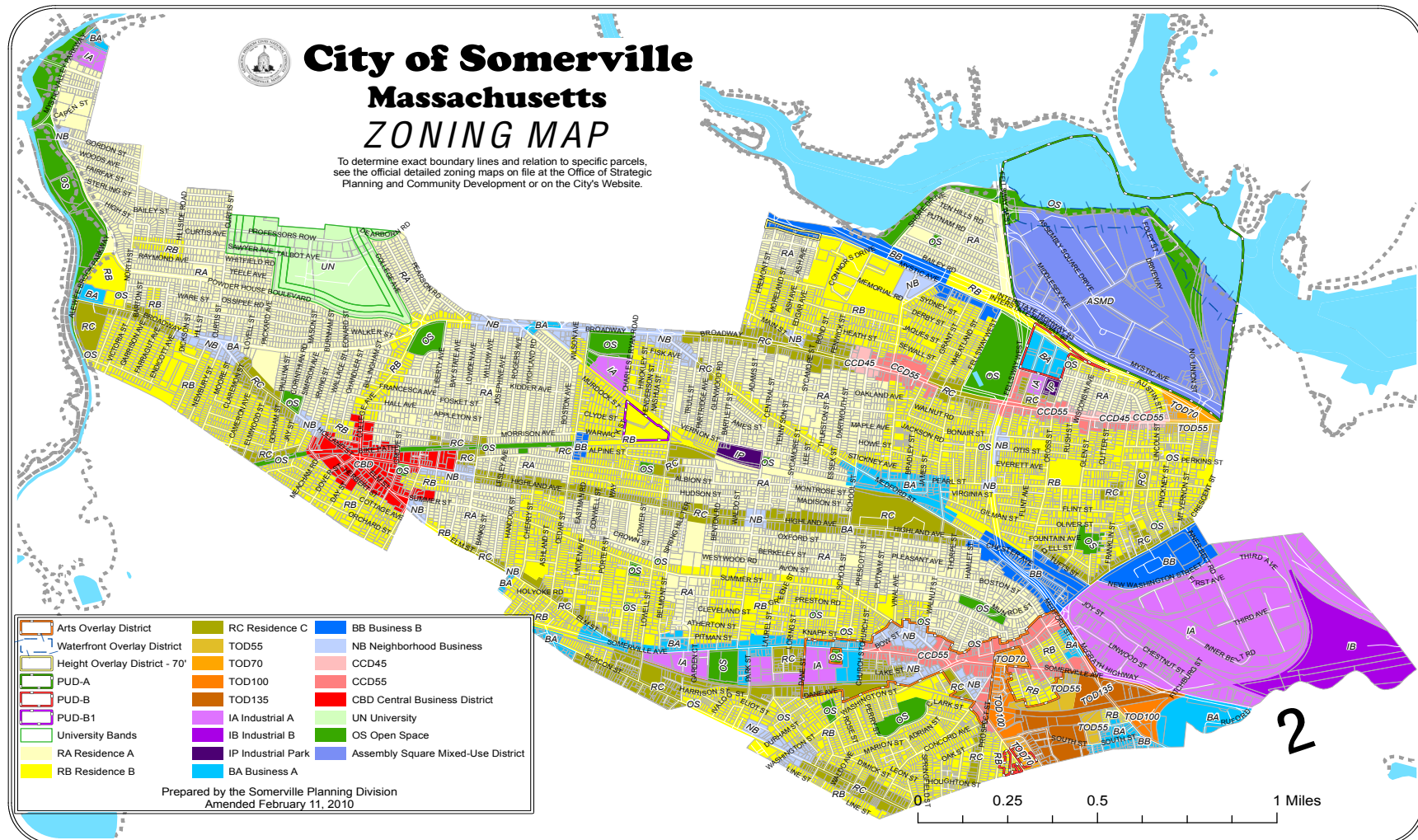


Figure 2-4: Existing zoning in Somerville. In contrast to Somerville's predominantly residential land use, Brickbottom (bottom right) remains primarily a commercial and light industrial district.

Current Ownership

Six large landowners control nearly half of Brickbottom's developable land. NSTAR, the largest property owner, owns much of the study area's center, while the City of Somerville owns the former Waste Management site and other small parcels. Brickbottom Artists Building occupies the triangle bordering the Fitchburg rail line. Cedox Capital owns the land primarily taken up by Iron Mountain; Tauro Realty, the land primarily used by U-Haul; and Laben Realty, the shopping center along McGrath Highway that is home to Sav-Mor Liquors. Other properties belong to the following companies and individuals:

1. Herb Chambers Corporation
2. Robert Romanow, Trustee
3. Arec 8 LLC
4. James A. Kiley Corporation
5. CCC Four Joy LLC
6. Frank A Tringale, Jr.
7. John and Joann Sacco
8. Donald J. Mazzeo
9. Joy Street Limited Partnership
10. Charles M. Winitzer, Trustee
11. Somerville Storage Partners LLC
12. Paul R. Lohnes and C. R. Laverty, Jr., Trustees

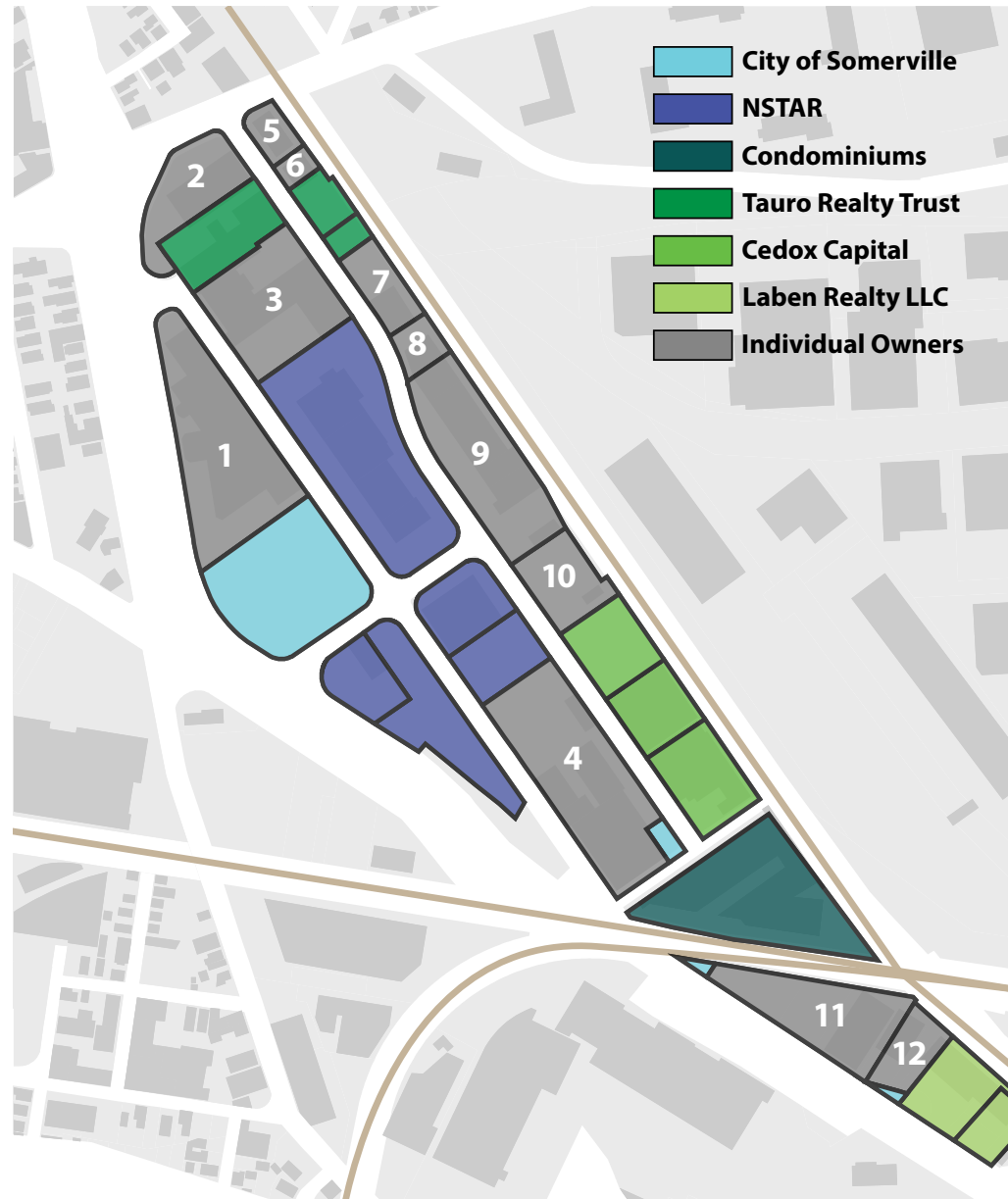


Figure 2-5: Current ownership of parcels in study area

Infrastructural Barriers

Brickbottom's boundaries are largely defined by significant infrastructural barriers, which inhibit access to and detach the area from the larger community. Running along the study area's eastern side lies the future Green Line right-of-way, an elevated track bed from the original Boston & Lowell railway (Figure 2-8). The earthen berm (Figure 2-7) on which it sits prevents the construction of a direct road connection to the Inner Belt neighborhood, contributing to the mutual isolation of both. While providing a welcome transit connection to Brickbottom via the proposed Washington Street Station, the Green Line itself may act to reinforce this barrier; there are no current plans for a connection to Inner Belt south of Washington Street.

To the south of the site, access to and from Cambridge is hindered by tracks used by the Fitchburg commuter line (Figure 2-8) and freight traffic. This obstacle is reinforced by the Squire's Bridge section (Figure 2-9) of McGrath Highway (see "Scary Way" box on the following page).

Brickbottom's western boundary is defined by the elevated McCarthy overpass section of McGrath Highway (Figures 2-6 and 2-8). Though road access to and from the rest of



Figure 2-6: McGrath Highway

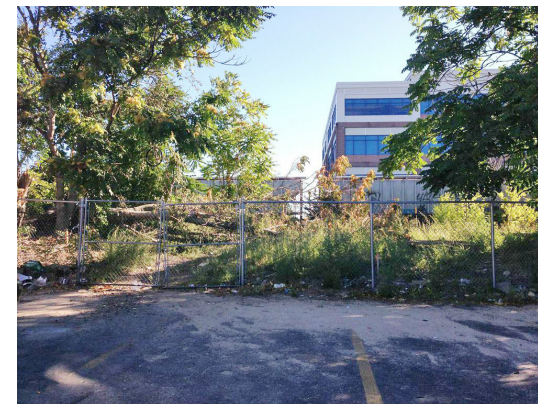


Figure 2-7: The Boston & Lowell track bed atop an earthen berm, currently an urban wilds space



Figure 2-8: Map of barriers to connectivity

“Scary Way”

The Somerville Avenue Extension provides direct vehicle and pedestrian access to the southern portion of Brickbottom and the Brickbottom Artists Building from Union Square and beyond. The road runs beneath Squire’s Bridge, the portion of McGrath Highway that passes over the Fitchburg rail line. Residents refer to the underlit, poorly marked passage as “Scary Way”, which is telling. Poorly maintained, prone to flooding, and lacking adequate lighting and pedestrian infrastructure, the route is an unpleasant, even hazardous, gateway to the site and deters bike and pedestrian travel via Somerville Avenue.



Figure 2-9: Squire’s Bridge and “Scary Way”

Pedestrians bound for Cambridge or the nearby Twin City Plaza shopping center must traverse the bridge itself. Residents complain that the steep stairways are difficult to climb and inaccessible to those with disabilities. Passage on the bridge is via a narrow sidewalk, close to six lanes of fast moving traffic. In winter, walkways are typically left unmaintained, covered in ice and snow. Bikers must either share a travel lane with cars or venture onto the sidewalk, while overcoming the significant grade of the bridge ramp. Currently, there are no plans to replace or reconfigure the bridge, though significant improvement and investment would greatly improve connectivity and access. See the Recommendations chapter for suggested improvements to both “Scary Way” and Squire’s Bridge.

Somerville exists, navigation is cumbersome at best. Pedestrian access under the highway is highly restricted and hazardous; those on foot must navigate multiple lanes of fast moving traffic, following poorly marked routes that lack adequate lighting (Figure 2-9). Indeed, *SomerVision’s* community input process identified the highway as one of Somerville’s most significant barriers, long hindering connectivity and splitting communities along much of its path through the city. Current plans to transform the elevated portion of McGrath into a grounded boulevard promise to restore connectivity to the surrounding community, especially along the Washington Street and Somerville Avenue corridors.

Street-Level Conditions

The streets of Brickbottom are a marked departure from the bustling intensity of surrounding Somerville. Little traffic flows into or out of the site. While almost entirely commercial, the neighborhood generally lacks the retail space and activity centers that attract visitors, apart from Herb Chambers. Overall, the study area resembles many post-industrialized areas that have not faced the attention of redevelopment.

The large size of building parcels in Brickbottom seems to discourage efficient land use. There is an abundance of underutilized or empty space,

1 Narrow or Non-Existent Sidewalks

3 Unactivated, Undifferentiated Streets

2 Fences and Parking Lots Fronting Street

4 Blank Facades

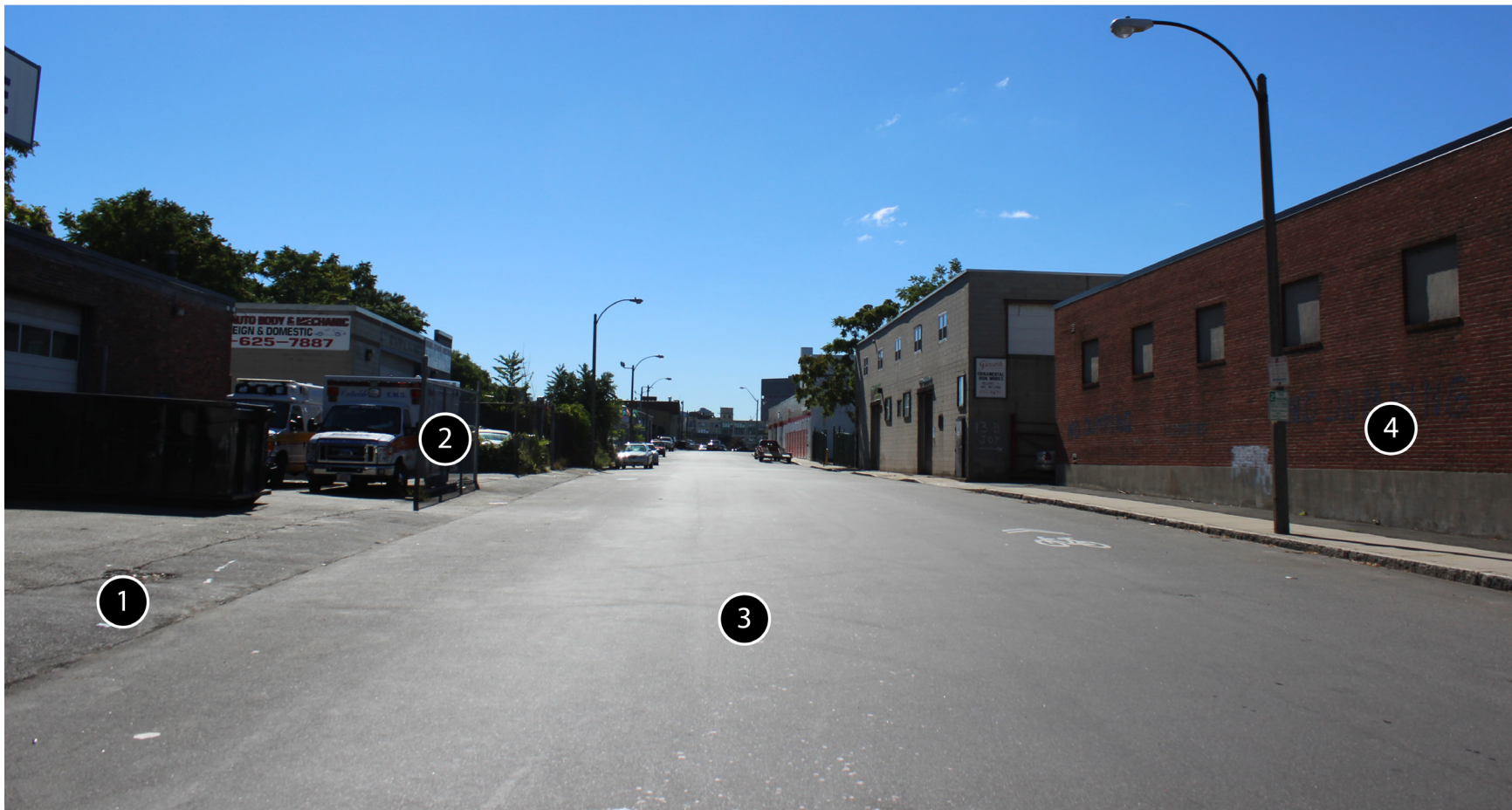


Figure 2-10: Street level conditions in Brickbottom

EXISTING CONDITIONS

exemplified by expansive surface lots, vehicle storage, and bare ground. In the absence of much vehicle or foot traffic, streets remain wide and empty, out of scale next to the predominantly one- and two-story buildings that border Brickbottom. The large scale and expansive distances between everything encourages the space to be wholly auto-oriented.

Figure 2-10 further illustrates some of the design challenges of the study area. Sidewalks, when present, are poorly maintained (1). Cracks, eroded surfaces, and overgrown vegetation makes travel difficult and often impossible for those with disabilities. Chain-link fencing, often topped with razor-wire, lines long segments of walkway, making visitors feel unwelcome.

Much of the Brickbottom streetscape is lined by surface parking lots (2). These lots fail to

engage the street and separate businesses from each other as well as from the streetline, contributing to the perception that streets themselves are overly wide, empty, and apart from token bike markings, entirely devoted to car travel (3).

Additionally, these lots act as an impermeable barrier to water absorption; this, along with the low-lying topography of the site, leads water to pool up while also burdening Somerville's already strained drainage infrastructure with additional storm runoff.

Area buildings often appear more temporary in design, if not intent, marked by simple sheet-metal cladding, cinderblock, or bare concrete construction. Large concrete warehouses mark the southern end of Brickbottom, presenting large, windowless, and featureless facades to the street (4). Such structures fail to engage

with the street while reinforcing a sense of being unwelcome.

Brickbottom's Character

On the other hand, several sites add significant character to the neighborhood. Herb Chambers, with its frontage on McGrath Highway, is in many ways the economic driver of the neighborhood. As an active retail center, it engages relatively well with the streetline with multiple entrances, windowed facade, and well-maintained if underutilized landscaping.

Joy Street Studios, in addition to proving valuable studio space, provides a handsome brick face to an area named for the material. As one of the older structures in the neighborhood, it succeeds in bridging past and present. Of similar architectural quality is the large former warehouse on the southern 'tail' of the study area, currently occupied by



Figure 2-11: Chain link fencing with razor-wire



Figure 2-12: Water pooling in a surface lot



Figure 2-13: Bare sheet-metal walls

Uncle Bob's Self Storage; its brickwork, ample window space, and well-scaled setback (*Fig. 17*) makes a rare attempt to reach out spatially to McGrath Highway.

The Brickbottom Artists Building, in contrast to the blank walls around it, provides an interesting, window-filled face to Fitchburg Street (*Figure 2-16*). This street's cobblestones, while creating a pleasant visual texture, also present an obstacle to residents and visitors with mobility problems (*Figure 2-14*). The artists who work, exhibit, and reside in the building, along with the nearby artist and artisan community in Joy Street Studios, add much cultural vibrancy to the neighborhood, and to Somerville as a whole.

Despite presenting a sometimes gritty post-industrial appearance, Brickbottom remains home to a community of hard-working craftspeople, manufacturers, and artists. It is this community and history of artisanship that has inspired the project team to rethink what can make a neighborhood a success. When we look ahead to Brickbottom's future, the team hopes to retain and strengthen this character, preserve its vibrant community, and create space for the makers of tomorrow.



Figure 2-14: Cobblestones on Fitchburg Street



Figure 2-15: Brickwork facade of Uncle Bob's Self Storage



Figure 2-16: Brickbottom Artists Building's windowed facade



VISION



Vision for Brickbottom

As a transformative area, Brickbottom can add much needed housing and commercial space to Somerville. At the same time, its industrial uses play a key role in maintaining a diversity of job opportunities in Somerville, and it is the industrial character of the neighborhood that has made it a place where people want to locate their businesses. Brickbottom can be a place where these new and existing uses come together to create a better kind of transit-oriented development — one that works alongside and celebrates light industry in the city. In the future Brickbottom, these communities are tied together by the spirit of making: whether it is the arts, robotics, crafts, or manufacturing, this spirit permeates the district, from its streetscape to its residents.

Creating a Framework

Understanding Brickbottom's constraints and opportunities and considering its future led to a framework plan for the neighborhood. The plan identifies main access points, street hierarchies, anchor parcels, key areas for public realm improvements, and catalyst sites for future development.

Brickbottom Neighborhood Plan Goals

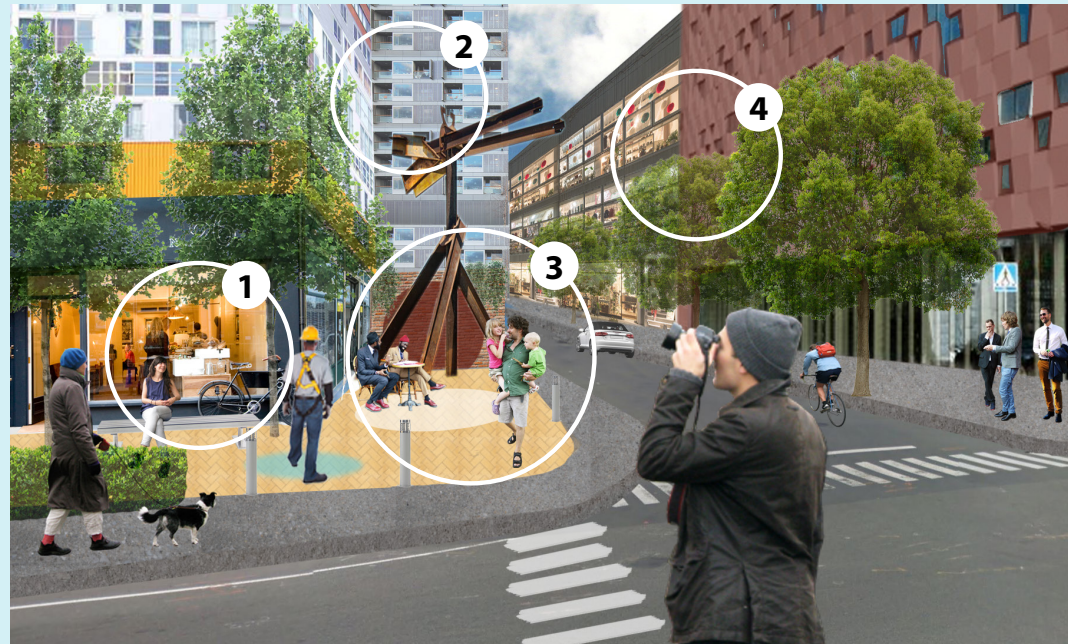


Figure 3-1: Neighborhood plan goals

1. Create mixed-use district with focus on industry and arts

2. Provide affordable space in which to work and live

3. Create a vibrant and walkable public realm

4. Increase density to leverage opportunities created by grounding of McGrath and new T station

Existing Conditions

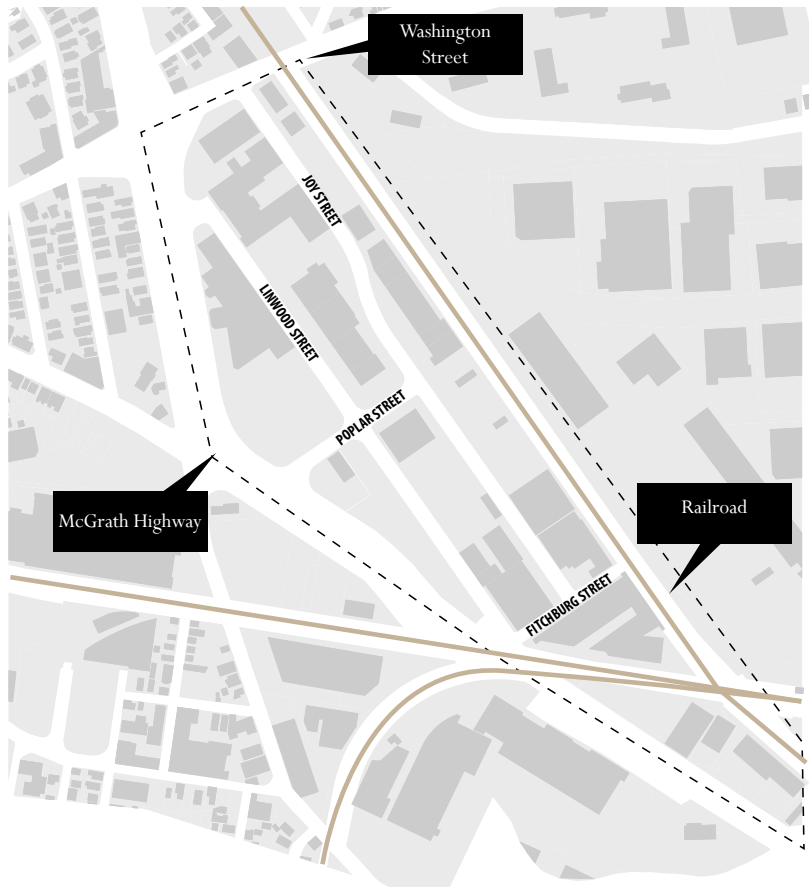


Figure 3-2: Existing conditions

One of the main constraints Brickbottom faces today is its hard edges: railroad tracks on the south and east, and the elevated McGrath Highway to the west. Many of the plans underway impact these barriers. The de-elevation of the highway will create a narrower and more pedestrian-friendly boulevard, and the lane reduction will result in new developable land. Part of the plan for the de-elevation includes rerouting the western

Plans Underway

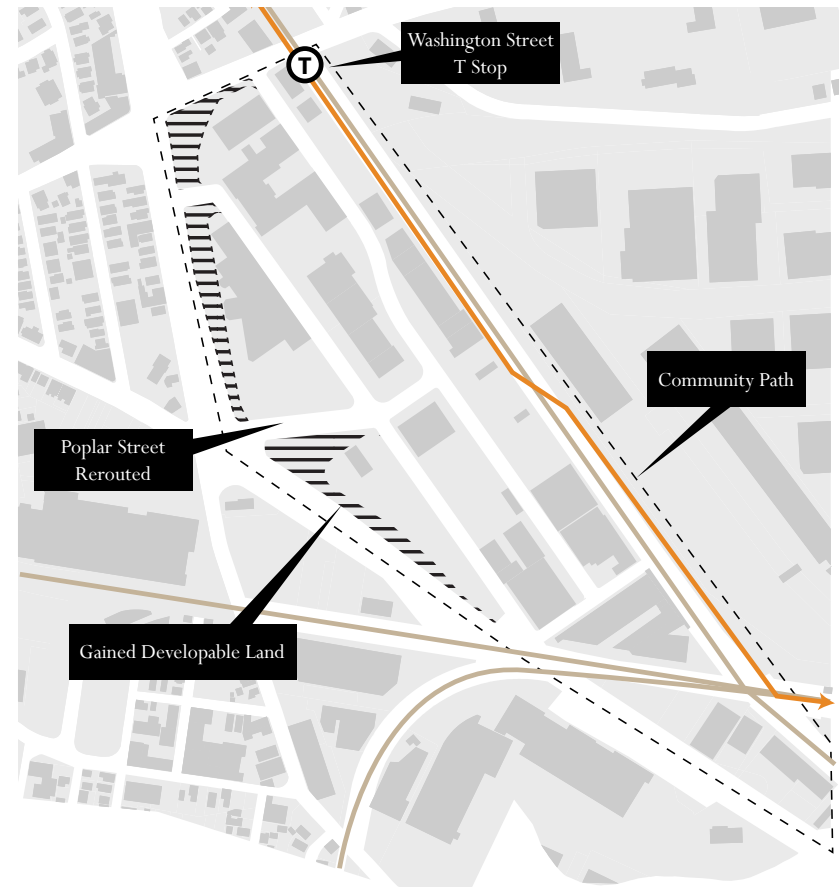


Figure 3-3: Projects currently underway

portion of Poplar Street to make the intersection easier to navigate. The arrival of the Washington Street Green Line station will also result in major changes, including more train traffic, increased connectivity, and a potential increase in land value. The planned Community Path extension works in tandem with the new T stop, running along the railroad tracks on the east.

Key Access Points

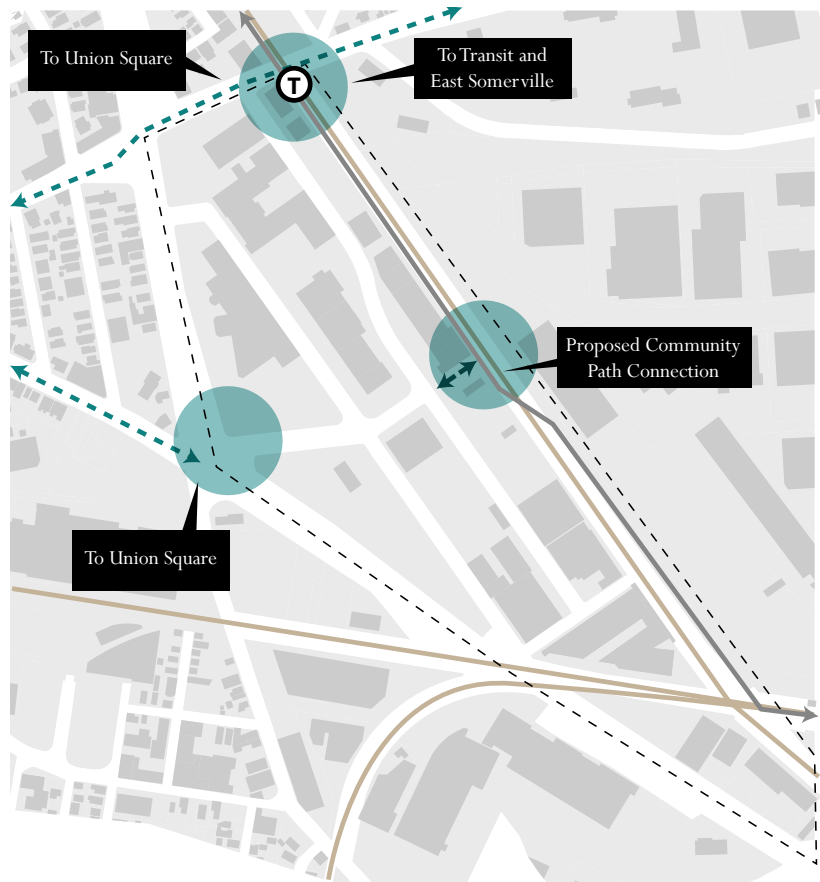


Figure 3-4: Key access points to Brickbottom

These three major plans create important access points for Brickbottom. The new intersection of McGrath Highway and Poplar Street becomes a gateway for pedestrians, bikes, and cars between Brickbottom and Union Square, and the T station connects Brickbottom to the rest of Somerville and to Boston. In addition, this plan proposes a connection to the Community Path at Joy and Poplar Streets, providing bike and

Street Priorities

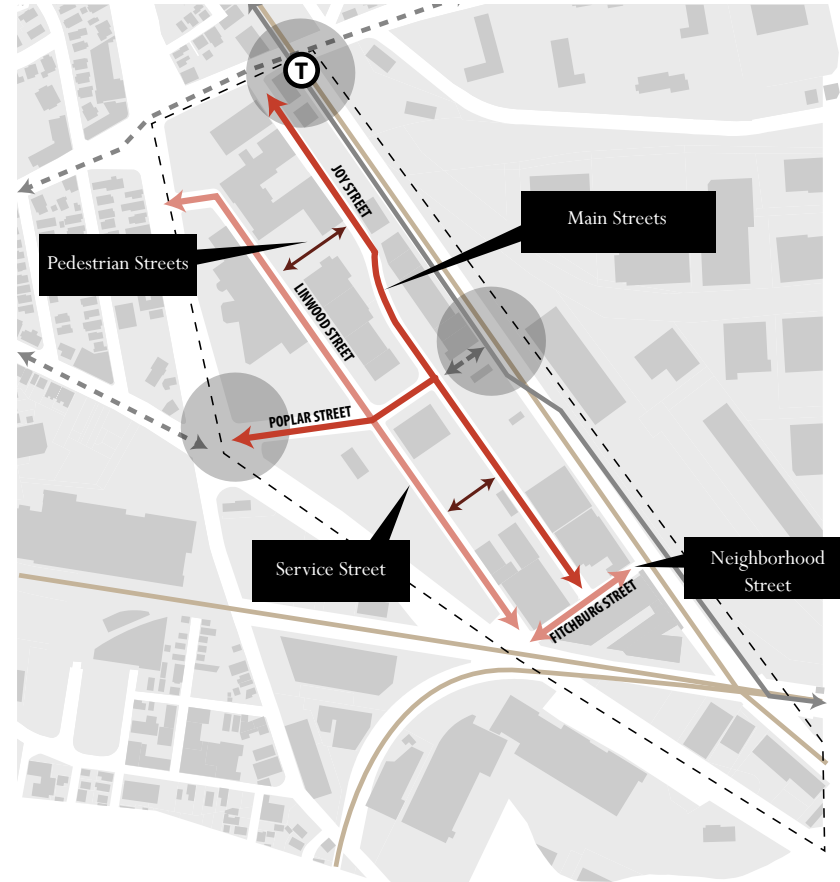


Figure 3-5: Hierarchy of streets

pedestrian access to the Brickbottom's interior. People are thus drawn to and through the neighborhood. Poplar and Joy streets will serve as the main pedestrian and bike arteries, with special attention to sidewalk improvements. Pedestrian paths between Joy and Linwood break up the large blocks, and Linwood becomes the main service street, providing industry with auto and loading access.

Anchors and Catalyst Sites

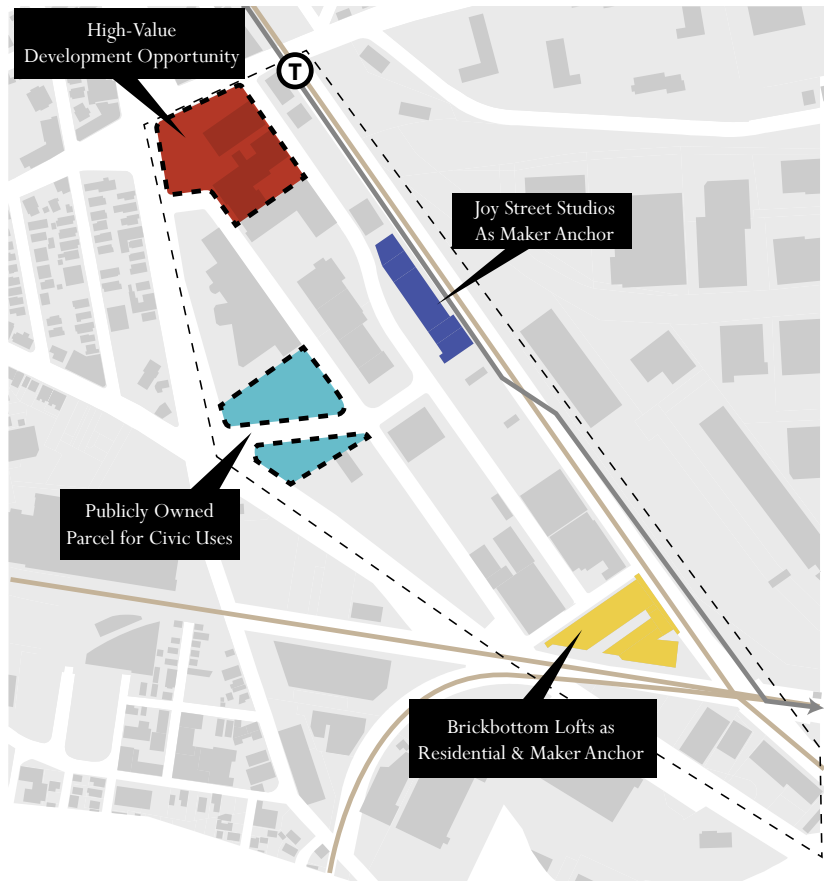


Figure 3-6: Anchors and catalyst sites lead to the plan framework

The realignment of McGrath creates a large new developable area. Combined with the new T station, this becomes valuable for the city as residential and commercial development. On the south end of the neighborhood, the existing Brickbottom Artists Building is the only current residential building, and, along with Joy Street Studios, brings artists and makers to Brickbottom. These buildings anchor the idea of

Public Realm and Catalyst Sites

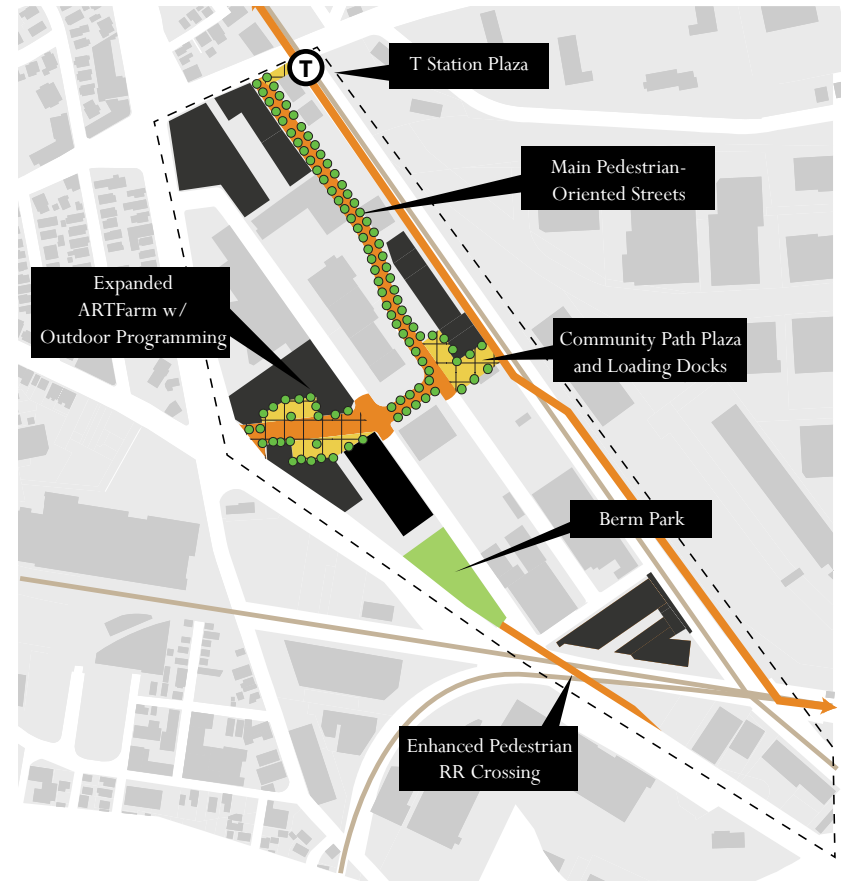


Figure 3-7: Final framework for Brickbottom

this district as one of artists and makers working together. Finally, the parcels on either side of Poplar are city-owned, providing an opportunity to bring civic uses to the area. The resulting framework is one in which Poplar and Joy streets become the heart of the neighborhood, catalyzing positive change, highlighting key access points, and providing active plazas for the residents, makers, and workers of Brickbottom.

Dense Mixed Use

Reaching the plan's goals requires development at a higher density than currently exists in the neighborhood. In order to accommodate affordable housing, arts, and makerspaces while preserving and developing large areas for light industry, the plan allows for buildings of a variety of heights up to 10 or 11 stories. At the same time, the area's zoning would require most developers who want to build housing or commercial uses to devote a significant percentage of their development to industrial uses. This strategically high standard will reward designs that are able to creatively mix uses either vertically or across multiple parcels. Setbacks at heights above 50 feet, meanwhile, will prevent the experience of monolithic height at street level. The result will be a higher density, but one that feels varied and full of activity, while meeting the city's goals.

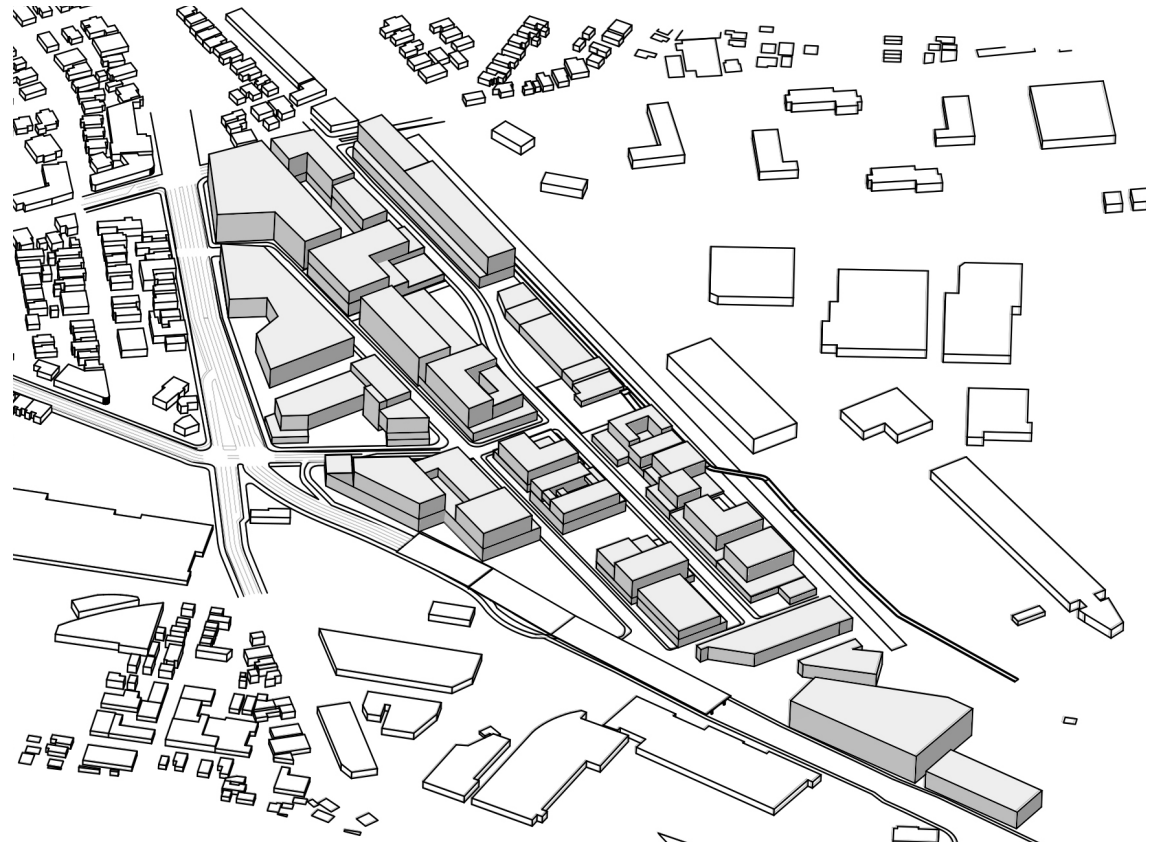


Figure 3-8: View of potential development and density in Brickbottom

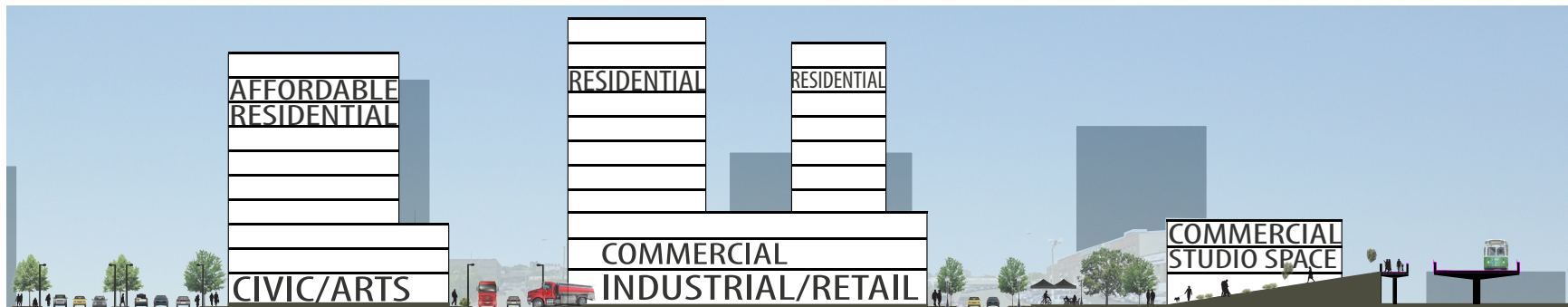


Figure 3-9: Section down Poplar Street, showing how uses could be distributed with new building heights

A Walk Through Brickbottom

All of the elements of this plan — from the street network to the built density — will highlight Brickbottom as a singular Somerville neighborhood. Whether getting off the Green Line at Washington Street, cycling down the Community Path from Davis Square, or walking down Poplar from Union Square, people can tell when they arrive in the community. The neighborhood is busy with making, and it is on full display — walking down Joy Street, every window offers a view onto the studios, workshops, offices, and occasional cafés to serve workers that lie beyond, and every building offers many such windows. Of course, this activity isn't just trapped behind glass, but spills out into the streets: when a sculptor steps out to borrow a tool from a neighbor, a visitor wheels her cello to the Art Center for lessons, or a group of engineers take a new contraption out for a spin in front of their loading docks.

Moreover, a few times a year, outside is invited in, and inside out. During the new, expanded open studios, visitors can not only drop in to Joy Street Studios, the Brickbottom Artists Building, and the hundreds of other work/live spaces that have sprung up in the neighborhood, but get an up-close look at the riveting, welding, soldering, sewing, cooking, and sawing that keep Brickbottom at the heart

of Somerville's hands-on economy. During BrickWorks, meanwhile, the Poplar Street plazas are transformed to an open-air market celebrating all that the community has to offer, and there's always a performance to catch, a meeting to attend, or an exhibit to view at the Civic Center. Indeed, even at quieter times Brickbottom's creative and industrious spirit is palpable in the very fabric of its streets, from benches and streetlights designed by resident artists to signage built right in the district by the glassworkers at Neon Williams.

At the same time, Brickbottom isn't only a place to work, but a place to call home. New market-rate and affordable apartments provide the opportunity for families, newcomers, and local workers alike to settle in the area, and the improved sidewalks, new green and public spaces, and vibrant street life make it a safe, appropriate, and exciting area for residents of all ages, incomes, and abilities; families are particularly fond of the Community Path that provides a safe route to Somerville High School, just under a mile down the road.

All of this activity is supported and reflected in four key new public spaces explored on the following pages: Milk Row Plaza, Berm Park, the Poplar Street Plaza, and the Joy Street Plaza.

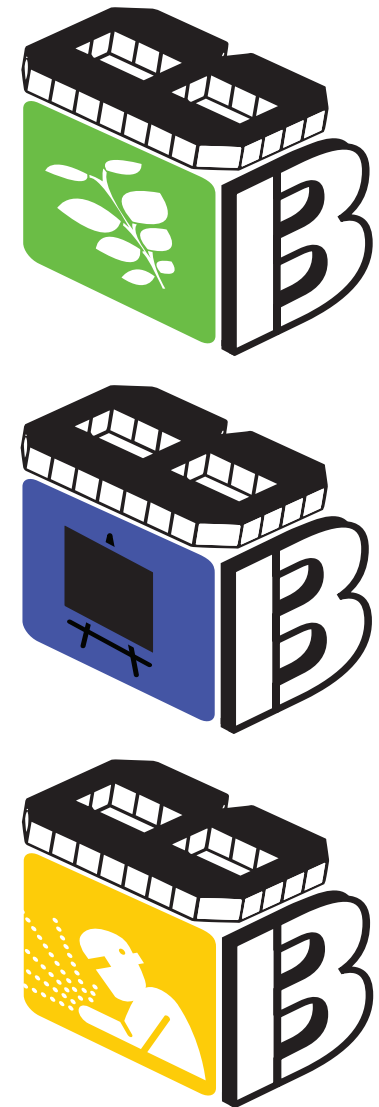


Figure 3-10: An identity for Brickbottom

Milk Row Plaza

For many, the northern end of Joy Street, where it meets Washington Street, will be a first introduction to Brickbottom. Here, where the Washington Street Green Line station will bring a new burst of pedestrian activity, lies Milk Row Plaza — named for the historic rail stop that lay almost exactly at the site of the new Green Line station back in the 19th century. The plaza, though modestly sized, will be an energetic, flexible, and highly utilized space, playing a key role in setting the tone for the district. At the same time, as it is located in the area most likely to see retail and food establishments, the plaza will reflect these uses in a way that is somewhat unique in the neighborhood.

For those traveling to Brickbottom on Washington Street, Milk Row’s strategic location will both provide a view onto and embody the bustle of activity on Joy Street and in the rest of the neighborhood beyond, welcoming passersby with its comfortable resting places, cafés, and galleries, and bold, rotating installations created by local artists. At the same time, Milk Row lies at the heart of the neighborhood’s most intensive development area, and will provide both visual and physical respite for the thousands of workers and



Figure 3-11: Public art and green space, Seattle, WA

residents in the buildings immediately around it — a place to take a quick lunch break or hold a meeting outside the office, or simply to sit and watch the world go by.

In form, the plaza is an “L” created by surrounding development, bordered to the east by a building that sits back from the sidewalk and to the south by one that abuts it (Figure 3-13). As in the best pocket parks, the walls surrounding Milk Row Plaza do not hem it in, but give it shape; artworks and greenery preview the distinct character of the district beyond, and provide these surfaces with visual interest, helping to create an “outdoor room.” With two sides open and two closed, the space also allows for a variety of experiences: one

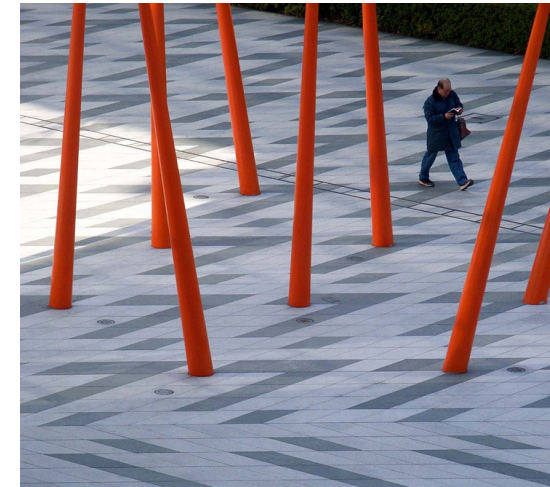


Figure 3-12: Public art in plaza, Tokyo

can move freely through the space to enter and exit the neighborhood or get swept up in the thick of things, or, alternatively relax in one of the quieter eddies of the southeast corner. In the spring and summer, ample greenery and the surrounding buildings provide shade during the hottest parts of the day; in the fall and winter, visitors take shelter from the worst of New England’s whipping winds.

Over and above this daily use, and despite its small size, at special times throughout the year Milk Row truly comes alive. A warm-season concert series sends music floating down Joy and Washington streets, pulling cyclists and pedestrians in off of the surrounding sidewalks. Right next to the T, the plaza also represents the



Figure 3-13: View looking south down Joy Street, including Milk Row Plaza

logical gathering place for regular walking tours of the neighborhood’s workshops and studios. Meanwhile, during the annual BrickBlock Party — which closes Joy Street to traffic from Washington to Poplar — Milk Row serves as

an ideal location for the welcome center and information booth, as well as a small cluster of outdoor children’s games. At these moments, the plaza’s size is a major asset, allowing it to be easily re-imagined to suit the needs and

character of a given event — as a few chairs fill the space during a performance to make it feel like a real venue, or the dramatic lighting on the surrounding walls during BrickBlock instantly creates a festive atmosphere.

Berm Park

Connected to the proposed pedestrian expansion of the McGrath Highway at Squire's Bridge is Berm Park. In a less busy part of the neighborhood, and with a greater emphasis on green space than the busier plazas to the north, Berm Park will build upon and improve the "urban wilds" already existing at the site to act as a reflective, community-oriented green space that serves a number of important functions.

Extending to the northwest, the park will transform what is currently a surface parking lot into much-needed vegetated permeable space that enhances neighborhood aesthetics, improves air quality, and helps to manage the stormwater pooling that currently occurs at the intersection of Linwood and Fitchburg

streets. This at-grade portion of the park also provides the opportunity to create small programmable spaces in which residents of the area can linger, socialize, and enjoy a play area, picnic tables, and flexible space for outdoor wellness programming. Gardens will showcase native plant life and stormwater management techniques, and provide an opportunity for the exhibition of small artworks by local artists.

The area currently occupied by the berm, in the southeast corner of the park, will be terraced into long, sloping switchbacks. Around this path, the park will preserve the existing "urban wilds" — the community of tall grasses and shrubs that has grown up here in the absence of maintenance or intervention, while at the same time introducing new, more substantial vegetation into the area. Walking up the stairs

to the bridge, a visitor is afforded a view over the neighborhood, juxtaposed against the natural surroundings. Art by local artists on the berm will be highly visible from Linwood Street and by passing motorists on McGrath. At the peak of the berm, a new line of trees will provide screening from the sights, sounds, and emissions of the roadway.

Improvements will be made to Squire's Bridge and the Somerville Avenue Extension that runs beneath it, which is currently so unwelcoming that Brickbottom residents refer to it as "Scary Way." Several high-impact, low-cost solutions will rid this street of its negative reputation. A coat of paint along the bridge and the stairs will visually enliven the area and enhance the feeling of safety; in the mid-1990s, residents of the Brickbottom Artists Building proposed a



Figure 3-14: Light installation, Brooklyn Bridge Underpass



Figure 3-15 Terraces, Chuckie Harris Park, Somerville



Figure 3-16: Project MUM Dance Party, Somerville



Figure 3-17: Southwest view of Berm Park

mural for the stair wall, and this plan should be revived. The new space will also be illuminated with both improved traditional street lighting and a light installation underneath Squire's Bridge, providing an opportunity to increase

safety while showcasing local talent. Finally, this one-way street will be converted into a bicycle and pedestrian way to continue to provide access after McGrath Highway is elevated. This new, car-free public space can

also be activated during neighborhood festivals, following the example of the Somerville Arts Council's successful Project MUM.

Poplar Street Plazas

Considering the importance of the western end of Poplar Street as one of the main gateways to Brickbottom, the plan identifies this as a catalyst area, activated by two public plazas: one on the north side of the street, and one on the south (Figures 3-6 and 3-7 as well as 3-25). Currently, the former waste transfer site to the north is owned by the City, while the other, to the south, is an NSTAR parking lot. The realignment of Poplar Street that will result from the de-elevation of McGrath will, if land swaps are undertaken with the State, create City-owned land on both sides of the street, allowing the opportunity to set the tone for development in the area and create a neighborhood gateway defined by civic uses.

The plazas in these areas will be framed by two civic buildings, designed to shape the plazas both literally, through their form, and figuratively, through the uses in each that these spaces will reflect. Though distinct, however, the two plazas will work together as a unified whole: while automobiles will still enter Brickbottom on Poplar Street, the road will be at curb height and feature a distinctive paving pattern, calming traffic and facilitating pedestrian interconnections.



Figure 3-18: Incorporating gardening into a city plaza, Switzerland

The North Plaza

In the near-term, the former waste transfer parcel will become ARTFarm, a community space for arts, food, and farm-related activities. In the long term, this plan will incorporate these uses into both a building and a public plaza that will provide an adaptable public space that can serve as a performing arts center, as well as provide opportunities for urban agriculture, community markets, food trucks, and displays for local art. The North Plaza is envisioned as a destination and community space that serves Brickbottom and pulls people in from the surrounding areas.



Figure 3-19: Cambridge plaza designed by STOSS and the Project for Public Spaces that allows for flexible space, food trucks, performances, and markets

The South Plaza

The South Plaza is programmed to build off of the strong industrial and maker presence in Brickbottom and the adjacent public building. The team envisions a flexible space that provides an opportunity for makers and artists from the surrounding development and the community as a whole to showcase their work.

As a whole the two plazas will represent the character of Brickbottom — from making and industry to new performance and green space — and serve as a destination for the people of Somerville and surrounding communities.



Figure 3-20: View East down Poplar Street

Joy Street Plaza

The existing parking surface adjacent to 86 Joy St. represents an opportunity to create much-needed public space. By creating a connection to the Community Path from Poplar and integrating with adjacent artist studios and industrial uses, the area will develop a vibrant community space that reflects neighborhood character. Artists within Joy Street Studios will be involved in programming the space, and opportunities will be created for displaying local artwork. At the same time, the plan recognizes the importance of some space for parking and deliveries to the continued operation of the area, and the portion of the

parking surface in front of the loading docks will be left primarily to serve these needs. After a certain hour of the day, however, this flexible area can transition to a public space with seating and activities that respond to the adjacent plaza.

The plaza, negotiating the grade between Joy Street and the Community Path, will be both an access point and resting place for passing pedestrians and cyclists. The space can serve as both a destination and a starting point, as there will be opportunities for bike storage as well as bike rentals.

As opposed to the Poplar Street plazas, meanwhile, the Joy Street Plaza is envisioned as a more intimate space, focusing more on everyday interactions than unique event programming meant to draw in visitors. Consistent with this community and everyday orientation, Joy Street Plaza provides play equipment and a space for families with small children, something that is currently lacking in Brickbottom. Joy Street Plaza provides a strong complement to the North and South plazas at the other end of Poplar Street, and together, they create a vibrant corridor that capitalizes on the strengths of the Brickbottom community.



Figure 3-21: The Yerba Buena “Park-Mobile” in San Francisco temporarily activates a parking space



Figure 3-22: The Carlsberg Industrial Playground, in Seattle, WA, combines industrial feel and materials to create vibrant public space



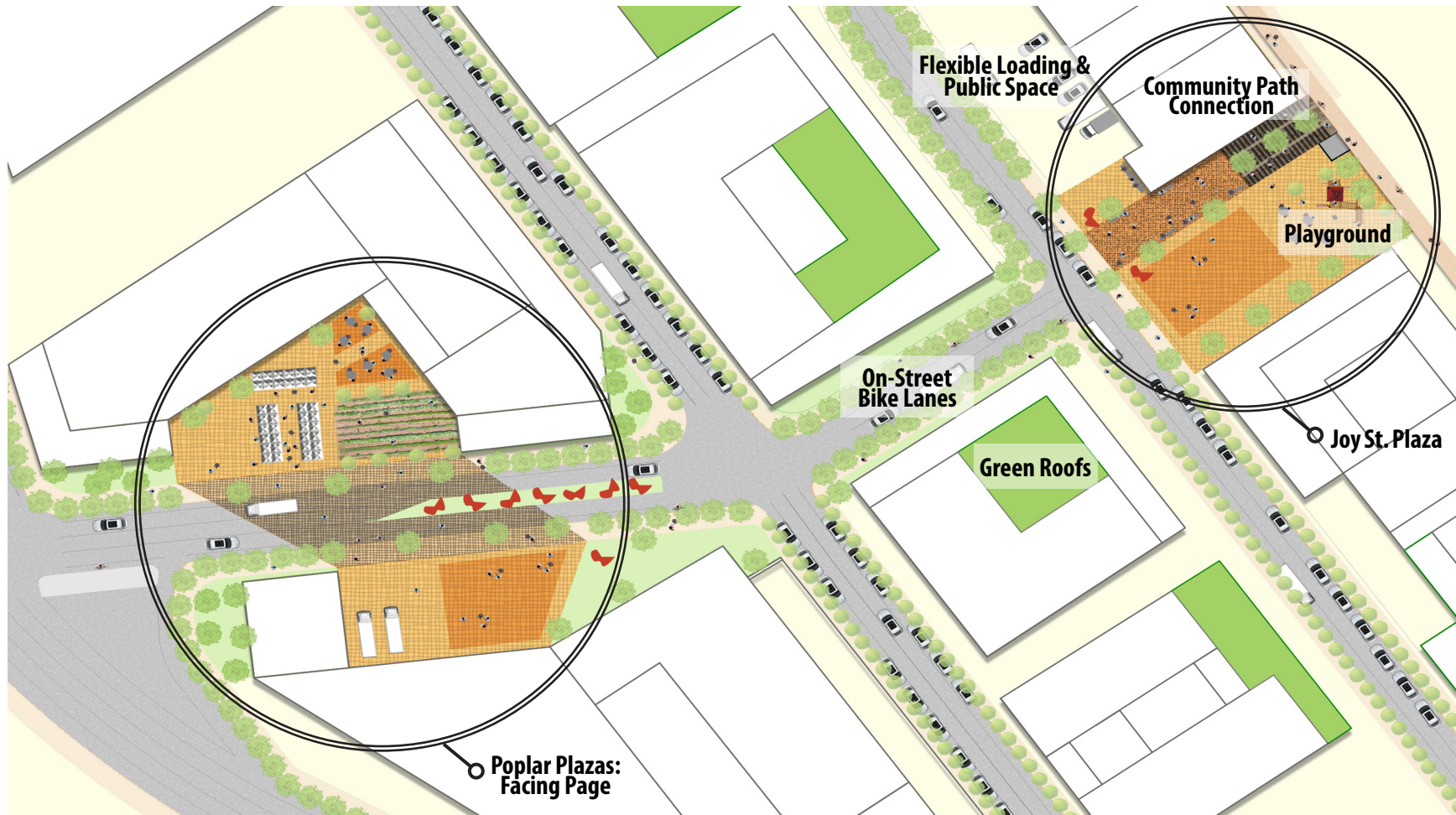
Figure 3-23: Stairs and plaza space in Santiago, Chile



Figure 3-24: View of Joy Street Plaza and the connection to the Community Path

Catalyst Site - Poplar Street

Poplar Street links key neighborhood gateways and, at the city-owned former waste transfer site, provides the greatest opportunity for a catalytic public intervention that sets the aesthetic and programmatic tone for the area. A series of distinct urban moments, Poplar Street reflects the best of Brickbottom's past and future, welcomes residents and visitors alike, and serves as the community's civic core.



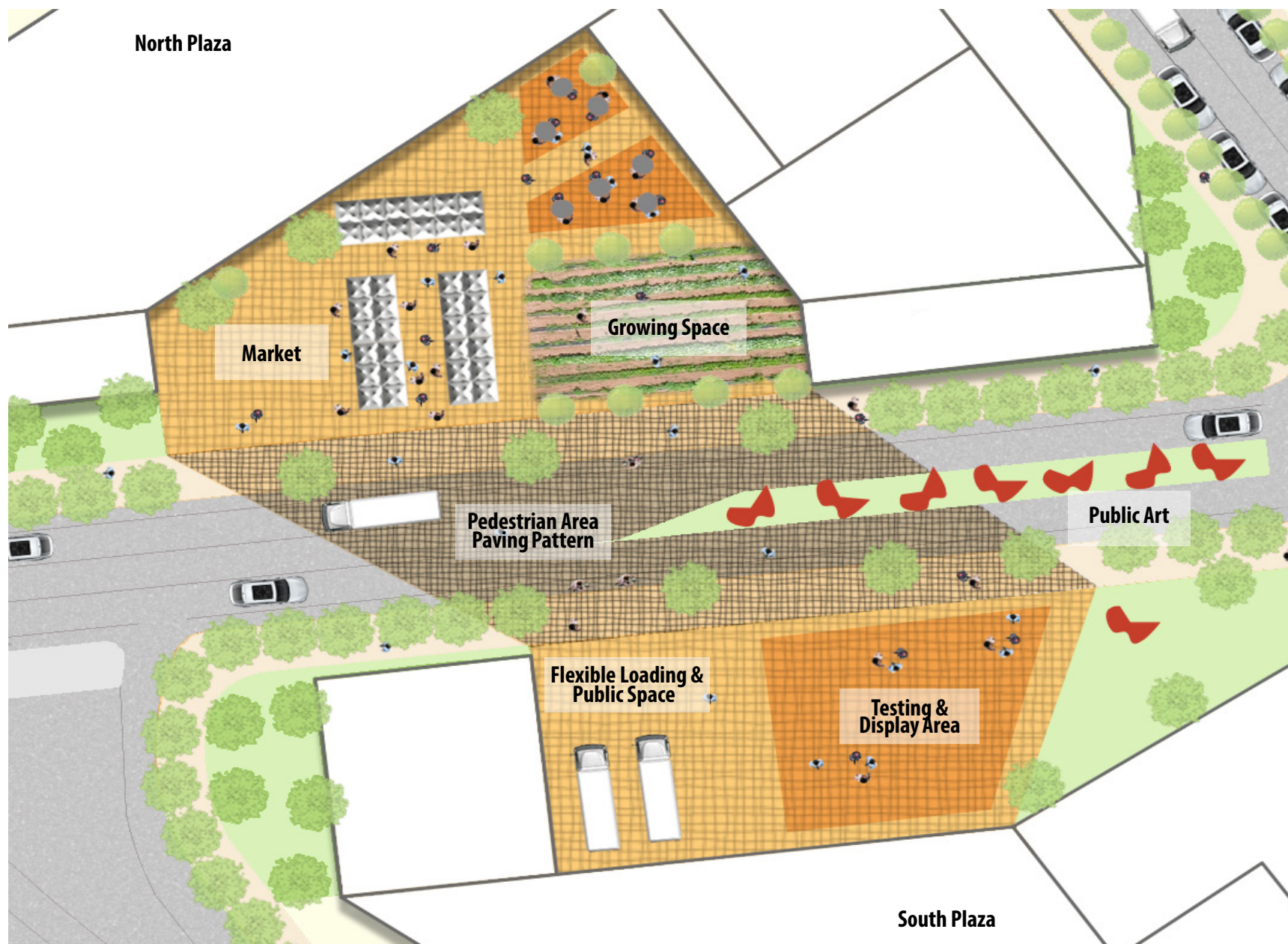


Figure 3-25: Site plan of Poplar Street corridor



RECOMMENDATIONS



Public Realm

Brickbottom is currently dominated by light industrial and automobile uses, and the streetscape is dominated by trucks and other motorized vehicles. With narrow sidewalks and a neglected streetscape, the neighborhood is not pedestrian friendly. To achieve our vision of a mixed-use maker, light industrial, and residential district, it is critical that the neighborhood become an enjoyable and safe place for pedestrians, cyclists, and motorists alike.

Objective 1: Enhance the public realm through urban design and streetscape improvements

To achieve the objective of enhancing the public realm within the district, we propose to create a transparent streetwall, create pedestrian-friendly sidewalks, and increase green space while better managing stormwater.



Figure 4.1-1: Currently, Brickbottom has many long, blank facades that hinder the pedestrian experience

1.1 Create transparent and active street walls

The position of the street wall — whether a building is set back or sits directly on the property line — greatly affects the pedestrian experience. To help ensure that a sidewalk is active and safe, building entrances should be located closely together, with people entering and exiting buildings at regular intervals. The future Brickbottom will be a district that celebrates making and light industry; providing transparency in street walls will be a central part of achieving this. Ensuring that the street wall is more than 50 percent transparent will facilitate visual interaction with ground floor uses and a secondary source of light for sidewalks at night.

Our zoning plan provides for minimum building setbacks in key pedestrian areas of Brickbottom. Areas with smaller setbacks



Figure 4.1-2: Large windows at Cambridge Auto Center allow pedestrians to observe interior uses

should contain street furniture such as plantings, café tables, and benches. Signage and awnings can also be used to add variety to the sidewalk experience. Building entrances should be clearly marked, closely spaced, inviting, and accessible to activate the sidewalk by encouraging use and providing activity at all hours. Long stretches of continuous facade segments without windows or entrances should be avoided to break down the visual scale of large parcels and encourage variety in the building plane.

1.2 Provide sufficient sidewalk space for pedestrians and greenery

Brickbottom will have two types of streets: main pedestrian-oriented streets (“A Streets”) and secondary roads that are more oriented toward service (“B Streets”). A Streets have a minimum sidewalk width of 11 feet. B Streets have a minimum sidewalk width of eight feet. Our plan includes three guidelines for overall sidewalk widths and uses:

- Ensure a minimum clearance width of six feet for A Streets and five feet for B Streets.
- Create an amenity zone for trees and plantings next to the curb (with tree pits ideally no less than five feet with an absolute minimum of three feet wide to allow for healthy tree growth).

- Create a frontage zone adjacent to the building wall for pedestrian amenities (zero to two feet).

These sidewalk dimensions are within the Boston Complete Streets guidelines, a plan created to ensure that Boston's future streets are vibrant and walkable (see Figure 4.1-6).

On A Streets with higher pedestrian volumes, curb cuts should be avoided, with exceptions in cases of parking facility entrances and loading docks as appropriate and necessary.

1.3 Integrate stormwater management and green space

Currently, the ground in Brickbottom is almost entirely composed of impervious surfaces, which can result in significant stormwater runoff. Planting strips should be placed along Joy and Poplar streets to collect stormwater runoff. At the southern part of the site where the elevation is particularly low, the intersection of Linwood and Fitchburg streets collects significant stormwater runoff. Rain gardens should be placed here to help with water filtration. These can be incorporated with the proposed open space at Berm Park. By implementing simple stormwater management techniques, and providing more pervious surfaces in the form of green space, Brickbottom can significantly improve its flooding issues, as well as the aesthetics of the public realm.



Figure 4.1-3: Flooding at Linwood Street and Somerville Avenue Extension



Figure 4.1-4: Rain gardens like this one can alleviate drainage issues



Figure 4.1-5: Stormwater planters can also address flooding (SW 12th Avenue, Portland, OR)

Boston Complete Streets

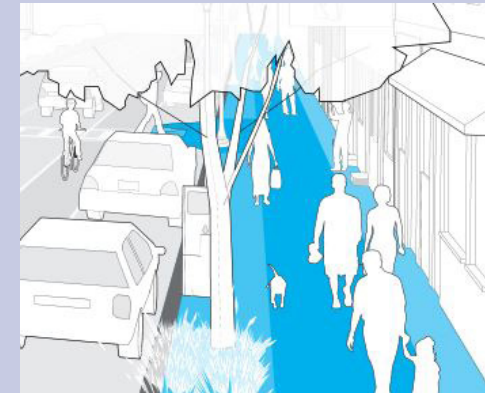


Figure 4.1-6: Boston Complete Streets Guidelines

Boston Complete Streets is an initiative to improve the quality of life in Boston by creating vibrant, walkable streets that also serve as efficient means of transportation. This initiative has produced guidelines that serve as policy and design guidance for communities interested in improving roadways and sidewalks. Sidewalk design principles include accessibility to all, all-weather access, human-scaled walking environment, durable and resilient materials, and stormwater management. We used these guidelines as a resource while planning and designing this plan.

1.4 Leverage developer interest to create new green spaces

Our zoning plan encourages developers to designate ten percent of building lots as publicly-accessible open space. Any resulting green space will increase stormwater retention and address air quality issues associated with Brickbottom's location next to McGrath.

1.5 Commission public realm improvements from local artists and makers

To create a sense of place in Brickbottom and support the District's overall mission to celebrate makers and artists, whenever possible Brickbottom residents and workers public should design and/or produce realm improvements. This can include street furniture, lighting, signage, murals, and public art.



Figure 4.1-7: A mural proposed by artists in 1996. The proposal is still posted in Brickbottom Lofts

Objective 2: Improve pedestrian connections from Brickbottom to the rest of Somerville

The lack of safe and attractive pedestrian connectivity between Brickbottom and its surrounding neighborhoods is a central concern for many residents. The de-elevation of McGrath Highway will certainly improve pedestrian connections to the neighborhood, but several other entry points still need to be addressed. Therefore, we propose to increase pedestrian space on Squire's Bridge and modify the proposed Community Path design to make it more interesting and pedestrian friendly.

2.1 Create a substantial pedestrian greenway on Squire's Bridge

At the southern end of Brickbottom, the Fitchburg Line railroad tracks divide the northern portion of the neighborhood from the southern "tail" of the study area. This area leads to several important neighborhoods including Lechmere, NorthPoint, and, of course the City of Boston. The only way to access this area on foot is by walking next to McGrath Highway along Squire's Bridge. We propose a new, landscaped pedestrian expansion to Squire's Bridge to allow residents and visitors to cross into Brickbottom from its surrounding neighborhoods.



Figure 4.1-8: Current Squire's Bridge pedestrian way

Seattle's Freeway Park



Figure 4.1-9: Freeway Park in Seattle, WA

Freeway Park is a public space and pedestrian pathway along Interstate 5, a major highway in Seattle. The Park was built in 1976 after a major initiative to provide more public space and better pedestrian connections in the city. Elements of Freeway Park should be employed in Brickbottom. In particular, Freeway Park creatively integrates green space with cement surfaces and facades, and effectively locates a pedestrian space along a busy highway.

2.2 Improve Community Path design and connect path to Brickbottom

As a continuous pedestrian spine along the new Green Line corridor, the proposed extension of the Somerville Community Path aims to create a safe pedestrian access route to the Washington Street Station and across Somerville. However, with limited access points and tall fences along its edge, the path's current proposed design does not take into account the quality of the pedestrian experience. Simple adjustments can transform this strictly functional walkway into an integral element of the public realm in Brickbottom. The path can be made more visually interesting and pedestrian friendly through varying paving materials, including seating and other street furniture, and implementing railing plantings and lighting installations (Figure 4.1-11).

Current plans indicate one entryway to the Community Path within Brickbottom, near the Washington Street Station. We propose that an additional entryway should be created at the intersection of Brickbottom's two main pedestrian corridors of Poplar Street and Joy Street. Because the Path is elevated in this area, a large urban staircase and handicap accessible elevator can be implemented. The stairway will include street trees and a small ramped areas so

cyclists can bring their bicycles up to the Path.

As a very dense, urban community, Somerville lacks large areas of open space and is limited in its ability to support natural habitats. Railroad rights-of-way represent some of the only areas in the city that can support wildlife. Along the rail bed representing the eastern boundary of Brickbottom, there is significant vegetation that can serve as an asset for the neighborhood. As the Community Path is extended through the site, these urban wilds can also provide a unique setting for pedestrians and bicyclists.



Figure 4.1-10: Rendering of Community Path Extension as currently proposed by MassDOT



Figure 4.1-11: Our proposed view north up Community Path, towards T station

Transportation and Circulation

Transportation in the Brickbottom area will change dramatically in coming years as McGrath Highway is de-elevated and as both the Green Line and Community Path are extended into the area. These developments will transform Brickbottom from a largely auto-dependent, somewhat isolated neighborhood into an area that is significantly more accessible for pedestrians, bicyclists, and transit users. Anticipating this, this plan recommends two main transportation objectives for the future development of Brickbottom: increasing multimodal circulation and capitalizing on regional transportation investments.

Objective 1: Increase multimodal circulation within and access to Brickbottom

In line with *Somerville* goals and residents' desires, Brickbottom should be made more walkable and vibrant, which is one of the objectives of this plan. The recommendations below offer multiple ways to achieve this goal.

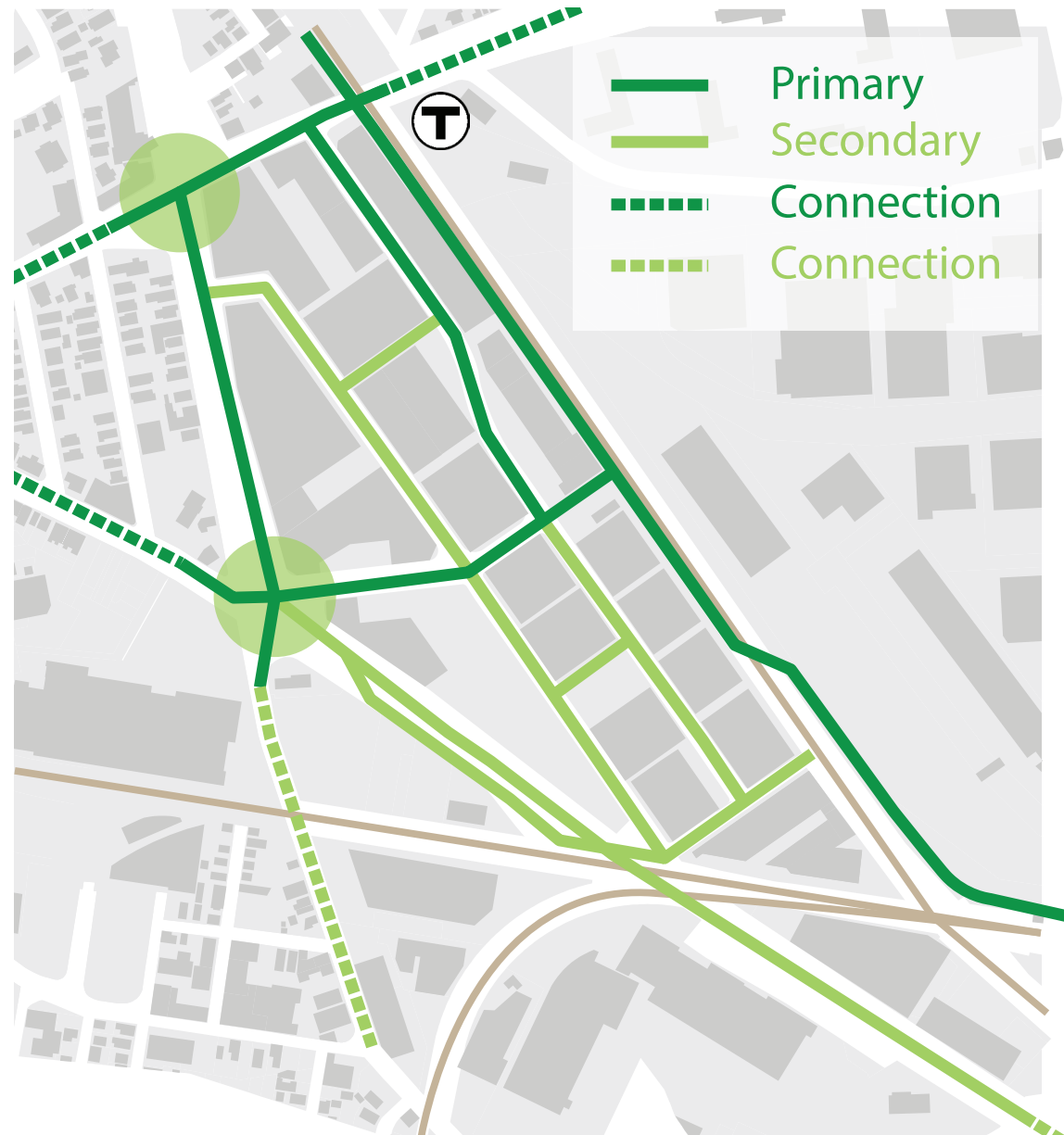


Figure 4.2-1: Pedestrian circulation

1.1 Provide safe and comfortable sidewalks throughout Brickbottom and along the de-elevated portion of McGrath Highway

Joy, Poplar, and Washington streets, as well as the de-elevated portion of McGrath are planned as primary pedestrian corridors (Figure 4.2-1) and should have wide sidewalks (10 to 14 feet) to encourage pedestrian activity. Sidewalks throughout the rest of Brickbottom should also be sufficiently wide to promote safe and comfortable pedestrian activity, though these sidewalks will be somewhat narrower than the sidewalks in the primary pedestrian corridors (8 to 11 feet). See the Vision chapter for details.

1.2 Provide safe and easy-to-navigate crosswalks at key intersections

Two priority intersections are critical to pedestrian access to Brickbottom: McGrath and Washington Street (Figure 4.2-2) and McGrath, Somerville Avenue, and Medford Street (Figure 4.2-3). These intersections are the key access points for pedestrians travelling between Brickbottom, Washington Street Station, parts of Cambridge, and Union Square. They should include clear crosswalks with timed lights as well as pedestrian islands where appropriate.

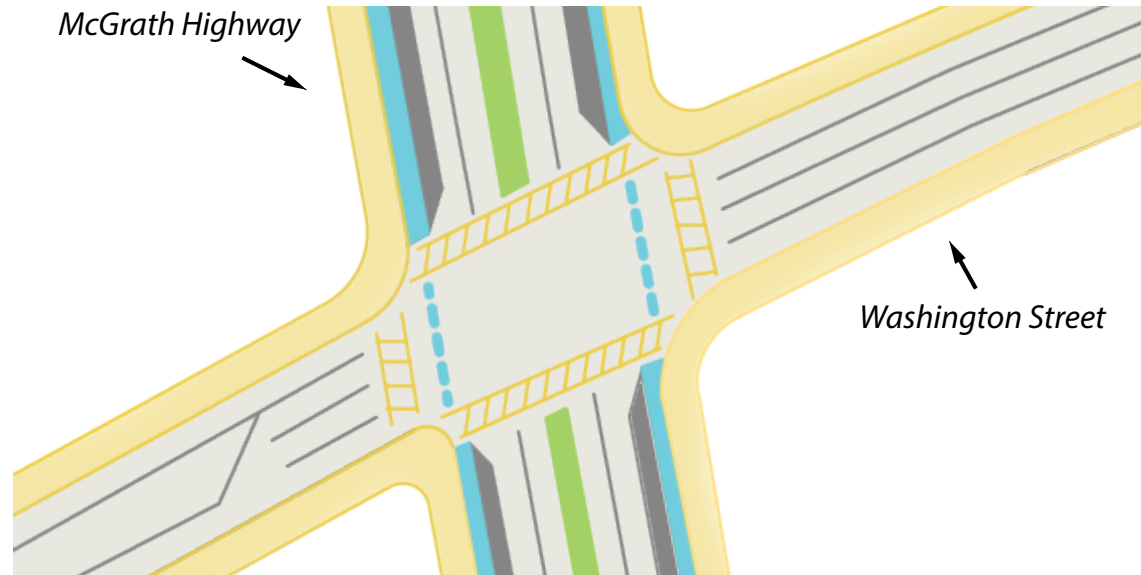


Figure 4.2-2: Intersection of McGrath and Washington Street

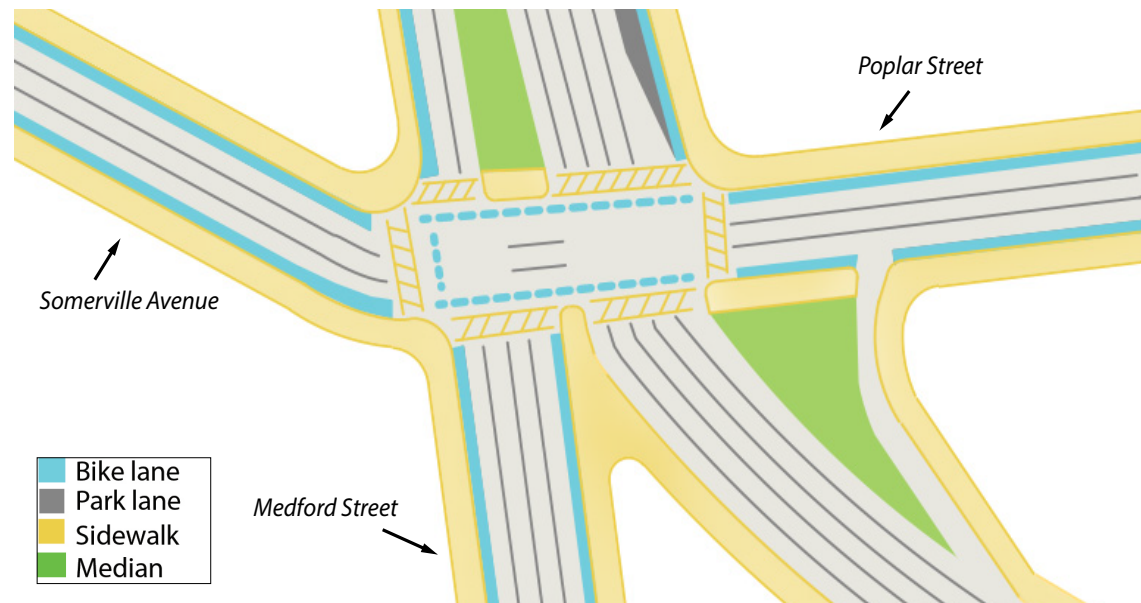


Figure 4.2-3: Intersection of McGrath, Somerville Avenue, and Medford Street

RECOMMENDATIONS

1.3 Create smaller blocks by using pedestrian pathways

Currently, blocks in Brickbottom are noticeably larger than blocks in surrounding Somerville neighborhoods (Figure 4.2-4). These existing large blocks discourage pedestrian activity; they increase the distance between points of interest and are not built at a “human scale.” The plan incorporates two pedestrian-only pathways between Joy and Linwood streets — one in the northern half of Brickbottom and one in the southern half of Brickbottom. These new pedestrian pathways will significantly increase pedestrian mobility and access in Brickbottom and support more human-scaled blocks and development.

1.4 Convert “Scary Way” into a shared-use path

A one-way service road runs under McGrath Highway to Linwood Street near the Brickbottom Artists Building. This road is officially called the Somerville Avenue Extension, but residents of the Brickbottom Artists Building have nicknamed it “Scary Way” (see “Scary Way” box in Existing Conditions). During stakeholder interviews and public meetings, many Brickbottom residents stressed the road’s unsafe feel and expressed the desire for a more welcoming and safe roadway design. While the road currently provides for automobile access to the Brickbottom Artists Building, the realignment of the intersection

of McGrath, Somerville Avenue, and Medford Street will make it much easier to access the Brickbottom Artists Building via Poplar and Linwood streets.

Given all of this, the plan transforms “Scary Way” into a shared-use pedestrian and bicycle path that will connect to the sidewalks and bike lanes leading into the intersection of McGrath, Somerville Avenue, and Medford Street. It will be critical to install adequate lighting to increase safety. Additionally, public art installations along the path will make the area more inviting and extend the artistic identity of Brickbottom to the path. Finally, the path will serve as a gateway to the study area.

Winter Hill



Union Square



Brickbottom

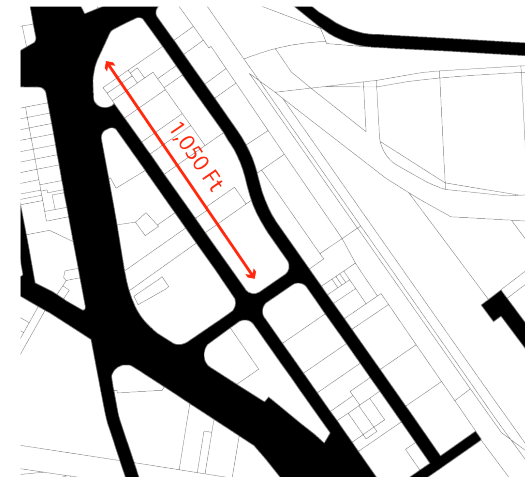


Figure 4.2-4: Comparison of typical Somerville block sizes

1.5 Add bike lane infrastructure

The plan proposes new bike lanes in both directions along the de-elevated portion of McGrath, Poplar Street, and, finally, along the “Scary Way” shared-use path. The City should continue to mark the rest of Brickbottom’s interior streets, as well as Washington Street, with sharrows markings, which indicate that automobiles should share the lane with cyclists (Figure 4.2-7). These new bike lanes, as well as the sharrows, will allow bicyclists to travel around the entirety of Brickbottom safely and efficiently. Further, it will be important to continue this bike infrastructure through the key McGrath intersections to enable safe bike connections and access to Brickbottom. This proposed Brickbottom bike network will connect to existing bicycle infrastructure along Somerville Avenue and Medford Street to the planned Community Path, and to proposed bike infrastructure such as the Grand Junction Path.

1.6 Concentrate bike parking along Poplar Street leading to the Community Path

Bike parking design should adhere to the Somerville zoning code’s specifications (section 9.15.2), which call for bicycle parking infrastructure designed to be used with U-type locks and do not solely hold the front wheel of

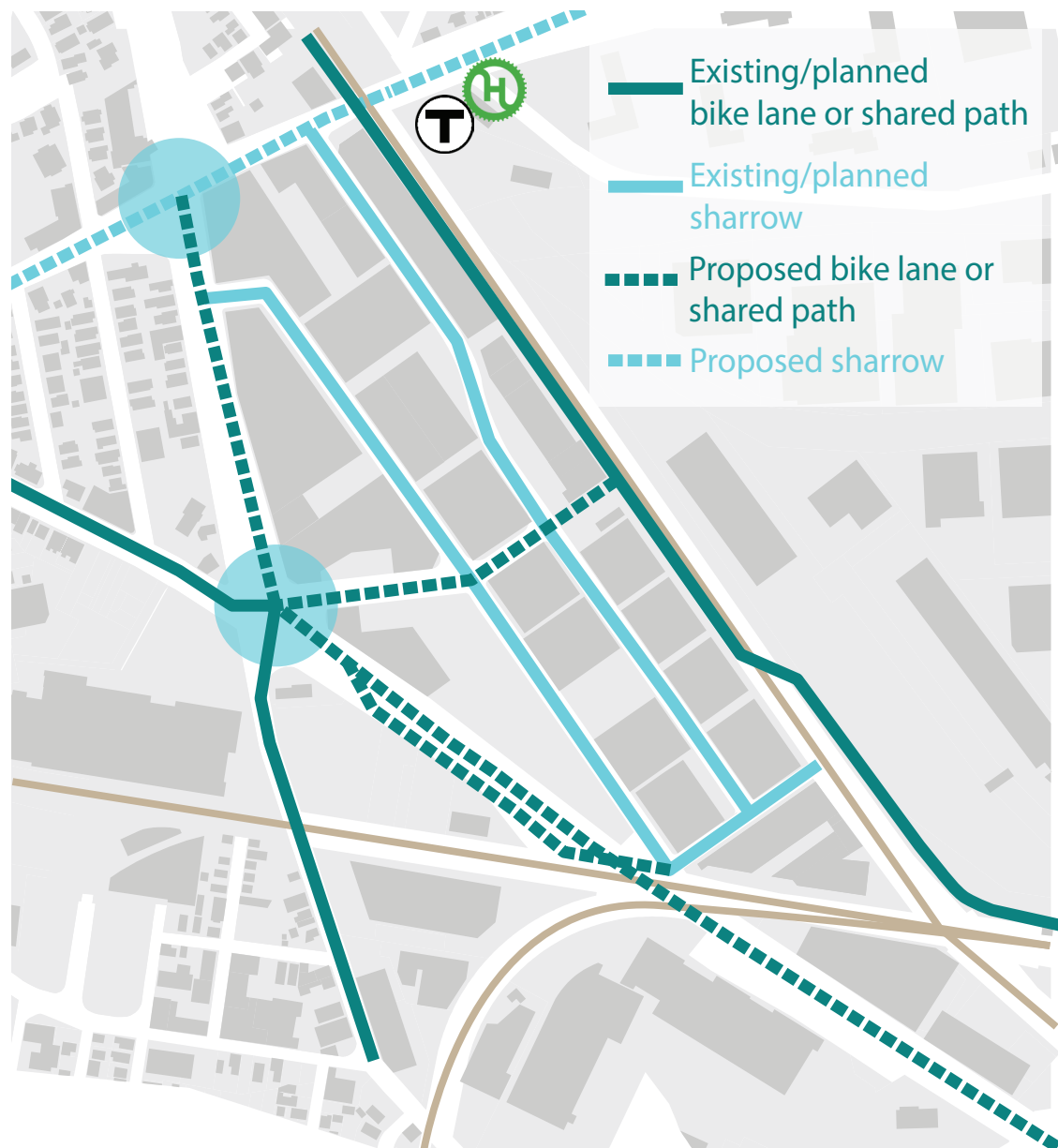


Figure 4.2-5: Bicycle circulation

RECOMMENDATIONS

the bicycle. Bicycle parking should also adhere to code specifications; within TOD zones, the code calls for one unit of bicycle parking per seven dwelling units and for a minimum quantity of bicycle parking for other uses based on square footage, ranging from one space per 3,000 square feet for office uses to one space per 5,000 square feet for light industrial uses. This will supplement the bike parking planned for the future Washington Street station, which will provide secure parking for 146 bicycles.



Figure 4.2-6: Secure bicycle parking

Transit Circulation and Access

The new Washington Street Green Line station will greatly enhance transit access to Brickbottom. New development will be transit-oriented to support this enhanced access. Buses will continue to run their current routes along Washington Street and McGrath. Given the small size of Brickbottom, the current bus routes should provide sufficient bus access and circulation without adding traffic to the area's interior streets. It is expected that the MBTA will adjust the bus stops and schedules for these routes as necessary to accommodate new transit patterns after the Green Line Extension opens.



Figure 4.2-7: Bicycle sharrows

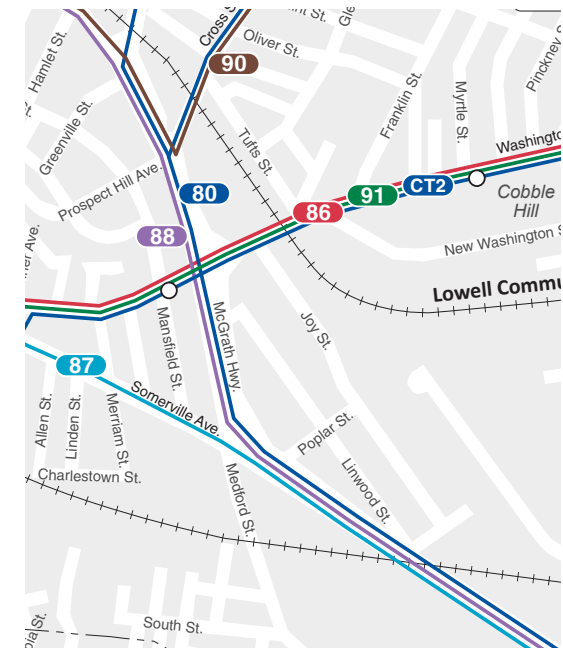


Figure 4.2-8: MBTA bus service in Brickbottom

1.7 Preserve automobile mobility

The plan continues to allow automobile traffic in both directions on all interior and perimeter streets in Brickbottom to maintain automobile mobility. Related to this, the plan supports the forthcoming redesign of MassDOT's Recommended Boulevard Alternative: both the general alignment of the roadway and intersections, as well as the reduction from three to two travel lanes in each direction on the de-elevated portion of McGrath. Based on analyses conducted by MIT graduate students in transportation planning and engineering as part of former Massachusetts Transportation Secretary Fred Salvucci's Urban Transportation Planning course, the team has confidence that the two-lane redesign will successfully accommodate future traffic along McGrath.

1.8 Designate north Linwood Street a service and automobile oriented street

The plan proposes redesigning the northern section of Linwood Street as a service-oriented street to facilitate deliveries and freight access, as well as general automobile access.

1.9 Provide metered on-street parking and limited, well-designed private parking

The plan proposes converting permit-only on-street parking to metered parking throughout

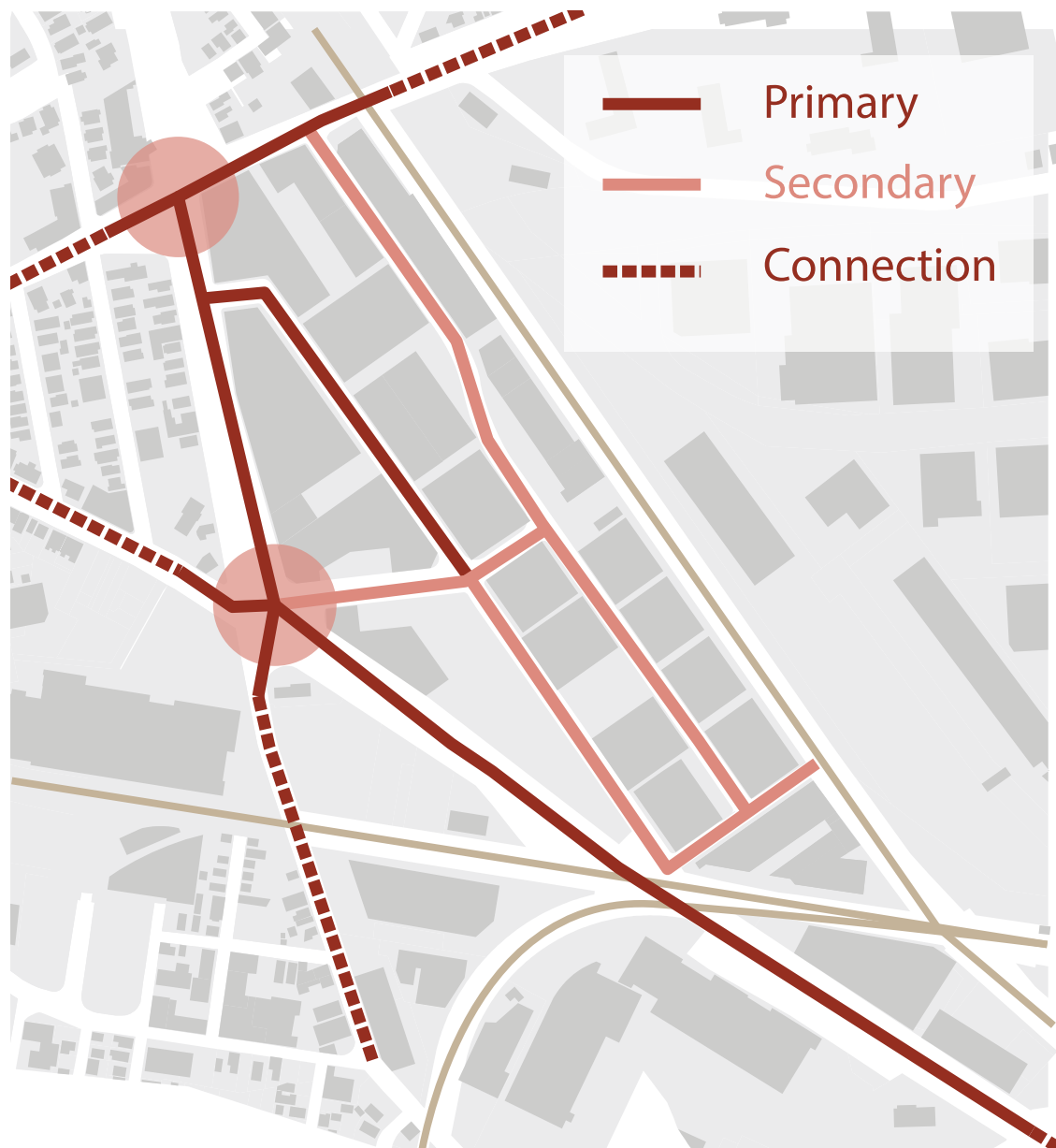


Figure 4.2-9: Automobile circulation

Traffic After Highway Removal

De-elevation or removal of highway infrastructure does not necessarily result in worsening traffic. In many cases, traffic has declined after highway removal. For example, San Francisco's Central Freeway, damaged in the 1989 Loma Prieta earthquake, was rebuilt as a ground-level urban boulevard and traffic declined from 100,000 vehicles per day to 45,000 vehicles per day after the post-earthquake construction of the new boulevard, even with less than a 3 percent shift to transit. The elevated Park East Freeway in Milwaukee, leading from downtown, was an elevated highway whose design was similar to McGrath's. After its removal, traffic declined from a peak of 52,000 vehicles per day to 19,000 vehicles per day on the replacement McKinley Avenue. In Seoul, total traffic through downtown decreased after the removal of the major Cheonggye Freeway.

While a number of other factors, such as the construction or addition of transit (which will be part of the Brickbottom evolution), will have an influence on traffic volumes, it is evident that removal of highway lanes or highway infrastructure does not necessarily lead to poor traffic outcomes.

the Brickbottom neighborhood, including the de-elevated portion of McGrath. All interior streets and the de-elevated portion of McGrath will have metered parking on both sides of all streets, with the exception of Joy Street, which will have only one side of parking, and Fitchburg Street, which will have one row of parking spots in front of the Brickbottom Artists Building. Private parking will be provided for residential buildings in accordance with the requirements for the Somerville's TOD zones and the proposed Brickbottom Special District, at the ratio of one parking spot per one unit of housing. Further, both of these zones provide additional requirements and guidelines for private parking, such that private parking must be structured, as opposed to open lot, and should make all attempts to be "screened" by street-facing buildings. Shared parking is also encouraged in these zones.

Objective 2: Capitalize on the Green Line Extension and McGrath de-elevation

2.1 Convert unused McGrath Highway right-of-way into developable space

This plan supports the forthcoming redesign of MassDOT's Recommended Boulevard Alternative, with two travel lanes in each direction instead of three (Figure 4.2-10). However, the plan offers a vision for the new

Boulevard that concentrates all the right-of-way not used for travel purposes to the eastern side of McGrath. This unused right-of-way (approximately 2.4 acres) can then be used for additional development along the Brickbottom side of McGrath that will face and interact with the de-elevated portion of the highway. Right-of-way is concentrated on the Brickbottom side to preserve existing residential development on the western side of the boulevard. This alignment will preserve automobile circulation and access while capitalizing on the de-elevation of McGrath to spur economic development in Brickbottom and create a more vibrant McGrath corridor. While MassDOT would have final approval over the use of the right-of-way, this recommendation aligns with MassDOT's mission, under the GreenDOT initiative, to support smart growth development.

An alternative to right-of-way development would be to build green space or parkland. However, park spaces directly adjacent to high-speed, high-traffic roads often remain under-utilized. Potential park users such as families with children or pets may find the space dangerous due to the proximity to traffic. Furthermore, all users of this type of park space often find that sound and air pollution from the neighboring road negatively affect the experience of using this type of open space.

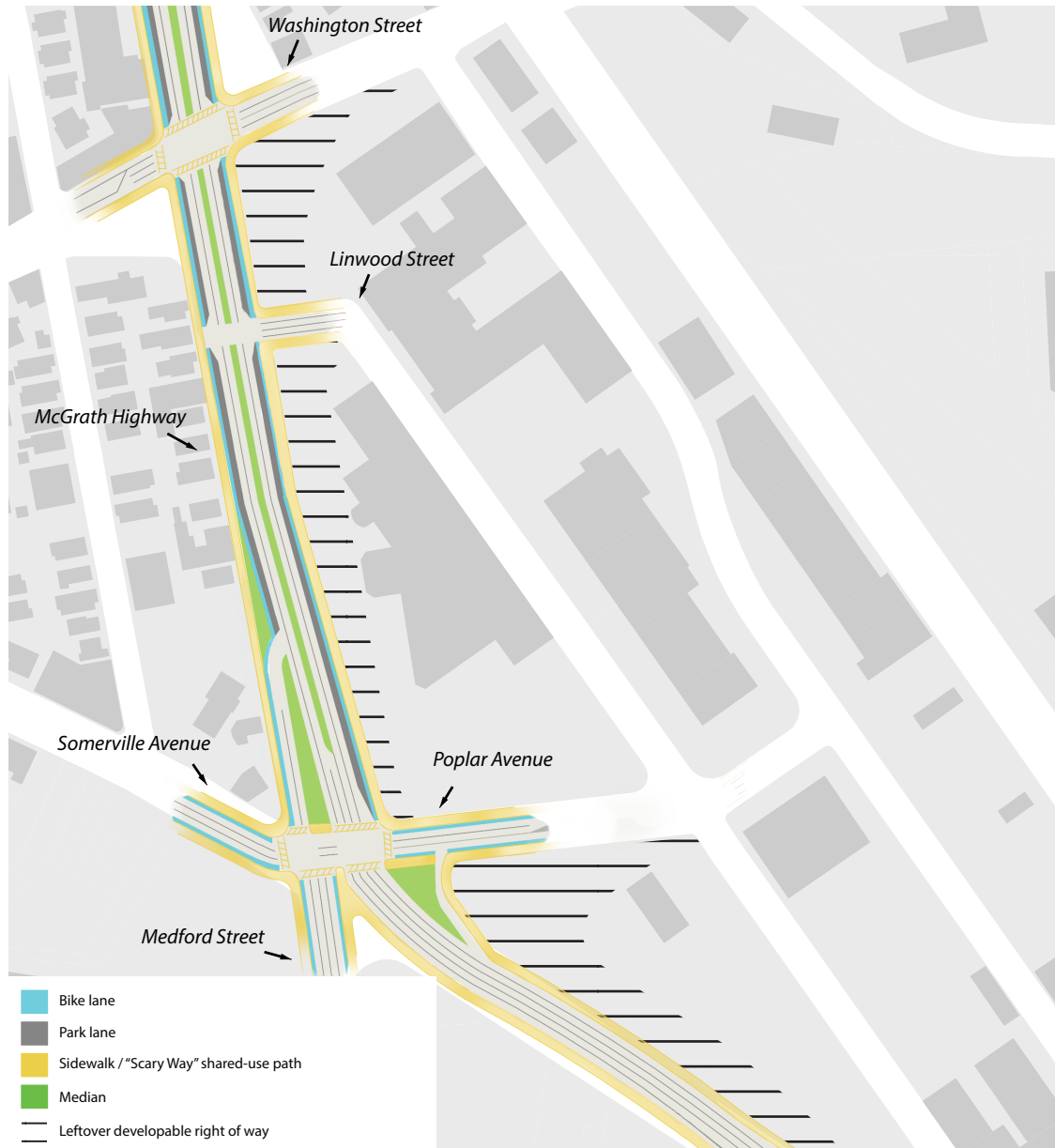


Figure 4.2-10: McGrath highway redesign

Parkland Along Boulevards

Parkland along urban boulevards is not necessarily heavily used. In particular, parkland along high-traffic boulevards may remain relatively lightly used. In the Boston area, Melnea Cass Boulevard, the Veterans of Foreign Wars Parkway, and West Roxbury Parkway all have stretches of green space that run linearly along the side of the road. However, due to traffic volumes and design that lacks “edges” to the parks, the green spaces remain relatively underutilized. Parkland along McGrath may suffer from some of the same issues, as traffic volume is expected to remain relatively high even on the de-elevated road. The plan therefore recommends prioritizing development in the reclaimed right-of-way.

2.2 Advocate for a new Hubway station at the Washington Street Green Line station

A new Hubway station at the Washington Street T Station will capitalize on this regional investment and give cyclists greater access to Brickbottom by allowing them to switch modes at the station. This new Hubway station would also connect well to the larger Hubway network, therefore enhancing bicycle circulation in both Brickbottom and the region.

Housing

The Green Line Extension will greatly enhance transit accessibility for residents and businesses in Brickbottom, but is also expected to add pressure to the city's residential housing stock. As is common with new transit development, rental prices and land values are anticipated to rise and low- and moderate-income residents become at risk of displacement. In MAPC's 2014 "The Dimensions of Displacement" report, researchers forecast that both renters and homeowners along the Green Line Extension corridor will see dramatic increases in housing costs. In particular, the area surrounding Washington Street Station is expected to see one of the sharpest rent increases.

To ensure Brickbottom's housing development progresses in an equitable, sustainable, and responsive manner, this plan advocates for two housing objectives, each supported by a set of specific recommendations.

Objective 1: Promote affordable and market-rate housing opportunities for households of all sizes, incomes, and accessibilities

1.1 Use density to target the Sustainable



Figure 4.3-1: Residents supporting the development of affordable housing at 181 Washington St.

Neighborhoods housing goal

Consistent with MAPC's new housing projections for 2030, this plan should at minimum achieve the City's housing goal of 1,147 housing units in Brickbottom. Based on our modeling projections, density goals, and proposed zoning changes, total residential space should increase by a little over five million square feet, or 60 percent of total square footage. Given *SomerVision*'s average square footage per unit (1,100) and requirements for open space and parking, this would yield a maximum of about 2,900 housing units. (See

"We're at a tipping point, both in Somerville and in the region. The Green Line Extension we have fought for is coming, as is a wave of new development, and we need a robust plan for affordable housing so that residents of all income levels can stay here and we can sustain a Somerville for everyone."

- Danny LeBlanc
Executive Director, Somerville Community Corporation

Appendix for detailed calculations.)

1.2 Prioritize affordable housing opportunities for families

According to Mayor Joe Curtatone's Sustainable Neighborhoods presentation, young families are leaving Somerville at faster rates than those moving in, and the City's existing housing programs are not effective in reaching middle-income families. For these reasons, we propose that housing policies prioritize low- and middle-income families and that design review encourage construction of multi-family housing and multi-bedroom, family-friendly units. Such development should also include amenities for children, such as play areas.

1.3 Create permanently affordable housing on city-owned land

Because of the difficulty of requiring private developers to provide permanently affordable housing, the City should use city-owned land for this specific purpose whenever possible. This plan recommends that the City and the Somerville Community Corporation (SCC) develop permanently affordable housing on the former waste transfer site (in the form of studios, to preserve housing for the artists and artisans who have long shaped Somerville's identity); based on our calculations and massing, this would yield about 300 studio units. The City and SCC should partner to create

family-sized units on any future sites the City acquires.

1.4 Require housing to be built according to Universal Design principles

Universal Design principles ensure that all people, both with and without disabilities, can easily and comfortably access buildings, streets, sidewalks, and parks. Site design review and permitting should require that housing development align with these design principles, making Brickbottom more accessible to all.

1.5 Raise and incentivize Inclusionary Zoning requirements

Currently, Somerville's inclusionary zoning policy requires that 15 to 17.5 percent of new housing in transit-oriented development areas be affordable, while 12.5 percent is required to be affordable outside these areas. Those numbers do not align with the City's ambitious goals for affordable housing, as stated above, nor does it address the severe housing needs for low- to moderate-income families.

We recommend raising the inclusionary zoning percentages to 20 percent in the TOD section of Brickbottom (see Zoning and Land Use Recommendations Section), subsidizing it via higher-priced commercial and residential development in non-TOD areas. The City can

Family Housing at Station Center



Figure 4.3-2 Example of family-focused yet innovative and mixed-use housing near transit
Station Center Family Housing transformed a former brownfield site in Medford, Massachusetts into a new LEED platinum, transit-oriented development, with 157 affordable rental units for families, public playground, ground-floor cafe and market, and indoor and outdoor community spaces. This example would be appropriate for the northern part of Brickbottom, near the T.

Financing Affordable Housing in Somerville



Figure 4.3-3: Saint Polycarp Village

Somerville Community Corporation's Saint Polycarp Village Apartments is a successful local example of affordable housing creation. It was financed with a layering of public and private funds from HUD, the Massachusetts Department of Housing and Community Development, MassHousing, Community Economic Development Assistance Corporation, the Massachusetts Housing Partnership, and the City of Somerville, as well as First Sterling Financial, Bank of New York Mellon, Bank of America, LISC, and the Enterprise Foundation. Development in Brickbottom will need to draw upon SCC's experience in putting together complex financing packages and partnerships.

also incentivize additional affordable space: if developers set aside more than the required affordable housing units under inclusionary zoning or set units as affordable in perpetuity, the City could waive its linkage fee and/or grant them a density bonus commensurate to the number of additional affordable housing units provided or length of affordability term.

1.6 Create affordable work/live space for local artists

There is a growing demand for affordable artist housing locally, even with the existing artist presence in Brickbottom. However, to prevent the displacement of resident artists, and to ensure the creation and sustainability of work space, the City should use housing development regulations and incentives to prioritize affordable work-live space for certified artists. Joy Street Studios provides work space only, but new regulations can emphasize work-live spaces to infuse the arts presence across the area 24/7. This will also promote a unique mix of uses and activities within Brickbottom, which leads to the next objective.

Objective 2: Integrate housing with a mix of other uses, making Brickbottom a dynamic place for people to live, work, and play



Figure 4.3-4: Artist work-live spaces, in high local demand, should be a housing goal for Brickbottom

2.1 Use zoning to maintain a mix of land uses, including arts and industry

Many community stakeholders want to preserve Brickbottom's industrial character and prevent the displacement of craftspeople and businesses. Moreover, given the demand and economic incentives for residential development, the City of Somerville must make sure that zoning revisions balance non-residential uses with housing needs. We recommend that total housing space exceed no more than 60 percent of new development proposals. (See Zoning and Land Use recommendations for more detail.)

2.2 Ensure that residential development is compatible with other uses and styles

Community stakeholders consistently said they do not want to see “typical mixed-use development” — i.e., housing above generic retail fronts or another Assembly Square or Kendall Square — and that they prefer a mix of artists, open space, light industry, offices, and restaurants or cafes. Similar to what is already taking place at Brickbottom Artists Building and the forthcoming Millbrook Lofts, the team proposes residential development be integrated with artist and maker working spaces, galleries, rooftop green open space, and active ground floor space with dining and entertainment. The ARTFarm project and Joy Street Studios are ideal opportunities that can illustrate how this can be done in the near term.

This new development should also integrate diverse building styles and design features, while reflecting the area’s industrial character and its hallmark artist identity. Design review and limited form-based codes within the zoning districts our plan proposes would allow greater control by the City over the look and feel of new mixed-use and housing construction. This will create a visually unique district, a true community of makers, workers, artists, and residents of varying incomes.

Emeryville Warehouse Lofts



Figure 4.3-5 Creative loft spaces in California

Originally built in 1925, a 200,000 square foot warehouse for a former fruit-drying company was transformed into 142 live/work lofts. A modern layout of airy lofts with raised sleeping platforms and open kitchen and living room areas complements the original building structure, made of steel-reinforced poured-in concrete. Flexible work spaces with glass roll-up garage doors and a pedestrian colonnade line the ground level. Development in Brickbottom should reflect this creative mixed-use style and design.

Millbrook Lofts in Somerville



Figure 4.3-6 Millbrook Lofts

Boston-based Berkeley Investments is constructing 100 loft apartments in the former cold storage building. A short walk from Lechmere Station, it will offer a mix of studios, one-bedroom, and two-bedroom apartments. The LEED-gold building will also feature a green roof, community amenities, covered parking, and bicycle parking. Five apartments will be designated for live/work residents on the ground floor as well as common studio space.

Economic Development

Somerville has many advantages that make it attractive to potential employers. As described by Somerville's Office of Strategic Planning and Community Development:

"The combination of favorable rents, proximity to Boston and Cambridge, a strong, built-in consumer base, an educated workforce and a powerful city-wide high-bandwidth infrastructure makes Somerville a very attractive location for businesses of all sizes."

The City seeks to improve upon this existing strong economic development foundation by focusing on transformative districts such as Brickbottom. *SomerVision* lays out several strategies intended to stimulate economic development, including:

- Zoning code changes to expand the City's commercial tax base
- Leveraging creative financing options to foster commercial development
- Using City-owned property to stimulate economic development
- Expanding arts and cultural tourism
- Promoting job creation by small businesses and entrepreneurs
- Investing in the talents, skills, and education

to provide opportunities to residents of all social and economic levels

Given Brickbottom's strong ties to arts and culture, its affordable rents, and its employment opportunities in skilled trades, many of these proposals are particularly well-suited to improving the neighborhood's economic outlook. This plan outlines five economic development objectives for economic

development in Brickbottom.

Objective 1: Strengthen Somerville's tax base

Despite its strategic location, highly educated workforce, and rising property values, Somerville has in past years struggled to balance its tax receipts against its budget. The City reports it continues to operate on fewer property tax dollars per capita than many

2012 Property Taxes Per Capita

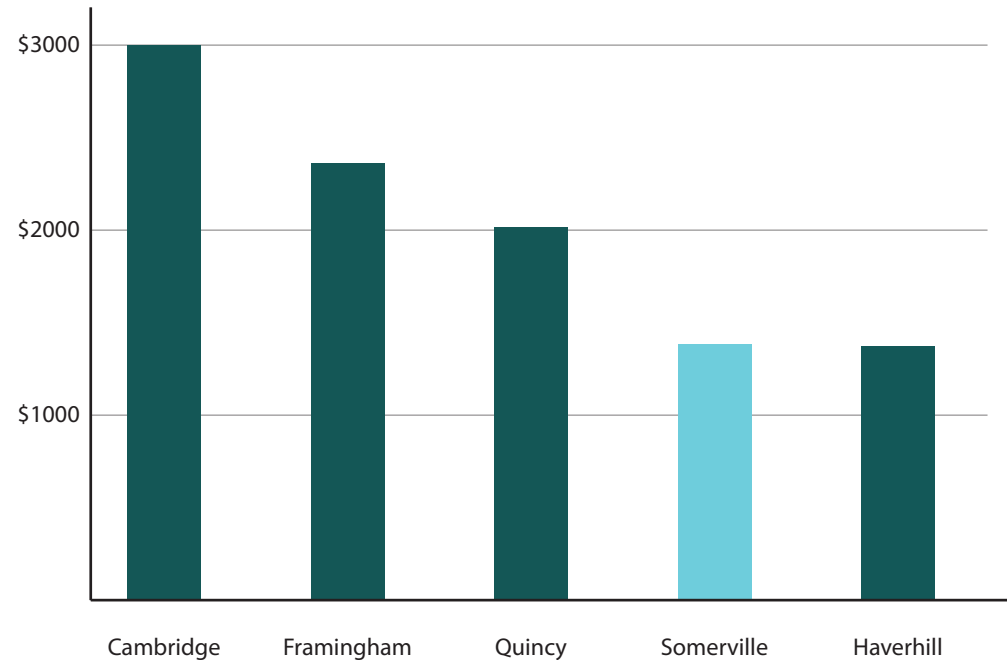


Figure 4.4-1: Somerville operates on fewer tax dollars per capita than many other Massachusetts cities

Massachusetts cities with a population of 50,000 or larger. In addition, the *Boston Globe* recently reported that the city has the state's largest residential property tax exemption, allowing homeowners who live in their properties rather than rent them to be taxed at 65 percent of the home's assessed value. Although the City has made strides toward balancing its budget, it has in past years depended on state aid to close deficit gaps.

1.1 Modify zoning to allow mixed use

Brickbottom is currently zoned for industrial use. Somerville can increase its tax base by zoning for mixed-use development. According to a 2011 report on land use trends within the city, industrial land generates the least in tax revenue for the City at \$0.98 per square foot compared to commercial (\$1.49 per square foot), residential (\$1.59 per square foot), and mixed use (\$1.51 per square foot). In fiscal year 2009, industrial properties accounted for approximately \$5 million, or 5.4 percent, of Somerville's total annual tax revenue. By contrast, new commercial developments, such as the Partners Healthcare facility in Assembly Square are expected to generate approximately \$2.2 million annually for the City. These data indicate that there is a significant opportunity to increase the city's tax base through mixed-use zoning policies.



Figure 4.4-2 (top left to bottom right): Cooking classes at KitchenINC; sculptor at work at Joy Street Studios; custom frame maker for fine art in New York City's mixed-use Starrett-Lehigh Building

2013 PRIVATE SECTOR JOBS AND WAGES IN SOMERVILLE, MASSACHUSETTS

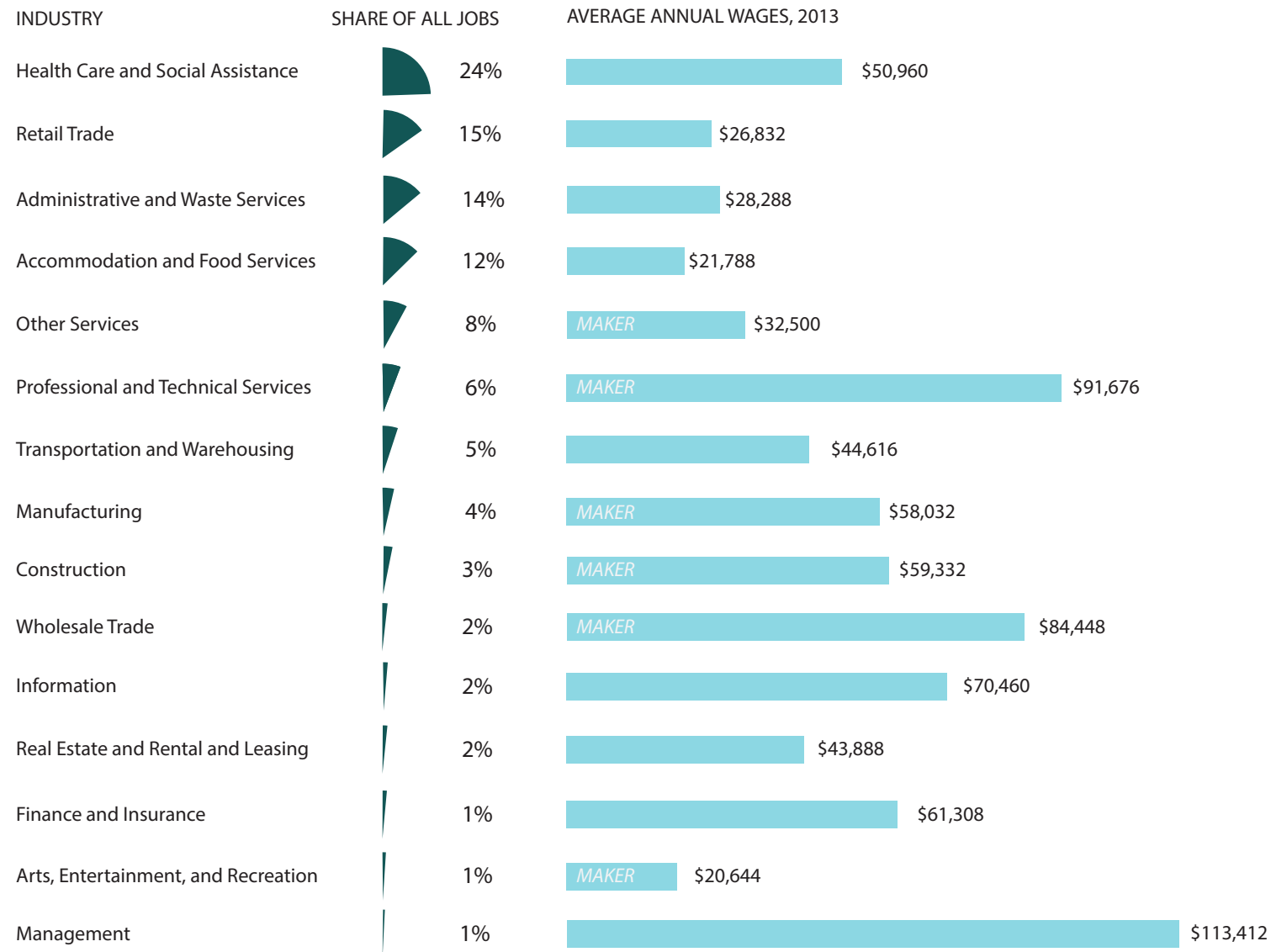


Figure 4.4-3: The majority of Somerville's maker careers exceed the City's median individual income and provide better wages than middle-skills retail and administrative jobs

Objective 2: Facilitate high-wage middle-skill ‘maker’ jobs

Even as the City pursues a mixed-use redevelopment strategy, it should be mindful of protecting skilled employment in Brickbottom. Industrial space is valuable because it provides for relatively high-wage jobs at a variety of skill levels. The zoning section of this plan describes a method for preserving industrial space in Brickbottom, yet it is also important to ensure that Somerville’s workforce has the skills necessary for employment in “maker” industries.

2.1 Expedite Jobs Linkage Fee Proposal

In response to a 2013 study indicating that redevelopment could create the need for additional skilled workers, Somerville has already proposed that a jobs linkage fee be imposed on commercial developments of at least 20,000 square feet. Under this proposal, developers would pay \$1.40 per square foot toward a city-wide Jobs Trust, which would operate similarly to the City’s Affordable Housing Trust. The proposal has been approved by the Board of Aldermen but requires approval at the state level to move forward. The City should do what it can to ensure that it does.

As a testament to the need for skilled workers,

Somerville’s Makers Have a Home in Brickbottom



Figure 4.4-4: Neon Williams’ 86 Joy St. location

In an interview, Steve Williams, owner of Neon Williams, Inc. — the supplier of the glowing tubes in Boston’s famous Citgo sign — described being displaced from Lechmere Square in Cambridge to Allston and then to Brickbottom by rising land values and various redevelopment projects. Brickbottom is uniquely situated to serve a regional need for light industrial space within the urban core. “Usually they have to go to the outskirts to do a new industrial park,” said Williams, “but this is smack dab in the middle of the city.” This central location enables Williams to be close to his customers, including movie crews for films like Black Mass, the Whitey Bulger biopic filmed partially in Somerville in 2014.



Figure 4.4-5: Signage in Neon Williams’ workshop

RECOMMENDATIONS

a 2010 report from the National Skills Coalition that about 45 percent of all jobs in Massachusetts were classified as middle-skill, but only 32 percent of Massachusetts workers had the education and training required to fill those positions. These careers, including jobs in the installation, maintenance, and repair industries, computer systems engineering, and creative skilled trades like carpentry and metalworking are higher-paying than retail or administration careers, and they build upon the strengths of Brickbottom’s current industrial character. By applying the proposed Jobs Linkage fee, Somerville has the potential to support many more of these “maker” jobs.

Objective 3: Provide affordable office space for new enterprises

In recent years, Somerville has established itself as a prime location for startups. Facilities like Greentown Labs, KitchenINC, and Artisan’s Asylum provide several models for fostering creativity and entrepreneurship. With its industrial building stock and accessible location, Brickbottom is also an ideal location for startup incubator space. Yet despite incubators’ recent successes, several residents expressed concerns that they would not survive without subsidy from the City. Somerville should pursue an incentive strategy to ensure they do, even without additional City funds.

3.1 Create zoning bonuses for Startup Space

Somerville should encourage new commercial tenants in Brickbottom to establish their own incubators within their facilities through an “innovation office space” provision in the zoning ordinance. Under such a provision, similar to a strategy currently being proposed

in Cambridge’s Kendall Square, developers can exempt a maximum of 20 percent new office space from the calculation of the allowable floor-area ratio, so long as it is dedicated to incubator space. “Innovation office space” is similar to “co-working space” in that it is characterized by small space allocations for individual employees, month-to-month rental



Figure 4.4-6: Somerville’s Loci Controls creates technology for harvesting natural gas from landfills as a member of the Greentown Labs startup incubator

terms, and sharing of resources like conference rooms and kitchens among several different tenants.

3.2 Nurture startups' next steps

Even as startups outgrow incubator space, they often still require affordable offices to thrive. This same zoning mechanism could be applied to the provision of “step-up space” offered at lower than market rate rents. This strategy could create additional benefits for both tenant and landlord. By having innovative startups as tenants, Brickbottom’s large commercial enterprises may be encouraged to invest in these firms, or perhaps they will use the opportunity to host networking events in the “step-up space,” bringing new energy into their offices. In addition, through this strategy, Somerville can ensure that new enterprises stay within the city limits as they grow.

Objective 4: Improve Brickbottom’s business district

As Brickbottom develops a new commercial character, resources must be directed towards generating and sustaining a vibrant business community.

4.1 Take advantage of facade improvement funds

Somerville is already working to provide grants and low-interest loans to business owners wishing to improve their properties through its Commercial Property Improvement Program (CPIP). Under CPIP, property owners and tenants may receive 100 percent reimbursement up to \$7,500 on projects designed to upgrade their business’ aesthetic appeal with new lighting, awnings, and signage. As Brickbottom transitions from fully industrial to mixed use, this may be a valuable way to ensure a more cohesive street frontage across new and existing structures.

4.2 Establish BID

In addition to taking advantage of existing programs, business owners should consider the establishment of a Business Improvement District (BID), especially along pedestrian streets like Joy Street and Poplar Street. Property owners may vote to establish a BID to encourage the provision of services, including:

- *Landscaping*
- *Maintenance of public areas*
- *Marketing and promotion*
- *Police protection*

- *Fire protection*
- *Parking management*
- *Gas and electric services*
- *Street and alley cleaning*
- *Trash collection*
- *Street lighting*

These services would be funded through an assessment on each property and channeled through the City toward the intended use. Some BID services are self-funding, including in some cases, parking. Given that Somerville’s transit-oriented zones encourage structured parking, business owners may find the BID structure a favorable way to ensure sufficient provision of parking and that shared facilities are properly maintained. BID funds could also be used to market the area to new potential tenants and businesses.

Objective 5: Emphasize education resources

In addition to improvements to the Brickbottom district itself, the City should recognize the important links to its early education system and preparatory programs for future careers in fabrication and industry.

5.1 Link vocational education to real jobs

Somerville High School's metal fabrication shop has produced public art across the city, as well as sound career opportunities in skilled trades that would be welcome in Brickbottom's industrial districts. The connection between these programs and the neighborhood's industry should be strengthened by bringing students into the work environment for on-the-job training and internships.

5.2 Establish a makerspace in Union Square Library

For younger students, the City can also invest in career-oriented education. Less than one mile from Brickbottom, the future Union Square Library will receive an \$18 million dollar state grant for the facility's construction. The City should seek additional funds to create a "makerspace" or "hackerspace" in this new, larger facility, which are becoming commonplace in public libraries.

The American Library Association endorsed makerspaces in 2014: "Makerspaces are enabling libraries to transform their relationship with communities and to empower community members of all ages to be creators of information, not just consumers."

Creating such a space in the nearby Union Square Library would strengthen youth technical education and provide skills and inspiration for future makers in Brickbottom.



Figure 4.4-7: Architectural rendering of Somerville's proposed new Union Square Library



Figure 4.4-8 (left column to right column, top to bottom): HATCH Makerspace logo and tool box; homemade Segway at Somerville's 2012 Mini Maker Faire; makers at work at Artisan's Asylum; FormLabs 3D printer at Somerville 2012 Mini Maker Faire; library makerspace in Henderson, NV

Makerspace: A Place to Learn

A 2013 report from MassDevelopment calls makerspaces “new and rapidly evolving hotbeds of innovation” (MassDevelopment, 2013). These community spaces provide facilities for learning and tinkering, including:

- 3-D printing equipment and software
- Arduino and other open-source hardware prototyping programs
- Electronics and computer programming
- Fiber arts, including sewing
- Paper arts
- Mosaic arts
- Jewelry making
- Recycled material projects

Somerville has a thriving “maker” culture and has already hosted several mini Maker Faires. A library-operated makerspace called HATCH is set to open in neighboring Watertown in January 2015. Somerville should learn from this example and expand upon it.

Zoning and Land Use

Land use and zoning regulations should create predictable standards in the built environment and promote health, safety, economic development, access to housing, and culturally vibrant communities. In that sense, zoning and land use regulations are tools to reinforce the vision set out in this plan.

This plan proposes two zoning districts. The first is a special high-density district that will protect and expand upon Brickbottom's connections to industry and the arts. By right, this district will allow for industrial and fabrication uses, as well as some small scale neighborhood-serving retail. It also prioritizes pedestrian-friendly street frontage, while still enabling light industrial uses to prosper. In addition, we recommend providing a mechanism by which multi-family residential and higher-value commercial space can be built, as long as certain required percentages of industrial and artistic space are met.

Our second district takes advantage of the best elements of the city's Transit Oriented District (TOD) zoning ordinance to create a high-density mixed-use community and catalyze growth in the neighborhood. Somerville's Planning Division is currently working on a



Figure 4.5-1: Current zoning allows for blank or hostile street frontage, buildings fronted by parking, and low density

full overhaul of its zoning ordinance. Even before that overhaul is complete, the City has done a great deal to streamline and simplify its zoning through the current TOD zones. These changes lend Somerville the flexibility to adapt to significant changes like the Green Line Extension and the grounding of McGrath.

Objective 1: Establish a Brickbottom Special District

Brickbottom can support much denser, mixed-use development; however, any changes to zoning should also protect its industrial and

arts character. Our plan calls for removing the entirety of the study area from the existing Industrial A (IA) zone and placing the majority of the area, minus the parcels closest to the new Washington Street Green Line station and the parcels along McGrath south of the Fitchburg Line railroad tracks, into a new Brickbottom Special District.

This district will have two overarching goals:

1. Protect and enhance the character of Brickbottom as an industrial, artisanal and creative manufacturing, fabrication, small-scale production, and arts hub in

Somerville

2. Create an interesting, attractive, and safe place for pedestrians, without encouraging the homogenous or predictable buildout that can result from overly-prescriptive regulations

New zoning districts do not displace existing uses. Any existing structures or uses are “grandfathered in” under the previous code. However, for new developments, the Brickbottom Special District would allow only certain uses by right. These “Fabrication” uses, detailed in Table 4.5-1 include both traditional

Fabrication Uses
<i>Artisanal manufacturing</i>
<i>Makerspace</i>
<i>Artist studio space</i>
<i>Furniture making and woodworking</i>
<i>Crafts-related or art supplies retail stores</i>
<i>Electronics and electrical equipment assembly</i>
<i>Printing, binding, or related activities</i>
<i>Food and beverage preparation and packaging</i>
<i>Shop and storage facilities for tradesmen</i>
<i>Small-scale metalworking</i>
<i>Textile work and manufacturing</i>
<i>Auto body shops</i>
<i>Wholesale trade and distribution</i>
<i>Others, as defined by the City</i>

Table 4.5-1: Fabrication uses

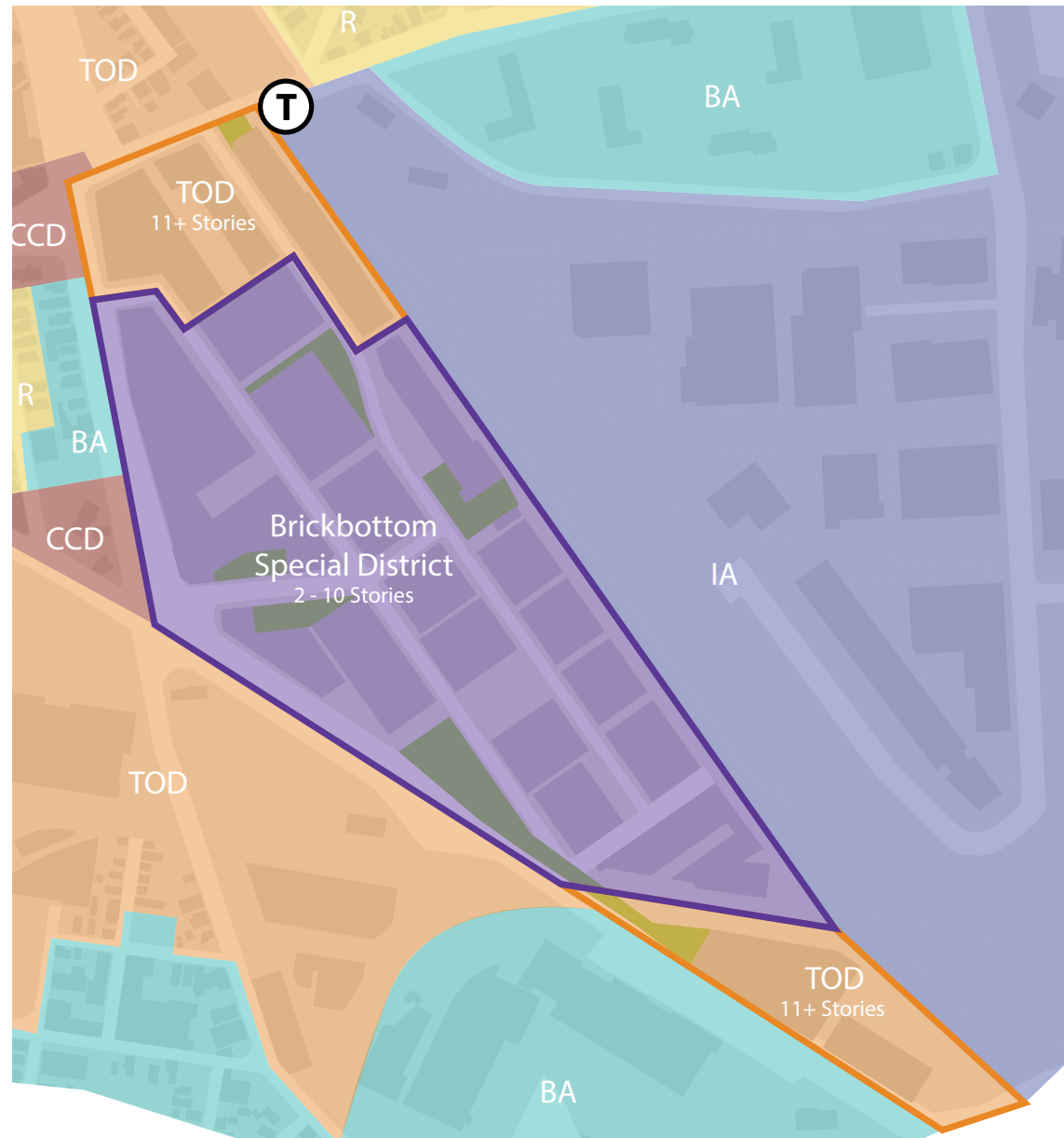


Figure 4.5-2: Proposed zoning for study area

RECOMMENDATIONS

light industrial uses currently allowed in the district, as well as a number of artistic production and arts-related uses.

Under this new district, all traditional light industrial uses should be subject to performance standards regarding environmental, noise, vibration, and light impacts, to be set by the City according to best practices.

Storage warehouse, cold storage buildings, and parking lots should be allowed as accessory uses only. Protected uses, as defined in the Somerville Zoning Ordinance, will also be

allowed by right.

In addition, in order to address the desire the team heard from a number of residents of Brickbottom Artists Building for more retail opportunities and gallery space for local artists, the following uses are also allowed by right:

- Non-format retail of 2,500 square feet or less
- Art galleries of 2,500 square feet or less

Any new construction or substantial

rehabilitation over 30,000 square feet, including phased projects, must seek site plan approval from the Planning Board under the procedure established by the Somerville Zoning Ordinance.

1.1 Foster industrial mixed use through clustered development

This district would also allow a special type of development, conditioned on receiving a special permit with design review, called a “Mixed Cluster Development.” The purpose of this mechanism is to allow property owners to propose innovative mixes of uses that

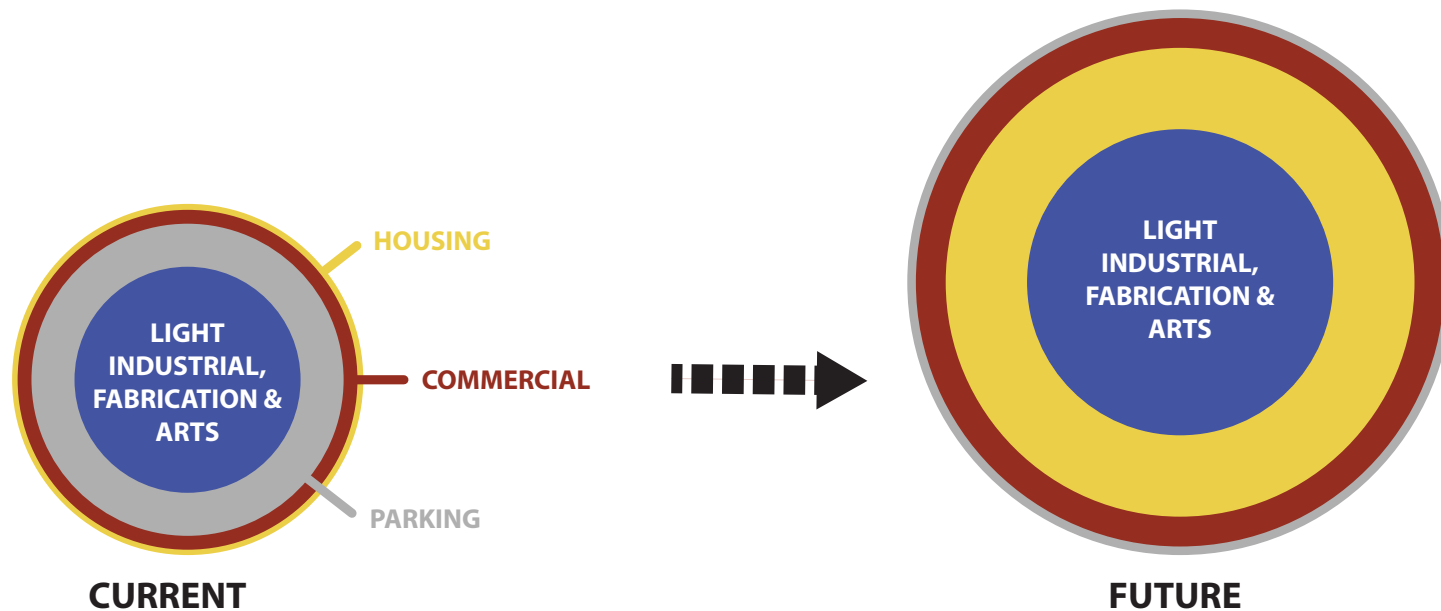


Figure 4.5-3: The plan's vision: a flexible and pedestrian-friendly mixed-used district — with an industrial and artistic heart

respond to prevailing economic needs, while maintaining the character of the district. We recognize that some industrial uses may require cross-subsidy from higher-value developments, and this is meant to be a mechanism to allow that to happen.

Using a Mixed Cluster Development, property owners can receive permission to build multi-family residential units and commercial spaces which are not allowed by right, provided that a calculated percentage of the gross floor area of all buildings within the development are dedicated Fabrication uses. This space can be distributed across different buildings on the site, or located within the same buildings as commercial and residential uses.

To determine the required Fabrication space in a Mixed Cluster Development, developers must calculate the overall buildable lot area of the parcels included. 50 percent of this buildable area should be dedicated to Fabrication uses (though it is not required to be on the ground floor, contiguous, or on a single floor).

If this area is less than 30 percent of the gross square footage of the full development as designed, more Fabrication space must be provided up to the 30 percent threshold, or Arts Related uses can be used to fill this gap.

These are detailed in Table 4.5-2.

These Mixed Cluster Developments could only be proposed on areas of at least 30,000 contiguous square feet of developable area, although this can include parcels not on the same side of the street. All of the parcels need not be owned by the same entity, though all current property owners of affected parcels must consent to the Mixed Cluster Development plan submitted to the City. The maximum size for a single Mixed Cluster Development is 120,000 contiguous square feet of developable area.

Conceptual site plans, with uses and square footage, should be submitted to the Board of

Arts-Related Uses

<i>Artist live/work space</i>
<i>Arts-related educational facility</i>
<i>Museum/gallery (larger than 2,500 square feet)</i>
<i>Retail sales of art</i>
<i>Office of creative design professional</i>
<i>Theater or performance space</i>
<i>Music practice, recording, and performance</i>
<i>Dance studio</i>
<i>Other bona fide arts-related uses, subject to Planning Board approval</i>

Table 4.5-2: Arts-related uses

Industrial Mixed Use in Action: Joy Street Studios



Figure 4.5-4: A tenant of Joy Street Studios

Located at 86 Joy St., Joy Street Studios provides one of the largest studio spaces in Somerville and is home to other uses including a martial arts studio and an auto body shop. A refitted warehouse, it serves as the workspace for nearly 100 local artists and their craft. Along with nearby Brickbottom Artists Building, it serves as one of the cornerstones of Somerville's artistic community and in many ways is one of the focal points of the Brickbottom neighborhood. The creation of art and mixing of uses in buildings like 86 Joy St. serves as one of the inspirations behind the creation of a special zoning district for the neighborhood.

RECOMMENDATIONS

Aldermen for approval. Upon approval of the conceptual use plan, a site plan should be submitted to the Planning Division which lays out the placement of buildings, green space, pedestrian amenities, etc. It should also list the number and character of housing units, the number of expected jobs, and acres of open space provided.

This site plan will be subject to approval by the Design Review Committee and the Planning Board before official adoption and will be evaluated on its commitment to the goals of

the district, its contribution to *SomerVision* goals, its contribution to the pedestrian environment, its provision of public amenities, its consideration of neighboring context, and the quality of building design. The established required documentation and procedures for site plan review shall be followed.

This mechanism relies not on the willingness of developers to build these fabrication spaces, but on the fact that the overwhelming demand in the city for housing units will convince developers to create developments that provide

the city with unique and desirable space for fabrication and arts uses while also providing returns on development. In order to allow for creative and innovative development plans, the site plan can exceed the height limit otherwise imposed on this district by 35 feet. Property owners and development teams should see this as an opportunity to build high-quality developments in the spirit of Brickbottom, not as an excuse to skirt the underlying zoning.

In addition to allowing for industry to be subsidized by higher value uses, this mechanism will build on the small but significant artistic and fabrication-oriented community of residents that already exists in Brickbottom. Industrial uses have existed side-by-side with commercial and residential space in Brickbottom for decades. Brickbottom has proven that “horizontal” integration of industrial uses is possible. However, in order to meet the City’s ambitious goals for jobs and housing growth within Brickbottom, “vertical” integration is also essential. That is, housing and offices must be able to share the same lot as light industry. It is also possible that proximity to industrial uses will keep rents in these units naturally lower, which is welcome.



Figure 4.5-5: Vertical integration of uses

No one city has mastered this emerging area of zoning regulation. As a result, Somerville has an opportunity to lead the way, and Brickbottom is an ideal neighborhood to showcase how industrial mixed use can thrive under appropriate regulations. Indeed, buildings like Joy Street Studios and the Brickbottom Artists Building illustrate how vertical integration of uses is already occurring in the study area.

1.2 Separate pedestrians from industrial traffic

Given the district's proximity to public transportation, Brickbottom should be inviting to pedestrians. However, because this will be an active industrial area, some truck traffic is to be expected and welcomed, as well as loading areas, docks, active driveways, and accessory parking. As far as possible, these should be separated from streets with heavier pedestrian traffic. In order to do this, a hierarchy of streets should be established within the zoning ordinance:

- Primary pedestrian streets: Poplar Street, Joy Street, Chestnut Street, and McGrath Highway
- Secondary street: Linwood Street

Requirements for street activation and public realm provision will be much stricter on primary streets than on secondary streets.

Making Industrial Mixed Use a Reality

The idea of vertically integrated industrial mixed-use zoning is an increasingly popular idea in American cities, in part due to the changing nature of manufacturing and the general revival of urban industry. Nascent rezoning efforts in Philadelphia, New York, Denver, and San Francisco informed the plan's best practices for integrating industrial, commercial, and residential uses on a single parcel.

Mixed-use industrial developments are a new concept and therefore may be difficult to fund through traditional bank financing. Somerville may wish to facilitate these deals or provide guarantees for commercial tenants to reduce their risk. Local banks that are more familiar with the urban context may also be engaged as debt providers for these projects. In addition, developers may wish to reduce risk by providing the required uses in separate structures, or by working through a not-for-profit developer.

Responding to concerns raised at the December 4 public meeting about the ability to secure mortgage debt for any condominiums in mixed-use buildings, this plan revises the required amount of fabrication space downward from initial percentages proposed to the community. The 30 percent requirement of fabrication/commercial space is meant to comply with underwriting standards for mortgages in mixed-use buildings. As these kinds of buildings become more common and attractive, the perception of their risk will reduce.

Furthermore, the City may consider revising building and fire codes to adjust or loosen them for mixed-use developments, if possible.

As much as possible, truck access, loading, parking, deliveries, waste collection, and other activities and structures deleterious to the pedestrian experience should be confined to secondary streets.

Objective 2: Adjust dimensional and design requirements for special district

Building form in industrial zones is too often ignored. This results in blank facades, disorienting setbacks, and an environment that is otherwise hostile to pedestrians. This plan recommends design guidelines sensitive to the needs of industrial buildings but protective of the pedestrian experience. The team wants this area to be a little unpredictable and somewhat non-uniform, and as such the following dimensional and design requirements are not particularly prescriptive.

This plan recommends higher heights in this district than many places in Somerville currently. Some adjacent areas are already zoned for 135 feet, so the height of 100 feet is not abnormal. In addition, attendees of both public meetings were generally supportive of higher densities in this area in service of meeting goals for jobs, housing units, and the quality of the public realm. In order to lessen the impact of height on the streetscape, a stepback requirement after 55 feet has been established.



Figure 4.5-6: Transparency helps integrate industrial uses into a pedestrian setting

2.1 Increase allowable height and density

The overall height limit for the district is 100 feet. In order to maintain a human scale, the maximum cornice height is 55 feet on primary streets — any building face higher than this should be stepped back a minimum of ten feet. There are no stepback requirements on secondary streets. This cornice height is based on the historic height limit for Brickbottom and is consistent with much of the built environment of Somerville. In order to create and maintain a consistent and generous public realm, buildings along Joy Street should be set back from the lot line by three feet. Lots with

frontage on a primary street should build to the lot line for at least 40 percent of the street frontage. 10 percent of the parcel must be used for publicly-accessible open space; there is no set requirement for maximum lot coverage.

The dimensional requirements for pedestrian street frontage are strong enough to ensure that building bulk is not overwhelming in scale, so this plan does not recommend a floor-area ratio maximum. This requirement would be limiting for an industrial, fabrication, and arts district that may have buildings of unconventional shape and size to accommodate uses not found in other areas of the city.

2.2 Set standards for building design

This district should allow for building designs that accommodate both industry and an active street life.

- No maximum building floorplate will be established, in order to not preclude industrial buildings which may need to be quite large. However, extensive areas of glass and window, providing visual access to interior uses, shall be part of all street facades and accompany building entrances — at least 60 percent of first-floor primary street facade and at least 40 percent of second-floor primary street facade.
- In addition, any buildings with primary street frontage longer than 50 feet are required to break up this facade with retail space, usable pedestrian respites, stormwater recharge gardens, or significant architectural details.
- Materials and colors should be consistent with traditional buildings' historic merit. Predominant exterior building materials should include brick, glass, wood, artistically used metal, stone, or stucco, used in a way which creates visual interest and distinctive identity.
- Minimum ground floor height should be in the range of 15 to 18 feet to allow

industrial machinery, loading dock access, and venting.

- Buildings with light industrial uses are required to have proper ventilation systems designed to ensure safety and prevent odors and other nuisances to neighboring properties.
- Between residential, commercial, and industrial uses occurring within the same building or on the same parcel, provide sound insulation and resilient channels in walls and ceilings to prevent excess noise



Figure 4.5-7: An industrial building in Spain uses distinctive building materials to engage the street

and vibration.

- The Mixed Cluster Development mechanism, which allows for site plans that do not conform to these proposed rules as long as the pedestrian experience remains high-quality, is designed to lend a certain kind of “positive unpredictability” to the built form of Brickbottom.

2.3 De-emphasize loading and parking

The loading and parking needs of industry can be detrimental for the pedestrian experience. This district should reduce conflicts when possible.

- No parking minimums for commercial space are established, in recognition of the nearby transit, walking, and bike infrastructure; neither, however, are maximums, as we recognize that industrial uses may need to provide parking for workers, deliveries, and visitors.
- Residential parking requirements shall follow the ratios established for TOD zones.
- When loading, parking, and active driveways cannot be confined to secondary streets, every effort should be made to incorporate creative design to reduce the negative visual impacts of the loading or

RECOMMENDATIONS

parking space.

- Every effort shall be made to provide parking underground and/or in structures suitably screened both visually and acoustically from the street and abutters. Any views from the street into parking structures shall be minimized through use of landscaping or architectural treatment.
- Neighboring parcels are encouraged to create shared parking.

2.4 Require high quality open space

Open space is an important element in creating a pedestrian-friendly environment in an industrial area.

- In designing and locating required usable open space, each open space area should be connected to another existing or proposed open space area, to the greatest extent possible, with the intent of establishing a network of usable open space.
- Publicly accessible open space shall be available to the public at a minimum from 9:00 am to 5:00 pm.
- Usable open space should augment the public realm and the pedestrian experience of the district; in addition to parks, plazas, seating areas, and other passive spaces, this requirement can be met with pedestrian

and bicycle shortcuts between streets.

Objective 3: Catalyze development around T stop

The proximity to the new Washington Street Station, as well as Lechmere Station, makes transit-oriented development (TOD) a logical fit for parts of Brickbottom. With the 2010

adoption of new TOD districts in Somerville's zoning ordinance, the tools are already in place.

3.1 Take advantage of Somerville's Transit Oriented District zoning

This plan recommends applying Somerville's Transit Oriented District zoning to the remaining parts of the study area. As defined by the Commonwealth of Massachusetts' model bylaw, transit-oriented development is a



Figure 4.5-8: TOD in Brickbottom could complement the City's ongoing efforts in Assembly Square

“development pattern created around a transit facility or station that is characterized by higher density, mixed uses, a safe and attractive pedestrian environment, reduced parking, and a direct and convenient access to the transit facility.”

Somerville’s TOD districts offer several advantages, including:

- Flexible use clusters that facilitate mixed use development
- Increased building heights and floor-area ratios (FAR) to create appropriate density near transportation hubs
- FAR bonuses for green building through LEED certification
- Protections for affordable housing, arts related uses, and open space.

Zoning these areas TOD135 — the existing maximum height — will ensure these advantages. In addition, the flexibility and simplicity of this zoning designation will allow for these parcels to be developed quickly, establishing an additional residential base for the area that can support the longer-term changes envisioned for the rest of the study area.

Zoning Overhaul Underway

Somerville recognizes that outdated zoning is a detriment to the City’s redevelopment and is working to update its code. Director of Planning George Proakis told the Boston Globe in June 2014 that the city’s zoning code was being overhauled because it was — until only recently — “state of the art for 1990.”

3.2 Amend existing TOD ordinance

The team has also identified several limitations in the TOD dimensional requirements that could prevent Brickbottom from developing sufficiently to reach the City’s ambitious job growth and housing goals. Therefore, this plan recommends that certain adjustments be made to the dimensional requirements for TOD135.

Primarily, building in TOD135 currently requires a minimum lot size of 50,000 square feet, which is relatively rare in Somerville and in the study area. In some cases, small parcels in Brickbottom could be combined to create larger developments at this height. However, in general, several smaller, independent developments will preserve the “funky” character of Somerville better than one large development could. Therefore, this plan recommends relaxing the minimum lot size.

This plan also recommends increasing the overall FAR for the TOD zone. As currently written, the city’s highest density zones will

result in tall, thin buildings surrounded by open space that could easily lack the character or activation intended. Particularly around the Washington Street Station, denser development with greater lot coverage is appropriate.

In addition, this plan recommends defining a new Fabrication use cluster under the TOD zoning text that more explicitly includes uses like makerspaces and artisanal manufacturing. The city’s current TOD light industrial use cluster already contains many creative and productive uses, like audio visual studios and printing presses, which should also be supported. For places like Brickbottom where the City hopes to encourage these uses, an FAR bonus, similar to the bonuses offered in Somerville’s Arts Overlay District, might be considered for building space for light industry and fabrication.

Additional zoning considerations

Planned Unit Developments

These zoning and land use recommendations are inspired by the City's TOD districts and the creation of special districts to guide large developments, a technique that the City employed with Assembly Square. In designing these recommendations, the team also considered treating the study area as a Planned Unit Development, or PUD, which would enable a smaller number of developers or even a single developer to create a unified vision of the Brickbottom area at greater variety, density and intensity than would normally be allowed. Somerville adopted a PUD code in the early 2000s.

This plan does not use the PUD structure for several reasons. As previously stated, parcel-by-parcel development will provide a better transition between abutting neighborhoods and maintain more of the “funky” character that makes Somerville unique. Beyond these considerations, PUD creates a large administrative burden for the Planning Division and leaves it open to legal challenges, as it can allow for very broad deviations from the set zoning without legislative approval. Mixed Cluster Development will allow for similar

results with less risk by creating a legislative approval requirement for these developments.

Business B districts

The area across Washington Street from the study area is currently zoned Business B, a designation meant to accommodate auto-oriented retail strips. It is not appropriate that an area so close to a transit stop be zoned for auto-oriented retail. While this area is not under consideration as part of this plan, we recommend that it be included in the TOD district around the Washington Street Station established under the plan. Indeed, the City should consider removing this Business B district from the zoning code entirely; in a future Somerville which is well-served by transit infrastructure, restricting development to auto-oriented retail strips is a waste of valuable space.



Figure 4.5-9: New York's Starrett-Lehigh Building, a successful example of industrial mixed use

Summary of Recommendations

Public Realm

Objective 1: Enhance the public realm through urban design and streetscape improvements

- 1.1 Create transparent and active street walls
- 1.2 Provide sufficient sidewalk space for pedestrians and greenery
- 1.3 Integrate stormwater management and green space
- 1.4 Leverage developer interest to create new green spaces
- 1.5 Commission public realm improvements from local artists and makers

Objective 2: Improve pedestrian connections from Brickbottom to the rest of Somerville

- 2.1 Create a substantial pedestrian greenway on Squire's Bridge
- 2.2 Improve Community Path design and connect path to Brickbottom

Transportation and Circulation

Objective 1: Increase multimodal circulation within and access to Brickbottom

- 1.1 Provide safe and comfortable sidewalks throughout Brickbottom and along the de-elevated portion of McGrath Highway
- 1.2 Provide safe and easy-to-navigate crosswalks at key intersections
- 1.3 Create smaller blocks by using pedestrian pathways
- 1.4 Convert "Scary Way" into a shared-use path
- 1.5 Add bike lane infrastructure
- 1.6 Concentrate bike parking along Poplar Street leading to the Community Path
- 1.7 Preserve automobile mobility
- 1.8 Designate northern part of Linwood Street as a service and automobile oriented street

RECOMMENDATIONS

Objective 2: Capitalize on the Green Line Extension and McGrath de-elevation

- 2.1 Convert unused McGrath Highway right-of-way into developable space
- 2.2 Advocate for a new Hubway station at the Washington Street Green Line station

Housing

Objective 1: Promote affordable and market-rate housing opportunities for households of all sizes, incomes, and accessibilities

- 1.1 Use density to target the Sustainable Neighborhoods housing goal
- 1.2 Prioritize affordable housing opportunities for families
- 1.3 Create permanently affordable housing on city owned land
- 1.4 Require housing to be built according to Universal Design principles
- 1.5 Raise and incentivize Inclusionary Zoning requirements
- 1.6 Create affordable work/live space for local artists

Objective 2: Integrate housing with a mix of other uses, making Brickbottom a dynamic place for people to live, work and play

- 2.1 Use zoning to maintain a mix of land uses, including arts and industry
- 2.2 Ensure that residential development is compatible with other uses and styles

Economic Development

Objective 1: Strengthen Somerville's tax base

- 1.1 Modify zoning to allow mixed-use

Objective 2: Facilitate high-wage middle-skill 'maker' jobs

- 2.1 Expedite jobs linkage fee proposal

Objective 3: Provide affordable office space for new enterprises

- 3.1 Create zoning bonuses for startup space

3.2 Nurture startups' next steps
Objective 4: Improve Brickbottom's business district <ul style="list-style-type: none"> 4.1 Take advantage of city façade improvement funds 4.2 Establish BID
Objective 5: Emphasize education resources <ul style="list-style-type: none"> 5.1 Link vocational education to real jobs 5.2 Establish a makerspace in Union Square Library

Zoning and Land Use

Objective 1: Establish a Brickbottom Special District <ul style="list-style-type: none"> 1.1 Foster industrial mixed-use through clustered development 1.2 Separate pedestrians from industrial traffic
Objective 2: Adjust dimensional and design requirements for special district <ul style="list-style-type: none"> 2.1 Increase allowable height and density 2.2 Set standards for building design 2.3 De-emphasize loading and parking 2.4 Require high quality open space
Objective 3: Catalyze development around T stop <ul style="list-style-type: none"> 3.1 Take advantage of Somerville's Transit Oriented District zoning 3.2 Amend existing TOD ordinance

5

CONCLUSION



86

JOY STREET STUDIOS

NO
PARKING
LOADING
DOCK

PHASING

This plan envisions a phased approach for changes within the Brickbottom area, to capitalize on existing momentum while allowing time for thoughtful design review and community engagement. While many of the large-scale projects, such as the Green Line Extension and McGrath de-elevation, will take some time to complete, short-term and small-scale actions like streetscape improvements will catalyze development and energize public spaces. Phased development should also prevent monolithic or cookie-cutter construction, yielding a more organic and varied built environment.

NEAR-TERM (2015-2017)

In the short term, the City of Somerville should take immediate action to improve the public realm in Brickbottom. Not only is this a relatively low-cost undertaking compared to later development phases, it is also an opportunity for catalyzing change and building community support. Similar to the facade improvement program the City currently runs, street-level enhancement will also offer benefits to artists, artisans, residents, and business owners in Brickbottom and start to energize public space in the area, particularly along Joy Street.

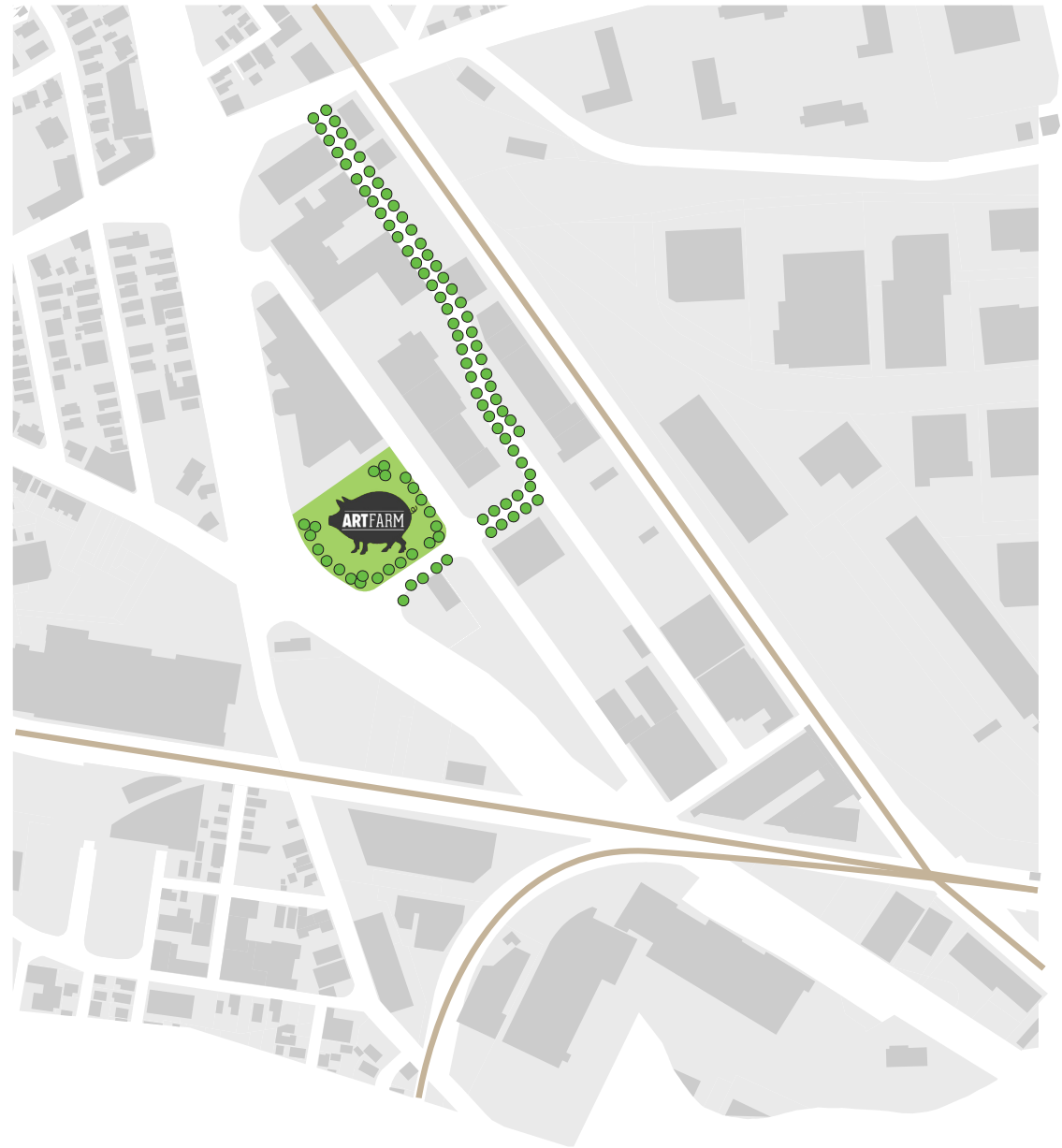


Figure 5-1: Brickbottom in 2017

In the near term, City efforts should center on:

- boosting walkability by sidewalk widening, ramps/curb cuts, and other improvements to make sidewalks more pleasant and accessible to all users
- enhancing the streetscape via plantings and additional street trees, public art, and locally-made street furniture
- improved lighting and signage, especially under “Scary Way”; improved maintenance and snow removal on pedestrian walkways

MEDIUM-TERM (2018-2023)

In the medium term, the completion of the T station and the Community Path will help catalyze early development projects and additional public realm enhancements. The re-zoning of the Brickbottom area will foster increased infill development closest to the T. Additionally, momentum from the NorthPoint development will make the “tail” of the study area more attractive to developers as well; this will create a unique opportunity for boosting the commercial tax base and increasing density. Zoning policies, permitting, and site design review should allow the City of Somerville leverage to shape development, emphasizing arts, maker space, and light industry, with

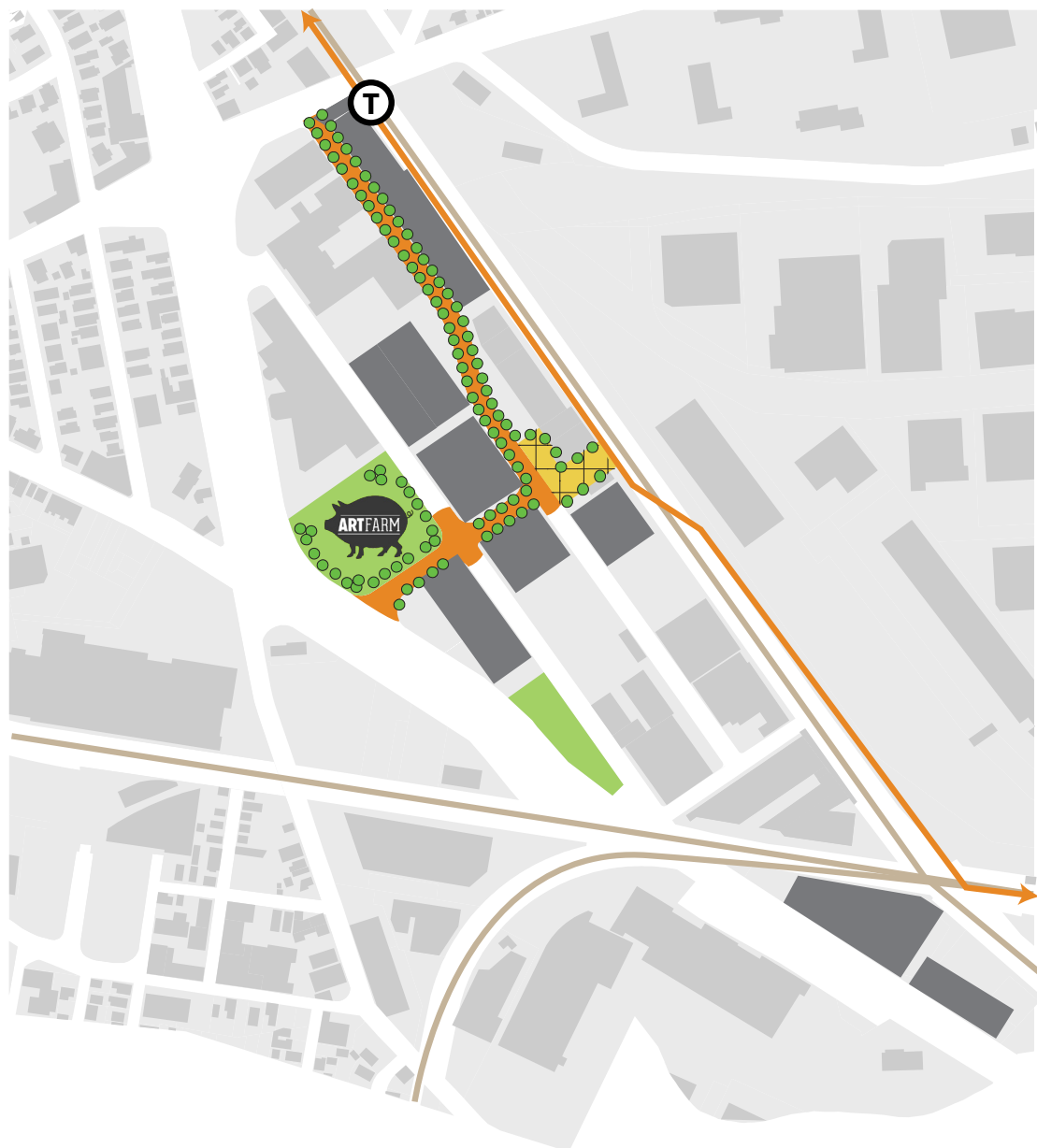


Figure 5-2: Brickbottom in 2023

CONCLUSION

some affordable housing.

In the medium term, efforts should focus on:

- transforming the parking lot in front of Joy Street Studios into a public plaza, with plantings, trees, and other placemaking efforts, as well as events like artist markets
- fostering development in line with the previously-outlined goals in the area surrounding the Poplar corridor, along Joy Street, and in the “tail”
- working with the MBTA to establish strong connections between the T station and the neighborhood, as well as creating a plaza at the entrance to the station as a gateway to Joy Street and the rest of Brickbottom

LONG-TERM (2024-2040)

In the long run, additional opportunities will allow for increased building density. Full build-out in the Brickbottom area may take as long as 25 to 30 years. It is expected that MassDOT will cede the excess right-of-way from the de-elevated and reconstructed McGrath Highway to the City; because of this, the team recommends holding off on permanent development of the northwestern portion of the Brickbottom area until the right-of-way is fully available. Long-term, the former waste



Figure 5-3: Brickbottom in 2040

transfer site will likely prove more valuable with permanent structures dedicated to art, civic uses, urban agriculture, and innovation.

In the long term, City efforts should center on:

- increasing density by encouraging redevelopment of parcels across the study area and allowing increased heights via the recommended zoning policies (with setbacks and cornice heights for light)
- using economic development policies to protect and promote a rich mix of artists, artisans and makers, and light industry, creating jobs for Somerville residents with a range of backgrounds and skills
- ensuring that additional development include sufficient affordable housing units to meet the City's goals and resident needs
- working with MassDOT to shape the de-elevation of McGrath, making sure that it is transformed into a more pedestrian- and bike-friendly space with a developable right-of-way

A New Future for Brickbottom

In building a plan for Brickbottom, the team wanted to preserve what made Brickbottom unique — its industrial heritage and fabrication space — while preparing it to meet the transformative impacts of major regional planning initiatives, such as the de-elevation of McGrath Highway and the Green Line Extension. The team also aimed to ground these recommendations in the targets for housing, economic growth, open space and general land use for Brickbottom as a “transformative area” set by *SomerVision*, the City of Somerville's comprehensive plan.

To concretely meet these planning goals, the team used the following four main goals as its guiding framework:

- Creating a mixed-use district with a focus on industry and the arts
- Providing affordable space in which to work and live
- Creating a vibrant and walkable public realm
- Increasing density to leverage opportunities

created by the McGrath Highway de-elevation and the new Green Line station

The district will retain and build on its light industrial and artistic community through the Brickbottom Special District zone, which allows for vertically integrated industrial mixed-use development. Makers, innovators, artisans, and craftsmen will have high-quality space to work, interspersed with residential and commercial development to provide lively street life to the neighborhood. Multi-family public plazas and parks in Brickbottom will open space for community members and will connect to regional parks such as the Community Path.

These objectives and recommendations in the public realm, transportation and circulation, zoning and land use, housing, and economic development will ensure that the Brickbottom district will be a mixed-use, walkable neighborhood playing a key role in Somerville's future.



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INTERVIEW PROTOCOL

INTERVIEW QUESTIONS

In addition to questions tailored to each stakeholder, the following standard questions were used in interviews.

How would you say you're connected to or have a stake in the Brickbottom area?

Have you seen the area change over time? If so, how and over what period of time?

What do you think are Brickbottom's greatest current strengths or assets?

What are the area's greatest current challenges?

What are the area's greatest opportunities for the future?

What do you worry about most for the area's future?

I had sent you 3 questions via email about land use; did you have a chance to fill them out or look at them?

(If Yes): Great, can you

email them back to me so I can record your responses?

Thanks.

(If No): Ok, no problem. You can just complete them after the interview and email them back to me so I can record your responses.

(If Yes): Do you have any additional comments or ideas about land use?

Who do you think will be directly affected by changes in the Brickbottom area? Indirectly?

Who else do you think we should talk to?

What would you say makes Somerville "funky"? (Alt: In other words, what makes it uniquely Somerville?)

Can you give five words that describe the essence of Somerville? Of the the Brickbottom area?

Is there anything else you'd like to add?

SUPPLEMENTAL LAND USE QUESTIONNAIRE

This questionnaire was given to identified stakeholders in the Brickbottom neighborhood. Interviews were conducted from September to November of 2014.

1. Please rank the top 3 land uses you think would be best (or most desirable, appropriate, or important) for the Brickbottom area.

- Single-family residential
- Multi-family residential or apartment
- Shopping/retail
- Dining, entertainment
- Light industrial (e.g. screenprinting, welding)
- Artists' and artisans' workspaces, galleries
- Heavy industrial (e.g. traditional factories)
- Automotive uses (e.g. car sales & repair)
- Office & lab space
- Urban agriculture & community gardens
- Mixed use (specify which of these other uses)
- Other

2. Which of the above land uses do you think would be the least important, desirable, or appropriate for the area?

3. Rank the top 3 features you think will be most crucial to the future success of this area.

- Better connection to Union Square
- Better connection to Inner Belt
- Transit-oriented development near new Green Line station
- Integration with the extended Community Path
- More affordable residential units
- More market-rate residential units
- More artists & arts-related uses and events
- More shopping & dining opportunities
- More performance & entertainment spaces
- More "maker" industries
- Safer, more attractive streets for pedestrians & bikers
- Continued access via cars
- Sufficient parking for cars, either on-street or in lots
- More green space and trees
- Other

PLANNED BUILT SQUARE FOOTAGE ESTIMATES

TOD ZONES		
	Square Feet (in thousands)	%
Commercial	500	30%
Residential	1,200	70%
<i>Total Floor Area</i>	<i>1,700</i>	<i>100%</i>
BRICKBOTTOM SPECIAL DISTRICT		
Fabrication / Arts Related	2,000	30%
Residential	4,100	60%
Retail	700	10%
<i>Total Floor Area</i>	<i>6,800</i>	<i>100%</i>
TOTALS		
Commercial / Retail	1,200	14%
Fabrication / Arts related	2,000	24%
Residential	5,300	62%
<i>Total Floor Area</i>	<i>8,300</i>	<i>100%</i>

PROJECTED JOBS AND HOUSING UNITS

JOBS			SOMERVISION GOAL
	Number	Square Feet Allotted	Number
Commercial Jobs	3,200	350 Per Job	
Fabrication Jobs	1,600	1,200 Per Job	
<i>Total Jobs</i>	<i>4,800</i>		<i>4,500</i>
<i>Figures include 5% set aside for parking and non-leasable space</i>			
HOUSING			
<i>Total Units</i>	<i>2,900</i>	<i>1,100 Per Unit</i>	<i>1,147</i>
<i>Figure includes 40% set aside for parking and common space</i>			

DIMENSIONAL REQUIREMENTS FOR BRICKBOTTOM SPECIAL DISTRICT

Minimum Lot Size (s.f.)	N/A
Maximum Lot Size (s.f.)	N/A
Minimum Lot Area/Dwelling Unit (s.f.)	450
Maximum Ground Coverage (%)	85
Floor Area Ratio (FAR)	N/A
Maximum Height (ft.)	100
Minimum Frontage (ft.)	50
Maximum Cornice Height (ft.)	55
Minimum Upper Level Setback (ft.)	10
Upper Level Maximum Floorplate (%)	N/A
Publicly Accessible Open Space Requirement (%)	10

