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Smart Growth & Regional Collaboration

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EXECUTIVE OFFICE of ENERGY & ENVIRONMENTAL AFFAIRS

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Metro North Land Use Priority Plan

Planning Ahead for Growth in Metro North Communities

Metropolitan Area Planning Council

October 2014

Metro North Land Use Priority Plan:
Planning Ahead for Growth in Metro North Communities

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Executive Summary

The nine municipalities that make up the Metro North subregion contain significant assets that make them attractive places for growth in today's housing and commercial markets. That is a good thing for Metro North as it evolves from its heavily industrial past—and good for the Commonwealth as it looks to attract employers and a younger workforce that want an urban location. These municipalities have relatively high population and employment densities, local and regional retail clusters, well-connected transportation networks for all modes, and high quality open space and recreational assets that draw people from all over the Boston region.

As the Boston region's population and economy continues to grow, Metro North is seeing increased development interest. This development activity will yield maximum benefit for local municipalities, the Boston Region, and the Commonwealth if it is targeted to the most suitable sites and coordinated to make best use of existing assets. There are several challenges to new development which include antiquated infrastructure, congested transportation networks (both roads and transit) and the burden of its industrial past. Metro North's ability to absorb growth and use it to build opportunity for those who live there now requires planning and a combination of public and private investment.

To that end, MAPC and its local and state partners evaluated growth and preservation opportunities across the subregion and identified a set of regionally-significant priority areas that should be the focus of development activity and open space efforts over the next 10 years.

This report provides an overview of the process and methodology used to identify Priority Development Areas and Priority Preservation Areas in nine municipalities (Chelsea, Everett, Malden, Medford, Melrose, Somerville, Revere, Winthrop, and the Boston neighborhoods of Charlestown and East Boston). It also highlights each of the regional Priority Development Areas individually, providing a more in-depth look at the opportunities and challenges with each site.

Throughout this process, MAPC worked with municipal staff and elected officials to identify local priority areas for both development and preservation. In total, 83 local sites (60 development, 23 preservation) were identified by the nine municipalities. These sites totaled more than 2,300 acres of land and could potentially accommodate 14,000 new housing units and 13 million square feet of additional commercial development.

Trimming this list down to a set of regional priority areas was challenging given the quality of all the sites and the ability of many of them to accommodate the type of growth that is consistent with both MetroFuture and the Patrick Administration's goals. In the end, MAPC developed a list of 36 regionally-significant priority areas (23 development, 13 preservation). These sites totaled approximately 1,200 acres and could accommodate 11,000 new housing units and 12 million square feet of additional commercial development.

The Commonwealth then selected 12 of the development areas and 13 of the preservation areas as state priorities. In selecting the state priority development areas, the Executive Office of Housing and Economic Development placed weight on whether development was likely in the next five

years, potential for transformative development, access to existing or planned transit connections, and the goal of revitalizing waterfront areas. In selecting the state priority preservation areas, the Executive Office of Energy and Environmental Affairs was cognizant of the more limited preservation opportunities in this subregion and therefore placed greater importance on integrating environmental and development goals in the priority development areas.

As the report highlights, many of these sites present opportunities, as well as significant challenges. Many of the Metro North municipalities have historically been manufacturing centers and, as that sector of the national economy has declined, the municipalities have been left with underutilized land with environmental issues and antiquated infrastructure around them.

In order to ensure new growth is not inhibited by these challenges, it is important that local, regional, and state entities partner to pool resources and help development and preservation locations progress. Bringing resources such as MassWorks, District Local Technical Assistance, and funds from the Boston Metropolitan Planning Organization together can help leverage new growth and preservation outcomes without undue burdens on the existing systems or to existing residents.

As Metro North and the MAPC region overall continue to grow, there are a number of important considerations that must be factored into local and state decision making to ensure that the region is stronger, more sustainable, and more equitable over time.

1. While the development of new housing units and the creation of jobs are both important goals for the region, municipalities must not lose sight of the role of open space and recreational opportunities in our municipalities. Densely populated neighborhoods, like those found in Metro North, rely on neighborhood-serving and regional parks for recreation, exercise, and social interaction. Open spaces also serve to green neighborhoods, clean the air, mitigate stormwater runoff, make the surrounding municipalities more resilient to natural disasters, and serve as wildlife habitat.

2. As regional priority development sites are planned, there must be a thoughtful and realistic consideration of the ratio of housing and commercial space proposed. Too often, the market is demanding more housing but municipalities seek tax revenues from commercial development. This can drive down the amount of housing approved in development locations, while creating potentially unrealistic expectations for commercial development. While the state and regional priority development areas identified in this report can meet a significant part of that housing demand, housing in many of the local priority areas and in many infill locations will also be needed.

3. Along with the development of new housing units in Metro North, municipalities must consider how housing can be provided at price points for both low-income and middle-income households. New development must incorporate price points and unit sizes to accommodate families, young workers, seniors, and low-income households, as well as an expectation for setting aside units for affordable housing. Striking a balance across housing types and price points will create more inclusive and equitable communities, thus strengthening the regional

economy by allowing more people to live in close proximity to public transportation, retail centers, schools, and jobs.

4. In order to prepare for future growth and preservation in Metro North, municipalities should undertake master planning or neighborhood planning initiatives to engage the public in dialogue around the changes they would like to see occur. These processes can set up successful zoning and permitting changes that can send the signal to developers that the community is ready for new investment so long as it is consistent with their vision. MAPC recognizes that planning capacity varies across Metro North municipalities, and stands ready to work with our municipalities and state partners to identify resources for technical assistance.

This report serves as a first step in identifying the locations and investments needed to continue to grow the region and ensure that residents and employees in Metro North experience a high quality of life, and are not unduly burdened by growth over time. While this list does highlight regional priority locations, it represents a snapshot in time and other local sites that were not elevated to regional significance still stand to make a case as important areas for growth and preservation. As circumstances change over time, those sites should be re-evaluated to determine if they can also assist in furthering the goals of local municipalities, the region, and the Commonwealth.

Overview of Project

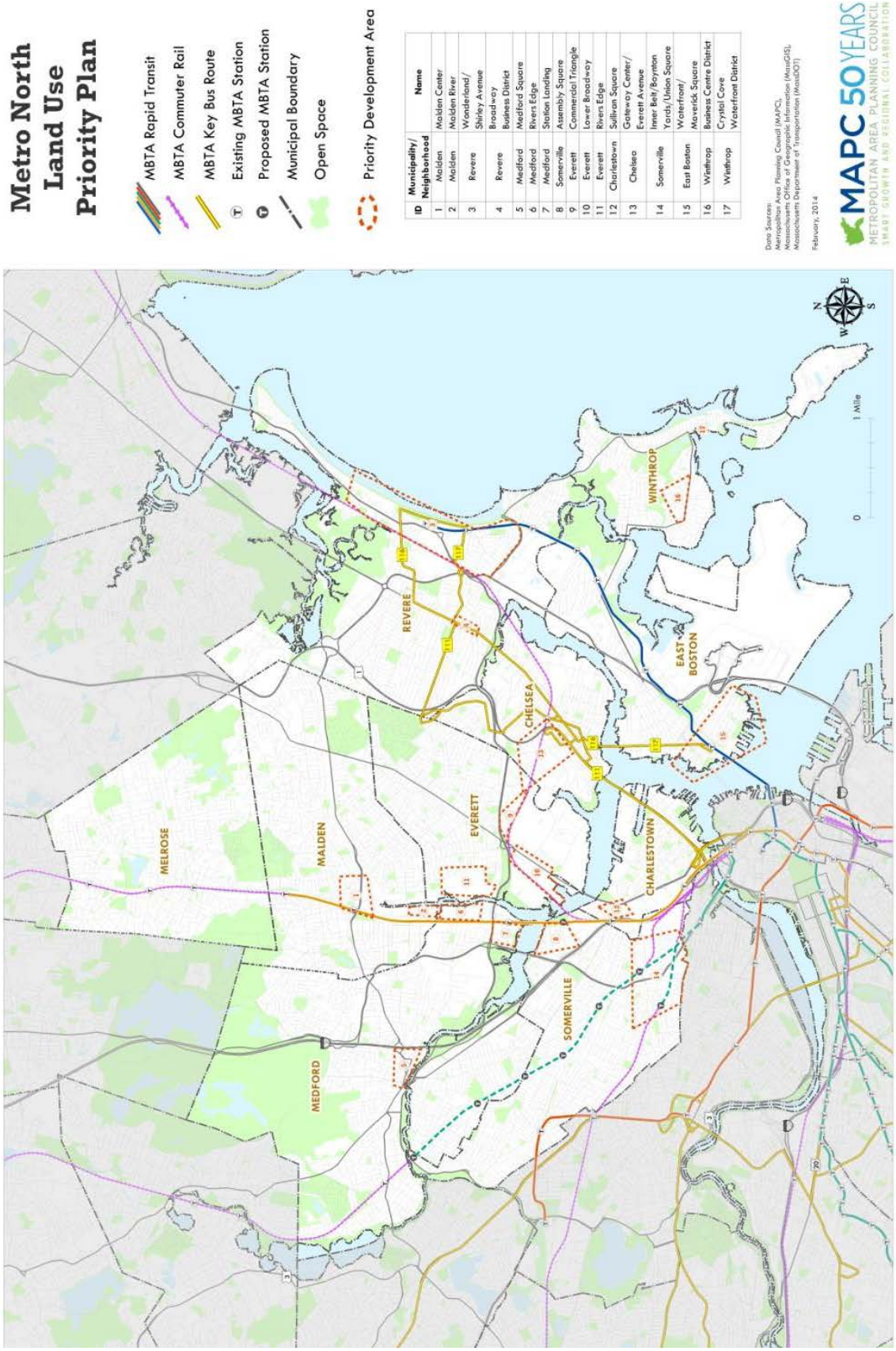
In 2013, Secretary Bialecki and staff from the Executive Office of Housing and Economic Development (EOHED) began a series of conversations with 9 municipalities north of Boston to determine a preliminary set of priority growth areas representing locations where these municipalities were working to create new housing and job opportunities. These 9 municipalities, which encompass Chelsea, Everett, Malden, Medford, Melrose, Somerville, Revere, Winthrop, and the Boston neighborhoods of Charlestown and East Boston, were branded "Metro North." Within these nine municipalities are places where local, regional, and state government, in partnership with private sector actors, could work collaboratively to make investments that would improve quality of life, increase access to housing and jobs, and create improved transportation options.

As a result of initial conversations between EOHED and municipal leaders in the Metro North municipalities, a preliminary set of 17 growth areas were identified (shown in Figure 1). Acknowledging that these were only a subset of all the local growth areas in Metro North, EOHED contracted with MAPC to engage in a broader process to capture all local priority areas for development *and* preservation as well as collecting information about infrastructure and regulatory challenges that need to be overcome. This broader process resulted in the Metro North Land Use Priority Plan.

The Metro North Land Use Priority Plan (hereafter, "The Project") was a collaborative effort between EOHED, the Executive Office of Energy and Environmental Affairs (EEA) and MAPC. The purpose of the project was to examine and evaluate opportunities for the promotion of additional housing, jobs, and open space in the Metro North subregion. Priority development sites were classified under two categories; those that could be made ready in the near-term (0-5 years) and those that could be made ready in the longer-term (5-10 years). MAPC also worked with our municipal and state partners to identify the potential barriers that may stand in the way of realizing the possibilities on each site. These barriers include critical transportation infrastructure investments, utility upgrades, flood mitigation, brownfields remediation, and regulatory changes such as zoning and permitting. The identification of the opportunities for development and preservation, as well as the infrastructure and regulatory challenges will allow MAPC, the Boston Metropolitan Planning Organization (MPO), and key state agencies to provide funding and technical assistance to locations where municipalities have indicated a preference for growth or preservation of land.

The priority areas identified through this process will also help align development and preservation goals of individual municipalities with regional and state goals such as the Sustainable Development Principles, Governor Patrick's statewide housing goal of producing 10,000 multifamily housing units per year, GreenDOT, MassDOT's mode shift goal, and MAPC's regional plan MetroFuture. The unique process used to screen the local development and preservation sites across Metro North allowed MAPC to compare each site to regional and state goals and policies to determine which sites would actually move the dial towards a more sustainable and equitable region.

Figure 1: Initial Set of PDAs



Characteristics of the Metro North Subregion

The Metro North municipalities present significant opportunities for sustainable growth but also substantial challenges. Metro North is a subregion that is undergoing a change from an industrial past to a future of mixed-use transit oriented development. This subregion is an appealing place to live for individuals and families with limited means because it has excellent access to public transportation with housing costs that are lower than one may find in many other parts of Metro Boston. As the market for transit oriented locations expands beyond Boston and Cambridge, Metro North communities stand to benefit from increased development activity and help the region and Commonwealth grow the jobs and housing we need to remain competitive on the national and global stage.

Metro North is home to 417,000 people and extends across 42 square miles, the southernmost edge of which is separated from Downtown Boston by the Charles River and a narrow section of Boston Harbor. The character of the municipalities ranges from high-density mixed-use urban municipalities to extensive industrial areas and moderate-density residential neighborhoods of one-and two-family homes. Metro North is traversed by two limited access highways (I-93 and MA Route 1), two subway lines, three commuter rail lines, and numerous bus routes.

Metro North's location close to the core of the MAPC region, its density, and its diversity of transit options provide significant transportation advantages. Residents in these municipalities are more likely to take transit to work than are people elsewhere in Metro Boston (25% versus 12%) and they can walk to numerous local destinations (most portions of the subregion are rated as "Very Walkable" or "Walker's Paradise" by WalkScore). As a result, households living in Metro North drive 30% fewer miles per day than the regional average (29 miles per day versus 42 miles region-wide), and commute miles per worker show a similar pattern. New housing units and jobs in Metro North will therefore place less of a burden on the region's transportation system than if those same households and jobs were located in less accessible locations.

However, Metro North also faces substantial transportation challenges. While some neighborhoods are served by frequent subway or commuter rail service, others have no rail stations within walking distance and are reliant on MBTA bus service, which is often infrequent and indirect. As a result, transit accessibility to employment varies considerably within Metro North, as shown in the Job Accessibility by Transit map (Figure 3). Locations near Orange Line stops in Somerville and Charlestown, for example, have among the best job accessibility by transit in the entire region, while in many parts of Revere, Everett, and Malden fewer than half as many jobs are accessible within a 45 minute transit commute. The proposed Green Line light rail extension through Somerville to Medford and the extension of Silver Line bus rapid transit through East Boston to Chelsea will help to mitigate some of these inequities, but further investments are needed to improve opportunity throughout Metro North.

The demographic and economic characteristics of Metro North residents demonstrate that improved opportunity is needed. Thirty-nine percent of residents are non-White, and this share increased by more than one third over the past decade. Educational attainment is lower and unemployment rates are higher here than in Metro Boston overall. Consequently, nearly half (47%) of Metro North's 76,000 households are low income and 44% experience high housing cost burden (that is, they are spending more than 30% of their annual income on housing costs.) Despite low

vehicle ownership and mileage, low income levels mean that Metro North households spend an average of 56% of their annual income on housing and transportation, well above the commonly-accepted standard for affordability of 45%.

Figure 2: Housing Cost Burden

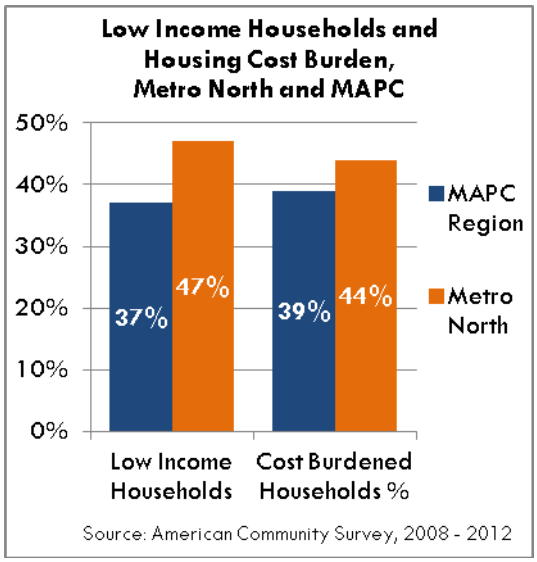
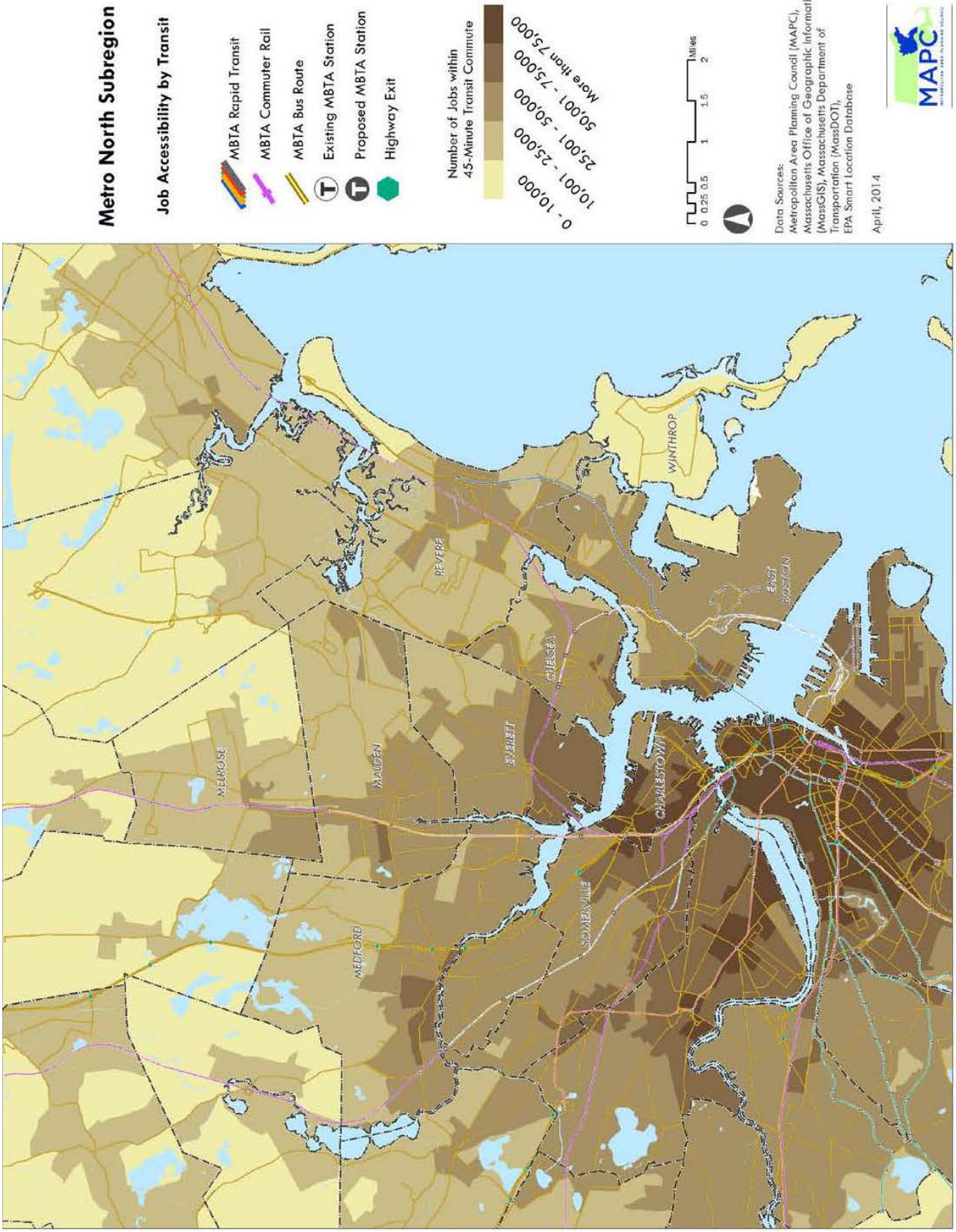


Figure 3: Access to Employment by Public Transportation



Unfortunately, economic opportunities within Metro North have faced substantial challenges. The subregion formerly served as an industrial center in the core of the region, with extensive areas dedicated to warehousing, food distribution, and manufacturing, among other industrial uses. Many of those uses have experienced substantial decline over recent decades, leaving behind a legacy of empty warehouses, paved areas, and brownfields. The region's economic resurgence, which has led to building booms in Downtown Boston and Cambridge, has not yet fully materialized in Metro North.

There are signs that change is on the horizon, however: the MAPC Development Database estimates that there are 8,900 housing units and 5.2 million square feet of new development either under construction or in the planning stages. A major mixed-use development is underway at Assembly Square in Somerville, with thousands of new units and more than one million square feet of retail and office space due to come on line before 2020. Meanwhile, major residential developments are underway in Malden, Chelsea, the East Boston Waterfront, Revere Beach, and elsewhere, and the residents of these new developments will bring new markets for retail, restaurants, and services[1].

Metro North may also soon be able to take advantage of firms looking to move out of high-cost space in Downtown Boston or Cambridge, while remaining near the core of the region. (For example, Partners Healthcare will soon relocate thousands of workers from Boston to new office space in Assembly Square.) Expanding the attractiveness of locations for employers within the whole of Greater Boston is a positive, as it increases the region's national competitiveness and provides options for attracting new companies to Massachusetts.

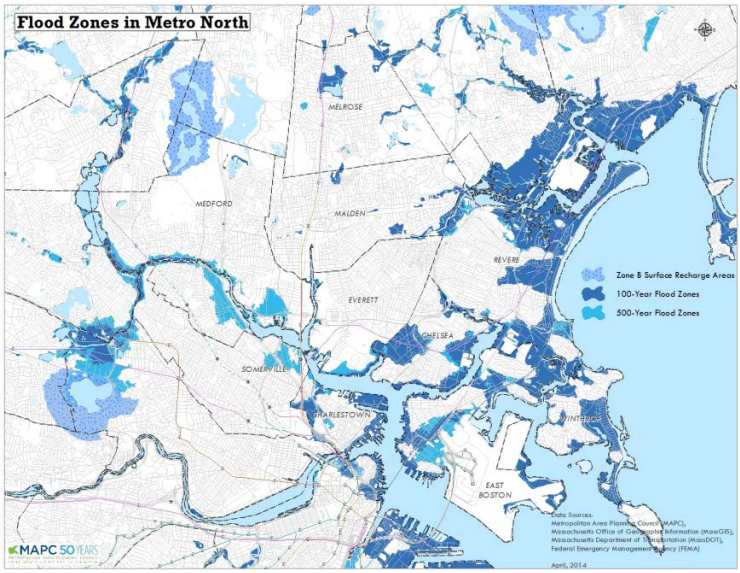
Over the long term, the need for new housing will remain strong. MAPC's recent population and housing demand projections anticipate a need for at least 41,000 additional housing units in Metro North over the next 20 years, an increase of almost 23%. This demand is driven by a variety of forces, including continued growth of minority and immigrant populations; an increased tendency among younger families to remain in the region's urban communities; and persistent declines in household size. If the supply of housing is not sufficient to meet this need, then rents and purchase prices are likely to continue rising past their already unaffordable levels, causing two negative outcomes: it would deter much-needed younger workers from remaining in the Boston region, and it could cause increased displacement of low-income households and renters out of Metro North to more remote locations.

The 23 priority development areas identified in this report are projected to meet about 27% of this subregion's housing demand. The additional 73% needed cannot be created through a few transformative development sites in these communities, and will require additional infill development that is transit accessible and benefits residents of all incomes and household sizes.

[1] It is worth noting that in September 2014, the Massachusetts Gaming Commission awarded a casino license to the location in Everett which will potentially bring new jobs, revenue, and infrastructure improvements to Metro North.

Finally, climate change, sea level rise, and increasingly frequent and powerful storms will present a major challenge to new and existing development in Metro North. As shown in Figure 4, 21% of the region's land area is within FEMA's 100y ear or 500-year flood zone, including many attractive coastal parcels and low-lying industrial areas in Revere, Chelsea, Winthrop, East Boston, and Charlestown that have been identified by the municipalities as priority areas for new development. Furthermore, Metro North's resilience to storm events is impeded by the age and condition of the infrastructure that was put in place over a hundred years ago. The development interest in the subregion presents new opportunities to retrofit this infrastructure and apply innovative design strategies to help the area become more resilient to natural disasters.

Figure 4: Flood Zone Map



Overall, Metro North is well positioned to take advantage of the changing marketplace which will afford municipalities with opportunities for new growth. This growth may not be realized without, and must not come at the expense of, good planning, improved infrastructure, and attention to social and environmental challenges. The process of identifying priority growth and preservation areas will help set the stage for additional infrastructure investment and localized planning efforts to prepare sites for future development and preservation.

Definitions

Through EOHED's Planning Ahead for Growth initiative, there are two commonly used terms that describe the designation of development and preservation locations in municipalities: Priority Development Areas (PDAs) and Priority Preservation Areas (PPAs). Each term is described in more detail below.

What are Priority Development Areas (PDAs)?

Priority Development Areas (PDAs) are areas within a city or town that have been identified as capable of supporting additional development or as candidates for redevelopment, but that may first require additional financial, regulatory, or infrastructure support. These areas are generally characterized by having good transportation access, active and available public utilities, and an absence of environmental constraints. In addition, many of these areas have undergone extensive area-wide or neighborhood planning processes and may have detailed recommendations for future actions. Rather than specific projects, PDAs represent locations in municipalities where growth and investments will be directed.

PDAs in Metro North can range in size from a single lot to many acres. They often include a mixture of housing, retail, office, and sometimes industrial uses. Redevelopment of under-utilized or abandoned properties, as well as adaptive re-use of existing buildings often fall under the auspices

of a PDA. The development vision for these sites should include a rational mix of housing versus commercial space, with particular attention paid to the inclusion of affordable housing and housing for families. Areas designated under state programs such as Chapter 43D (expedited permitting), Chapter 40R (smart growth zones) or Economic Opportunity Areas can be examples of PDAs. Included in these designations will be the local recommendations for the types of uses appropriate or envisioned for these sites should they be developed.

What are Priority Preservation Areas (PPAs)?

Priority Preservation Areas (PPAs) are areas within a city or town that deserve special protection due to the presence of significant environmental factors and natural features, or represent opportunities to increase access to open space for current and future residents. Environmental factors that are taken into account when reviewing PPAs include endangered species habitats, areas critical to water supply, scenic vistas, areas important to a cultural landscape, or areas of historical significance.

The Metro North municipalities present a challenge when it comes to designating PPAs compared to other portions of the MAPC region. There are very few opportunities to preserve large swaths of open space because the Metro North municipalities are virtually built out. Opportunities to increase open space mainly rely on retrofitting existing park space, incorporating new open space into future development, thinking creatively about new uses for publicly held assets like old schools, administrative buildings, or churches, and working to open up useable access to waterways through Chapter 91 and land development along the waterfront.

Other Factors that were Reviewed

In addition to identifying PDAs and PPAs, MAPC also worked with our municipal partners to uncover potential infrastructure and regulatory challenges that may need to be overcome in order to catalyze development and/or preservation on each site. These challenges may be related to transportation access, safety, or congestion, zoning and permitting changes that may need to take place to encourage the type of development desired by the community, or the need to upgrade water, sewer, or stormwater infrastructure. These infrastructure and regulatory changes are often critical to supporting increased development identified for PDAs while respecting the need to protect PPAs.

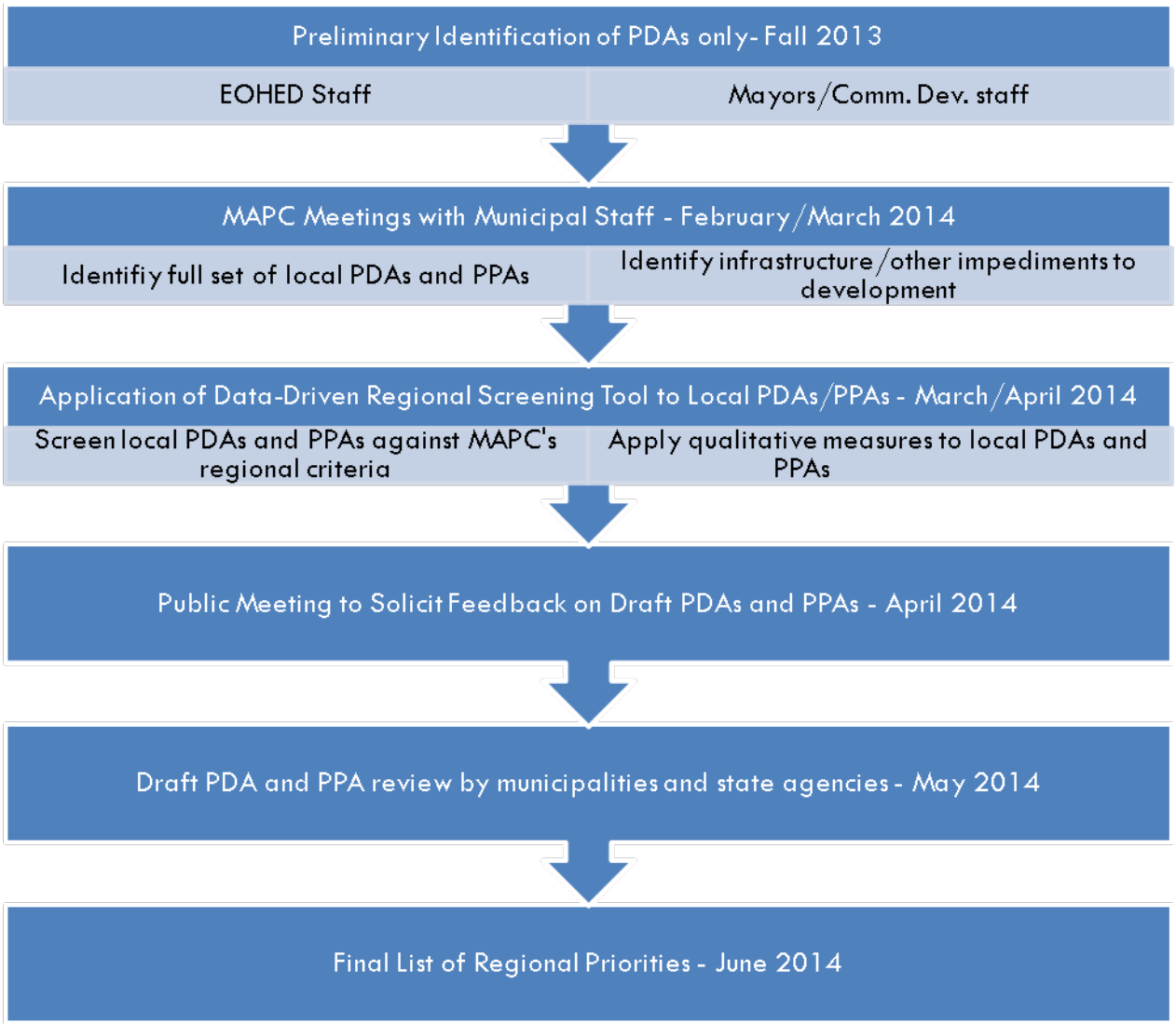
Working with the Metro North municipalities, MAPC also identified several "regional assets." These infrastructure components largely relate to off-street shared use pathways such as the Community Path in Somerville and the Northern Strand Trail that traverses parts of Malden, Everett, Saugus, and Lynn. While these trails are used for both recreation and transportation purposes, they are truly seen as regional amenities and were treated as such by being categorized separately on the maps. MAPC would encourage both local and state investment in these regional assets to further improve connectivity and advance additional non-auto transportation choices.

Process Overview

The process of identifying priority development and preservation areas in Metro North was a partnership between the 9 municipalities, MAPC, and staff from EOHED, EOEEA, and MassDOT. The initial list of PDAs and PPAs was generated by city and town staff which included officials from planning, conservation, engineering/public works, redevelopment authorities, and mayors/town

managers. MAPC facilitated meetings with each community's staff to guide the identification of local PDAs and PPAs and gather information about the potential build outs for each site and the physical and regulatory constraints on each site. Figure 5 provides an overview of the process undertaken to identify regional PDAs and PPAs.

Figure 5: Regional PDA/PPA Identification Process



Identification of Regional Priority Development and Preservation Areas

As noted in Figure 5, the identification of regional PDAs and PPAs was a multi-step process that involved coordinated feedback throughout from our municipal and state partners. The following steps were taken by MAPC to identify the list of regional priority areas in Metro North.

Preliminary Identification of PDAs

As was noted in the project overview, the Metro North PDA/PPA identification process began with initial outreach by Secretary Bialecki and EOHED staff to each community which resulted in the preliminary identification of 17 priority development areas. This set of 17 areas served as the starting point for the Metro North Land Use Priority Plan. The full list of the 17 initial PDAs can be found in Appendix 1, List #1.

MAPC Meetings with Municipal Staff

Building on the original list of 17 PDAs, MAPC scheduled meetings with each of the 9 Metro North municipalities to develop a comprehensive list of all local PDAs and PPAs. These meetings occurred at the staff level where MAPC facilitated a discussion that not only included identifying PDA and PPA locations, but also uncovered qualitative information about each site highlighting the opportunities and challenges for development and/or preservation. To help facilitate the conversation, MAPC provided each municipality with a set of maps highlighting the types of considerations and criteria used to score and identify regional priority sites. These maps included information on:

- Travel choices: The number of jobs within a 45 minute transit commute.
- Walkable Communities: The area's Walk Score.
- Open Spaces: Rare species habitats, BioMap 2 habitats, and the amount of undeveloped land.
- Healthy Watersheds: Areas within a Zone B surface recharge area, 100-year flood zones and 500-year flood zones.
- Current Assets: Existing population and employment density.
- Growth Potential: Recent and proposed developments, Smart Growth Zoning (40R) districts, Expedited Permitting (43D) districts, and Growth Districts Initiative (GDI) districts.
- PPA Opportunity Areas: Tax exempt lands, protected open space, and walking access to open space expressed as a ratio of acres of existing open space per resident across each municipality.

In order to ensure MAPC was comprehensive in our data collection, we asked the following set of questions about each PDA and PPA location:

1. If a community had one of the original 17 PDA locations, were the boundaries of the initial PDA drawn accurately?
2. Are there additional PDAs that need to be added?
3. What type (mixed-use, infill, residential only, commercial only) and amount of development (housing units, square feet of commercial, etc.) is likely to occur?
4. Are there currently proposals in the review process or permitted for each location?
5. Is the zoning in place to support the type of development envisioned or permitted for this location?
6. Are there regulatory, environmental or infrastructure impediments to development?

7. What areas does the municipality want to see preserved as Priority Preservation Areas?
    a. Are there any impediments to preserving the identified locations?

Prior to meeting with municipal planners and community development directors, MAPC reviewed the open space and recreation plans of each community to see what areas may have already been identified for future preservation. Except for Melrose, none of the plans contained a list or map of areas for future protection. The emphasis of these plans was on rehabilitation of existing parks rather than new park acquisitions or protection of environmentally sensitive areas.

The individual meetings with each of the 9 municipalities resulted in a comprehensive list of over 80 PDAs and PPAs. The full list of local PDAs and PPAs can be found in Appendix 1, List #2.

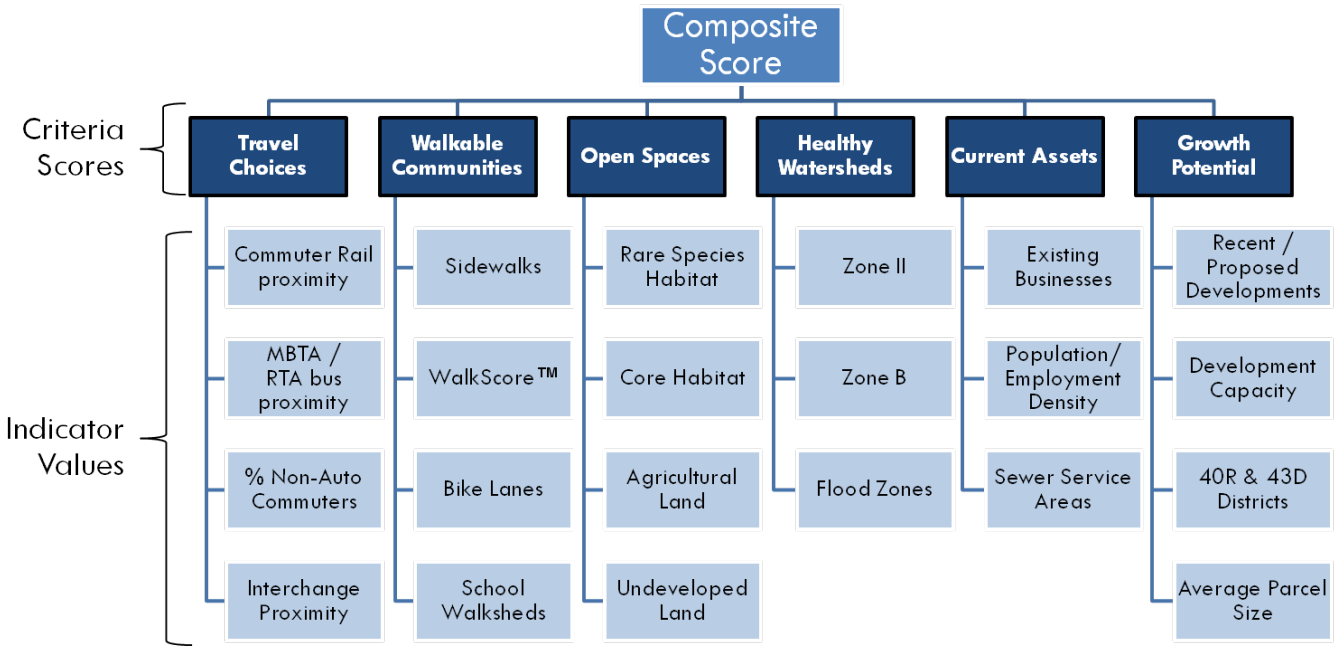
Application of the Regional Screening Tool

In order to increase transparency and provide a data-driven approach to elevating local priority areas to regional priorities, MAPC performed a suitability analysis for each local site using Community Viz, a computer-based assessment tool for planning. A suitability analysis digitally mimics the human decision-making process and can quickly evaluate sites based on a set of site suitability criteria. The local PDA and PPA sites were screened using a variety of relevant data layers as inputs into the analysis. Each site was given a suitability score based on how it scored against those data layer inputs. For example, MetroFuture includes goals and objectives related to constructing residential development in locations where future residents would be within a ten minute walk of public transportation. In order for the final suitability score to reflect this goal, MAPC utilized a dataset that delineates areas that are within a ½ mile walking distance to a transit station. Potential development sites that overlap those areas received higher suitability scores than those that did not overlap. The overall screening tool contains dozens of suitability measures against which PDAs and PPAs were screened. To create a composite score for each PDA and PPA, each measure was given a weight from 1 to 10 that reflects the importance of the measure to the type of development proposed or to the preservation of an area. All of these suitability measures fed into a final composite score from 0 (the least suitable site) to 100 (the most suitable site).

The advantage of using an computer-based suitability analysis process instead of only relying on a qualitative assessment is improved consistency. Once stakeholders decide how important a particular factor will be in their decision--the weight the factor is given in the suitability analysis--that decision rule is applied uniformly to each site. The weakness of the suitability analysis is that some factors cannot be quantified using a spatial dataset. Overall "project readiness," for example, is a factor that planners, developers, and local officials need to determine apart from the model. These kinds of qualitative factors must be taken into account when interpreting the suitability model output and coming to a final decision on which sites constitute regional priorities. The qualitative process was applied by MAPC after consultation with our municipal and state partners to ensure regional priority areas met local, regional, and state goals.

A graphic showing the interplay of the suitability measures, the overall criteria, and the composite score is shown in Figure 6. A full explanation of the application of the regional screening tool can be found in Appendix 2.

Figure 6: Regional Screening Tool Hierarchy



Public Input and Qualitative Assessment of Sites

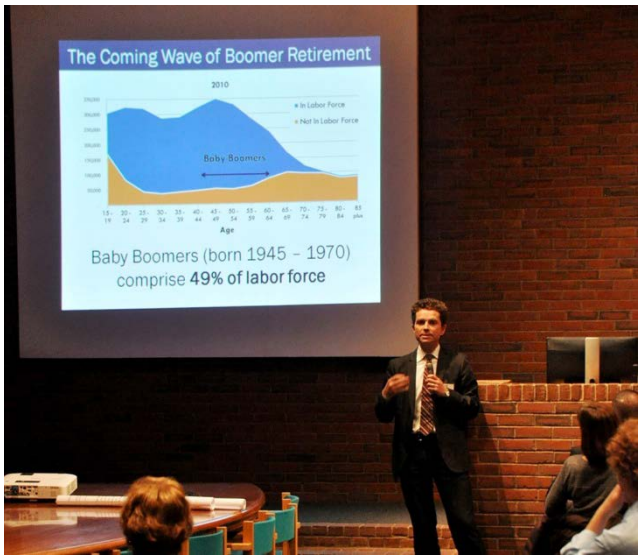
To supplement the screening tool and data-driven analysis of each site, MAPC also solicited specific feedback on the draft list of regional priority areas by confirming priorities, readiness, development potential, and impediments with each municipality. MAPC also solicited feedback from the public at a regional forum held in April 2014 where a draft list of regional priority areas was discussed. The regional forum stimulated a robust dialogue among the participants about the type and location of new development, how priority areas would/could be connected to the transportation network, and how new development could help create opportunities for passive and active open spaces. A few key points discussed by many at the regional forum included:

- A regional approach to development in Metro North is important. There is a great need to construct more housing in transit accessible locations, but regulatory, environmental and infrastructure barriers create challenges.

- The general lack of accessible open space in Metro North is an issue. Are there ways to increase the amount of open space, as well as increase access to regional open spaces like Middlesex Fells that can serve the whole of Metro North?

- Multi-modal transportation improvements are needed throughout Metro North. There are significant areas of vehicular congestion like Wellington Circle, but also a desire to continue expanding and improving our transit network.

- Adapting to climate change and ensuring our systems are resilient to more frequent and intense natural events are critical challenges in Metro North that impact development, preservation locations, and infrastructure. This must be factored into future planning efforts and infrastructure designs.



The input from the municipalities and general public on the draft priority areas was summarized and shared with state partners who also provided input on the draft list. MAPC took the collective input along with the results of the regional screening tool and finalized the list of regional priority areas for Metro North.

Regional PDAs and PPAs – Opportunities and Challenges

At the beginning of this process, Metro North municipalities provided MAPC with a list of 83 local priority areas for development and preservation. In summary, there were 60 local development sites totaling 2,150 acres with a potential build out of 14,400 housing units and 13.2 million square feet of commercial development. There were also 23 local priority preservation sites identified totaling 160 acres. After screening these sites and soliciting input on regional priorities through individual discussions with each municipality and holding the regional forum for the public, MAPC cut the 83 local sites down to 36 regional sites.

There are 23 regionally significant development sites in the Metro North Plan totaling 1,100 acres of land with a potential build out of 11,400 housing units and 11.9 million square feet of commercial development. The regionally significant preservation sites total 107 acres across 13 sites. Figure 7 provides a summary of the differences between the local and regional priority areas.

Figure 7: PDA/PPA Summary

Geography	Number of PDAs	Acres of PDAs	Housing Unit Potential	Commercial SqFt Potential	Number of PPAs	Acres of PPAs
Local	60	2,150	14,400	13.2M	23	160
Regional	23	1100	11,400	11.9M	13	107

*The housing unit and commercial square foot potential of local PDAs is likely larger than shown in Figure 7. This is the result of not having build out potentials for all local PDA sites.

Throughout the PDA/PPA identification process, several key qualitative questions and considerations arose that helped guide the selection of regional priorities. These considerations included:

- Timeframe – The need to continue building housing and growing jobs in Metro North is a critical goal of both MAPC and the Patrick Administration. The ability to catalyze development in a relatively quick timeframe in Metro North is an important factor to realizing growth in PDA locations. As such, MAPC divided regional PDA sites into short- and long-term priorities. Short-term priority sites are those that are ready now, or can be made ready in the next 5 years for development. Long-term sites are those that can be made ready in 5-10 years.

- Location and Access – The location of priority areas is another important factor. MAPC reviewed the location of each site to determine its proximity to public transportation and other growth and preservation sites, and if any land in the area had been designated as growth areas under other state programs like 43D, 40R, or GDI. For PPA sites, MAPC looked at how the new PPA site would increase access for nearby residential areas and if the new site connected with other existing preservation sites to form a larger network.

- Growth Potential and Development Mix – Given the demand for housing and jobs in Metro North, the amount of growth anticipated on each PDA and the mix of housing and commercial development is important to understand. Sites that can accommodate higher amounts of the growth in the short-term and have a well-balanced mix of development types were rated more favorably.

- Infrastructure – Aging infrastructure, whether it be transportation, utilities, or stormwater, is a major issue in Metro North municipalities. MAPC discussed infrastructure needs for each site with our municipal and state partners to identify potential locations for investment by local, state, federal, and private partners. Infrastructure components of development are often the most challenging to fund, and can make great examples of where state funding could open up development opportunities.

- Environmental Constraints – A number of prime development sites in Metro North were once home to large industrial and manufacturing complexes that left behind environmental hazards which must be cleaned up prior to new development occurring. Environmental

clean-up, similar to infrastructure projects, is challenging to fund and can often make or break a development's pro-forma. This is also an area where state brownfields funding can be of assistance to help offset some of the costs of site remediation and clean up.

- Regulatory Challenges – Zoning and permitting can be two additional challenges to having development occur in a timely manner in PDAs. Many of the sites call for mixed-use development, but the current zoning may not allow that to occur. The process of getting zoning changed can add significantly to the timeline of a development. By identifying the regulatory challenges in advance; local, regional and state resources can be targeted to municipalities looking to adopt a zoning change in order to permit the type of development they may want on a site. Streamlined permitting of sites through a process like 43D can also increase the likelihood of development taking place by making the permitting process prompt and predictable.

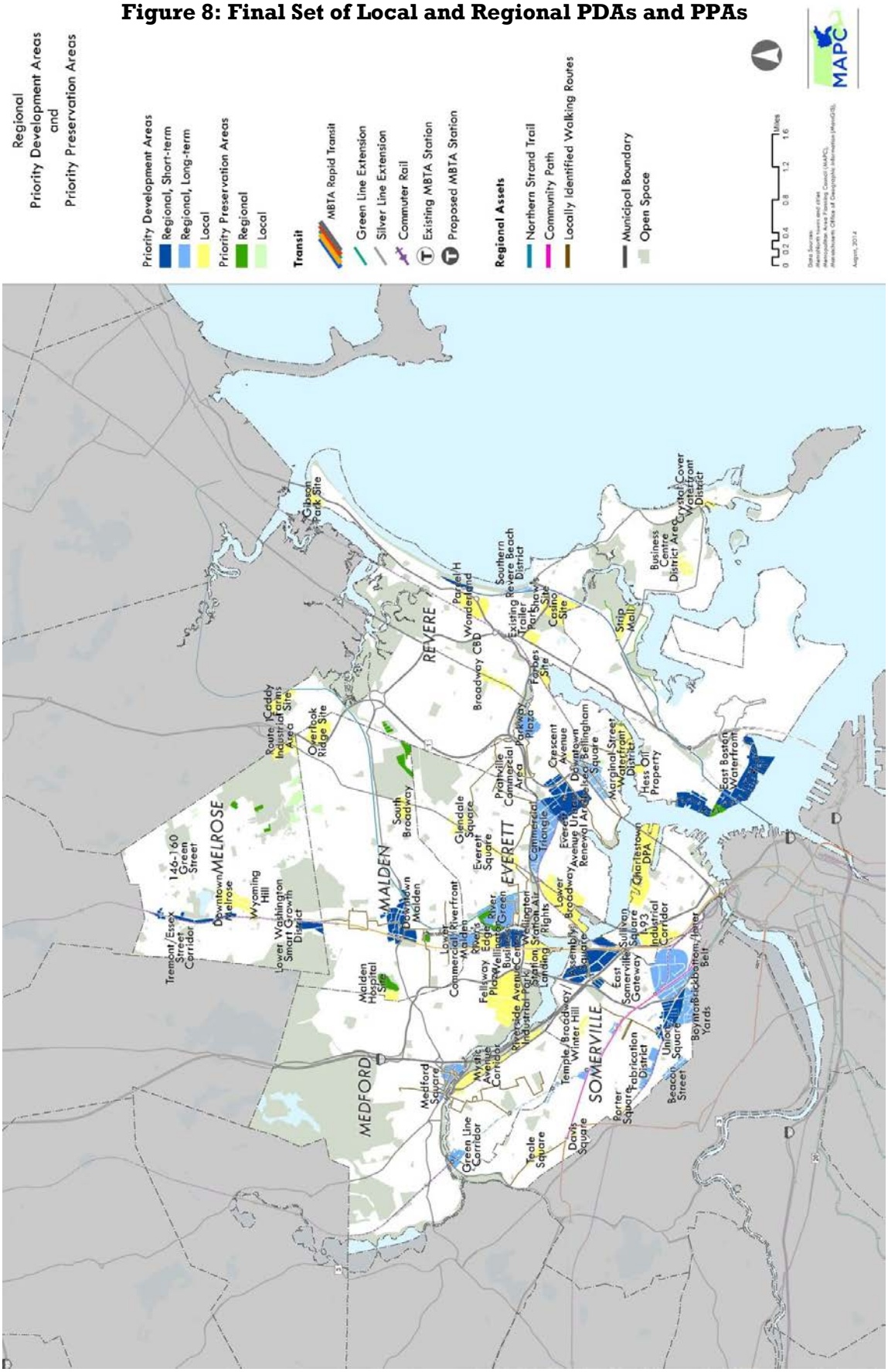
- Multi-Purpose Open Spaces – On the preservation side, MAPC looked at preservation areas at the local level to see if there were opportunities to incorporate more than one type of use for the land available. This could include things like a passive recreation location that also serves as a stormwater retention facility and an urban wild for habitat. Given the limited opportunities in Metro North for additional preservation areas, the ability of open spaces to serve multiple functions is critical. This is especially true for our coastal municipalities that experience flooding and storm surge during weather events.

By reviewing both the results of the screening tool and taking into account the qualitative factors listed above, MAPC was able to select 36 regional PDAs and PPAs from the list of 83 local sites.

Regional Priority Development Sites

To provide more detail on the regional PDAs, MAPC compiled a one page description of each of the 23 PDAs with accompanying information on site readiness, opportunities for development, and potential challenges that still need to be addressed to maximize the effectiveness of each site. Figure 8 provides an overview map of all the local and regional priority areas across Metro North. The full list of regional PDAs can be found in Appendix 1, List #3.

Figure 8: Final Set of Local and Regional PDAs and PPAs



East Boston Waterfront:

With approximately 650 housing units already in the pipeline, the 167 acre East Boston Waterfront priority development area is poised to become the next waterfront growth area within the City of Boston. East Boston offers access to rapid public transportation on both the Blue Line and Silver Line, easy access to Logan Airport, and a growing number of parks and open spaces. The highly walkable neighborhoods provide access to daily service needs, restaurants and retail. The East Boston Waterfront is a short-term regional PDA as well as a state PDA.

East Boston Waterfront Opportunities/Benefits:

- Access to waterfront development.
- Transportation access to multiple forms of public transportation, walking and cycling paths, and Route 1, I-90 and I-93.
- Incorporation of new open space through Chapter 91 lands along the waterfront.
- Future water transportation services from East Boston to Downtown Boston.

East Boston Waterfront Challenges:

- Buildings and infrastructure must be designed to take into account rises in sea level and resiliency for more frequent and severe storms.
- Waterfront infrastructure needed to accommodate new development.
- Maintaining public access to the waterfront.
- No direct bike/pedestrian connections to Downtown Boston.

Sullivan Square:

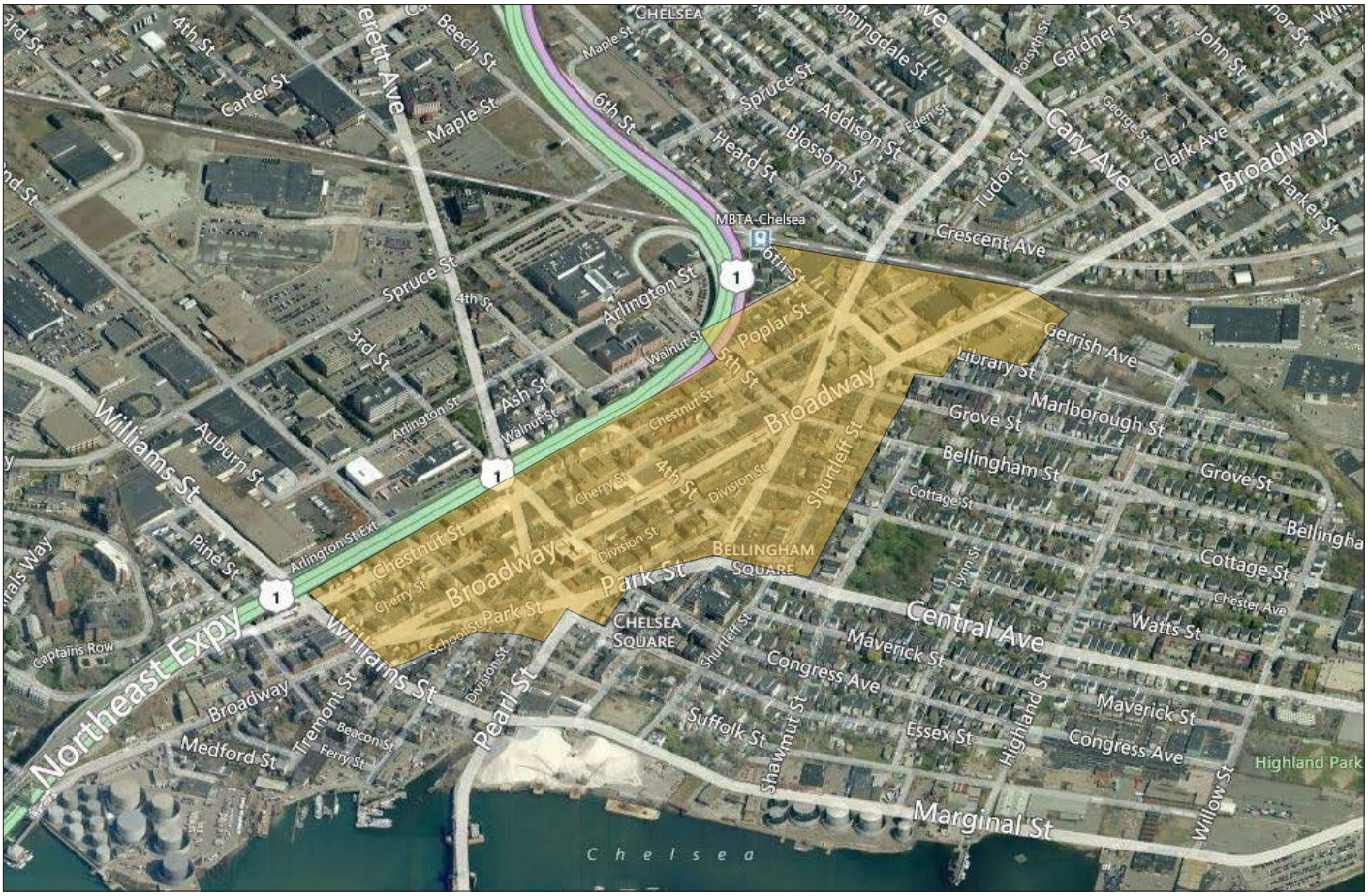
The Sullivan Square priority development area offers a unique opportunity to leverage publicly owned land into a true transit-oriented development adjacent to the MBTA's Sullivan Square Orange Line station. The planned transportation project to create a boulevard along the Rutherford Avenue corridor will help connect this area to the rest of Charlestown and add community open space and neighborhood amenities. Sullivan Square is a long-term regional PDA as well as a state PDA.

Sullivan Square Opportunities/Benefits:

- Direct access to the Sullivan Square Orange Line station and connecting bus routes.
- Transportation access to regional highway network.
- Most of the developable land is held by the MBTA and the City of Boston.
- A planning process that set the stage for land disposition has already been undertaken by the BRA.

Sullivan Square Challenges:

- Significant roadway infrastructure changes are needed along Rutherford Avenue and other connecting streets to allow for new development to occur.



Downtown Chelsea/Bellingham Square

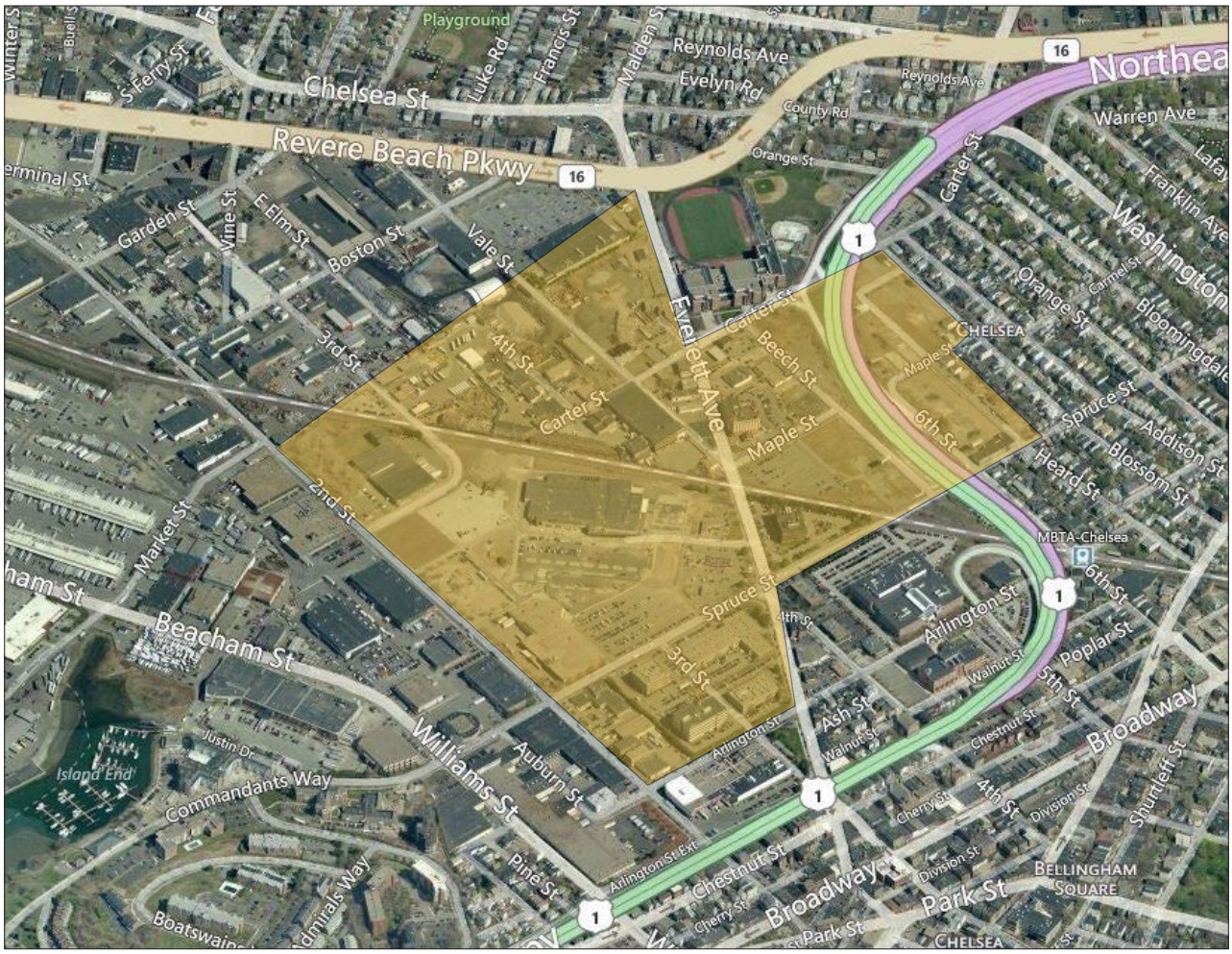
A historic downtown area of approximately 43 acres, the Downtown Chelsea/Bellingham Square priority development area offers opportunities for residential, commercial, and mixed-use development in close proximity to new major employers. By 2016, the Silver Line Extension will offer an easy connection to the Innovation District in Boston. This area also provides easy access to Route 1. Downtown Chelsea is a long-term regional PDA.

Downtown Chelsea Opportunities/Benefits:

- Transportation access to multiple forms of public transportation, including a new commuter rail station and an extension of the Silver Line in 2016 with direct access to East and South Boston.
- Walkable downtown location with easy access to and from surrounding residential neighborhoods.
- City is looking to promote additional residential development in the Downtown.

Downtown Chelsea Challenges:

- Some infrastructure upgrades are needed at intersections and along sidewalks to improve safety for pedestrians.
- City needs to undertake a sewer separation project in this area.
- Central business district zoning is in place, but tweaks need to be made on residential requirements.
- No direct bicycle/pedestrian connections to Downtown Boston.
- Bus overcrowding is a serious issue.



Everett Avenue Urban Renewal Area:

The terminus of the future Silver Line Extension, the Everett Avenue area has already seen significant residential and commercial development and has a future build out of about 1,000 units of housing and 300,000 square feet of commercial space. The City is positioning this area as a location for hotels to support Logan Airport, as well as becoming a mixed-use anchor within walking distance to Downtown Chelsea. Everett Avenue is a short-term regional PDA as well as a state PDA.

Everett Avenue Opportunities/Benefits:

- City is interested in seeing more residential and commercial development occur in this location.
- Significant private investment is already occurring, providing a proven market for future development.
- Area was already rezoned as part of the urban renewal plan.
- Future transit connections via a new commuter rail station and the Silver Line Extension will provide improved access.

Everett Avenue Opportunities/Benefits:

- Roadway resurfacing and signalization is needed along Spruce Street and Second Street.
- Everett Avenue needs improvements between the rail tracks and Revere Beach Parkway.
- Replacement of the Market Street culvert is needed to mitigate flooding issues.
- The area has a history of past industrial uses which may require environmental remediation if redevelopment is to occur.

Parkway Plaza

The third priority development area in Chelsea, Parkway Plaza looks to retrofit the existing Chelsea Commons retail development into a mixed-use center. New housing developments in this priority area have already started providing housing within walking distance to retail and open space amenities. This 45 acre site has a potential build out of about 300 housing units, of which 56 are already constructed. Parkway Plaza is a long-term regional PDA.

Parkway Plaza Opportunities/Benefits:

- City is interested in creating a mixed-use center at this location.
- One of the largest parcels in the City that is under single ownership.
- Access to Route 1 and Route 16/Revere Beach Parkway.
- Development, if designed well, could take advantage of open spaces along Mill Creek.

Parkway Plaza Opportunities/Benefits:

- Access to Route 1 and Route 16 needs to be improved.
- Floodplains do impact parts of the site, but proper site planning could help mitigate the issue.
- Environmental testing has shown some contamination that would likely need remediation.

Commercial Triangle:

The Commercial Triangle priority development area is approximately 85 acres with a mix of industrial, retail, and residential uses. The City is interested in this area becoming more of a mixed-use neighborhood with retail amenities to serve the existing surrounding neighborhoods, as well as future residential development. This area is currently only served by MBTA bus routes, but MassDOT has committed to studying a possible extension of the future Chelsea Silver Line to serve Everett. The City is currently undertaking a Master Plan for this area to identify a vision, land use alternatives, and other critical improvements needed to set the stage for future development. The Commercial Triangle is a long-term regional PDA.

Commercial Triangle Opportunities/Benefits:

- City is currently undertaking a Master Planning process for this area that will set a vision for the area and the stage for future zoning changes.
- MassDOT will be studying the possibility of extending the Silver Line Gateway route that will terminate in Chelsea at the border of Everett.
- Access to Route 16 and other regional roadways.

Commercial Triangle Challenges:

- Improvements are needed for the access points to, and intersections with, Route 16.
- Stormwater issues near Market Street culvert cause flooding issues in the area.
- Former industrial properties in the area may have brownfields issues that may need to be remediated.
- Zoning is not currently in place to support the type of development the City envisions.

River Green:

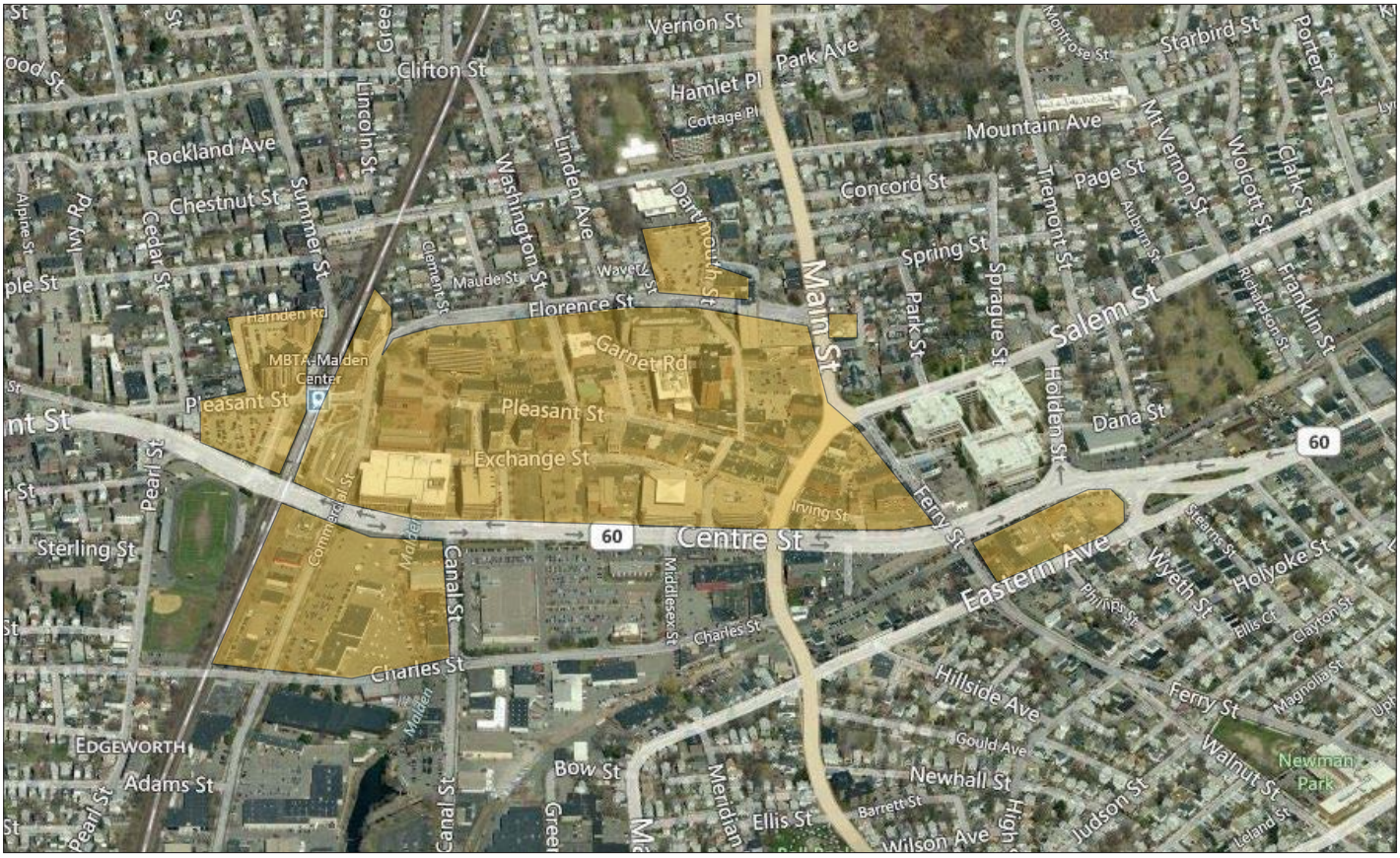
The River Green priority development site is part of the larger River's Edge project that brought together Everett, Malden, and Medford to create a redevelopment plan for post-industrial property along the Malden River. River Green is approximately 73 acres in size with a potential build out of 700 units of housing and 500,000 square feet of commercial space. There are already 190 units of housing permitted with construction expected to occur soon. This development location is along the Malden River providing riverfront access and views in addition to nearby parks and open spaces that have already been improved for the community. River Green is a long-term regional PDA as well as a state PDA.

River Green Opportunities/Benefits:

- Significant development opportunity.
- Riverfront property, river views, water access.
- Close proximity to other major mixed-use developments like Station Landing.
- Access to existing open space amenities and park spaces.
- Access to regional roadways like Route 16.

River Green Challenges:

- Traffic issues at Santilli Circle.
- Overcrowding on MBTA buses in the area.
- Pedestrian safety and accessibility issues need to be addressed.
- Stormwater system needs to be studied and likely reconstructed.
- Potential brownfields from prior industrial uses may need to be remediated.
- Zoning changes may need to occur to ensure new development relates to its location along the river.



Downtown Malden:

Downtown Malden is another priority development area located along the Orange Line corridor with direct access via the Malden Center station. The proximity of Downtown to the Orange Line has spurred significant development interest, anchored by the redevelopment of Malden's Government Center and police station. The 64 acre priority area has a potential build out of around 800 additional housing units and 266,000 square feet of commercial development, including a potential baseball park. The Downtown also offers a wide range of restaurant choices, access to the nearby Northern Strand pathway, and several parks and recreational spaces within close walking distance. Downtown Malden is a short-term regional PDA as well as a state PDA.

Downtown Malden Opportunities/Benefits:

- Access to Malden Center Orange Line station and multiple MBTA bus routes.
- Available land for redevelopment.
- Zoning in place that allows for mixed-use and residential development.
- Downtown environment with many amenities within close walking distance.
- Location that has already seen public and private investment taking place.

Downtown Malden Challenges:

- Reconnecting Pleasant Street (currently pending the demolition of City Hall).
- Parking study should be undertaken to determine capacity, duration, and strategies for managing and improving the current parking assets.

Lower Commercial Street/River's Edge:

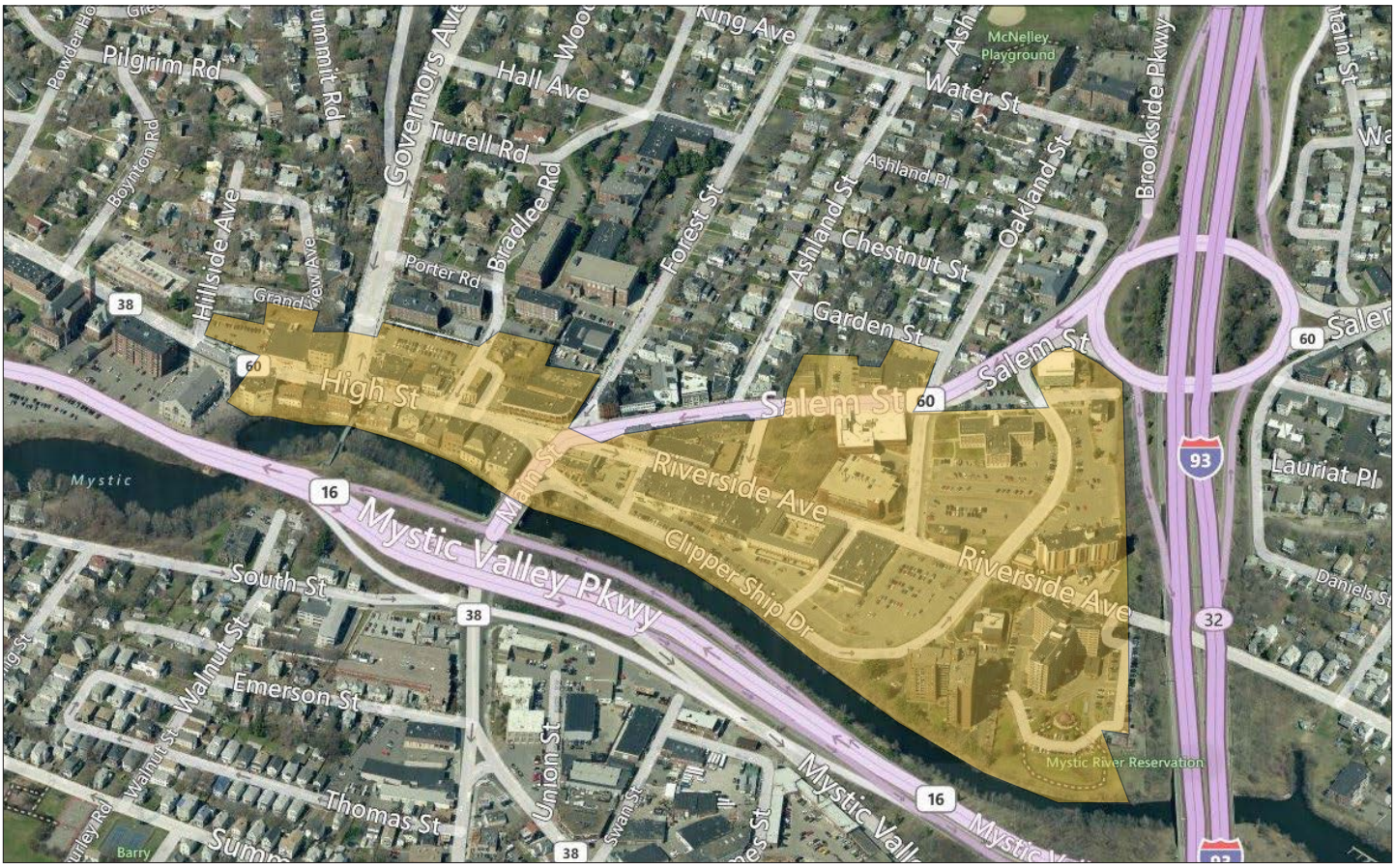
The Lower Commercial Street/River's Edge priority area in Malden is part of the larger River's Edge redevelopment area along the Malden River in Malden, Everett, and Medford. The 32 acres in Malden offer an opportunity for significant housing and mixed-use development, with a projected build out of around 1,100 housing units and 400,000 square feet of commercial space. This development is located about a mile from both the Malden Center and Wellington Orange Line stations, and offers riverfront views and access for new development. This site has not yet been rezoned, and provides an opportunity to define a project and work with the City at the ground level. River's Edge in Malden is a long-term regional PDA as well as a state PDA.

Lower Commercial Street Opportunities/ Benefits:

- Riverfront location within walking distance to Downtown Malden and Station Landing in Medford.
- Within one mile of two Orange Line stations and multiple MBTA bus routes.
- Opportunity for a significant mixed-use project.
- Portions of the site are controlled by the City of Malden.

Lower Commercial Street Challenges:

- Relocation of the Malden DPW facility would need to occur prior to redevelopment.
- Assistance needed with rezoning and potentially expedited permitting to assist with the redevelopment of the sites.
- Possible environmental remediation needed due to prior uses.
- Maintaining and improving public access to the river.



Medford Square:

Medford Square is at the heart of the City with a mixture of housing, retail, restaurants, offices, and City Hall all surrounded by established residential neighborhoods. Medford Square provides easy access to the riverfront via a network of linear parks, as well as several MBTA bus routes with direct connections to rapid rail stations. Mixed use development opportunities are available in the Square with the ability for new development to complement and enhance the existing vibrancy of the area. The Master Plan completed for the Square projected a build out of about 570 new housing units and 15,000 square feet of commercial space. Medford Square is a long-term regional PDA as well as a State PDA.

Medford Square Opportunities/Benefits:

- Downtown environment with many amenities within close walking distance.
- Access to MBTA bus routes.
- Access to I-93 and Route 16.
- Riverfront access with many already improved parks and open spaces.
- Additional improvements slated for Clippership Park.

Medford Square Challenges:

- Pedestrian and circulation improvements are needed in Medford Square.

Wellington Business Center:

The Wellington Business Center is a 34 acre priority development area along the Malden River within a close walking distance to the Wellington Orange Line station. It's location along the Malden River provides opportunity for riverfront access and river views. The Business Center site is also within close proximity to the Station Landing mixed-use development which offers retail, restaurants, a gym, and much more. This site is projected to have a build out of about 350 additional housing units. Wellington Business Center is a short-term regional PDA.

Wellington Business Center Opportunities/ Benefits:

- Riverfront access and river views for new development.
- Close walking distance to Wellington Orange Line station.
- Short-term opportunity for infill residential development.
- Close proximity to local and regional retail development.

Wellington Business Center Challenges:

- Traffic congestion at Wellington Circle.
- Maintaining and improving access to the river.

Lower Washington Smart Growth District:
The Lower Washington District in Melrose provides an opportunity for continued redevelopment in a district where a number of significant residential and mixed-use projects are already taking place. The zoning for the District has already been approved by the City to encourage higher density transit-oriented uses. This priority development area is within close walking distance to the Oak Grove Orange Line station, and is situated about halfway between Downtown Melrose and Downtown Malden. The 16 acre area has a projected build out of about 300 additional housing units and over 50,000 square feet of commercial space. The District is also within close proximity to local and regional recreation and open spaces like the Middlesex Fells. Lower Washington is a short-term regional PDA.

Lower Washington Opportunities/Benefits:

- Access to Oak Grove Orange Line station and multiple MBTA bus routes.
- Zoning in place that allows for mixed-use and residential development.
- About a mile from both Downtown Melrose and Downtown Malden.
- Location that has already seen public and private investment taking place.

Lower Washington Challenges:

- Improve pedestrian connections to Oak Grove MBTA station.
- Improve bicycle accommodations along Pleasant and Washington Streets.
- Improve streetscape amenities along Washington Street from Oak Grove to the Melrose City Line.
- Possible clean up challenges related to the older mill buildings on site.

Tremont/Essex Street Corridor:

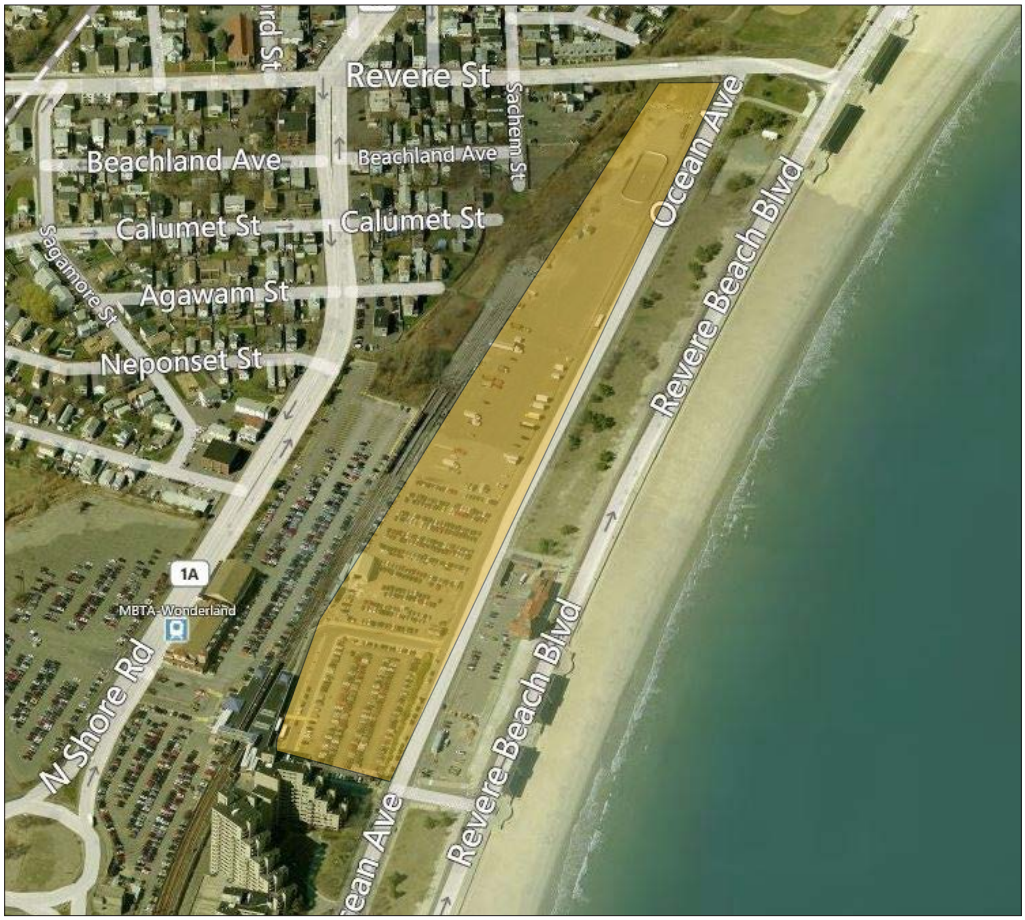
The Tremont/Essex Street priority area is a linear corridor in the City of Melrose that spans three commuter rail stations. The southern end of the corridor is in close proximity to Downtown Melrose, while the northern end is in the City's Highlands neighborhood. Both areas are neighborhood serving retail and restaurant nodes. Along the corridor there are numerous redevelopment opportunities where older auto-oriented uses are beginning to turn over and create locations for new multi-family housing development. This corridor is also home to the Melrose high school and middle school, as well as several public recreation areas and park spaces. Recently, the Board of Alderman adopted a new overlay zoning district that would allow for the development of multi-family housing and mixed-use projects along the corridor. The projected build-out is about 500 housing units, as well as accommodating first floor retail and commercial uses. The Tremont/Essex Street Corridor is a short-term regional PDA as well as a state PDA.

Tremont/Essex Street Opportunities/Benefits:

- Access to three commuter rail stations within the corridor.
- Close proximity to Downtown Melrose and other smaller neighborhood business nodes.
- Numerous opportunities for redevelopment along the entire corridor.
- Approved zoning in place to encourage additional residential and mixed-use development.
- Amenity rich corridor including parks, open spaces, schools, and grocery store.

Tremont/Essex Street Challenges:

- Improvements needed to upgrade sidewalks, crosswalks, and bicycle accommodations along Tremont/Essex Street.
- Streetscape improvements needed along Tremont/Essex Street to create consistency with existing streetscape patterns on connecting roadways.
- Parcel consolidation along the rail line may be necessary.



Parcel H:

Directly adjacent to a stretch of Revere Beach and unobstructed waterfront, Parcel H/Waterfront Square is a transformational development location set to become a mixed-use destination for living, working, and playing. Adjacent to the MBTA's Wonderland Blue Line station, this 9 acre site has a potential build out of 700 residential units, a hotel, and 83,000 square feet of commercial space. An expedited permitting process is already in place to ensure developers of a quick turnaround so long as the quality of development matches the vision for the area. Two residential projects are already entering construction phases. Parcel H is a short-term regional PDA as well as a state PDA.

Parcel H Opportunities/Benefits:

- Priority area is adjacent to the MBTA's Wonderland Blue Line station.
- New development will have access to Revere Beach and water views.
- Opportunities for constructing residential and mixed-use development.
- Expedited permitting and zoning can provide for a faster approval process.
- Proximity to Logan Airport and Downtown Boston.

Parcel H Challenges:

- Roadway improvements needed along Ocean Avenue
- Park land improvements needed along Revere Beach Boulevard as called out in the Master Plan.
- Compensatory flood storage needed and improvements to Eastern County Ditch.
- New development should mitigate and adapt to rising sea levels and more severe storms.

Southern Revere Beach District:

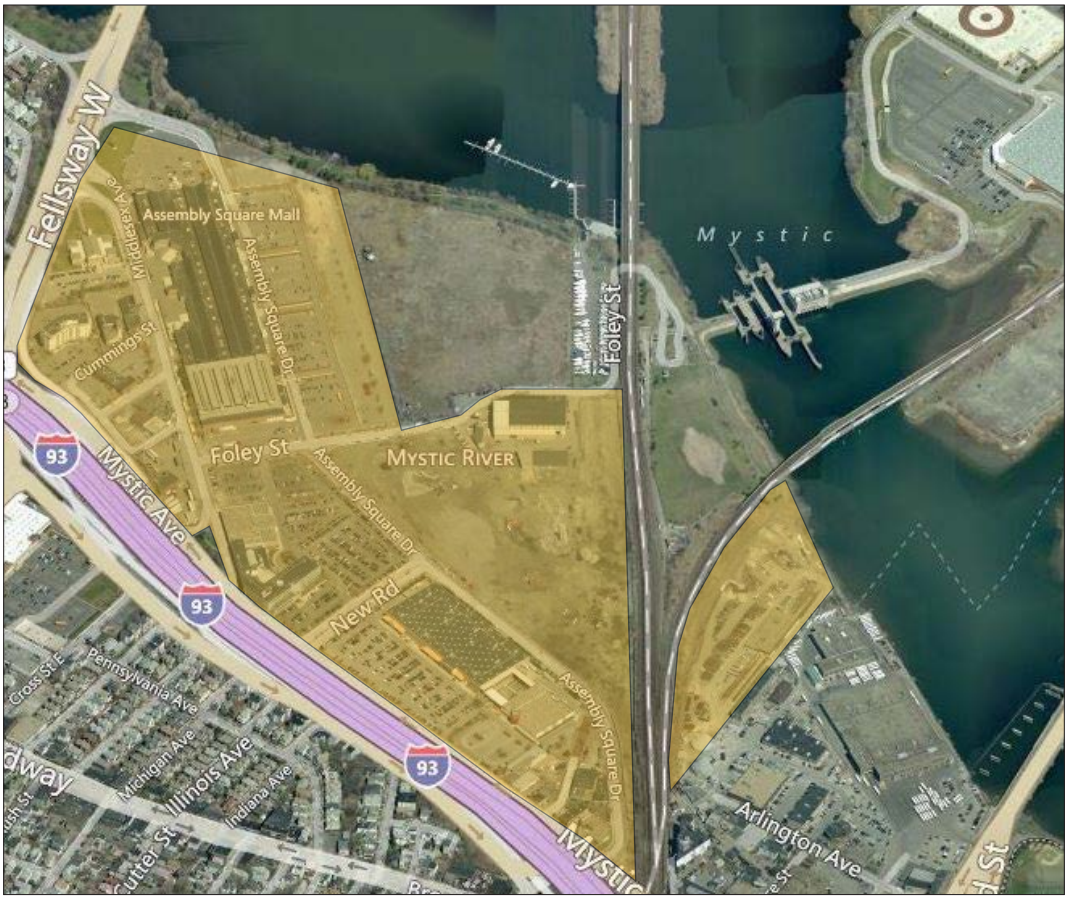
Also along Revere Beach, the Southern Revere Beach District is located just south of both Parcel H and the Wonderland Blue Line station. The 5 acre priority development area currently has a mix of older commercial buildings and vacant lots with beachfront property that is underutilized. The area has already been zoned RC2, which allows for the highest densities of any zoning district in the City. The vision for this area includes a mixture of housing and retail development, with a projected build out of about 400 units of housing and 40,000 square feet of commercial space. Southern Revere Beach District is a long-term regional PDA.

Southern Revere Beach Opportunities/Benefits:

- Priority area is adjacent to the MBTA's Wonderland Blue Line station.
- New development will have access to Revere Beach and water views.
- Opportunities for constructing residential and mixed-use development.
- Area already zoned RC2 - highest density zoning district.
- Proximity to Logan Airport and Downtown Boston.

Southern Revere Beach Challenges:

- Parcel consolidation may be needed to address the depth of lots.
- Parking in this area could present a challenge.
- New development should mitigate and adapt to rising sea levels and more severe storms.



Assembly Square:

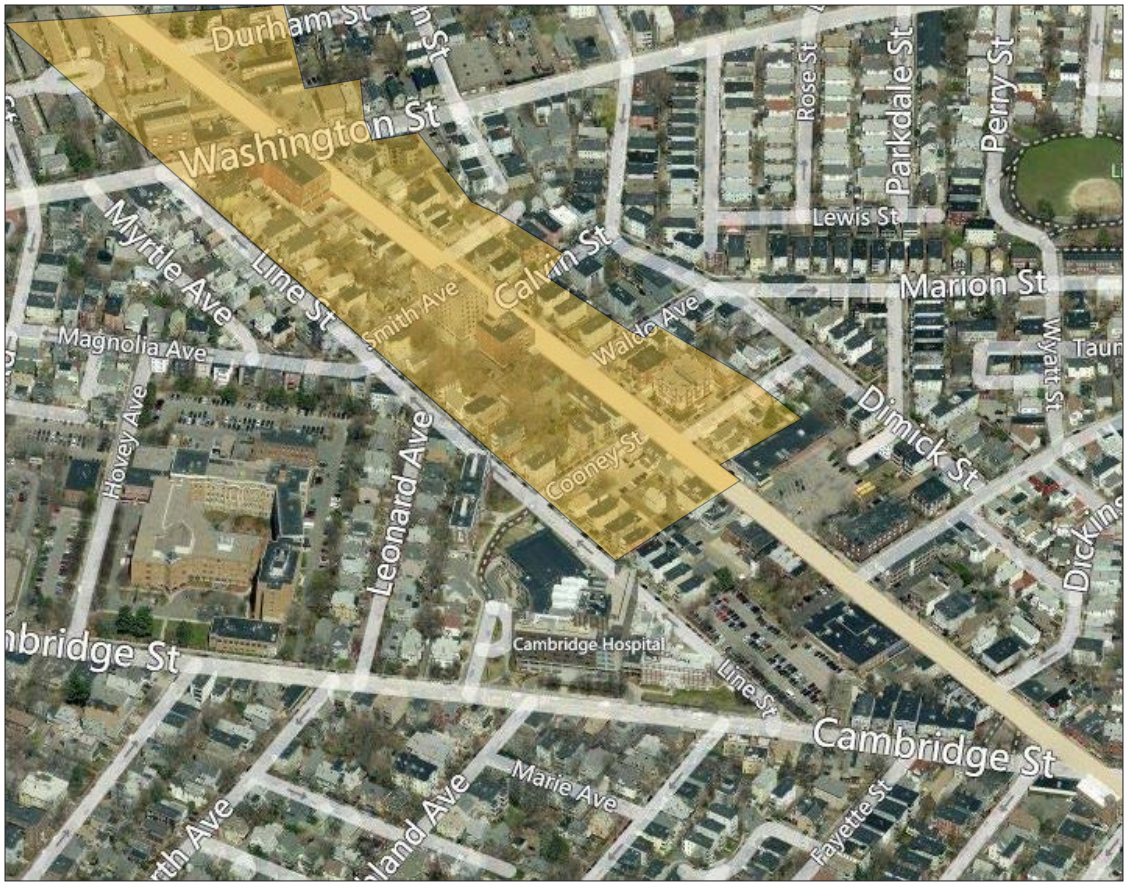
As one of the largest priority development areas in Metro North, Assembly Square is a prime location for transformational mixed-use redevelopment. With the opening of a new Orange Line station and close proximity to I-93, Assembly Square offers excellent transit and roadway access. The build out of Assembly Square is 1,813 units of housing, 2.8 million square feet of office space, and 635,000 square feet of retail, restaurants, and entertainment uses. This level of development will transform a former Ford assembly plant into a new mixed-use destination in the City of Somerville. Improvements to Assembly Square not only include a new transit station, but also a significant investment in parks and open space along the river. Assembly Square is a short-term regional PDA as well as a state PDA.

Assembly Square Opportunities/Benefits:

- Opportunities for additional development to occur outside the planned Assembly Row development area.
- Access to a new Orange Line station.
- Riverfront development and views.
- Riverfront parks and open space.
- Adjacent to retail, restaurants, and movie theater in Assembly Row.

Assembly Square Challenges:

- Brownfields assessments and remediation may be needed for development sites outside the current Assembly Row development area.
- Maintain and improve access to and open spaces along the river.



Beacon Street:

One of the many neighborhood infill development locations across the City of Somerville where new mixed-use development would provide additional housing units and small retailers and restaurants. Beacon Street, not far from the proposed Union Square spur of the Green Line Extension, will have direct rapid transit access in the coming years. The 14 acre priority development area has a projected build out of approximately 100 housing units and 30,000 square feet of commercial development. Beacon Street is a long-term regional PDA.

Beacon Street Opportunities/Benefits:

- Master Planning effort has already set the vision for Beacon Street.
- Money for roadway improvements being allocated by the Boston MPO.
- Access to future Green Line station at Union Square.
- Opportunities to redevelop parcels to create more housing and retail space.

Beacon Street Challenges:

- Adoption of the city-wide rezoning effort that will more easily enable this type of development to take place.
- Green Line Extension must be fully funded and constructed.
- Improvements slated for Beacon Street need to occur.
- Needs brownfields assessment and potential remediation based on findings.

Boynton Yards:
Boynton Yards is one of the historically industrial areas in Somerville adjacent to the future Green Line Extension stations at Union Square and Brickbottom. At 33 acres, Boynton Yards has a projected build out of 500 housing units and 900,000 square feet of commercial space making it one of the transformational development sites in the City. The combination of this area, Union Square, and Inner Belt will completely reshape the uses and functionality of these underutilized parts of the City. The transformative changes envisioned for this area will require significant infrastructure investments by the public and private sectors. Boynton Yards is a long-term regional PDA.

Boynton Yards Opportunities/Benefits:

- Access to the future Green Line Extension station at Union Square.
- Opportunity to develop a significant amount of residential, mixed-use, and commercial development.
- Master Planning effort has already set the vision for Boynton Yards as an area to transform.

Boynton Yards Challenges:

- Green Line Extension must be fully funded and constructed.
- Need to reconfigure local roadways to support new development.
- Stormwater drainage issues must be addressed to mitigate flooding.
- Need brownfields assessment and potential remediation based on findings.
- Adoption of the city-wide rezoning effort that will more easily enable this type of development to take place.

Inner Belt/Brickbottom:

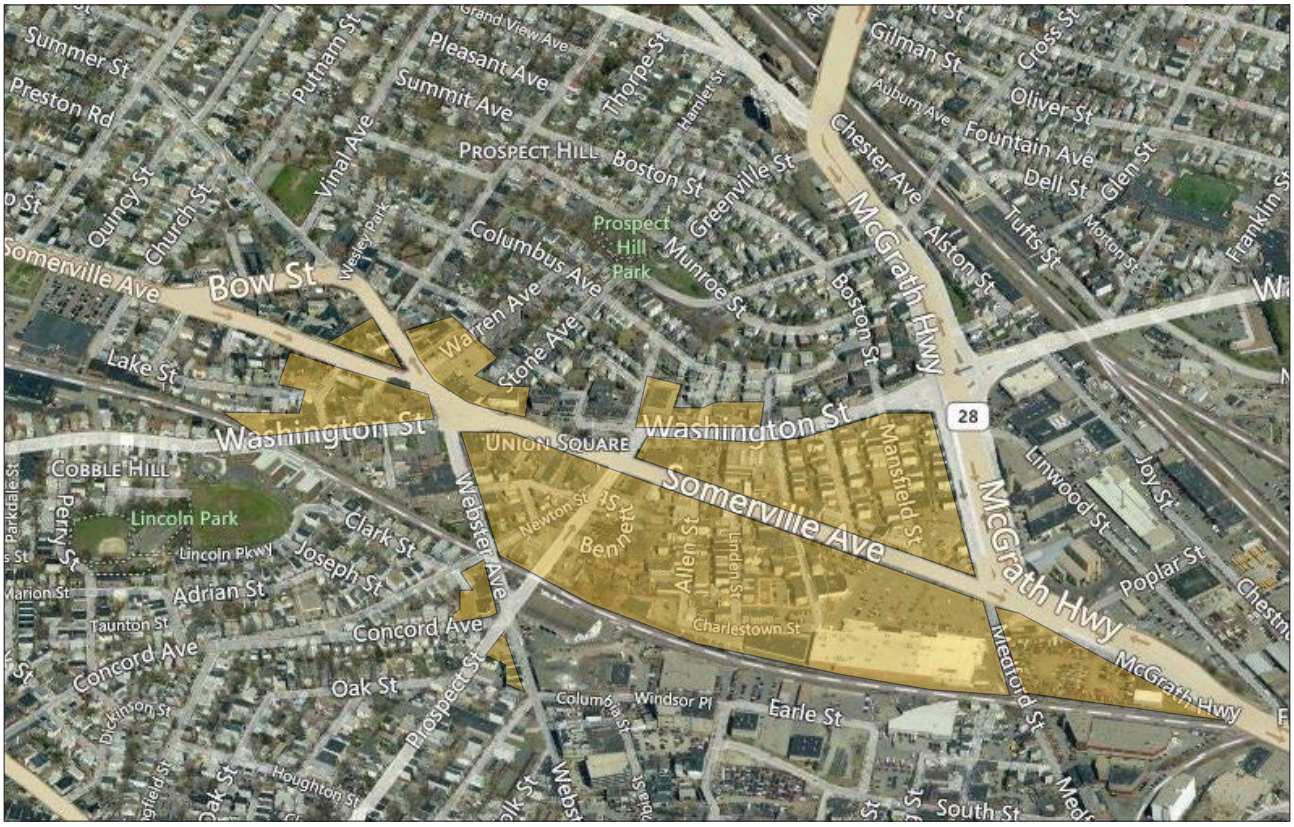
The second of three adjacent transformative development areas in Somerville, the Inner Belt/Brickbottom area will be the beneficiary of a new Green Line station which is the cornerstone for new development in the area. This 120 acre development area is projected to have a build out of approximately 1,750 housing units and over 4 million square feet of commercial development. The vision for this area is to create a vibrant mixed-use neighborhood with housing, retail, office space, and public open space. The transformation of Inner Belt requires significant infrastructure investment from the public and private sectors. This area is a long-term regional PDA as well as a state PDA.

Inner Belt Opportunities/Benefits:

- Access to the future Green Line Extension station at Brickbottom.
- Access to Route 28 and I-93.
- Opportunity to develop a significant amount of residential, mixed-use, and commercial development.
- Master Planning effort has already set the vision for Inner Belt/Brickbottom as an area to transform.

Inner Belt/Brickbottom Challenges:

- Green Line Extension must be fully funded and constructed.
- Need to ground McGrath Highway.
- Need to construct Inner Belt multi-modal bridge.
- Need to reconfigure local roadways to support new development.
- Stormwater drainage issues must be addressed to mitigate flooding.
- Needs brownfields assessment and potential remediation based on findings.
- Adoption of new zoning for this area to allow the development vision to take place.



Union Square:

The third of the adjacent transformational areas in Somerville, Union Square will also be the beneficiary of a new Green Line station in the years to come. This 45 acre development area is projected to have a build out of approximately 750 additional housing units and over 1.5 million square feet of commercial development. The vision for this area is to create a vibrant mixed-use neighborhood with housing, retail, office space, and public open space. The transformation in Union Square also requires significant infrastructure investment from the public and private sectors. This area is a short-term regional PDA as well as a state PDA.

Union Square Opportunities/Benefits:

- Access to the future Green Line Extension station at Union Square.
- Opportunity to develop a significant amount of residential, mixed-use, and commercial development.
- Urban renewal plan has already been filed and adopted setting the stage for redevelopment to occur in Union Square.

Union Square Challenges:

- Green Line Extension must be fully funded and constructed.
- Need to reconfigure local roadways to support new development.
- Stormwater drainage issues must be addressed to mitigate flooding.
- Needs brownfields assessment and potential remediation based on findings.

Fabrication District:

The only regional priority development area that fell into the commercial/industrial category, Somerville's Fabrication District is a unique opportunity to help grow and provide for maker space to support local artists, fabricators, and entrepreneurs. This growing sector of the local and regional economy is critical to supporting jobs and providing space in our communities where these employers can flourish. Within this 20 acre priority development area the City has already seen about 80,000 square feet of existing commercial space retrofitted and occupied. The Fabrication District is a long-term regional PDA.

Fabrication District Opportunities/Benefits:

- Opportunity to provide space for a growing segment of Somerville's creative economy.
- Access to existing cluster of creative economy jobs and maker space.
- Close proximity to Union Square and Boynton Yards priority areas.
- Easy access to future Union Square Green Line station.

Fabrication District Challenges:

- Adoption of city-wide zoning reform will include fabrication district regulations that are critical to protecting and growing this district.

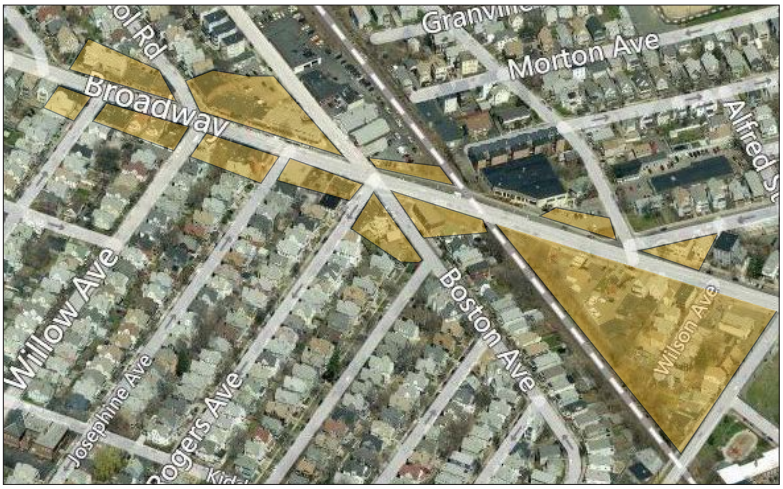
Green Line Corridor:

The Green Line Extension, when completed, will be one of the first significant public transit expansions in our region since the 1980's. Already, the cities of Somerville and Medford are seeing increased development demand within walking distance to the planned station locations. MAPC chose to lump these four station areas together because on their own the development potential is not significant, but together as a corridor it is larger. The 36 acres that make up the station areas in the corridor have a potential build out of about 300 units of housing and 120,000 square feet of commercial space. The Green Line Corridor is a long-term regional PDA.

Gilman Square

Magoun Square

Ball Square



Route 16/Mystic Valley Parkway

Green Line Opportunities/Benefits:

- Access to new Green Line Extension stations with direct connections to Boston and beyond.
- Station area plans have already been completed for each area, setting the stage for new development.
- Opportunity to construct new housing and mixed-use development.

Green Line Challenges:

- Green Line Extension must be fully funded and constructed.
- Local roadway improvements are needed to make station access safer and improve walking conditions.
- Zoning changes are needed in both Somerville and Medford to support new residential and mixed-use development around the stations.
- Streetscape improvements in the station areas are also desired.

East Somerville Gateway:

Another neighborhood mixed-use infill location, the 2 acre East Somerville Gateway priority development area is envisioned by the City to provide housing and commercial space for the surrounding neighborhood. With easy access to public transportation and to I-93, this is an ideal location for increased development. The projected build out of this area is approximately 100 units of housing and 120,000 square feet of commercial space. It's proximity to other major transformational development areas could make this a prime location for supportive development on a smaller scale. East Somerville Gateway is a short-term regional PDA.

East Somerville Opportunities/Benefits:

- Close proximity to Sullivan Square Orange Line station.
- Access to I-93.
- Opportunity to construct additional housing and commercial space.
- Within close proximity to several major transformational PDAs including Sullivan Square, Assembly Square, and Brickbottom/Inner Belt.

East Somerville Gateway Challenges:

- Streetscape and utility improvements along Broadway.
- Utility improvements along Broadway.
- Adoption of new zoning for this area to allow the development vision to take place.
- Needs brownfields assessment and potential remediation based on findings.

Regional Priority Preservation Sites

Challenges of identifying PPAs in urban areas

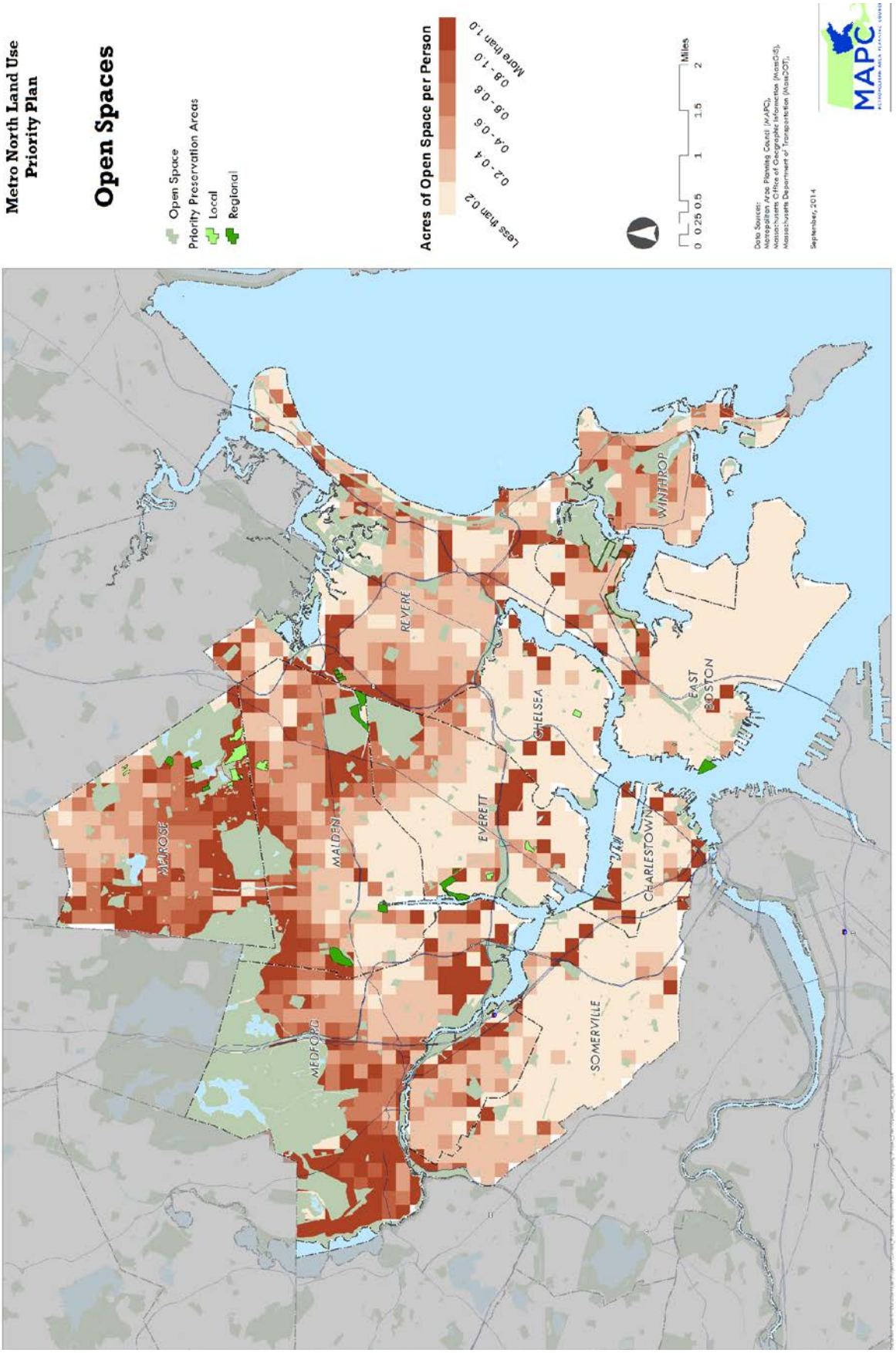
In the densely developed municipalities that comprise Metro North, identification of priority preservation areas must go beyond traditional conceptions of parks (either urban or suburban) or the identification of large areas of environmentally sensitive lands that are in need of protection. In these municipalities, the concept of preservation needs to be broadened to include innovative ways to create, reclaim or make better use of both public and private lands that can serve the needs of the residents and visitors and create opportunities for recreation and environmental protection. The following examples are non-traditional open space locations/types that could provide additional greenery, park space, or serve as environmental protection sites in Metro North:

- Chapter 91 public access sites along waterways
- Tax-exempt parcels whose current use may no longer be relevant
- Green infrastructure: rain gardens and vegetated swales
- Parklets – parking spaces repurposed into public space
- Daylighting urban waterways
- Community gardens
- Multi-use paths and trails
- Rooftop playgrounds and parks
- Urban wilds
- Traffic circles/rotary plantings/medians
- Planters/plantings/streetscape

In addition to new local opportunities for open space, municipalities should consider how their residents can connect to nearby regional opportunities for recreation and open space. A safer and more efficient transportation network that connects multiple municipalities and their open space areas could provide these opportunities to a wider audience. Connections could include improvements to public transportation, a connected network of sidewalks, or a regional greenway/trail network for cyclists and pedestrians.

As was mentioned earlier in the report, identifying PPAs at the local and regional level was challenging because of the limited opportunities to acquire new land for open space. The focus of many municipal officials has been on making the parks they already have better. In the end, MAPC did identify 13 regional PPAs across Metro North. We recognize that these 13 areas do not provide ample access to open space and recreational opportunities for residents in many of these municipalities. Therefore, MAPC feels it is important for municipal officials to consider access to open space as new development is taking place or as tax exempt parcels in their municipalities are available for purchase or repurposing. One way of identifying locations where access to open space is limited is to look at the number of acres of open space per resident. MAPC developed a map that shows acres of open space per resident mapped across Metro North. The lighter shaded areas in Figure 9 highlight locations where access is very limited, and residents have to travel further to find quality open space and recreation locations. This map should be used by local and state officials to seek out future opportunities to increase access for current and future residents.

Figure 9: PPAs and Access to Open Space Map



State Priority Areas

The final step in this planning process was to identify a subset of the regional priority areas for both development and preservation that would constitute the state priority locations. MAPC provided both EOHED and EOEEA with our final list of regional PDAs and PPAs. Both agencies then ran the regional sites through their own quantitative and qualitative screening and consulted with MassDOT about the proposed sites. The process resulted in the selection of 12 proposed state PDAs and 13 proposed state PPAs. On July 31, this list was discussed and feedback collected at a public meeting. The final list of State PDAs and PPAs can be found in Appendix 1, List #4.

Identification of State Priority Areas

The starting point for the state's analysis of priority development and preservation areas was the list of 23 regional PDAs and 13 regional PPAs developed by MAPC. To identify locations that would be elevated to the state PDA list, the state placed weight on the following factors:

1. **Areas with either a short-term development timeline or a long-term timeline but potential for transformative development.** Of the 12 state priority development areas, seven are likely, based on existing conditions, recent activity, and project approvals, to see development within 5 years. The other five state priority areas are more likely to be developed within a 5-10 year timeframe. However, because these areas have substantial amounts of underutilized land, there is the potential for large-scale development that transforms, or creates a new, neighborhood.

2. **Areas located within a half-mile of an existing transit station, including subway, commuter rail and bus rapid transit stations**. For the purposes of identifying the most promising places for future transit-oriented development (TOD), the state also considered locations where transportation improvements were scheduled to occur in the near future (e.g. the Green Line and Silver Line extensions). In total, 9 of the 12 state PDAs support TOD.

3. **Areas where future development activity would serve to revitalize the waterfront.** The importance of the waterfront was evident throughout the local and regional process, as evidenced by the designation of several waterfront PDAs and PPAs by the nine Metro North municipalities, as well as numerous comments made at the regional and state forums to support this priority. Thoughtful development of waterfront locations in Metro North communities has the potential to bring significant regional benefits, including: increasing the amount of jobs and housing available to meet current and future needs, creating new open space opportunities and increasing resiliency to sea-level rise and natural disasters. In total, 6 of the 12 state PDAs support revitalizing the waterfront.

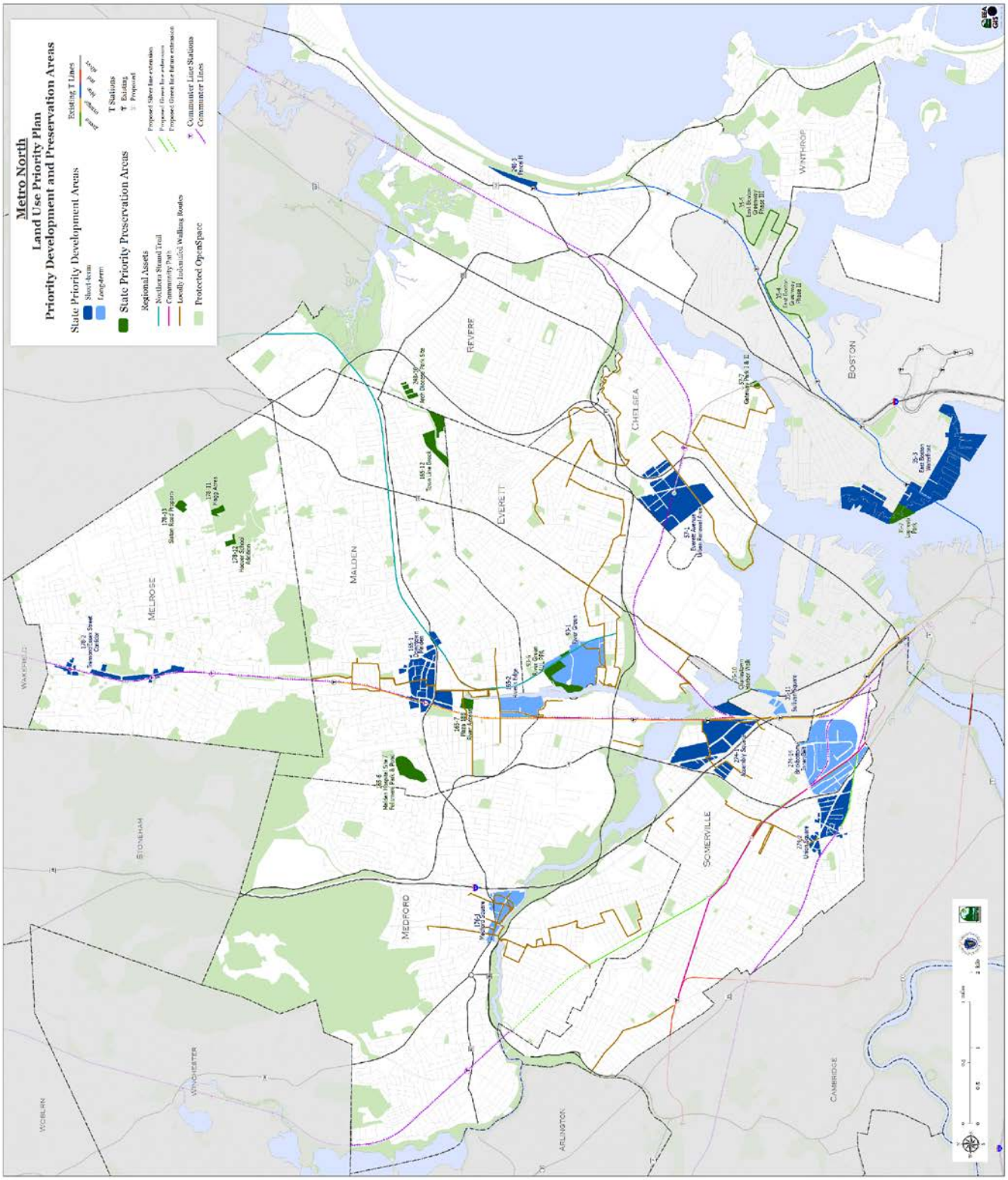
In regard to Priority Preservation Area selection, staff from Energy and Environmental Affairs met early on with MAPC to inform the screening process described previously in this report. Many alternatives were discussed, and a number of them incorporated into MAPC's PPA Model that is detailed in Appendix 2. Once MAPC issued a final list of Regional Priority Areas the Commonwealth undertook its own review. A computer based analysis was performed and agency staff familiar with existing protected open spaces and ongoing land conservation efforts in the Metro North communities was consulted.

Ultimately, given the careful screening done by MAPC and the heavily developed nature of the Metro North communities all thirteen areas deemed significant at the regional level were designated as state Priority Preservation Areas. Echoing statements made by MAPC earlier in this report, going forward it is going to be important for local, regional, and state governments to be creative and flexible – looking for ways for open spaces to fulfill multiple objectives and seizing opportunities that arise as land is redeveloped to create park space.

Conclusion

The Metro North subregion stands to benefit greatly from increasing demand for development in smart growth, transit oriented locations that provides easy access to local and regional amenities. This report lays out a set of regional locations that MAPC believes are priorities for focusing that growth and incorporating additional open space for existing and future residents. The focus must now shift from the identification of the areas to using local, regional, and state resources to fix infrastructure issues and implement regulatory changes that will catalyze change to benefit the region for years to come.

Figure 9: State Priority Areas Map



Appendix 1: List of Local PDAs and PPAs Generated During the Process

List #1 – Initial Set of 17 PDA Locations from 2013

This list represents the initial set of PDA locations as identified by the first set of meetings between the municipalities and EOHED in 2013. The City of Melrose was not included in the initial 2013 meetings, but was added prior to the start of the MAPC process.

Original Priority Development Areas

PDA ID#	Municipality	Name
1	Malden	Malden Center
2	Malden	Rivers Edge/Malden
3	Revere	Wonderland
4	Revere	Broadway Business District
5	Medford	Medford Square
6	Medford	Rivers Edge/Medford
7	Medford	Station Landing
8	Somerville	Assembly Square
9	Everett	Commercial Triangle
10	Everett	Lower Broadway
11	Everett	Rivers Edge/Everett
12	Charlestown	Sullivan Square
13	Chelsea	Gateway Center
14	Somerville	Union Square/Inner Belt
15	East Boston	Waterfront/Maverick Square
16	Winthrop	Business Centre
17	Winthrop	Crystal Cove

List #2 – MAPC's Local PDA and PPA Locations in Metro North

This list represents the final set of PDA and PPA locations as identified during MAPC's meetings with each municipality in 2014.

Full List of Local PDAs

Municipality	PDA ID #	PDA Name
Boston	35-8	Charlestown DPA
Boston	35-3	East Boston Waterfront
Boston	35-7	Hess Oil Property
Boston	35-9	I-93 Industrial Corridor
Boston	35-6	Strip Mall
Boston	35-11	Sullivan Square

Chelsea	57-9	Crescent Avenue
Chelsea	57-5	Downtown Chelsea/Bellingham Square
Chelsea	57-1	Everett Avenue Urban Renewal Area
Chelsea	57-3	Forbes Site
Chelsea	57-2	Marginal Street Waterfront District
Chelsea	57-4	Parkway Plaza
Chelsea	57-8	Prattville Commercial Area
Everett	93-3	Commercial Triangle
Everett	93-5	Everett Square
Everett	93-4	Glendale Square
Everett	93-2	Lower Broadway
Everett	93-1	River Green
Malden	165-1	Downtown Malden
Malden	165-2	Lower Commercial/Riverfront Malden
Malden	165-4	Malden Hospital Site
Malden	165-3	Overlook Ridge Site
Malden	165-8	South Broadway
Medford	176-7	Fellsway Plaza
Medford	176-1	Medford Square
Medford	176-9	Mystic Avenue Corridor
Medford	176-5	River's Edge
Medford	176-6	Riverside Avenue Industrial Park
Medford	176-2	Station Landing
Medford	176-3	Wellington Business Center
Medford	176-4	Wellington Station Air Rights
Melrose	178-5	146-160 Green Street
Melrose	178-4	Downtown Melrose
Melrose	178-1	Lower Washington Smart Growth District
Melrose	178-6	Route 1 Industrial Area
Melrose	178-2	Tremont/Essex Street Corridor
Melrose	178-3	Wyoming Hill
Revere	248-4	Broadway CBD
Revere	248-8	Caddy Farms Site
Revere	248-1	Casino Site
Revere	248-5	Existing Trailer Park
Revere	248-9	Gibson Park Site
Revere	248-3	Parcel H
Revere	248-6	Shaw's Site
Revere	248-7	Southern Revere Beach District
Revere	248-2	Wonderland
Somerville	274-1	Assembly Square

Somerville	274-11	Beacon Street
Somerville	274-3	Boynton Yards
Somerville	274-14	Brickbottom/Inner Belt
Somerville	274-7	Davis Square
Somerville	274-4	East Somerville Gateway
Somerville	274-8	Fabrication District
Somerville	274-6	Green Line Corridor
Somerville	274-10	Porter Square
Somerville	274-12	Teale Square
Somerville	274-9	Temple/Broadway/Winter Hill
Somerville	274-2	Union Square
Winthrop	346-1	Business Centre District Area
Winthrop	346-2	Crystal Cover Waterfront District

Full List of Local PPAs

Municipality	PPA ID #	PPA Name
Boston	35-1	Central Square
Boston	35-2	Lopresti Park
Boston	35-4	East Boston Greenway Phase II
Boston	35-5	East Boston Greenway Phase III
Boston	35-10	Charlestown Harbor Walk
Chelsea	57-6	Garden Cemetery
Chelsea	57-7	Gateway Park I & II
Everett	93-6	River Green AUL PPA
Everett	93-7	Best Buy Parking Pad
Everett	93-8	Lynde Park Relocation
Malden	165-5	High Rock Park
Malden	165-6	Fellsmere Park & Pond
Malden	165-7	Plaza 188 River Access
Malden	165-12	Town Line Brook
Melrose	178-7	Colluci Estate
Melrose	178-8	EMARC Property
Melrose	178-9	Dexter Road
Melrose	178-10	Contreas Property
Melrose	178-11	Flagg Acres
Melrose	178-12	Hoover School Addition Property
Melrose	178-13	Slaton Road Property
Melrose	178-14	Kenworthy/Kendal Properties
Revere	248-10	Arch Diocese Park Site

List #3 – MAPC's List of Regional PDA and PPA Locations in Metro North

This list represents MAPC's final set of regional PDA and PPA locations.

Full List of Regional PDAs

Municipality	PDA ID #	PDA Name
Boston	35-3	East Boston Waterfront
Boston	35-11	Sullivan Square
Chelsea	57-5	Downtown Chelsea/Bellingham Square
Chelsea	57-1	Everett Avenue Urban Renewal Area
Chelsea	57-4	Parkway Plaza
Everett	93-3	Commercial Triangle
Everett	93-1	River Green
Malden	165-1	Downtown Malden
Malden	165-2	Lower Commercial/Riverfront Malden
Medford	176-1	Medford Square
Medford	176-3	Wellington Business Center
Melrose	178-1	Lower Washington Smart Growth District
Melrose	178-2	Tremont/Essex Street Corridor
Revere	248-3	Parcel H
Revere	248-7	Southern Revere Beach District
Somerville	274-1	Assembly Square
Somerville	274-11	Beacon Street
Somerville	274-3	Boynton Yards
Somerville	274-14	Brickbottom/Inner Belt
Somerville	274-4	East Somerville Gateway
Somerville	274-8	Fabrication District
Somerville	274-6	Green Line Corridor
Somerville	274-2	Union Square

Full List of Regional PPAs

Municipality	PPA ID #	PPA Name
Boston	35-2	Lopresti Park
Boston	35-4	East Boston Greenway Phase II
Boston	35-5	East Boston Greenway Phase III
Boston	35-10	Charlestown Harbor Walk
Chelsea	57-7	Gateway Park I & II
Everett	93-6	River Green AUL PPA
Malden	165-6	Fellsmere Park & Pond
Malden	165-7	Plaza 188 River Access
Malden	165-12	Town Line Brook
Melrose	178-11	Flagg Acres

Melrose	178-12	Hoover School Addition Property
Melrose	178-13	Slaton Road Property
Revere	248-10	Arch Diocese Park Site

List #4 – EOHED/EOEEA List of State PDA and PPA Locations in Metro North

This list represents EOHED's and EOEEA's final set of state PDA and PPA locations.

Full List of State PDAs

Municipality	PDA ID #	PDA Name
Boston	35-3	East Boston Waterfront
Boston	35-11	Sullivan Square
Chelsea	57-1	Everett Avenue Urban Renewal Area
Everett	93-1	River Green
Malden	165-1	Downtown Malden
Malden	165-2	Lower Commercial/Riverfront Malden
Medford	176-1	Medford Square
Melrose	178-2	Tremont/Essex Street Corridor
Revere	248-7	Parcel H
Somerville	274-1	Assembly Square
Somerville	274-14	Brickbottom/Inner Belt
Somerville	274-2	Union Square

Full List of State PPAs

Municipality	PPA ID #	PPA Name
Boston	35-10	Charlestown Harbor Walk
Boston	35-4	East Boston Greenway Phase II
Boston	35-5	East Boston Greenway Phase III
Boston	35-10	Lopresti Park
Chelsea	57-7	Gateway Park I & II
Everett	93-6	River Green AUL PPA
Malden	165-6	Fellsmere Park & Pond
Malden	165-7	Plaza 188 River Access
Malden	165-12	Town Line Brook
Melrose	178-11	Flagg Acres
Melrose	178-12	Hoover School Addition Property
Melrose	178-13	Slaton Road Property
Revere	248-10	Arch Diocese Park Site

Appendix 2: MAPC's Regional Screening Tool and Site Suitability Analysis

Documentation

Summary

In order to increase transparency and provide a data-driven approach to elevating local priority areas to regional priorities, MAPC performed a suitability analysis for each local site using Community Viz, a computer-based assessment tool for planning. A suitability analysis digitally mimics the human decision-making process and can quickly evaluate sites based on a set of site suitability criteria. The local PDA and PPA sites were screened using a variety of relevant data layers as inputs into the analysis. Each site was given a suitability score based on how it scores against those data layer inputs. For example, MetroFuture includes goals and objectives related to constructing residential development in locations where future residents would be within a ten minute walk to public transportation. In order for the final suitability score to reflect this goal, MAPC utilized a dataset that delineates areas that are within a ½ mile walking distance to a transit station. Potential development sites that overlap those areas received higher suitability scores than those that did not overlap. The overall screening tool contains dozens of suitability measures against which PDAs and PPAs were screened. To create a composite score for each PDA and PPA, each measure is given a weight from 1 to 10 that reflects the importance of the measure to the type of development proposed or to the preservation of an area. All of these suitability measures feed into a final composite score from 0 (the least suitable site) to 100 (the most suitable site).

The advantage of using a suitability analysis instead of only relying on a qualitative assessment is that performing the suitability process electronically improves consistency. Once stakeholders decide how important a particular factor will be in their decision--the weight the factor is given in the suitability analysis--that decision rule is applied uniformly to each site. The weakness of the suitability analysis is that some factors cannot be quantified using a spatial dataset. Overall "project readiness," for example, is a factor that planners, developers, and local officials need to determine apart from the model. These kinds of qualitative factors must be taken into account when interpreting the suitability model output and coming to a final decision on which sites constitute regional priorities. The qualitative process was applied by MAPC after consultation with our municipal and state partners to ensure regional priority areas met local, regional, and state goals.

Preparation

The team met with planners from each Metro North municipality to obtain a set of local priority development and preservation areas. GIS Analysts Bill Wang and Eliza Wallace provided an atlas demonstrating the suitability criteria (described below) along with a large aerial photograph of the municipality overlaid by parcel boundaries. The local planners hand-sketched the boundaries of the local development and preservation priority areas on the large aerial photograph. The analysts digitized these sites by copying the included parcels into a new dataset. These parcels were then merged so that each multi-parcel priority area consisted of only one complex shape, even if that

shape was discontinuous. Each site was also assigned an ID number so that the associated data provided by the planners can be linked to each priority area for the suitability analysis.

The municipalities were also provided with a blank spreadsheet so that they could provide the following data on each priority area:

Site Type: Either a PDA or PPA

Development Type: Four Boolean fields determining whether a site was being considered for Multifamily Residential, Mixed Use Infill, Mixed Use Master Planned, Commercial Retail, Commercial Office, or Commercial Industrial development. Eventually, we combined the three Commercial uses into a single Commercial Industrial development type.

Housing Units: An estimate of the number of housing units planned for the site, if residential or mixed use.

Commercial Square Feet: An estimate of the commercial square footage planned for the site.

After the PDAs and PPAs were initially digitized, Eric or Joan followed up with each municipality to get confirmation of the digitized boundaries and associated spreadsheet data. Several municipalities requested edits ranging from adding or deleting sites, changing site boundaries, or simply altering the associated spreadsheet data. Once these details were confirmed, the local priority areas and associated data were loaded into Community Viz for the suitability analysis.

The Models

The suitability model was initially based closely on a model developed by MAPC for the South Coast Rail priority area study. The model for ranking the priority preservation areas is far simpler than that for ranking the PDAs, so it is described first, below.

The PPA Model

In Community Viz, a powerful ArcGIS add-in for planners, a number of datasets were brought in as criteria that were then weighted (with a value from 1 to 10, with 10 being the highest) to create an overall score that would indicate which sites were the most suitable areas for preservation.

Priority Preservation Areas – Suitability Criteria				
Indicators	**Metric**	**Source**	**Weight**	
Land Conservation			***Urban***	***Natural***
NHESP BioMap2 Core Habitat	Percent Overlap	MassGIS	7	8
NHESP BioMap2 Critical Natural Landscape	Percent Overlap	MassGIS	7	8
NHESP Priority Habitats of Rare Species	Percent Overlap	MassGIS	7	8
Prime Agricultural Soils	Percent Overlap	MassGIS	5	7
Prime Forest Land	Percent Overlap	MassGIS	3	8

Areas of Critical Environmental Concern	Percent Overlap	MassGIS	3	6
Water Resources				
CVPs buffered 150 feet	Percent Overlap	MassGIS	3	5
Aquifers - High and Medium Yield	Percent Overlap	MassGIS	3	5
EPA Designated Sole Source Aquifers	Percent Overlap	MassGIS	0.5	1
DEP Approved Zone 2s within 2640 ft of any PWS well	Percent Overlap	MassGIS	5	5
DEP Approved Zone 2s further than 2640 ft from any PWS well	Percent Overlap	MassGIS	3	3
Interim Wellhead Protection Areas: 2640 ft buffer of only PWS	Percent Overlap	MassGIS	4	4
Zone Bs	Percent Overlap	MassGIS	4	4
DEP Wetlands 150-ft Buffer	Percent Overlap	MassGIS	3	3
Rivers Protection Act Buffers	Percent Overlap	MassGIS/MAPC	3	3
NOAA composite shoreline 400-ft buffer	Percent Overlap	NOAA	4	4
Outstanding Resource Waters	Percent Overlap	MassGIS	4	4
Preservation Potential				
FEMA Flood Zones (100-Year Floodplains)	Percent Overlap	MassGIS	8	8
1000 ft buffer of protected OpenSpace (buffer only)	Percent Overlap	MassGIS	5	5
Accessibility				
Walkable Open Space	Weighted average of overlapping grid cells	MassGIS/ MAPC	10	2
Bicycle/Pedestrian Lanes & Paths	Percent overlap	MAPC/ MassDOT	7	2
Sidewalk Availability	Weighted average of overlapping grid cells	MassGIS/ MAPC	8	2

WalkScore™	Weighted average of overlapping grid cells	WalkScore™	8	2

Most of the criteria are consistent with the traditional criteria for land preservation—areas that would preserve natural, undisturbed habitats, such as wetlands or prime forest lands. While these criteria were crucial for the development of the South Coast Rail priority preservation areas, few undisturbed tracts of land remain in the far more densely developed Inner Core municipalities of the Metro North region. In Metro North, the focus for preservation is less on municipalities purchasing land to permanently protect an area from development, and more about carving out space to provide more recreational opportunities for the residents and workers.

To adapt the suitability methodology to the urban nature of the Metro North region, we also included a "walkable open space" accessibility measure, which was incorporated into the suitability formula along with the various "natural" criteria. "Walkable open space" constitutes the amount of open space (in acres) accessible within 1 mile by foot for each person living or working in that location. This criterion had an inverse weight, meaning that the local PPAs with less available open space per person received a higher overall regional PPA score. For example, the East Boston Greenway scored very highly according to these criteria because it scored low on "walkable open space", while also scoring high on the more traditional criteria.

After running this model and examining the outputs, we realized that some areas in the northern part of the subregion did have some potential for more traditional preservation. In particular, some areas overlapped with prime forest areas. These areas had lower population density, however, and so the model rated them lower overall. To avoid excluding areas that met the more traditional definition of a regional preservation priority, MAPC added a scenario in Community Viz called "Natural Areas" that would not weight the accessibility criteria as highly. See the table above for the weights of each scenario. When selecting regional PPAs, MAPC chose the top rated PPAs from the "accessibility" scenario, and then selected the top-rated PPAs from the "natural" scenario as well.

The PDA Model

The suitability model for ranking the PDAs is far more complex than that for the PPAs. The suitability criteria for PDAs are grouped by topic area. Each criterion has a weight that contributes to its score within that topic area. For example, MBTA Transit Walksheds are a layer included in the analysis within the "Travel Choices" topic. Each PDA has a score for percent overlap with that layer. For a PDA in the multifamily residential scenario, that score receives a weight of 7 in the "Travel Choices" topic. That PDA will receive an overall score for all Travel Choices. Travel Choices, in turn, is weighted relatively highly towards the overall suitability score (7). In contrast, the Current Assets criteria group as a whole only receives a weight of 4.

Not every local PDA was included in each scenario in the final score calculations. Ultimately, MAPC used four distinct scenarios for ranking PDA sites—Multifamily Residential, Mixed Use Master Planned, Mixed Use Infill, and Commercial. See the table below for details on the differences in weight for each criterion for the four scenarios.

Priority Development Areas – Suitability Criteria						
Indicators	**Metric**	**Source**	**Multifamily Residential**	**Mixed Use: Infill**	**Mixed Use: Master Planned**	**Commercial**
Travel Choices			**7**	**7**	**7**	**3**
Percent of Non-Auto Commutes	Weighted average of overlapping census tracts	ACS 2007-11 5-Year Estimates	7	7	2	0
Jobs within 45min Transit Commute	Weighted average of overlapping	EPA Smart Location Database	5	5	5	0
Workforce within 45min Transit Commute	Weighted average of overlapping	EPA Smart Location Database	0	0	3	5
MBTA Transit Walksheds	Percent overlap	MAPC/ MassGIS/ MassDOT	7	5	5	2
Walkable Communities			**9**	**9**	**3**	**3**
Sidewalk Availability	Weighted average of overlapping grid cells	MassGIS/ MAPC	5	5	5	2
WalkScore™	Weighted average of overlapping grid cells	WalkScore™	5	5	5	2
Bicycle/Pedestrian Lanes & Paths	Percent overlap	MAPC/ MassDOT	5	5	5	0
High Traffic Roadway Proximity	Percent overlap	MassGIS	5	5	5	0
Walkable Schools	Count	MAPC	7	5	5	0
Intersection Density	Weighted average of overlapping grid cells	MassGIS	3	5	3	0

Open Spaces			**2**	**2**	**2**	**2**
Rare Species Priority Habitat	Percent overlap	MassGIS	5	5	8	5
Core Habitat & Critical Landscapes (from BioMap2)	Percent overlap	MassGIS	5	5	8	5
Agricultural Land Use	Percent overlap	MassGIS	5	5	5	5
Undeveloped Land	Percent overlap	MassGIS	2	5	5	5
Developable Land	Percent overlap	MassGIS	0	0	0	0
Healthy Watersheds			**5**	**5**	**3**	**3**
Zone II Aquifer Recharge Areas	Percent overlap	MassGIS	5	5	8	7
Zone B Surface Water Supply	Percent overlap	MassGIS	5	5	5	5
Flood Zones - 100 year	Percent overlap	FEMA/ MassGIS	7	5	7	5
Flood Zones - 500 year	Percent overlap	FEMA/ MassGIS	7	5	5	5
Current Assets			**4**	**5**	**2**	**5**
Number of Businesses	Weighted average of overlapping grid cells	InfoGroup/ MAPC	3	7	3	2
Population & Employment Density	Weighted average of overlapping grid cells	InfoGroup/ MAPC	7	5	3	0
Inverse Population & Employment Density	Weighted average of overlapping grid cells	InfoGroup/ MAPC	0	0	0	5
Growth Potential			**4**	**4**	**10**	**7**
Recent & Proposed Developments	Count	MAPC	5	5	6	3
Estimated Development Capacity	Calculated value	MAPC	5	5	8	7
Smart Growth Zoning Districts	Percent overlap	MAPC	5	5	5	5
Expedited Permitting Districts	Percent overlap	MAPC	5	5	5	0
EOHED Growth District Initiative sites	Percent overlap	EOHED	0	0	5	7

MassGIS	0	0	5	5

After creating a ranked list from 0 to 100 of all PDAs for each scenario, MAPC created a draft list of PDAs based on the top third or half of sites in each scenario. For most scenarios, we elevated the top third to a regional priority, but there were far fewer commercial sites, so we elevated the top half of those.

Ultimately, after the suitability analysis was conducted, we shared the draft list with various stakeholders at a forum, where MAPC gathered some of the local knowledge that could not be captured through our spatial datasets. The experience of local planners, officials, and developers was taken into account to interpret the suitability rankings, and to make necessary adjustments.