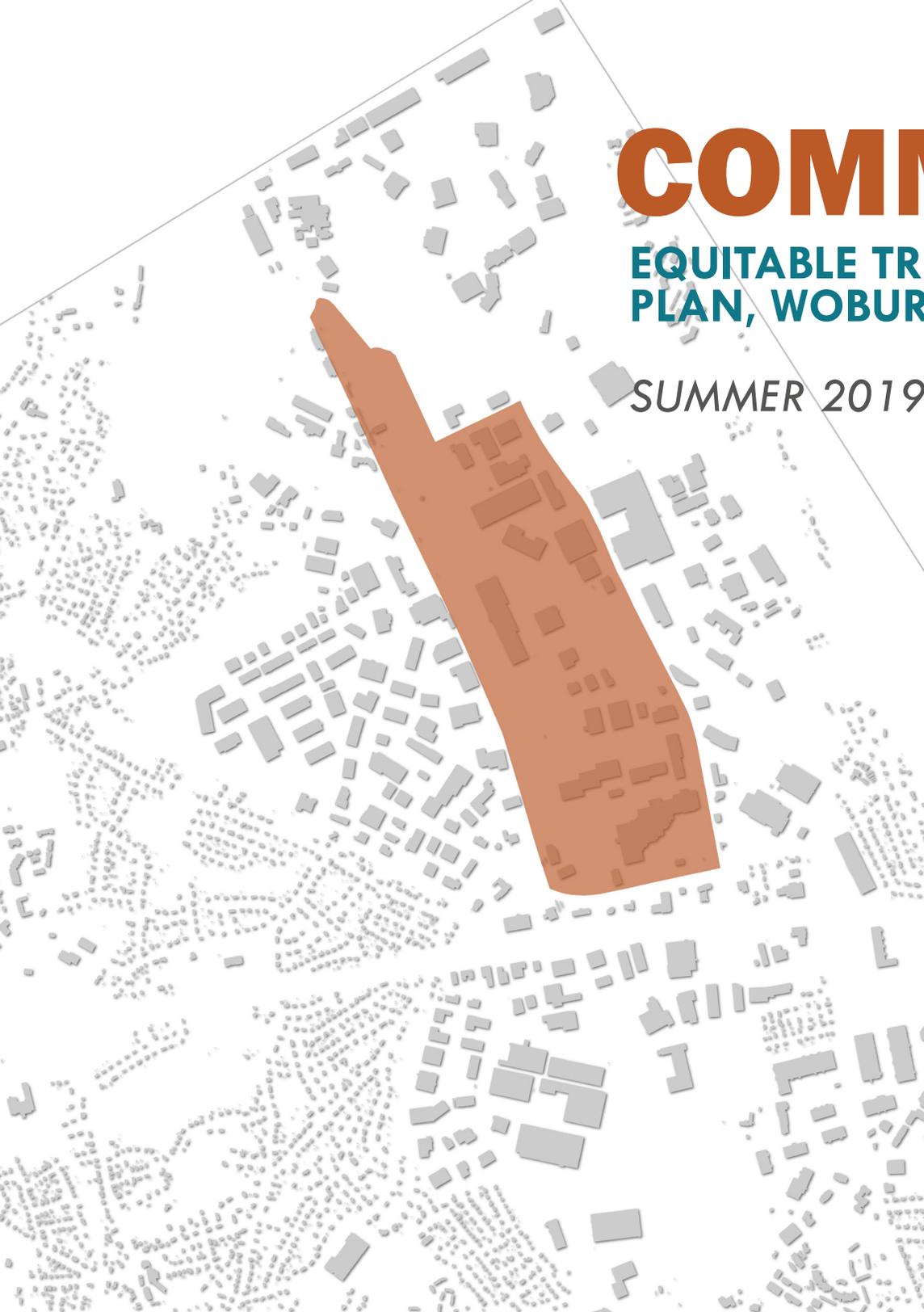


COMMERCE WAY

EQUITABLE TRANSIT-ORIENTED DEVELOPMENT PLAN, WOBURN MA

SUMMER 2019



ACKNOWLEDGMENTS

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STUDY GOALS

Woburn's Commerce Way corridor is in the midst of a nascent revitalization. An area that was once synonymous with environmental degradation became a thriving commercial and industrial area. The corridor is now entering a second phase of its evolution, where anticipated future development will help create a walkable, mixed-use neighborhood.

The City of Woburn has partnered with the Metropolitan Area Planning Council to understand the area's potential, develop a community-led vision for the area, and craft a variety of recommendations and associated deliverables to help achieve this vision. The plan attempts to balance the various needs and desires of a diverse set of stakeholders.

An overarching aim of this study is to leverage the area's transit-oriented location, including a focus on ensuring access to homes and jobs is available to people across the socio-economic spectrum. This focus, known as Equitable Transit-Oriented Development (E-TOD) can be among the best ways for communities to develop in a way that meets its needs, as well as the region's. (See Benefits of E-TOD on page 12 for additional information.)

Within this context, the plan's major areas of focus include:

- Neighborhood development with a focus on integrating proposed and future residential and mixed-use development into the area.
- A sense of place by leveraging the area's natural assets and incorporating distinctive, high quality design to future development.
- Connectivity, especially for pedestrians through new and enhanced infrastructure, as well as urban design that fosters walkability.
- Economic vitality through public and private transportation improvements to connect people to Woburn's major job centers and transit.

Recommendations to achieve the above are provided for potential short-, medium-, and long-term time frames to assist the City with prioritization. Furthermore, the various tools and stakeholders needed for implementation are listed.

Previous Studies

As part of this plan, relevant studies have been reviewed to understand context and build on relevant recommendations. These previous studies include:

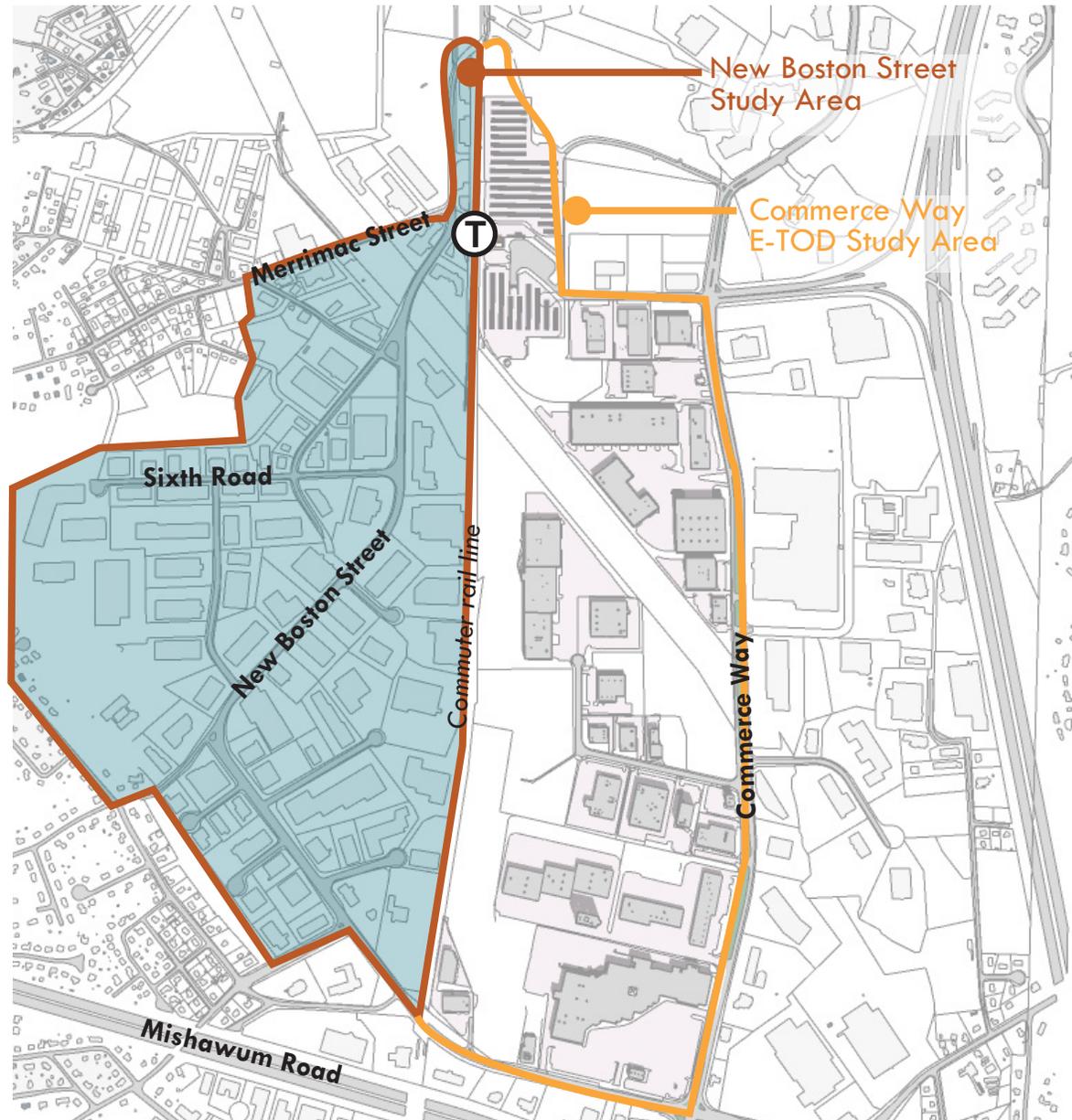
- **City of Woburn Plan for Progress: Master Plan 2015-2025** (January 2016). The City's most recent master plan has a number of goals and strategies directly related to the Commerce Way study area.
- **Woburn Housing Production Plan** (June 2016). By its nature, E-TOD includes housing for various income groups and family types. The City's recent HPP was reviewed to understand Woburn housing need and demand.
- **New Boston Street Bridge Replacement: 25% Design Submission** (July 2011). The upcoming reconstruction of the New Boston Street Bridge, destroyed in the 1970s, creates new connectivity opportunities. These planning efforts were consulted to inform this plan's transportation recommendations.

New Boston Street Study

In addition to the previous studies listed on the preceding page, the City engaged MAPC on a small body of work related to the adjacent New Boston Street area. The New Boston Street Industrial Park is a thriving business district supporting over 300 businesses and thousands of jobs. Its easy access to highways make it attractive for businesses serving a regional customer base and also provides an excellent employment base both from the Boston suburbs as well as smaller cities around the region.

MAPC facilitated a meeting with area land and business owners to inform recommendations that would further the area's continued success as a business and industrial district. This, combined with an analysis of the site and existing businesses led to a number of recommendations. Although the nature of the New Boston Street area differs from the E-TOD area, a number of the recommendations apply to both areas and have been incorporated into this plan, as appropriate.

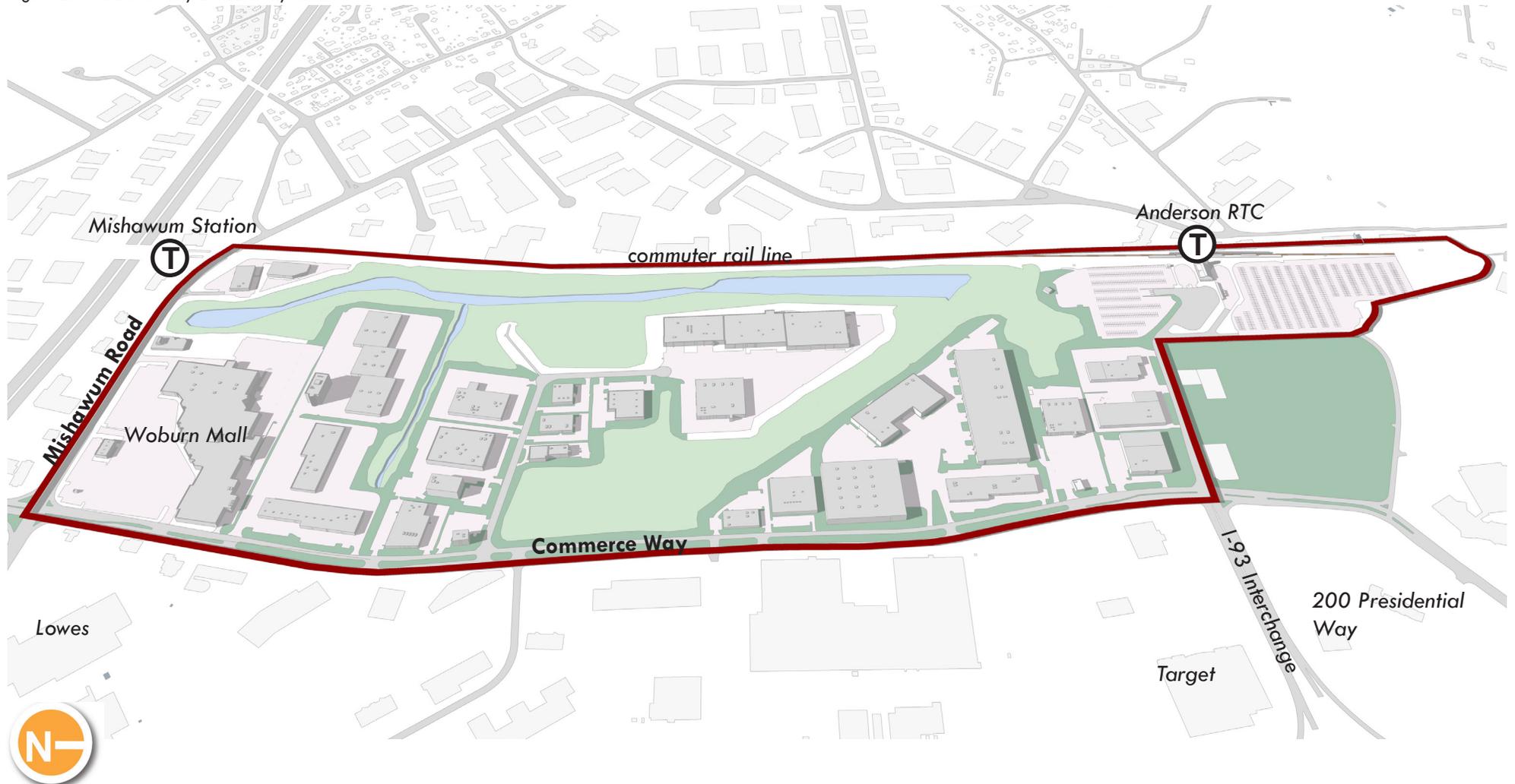
Figure 1: New Boston Street study area



THE LOCATION

The study area, described in detail in the Study Area chapter of this plan, is a highly attractive site for additional development, including mixed-use and multifamily, as well as the various elements (e.g., transportation improvements, public realm enhancements, restaurant and retail opportunities) needed to create a vibrant neighborhood.

Figure 2. Commerce Way E-TOD study area



Achieving City Goals

As noted above, Woburn's recent Housing Production Plan and Master Plan set forth a number of goals and strategies relevant to the study area.

Some of the Master Plan's major goals are:

- » The City will prioritize achieving more affordable housing through new developments.
- » The City will take better advantage of regional assets such as the Anderson Woburn Commuter rail station and create connections between MBTA stations and other areas of the City.
- » Commercial growth will occur within the Downtown Area, the Commerce Way Overlay District, and New Boston Street area with some potential additional development at the former Kraft site in southeastern Woburn.
- » The City will continue to prioritize preserving open space and providing recreational opportunities for its residents.

Specific goals that this E-TOD plan and associated deliverables advance include:

1. Encourage appropriate and well-designed development.
 - » Create design guidelines for all Woburn business districts and other districts where mixed-use residential and commercial are allowed.
 - » Provide incentives for a variety of housing types by reviewing and allowing a greater range of residential uses by-right and by offering incentives in appropriate locations.
 - » Provide information about 40R Districts, sample ordinances, 40R applications, and information on Compact Neighborhoods to Planning Board, Zoning Board of Appeals, and City Council.
 - » Consider establishing 40R Smart Growth Overlay Districts at Anderson RTC or other appropriate site(s).
2. Add affordable housing units to the Subsidized Housing Inventory to achieve the 10% requirement.
3. Increase resident awareness of unmet housing needs and demand, and explore real and perceived impacts of housing development on the community.
4. Utilize land use policies, design standards, and public investment to create commercial districts that incorporate a mix of uses in key development areas.¹
 - » Pursue transit-oriented development at the Anderson RTC.
 - » Consider implementing design guidelines for the Commerce Overlay/New Boston Street area.
5. Work with key property owners within the priority development areas to foster new development in line with the goals of this plan.
 - » Work with property owners in the Commerce Way Overlay and New Boston Street areas to determine possibilities for redevelopment.
6. Improve access between Anderson RTC and area employers.
 - » Study and establish a shuttle service between Anderson RTC and major employment areas.
 - » Investigate feasibility of establishing or partnering with a transportation management organization or association.

¹ The identified key development areas included downtown, New Boston Street, and Commerce Way Overlay.

7. Provide active and passive recreational opportunities for all residents.
 - » Create multi-use trails to provide access to open spaces and other uses.
 - » Develop multi-use path on or near the MBTA right-of-way.
8. Improve access to transit.
 - » Construct foot bridge between Anderson RTC and Merrimac Street.

Demand for TOD style development

Across the region, and indeed, nationally, macro-trends are converging that make transit-oriented development in extremely high demand. The trends are both demographic and cultural.

Among demographics, several factors stand out. First, household size is generally decreasing. For example, in Woburn the average household size in 2000 was 2.5. In 2010 it decreased to 2.4. By 2030 MAPC projects this figure to drop to 2.3. As younger people are often waiting longer to have children and older people are living longer, demand for housing appropriate for smaller households has increased.²

Second, population in the City has increased over the past several decades, a trend expected to continue. The City’s population in 1990 was 36,000. By 2030, MAPC projects the population to be nearly 42,000. Housing types associated with TOD, including multifamily, townhouses, and other clustered forms of development, can be the best way to accommodate this future growth.

Finally, Woburn is aging rapidly. From 2000 through 2030, residents 65 years of age and older are expected to grow by 74%, rising from 16% of Woburn’s total population to a quarter of

it. (See Figure 3.)

The change in demographics, combined with changing preferences and needs for various age groups, suggest several things:

- Many seniors wish to “age in place,” i.e., remain in their communities during retirement. Many of these people increasingly do not want or are unable to drive for every trip. As with the younger generation they are increasingly interested in access to restaurants, stores, and other amenities.
- Younger people (20-34 year olds) are generally interested in living in a walkable, downtown-like setting, where they can walk to restaurants and other points of interest. They often don’t want to rely on a car for every time they leave their homes. They also want easy access to transit such as the commuter rail. For example, according to a recent poll, 76% of Millennials want to live in a transit-oriented neighborhood (i.e., containing the elements listed above).³ While many would choose to live in the downtown neighborhoods of Boston, Somerville, and Cambridge, as these communities become increasingly unaffordable, suburbs such as Woburn become more attractive.

² See <http://www.housing.ma/woburn/profile>

³ 2015 Urban Land Institute Boston/New England and MassINC Polling of 660 Boston area young professionals.

- People entering their mid-30s are often interested in living in a community with good schools. As their household sizes increase, they often prefer single family homes with more space. But many would still like easy access to the trappings of downtown settings with restaurants, night life, and a mix of amenities, even if they don't live directly within that type of setting. (See Figure 4.)

These factors imply a need for:

- Additional housing units, particularly smaller units for rent or sale in multifamily buildings.
- A walkable community, containing a mix of uses where people do not need to rely on automobiles for every trip or activity. Being walkable means having places to go in an attractive setting (i.e., the walk must be interesting), in addition to being safe and accessible.
- Access to transit, as many young professionals work in or near Boston. Within the broader context of an increasing preference for downtown settings, many employers are relocating to Boston and adjacent communities, making transit access increasingly attractive.

Within this framework, the Commerce Way area is well-positioned to support the changing demographic needs.

Figure 3. Woburn population by age cohorts

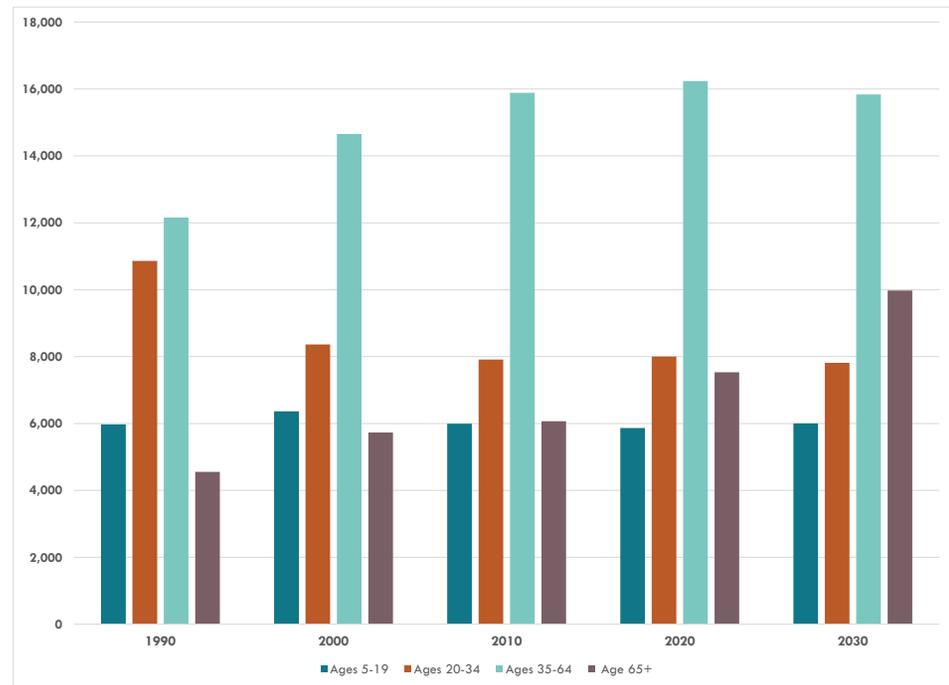
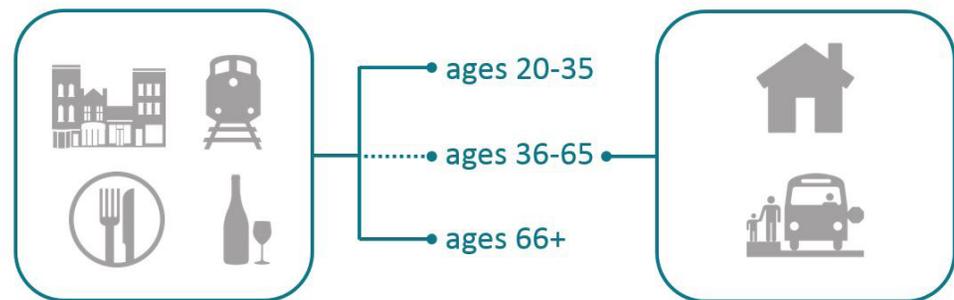


Figure 4. Due to cultural and demographic shifts, younger and older generations tend to be interested in living in walkable, transit-oriented neighborhoods.

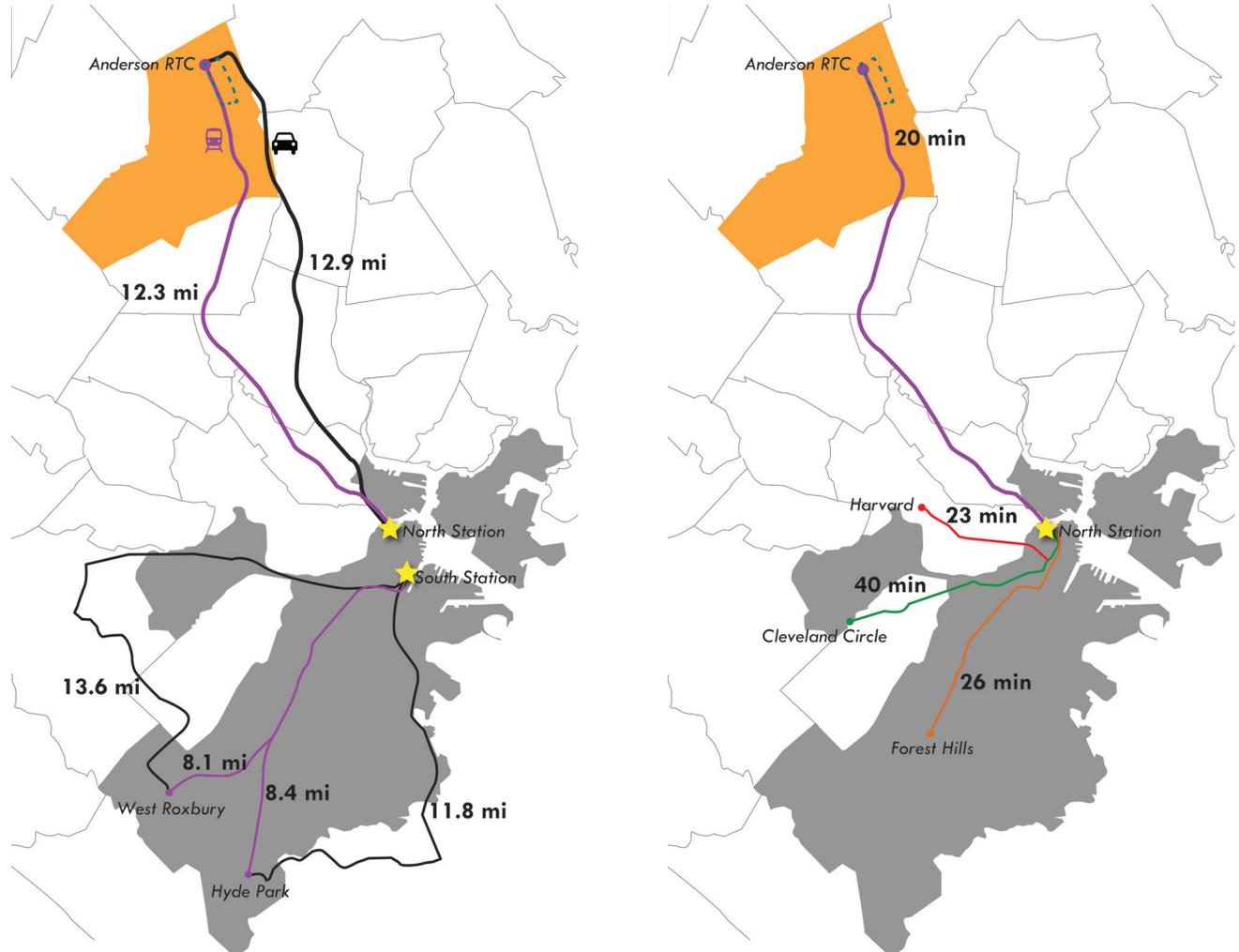


Location relatively close to Boston

Woburn’s location is another asset that makes TOD attractive. As a regional employment center itself and its proximity to the Route 128 corridor, it provides an attractive base for residents to access area jobs. Yet it is also relatively close to Boston, making it an attractive and relatively cost-effective choice for Boston employees. For example, it is approximately 13 miles from Anderson Station to North Station by car. This is similar to even some of Boston’s own neighborhoods, such as parts of West Roxbury and Hyde Park.

More important than distance, however, is time to destination. Although rush-hour vehicular trips can be arduous (as it is everywhere in the region), the commuter rail provides hourly access to Boston in only 20 minutes. Although frequency is far short of the MBTA subway lines, actual times to North Station are often much shorter than many places that are geographically closer. (See Figure 5.)

Figure 5. Distance and, more importantly, time to travel from Anderson RTC to downtown Boston is not very different from many locations within and close to the city itself. (Frequency of transit service, however, is far better on the subway lines compared to the commuter rail line.)



*Road distances were estimated by fastest route to destination for road distances, not, necessarily shortest route. Both road distance and transit time were estimated via Google Maps.

Projections Methodology

The metropolitan Boston region is home to an ever-changing population, shaped by numerous factors. To help plan for this uncertain future, MAPC has prepared a dynamic model of future population, household size, and housing demand for Metro Boston and its municipalities. MAPC's projections include two scenarios for regional growth. Each scenario reflects different assumptions about key trends. The "Status Quo" scenario is based on the continuation of existing rates of births, deaths, migration, and housing occupancy. Alternatively, the "Stronger Region" scenario explores how changing trends could result in higher population growth, greater housing demand, and a substantially larger workforce. Specifically, the Stronger Region scenario assumes that in the coming years:

- The region will attract and retain more people, especially young adults, than it does today;
- Younger householders (born after 1980) will be more inclined toward downtown living than were their predecessors, and less likely to seek out single family homes; and,
- An increasing share of senior-headed households will choose to downsize from single family homes to apartments or condominiums.

Of the two scenarios, Stronger Region is more consistent with the housing, land use, and workforce development goals of MetroFuture and has been adopted by the Executive Office of Housing and Economic Development as the basis for the Commonwealth's multifamily housing production goal. Furthermore, based upon a review of its previous projections, the Stronger Region scenario was the more accurate of the two scenarios. The projections in this report, therefore, rely on the Stronger Region scenario.

Development of these projections was supported by an advisory team comprising academic experts, state agencies, neighboring regional planning agencies (RPAs), and member municipalities. MAPC reviewed reports from other regions nationwide to assess the current state of practice and also reviewed prior projections for its region to assess their accuracy and identify opportunities for improvement. The "Metro Boston" region refers to 164 cities and towns in Eastern Massachusetts, including the entire MAPC district as well as all or portions of five neighboring RPAs. This region coincides with the extent of the travel demand model used by the Boston Metropolitan Planning Organization.

Data sources for the projections include Decennial Census data from 1990, 2000, and 2010; American Community Survey (ACS) data from 2005 to 2016; fertility and mortality information from the Massachusetts Community Health Information Profile (MassCHIP); housing production information from the Census Building Permit Survey database; and MAPC's Development Database. For more information please visit <http://www.mapc.org/available-data/projections>.

Scale of Study Area

The final element of the study area's attractiveness for TOD is its size, which represents a huge opportunity for redevelopment. While many existing businesses are thriving and, indeed, the City may not wish to see wholesale redevelopment of this area, there is enough opportunity to accommodate new growth while retaining parts of the site, as is. The following diagrams (Figures 6 through 9) provide examples of locations to give a sense of the study area's scale.

Figure 6. The Commerce Way E-TOD study area outlined to provide a comparison to other areas. Note: The scale comparisons are approximations and intended to provide a sense of scale, not to imply the type or intensity of future development.



Figure 7. The Commerce Way E-TOD study area is approximately the size of Boston's Back Bay neighborhood.

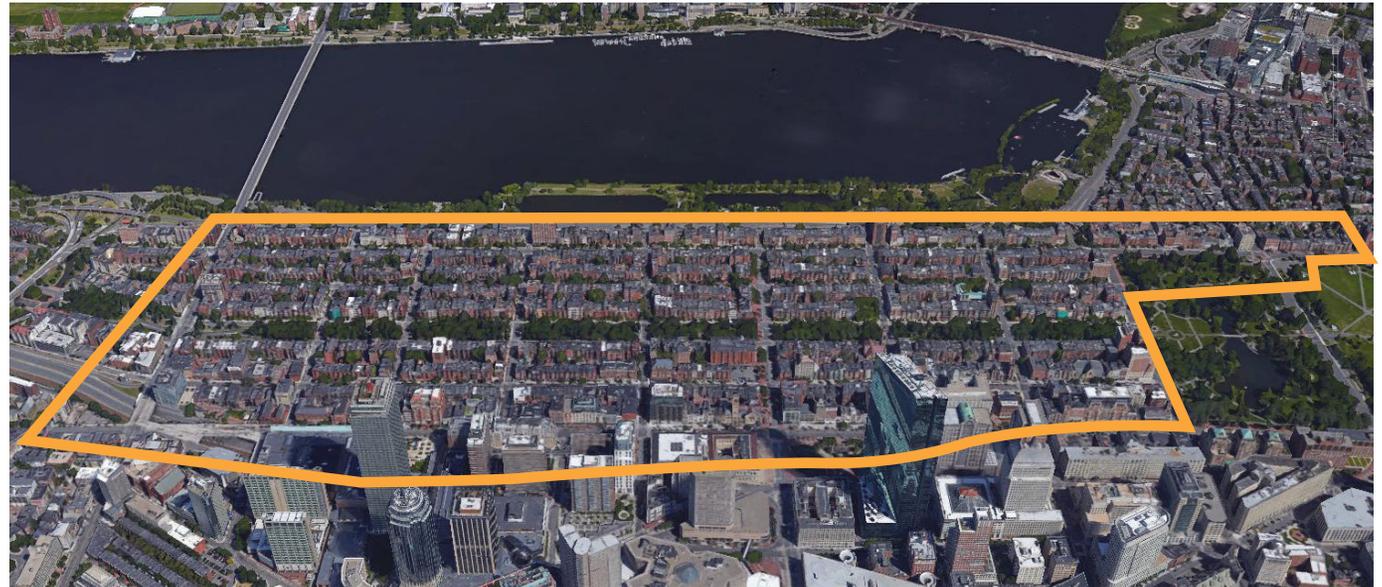


Figure 8. The Commerce Way E-TOD study area is approximately the size of two Assembly Rows (Somerville)

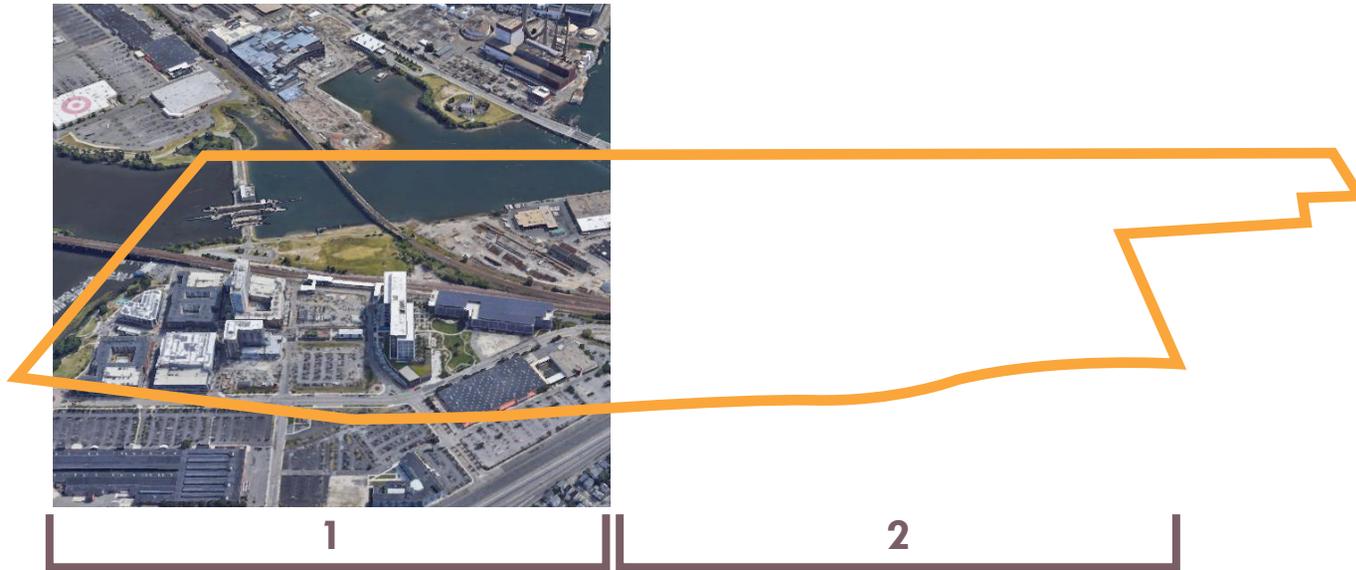
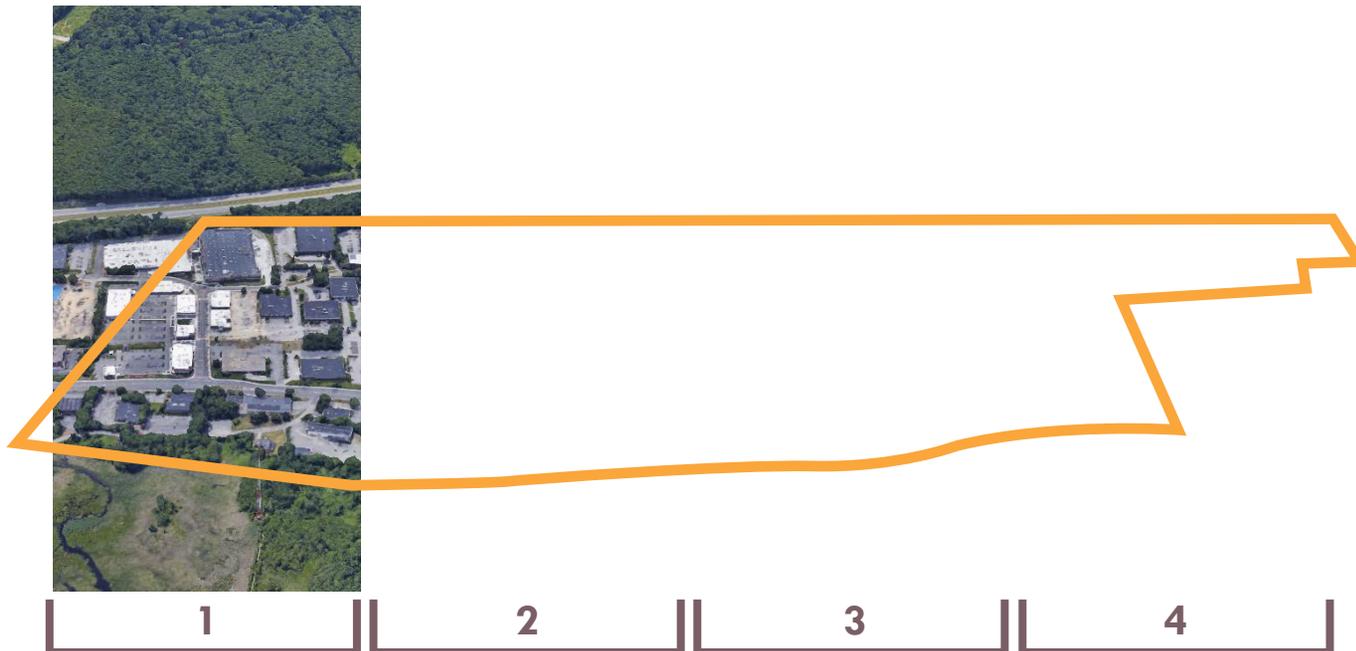


Figure 9. The Commerce Way E-TOD study area is approximately the size of four Third Avenues (Burlington)



EQUITABLE TRANSIT-ORIENTED DEVELOPMENT OVERVIEW

Woburn's Commerce Way E-TOD corridor is well-located both with a commuter rail station and the potential for additional multi-modal options for traveling throughout the City. Transit-oriented development (TOD) is a strategy to integrate a mixture of housing, office, retail and other daily needs in a walkable neighborhood close to quality public transportation. TOD is usually accomplished through higher intensity, mixed-use, multifamily development close to the station area with decreasing intensity as one gets further from the station.

Equitable TOD combines the TOD approach with an "equity lens," helping to ensure that the development serves those who most stand to benefit. It incorporates affordable housing and other measures to reduce displacement pressures on both residents and commercial tenants.

The ability of residents and employees to walk and bike to and from the station area is also extremely important. A safe and well-connected walking and biking network helps connect residents to local businesses, jobs, recreation areas, and the transit station itself. More trips taken by cyclists and pedestrians can help reduce auto traffic on local and regional roadways, improving congestion and air quality.

TOD has a number of benefits for a community, depending on the type and quality of the transit service available.

Benefits of Transit Oriented Development

TOD can provide transportation choices. TOD provides transportation for young people, the elderly, people who do not drive, and those who choose to or cannot afford to own a car.

TOD can increase transit ridership. TOD improves the efficiency and cost effectiveness of transit investments. New development around transit stations can increase transit ridership by 20 to 40 percent, which would increase revenue for the MBTA.

TOD can reduce reliance on automobiles. By creating neighborhoods where housing, jobs, and shopping are within walking distance to transit, reliance on driving can be reduced. TOD can reduce annual household rates of driving by 20 to 40 percent.

TOD can reduce air pollution and energy consumption. With more pedestrian, bike, and transit travel taking place, reductions in driving can ease congestion and improve local air quality. TOD can reduce rates of greenhouse gas emissions by 2.5 to 3.7 tons per year for each household.

TOD can increase households' disposable income. Housing and transportation costs are the number one and two highest expenses households have to account for. Some estimates show that reducing household driving costs can help save \$3,000-\$4,000 annually. This can greatly increase a household's disposable income and ease overall household cost burden. By reducing household expenditures on transportation costs, more disposable income is available to be spent on housing costs.

TOD can bolster the local economy. Constructing housing within walking distance to existing or future business districts means local businesses can be supported by the surrounding neighborhoods.

TOD can increase the municipal tax base. New development around the transit station can add to the municipal tax base without large infrastructure costs. This can mean new investments in schools, municipal services, or parks and recreation.

TOD can contribute to more affordable housing. New development around transit stations should also include deed restricted affordable housing units for households making below the area median income.

TOD concepts can be applied in a context-sensitive manner to fit the character of the community, from small suburbs to urban centers. The accompanying photos (Figure 10) are local examples of TOD along commuter rail stations.

Figure 10. Local examples of transit-oriented development projects



Salem



Beverly



Reading



Melrose

THE SITE

The Commerce Way E-TOD area is located in the northeast quadrant of the city, near the I-93 and I-95 interchanges. (See Figure 11.) The study area is bounded by Mishawum Road on the south, the commuter rail tracks on the west, Commerce Way on the east, and Atlantic Ave / Anderson Regional Transportation Center on the north. All sides of the study area are bounded by commercial, retail, and industrial spaces. For example, the corridor on the east side of Commerce Way includes a Lowes Home Improvement, restaurants, hotel, distribution center, and Target. Woburn's residential areas, which are primarily single family residences, are located to the west and south of the study area.

Figure 12 provides a diagram of the study area. The corridor, over a mile long, extends from the Woburn Mall at the corner of Mishawum Road and Commerce Way up to Anderson RTC. The width is more than a third of a mile wide, giving a total land area of 236 acres. Twenty-nine parcels comprise the study area, which contains almost 1.3 million square feet of development, most of which is large-footprint, single story industrial and commercial space. The Aberjona River, Mishawum Lake, and associated wetlands line the western half of the site, and a utility corridor cuts across the area. Figure 13 provides various photos of the study area.

STUDY AREA OVERVIEW

Figure 11. Location of study area within Woburn

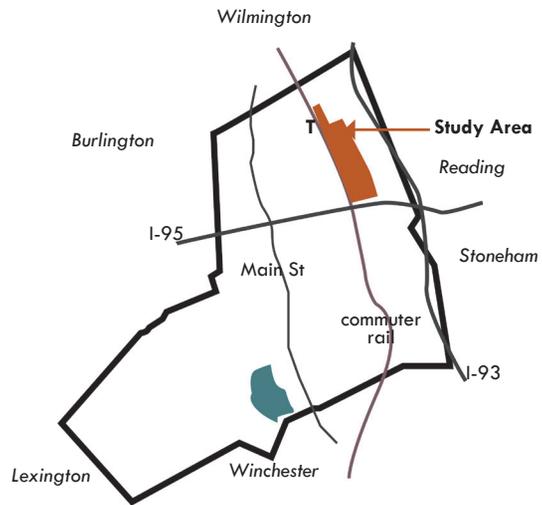


Figure 12. Study area details

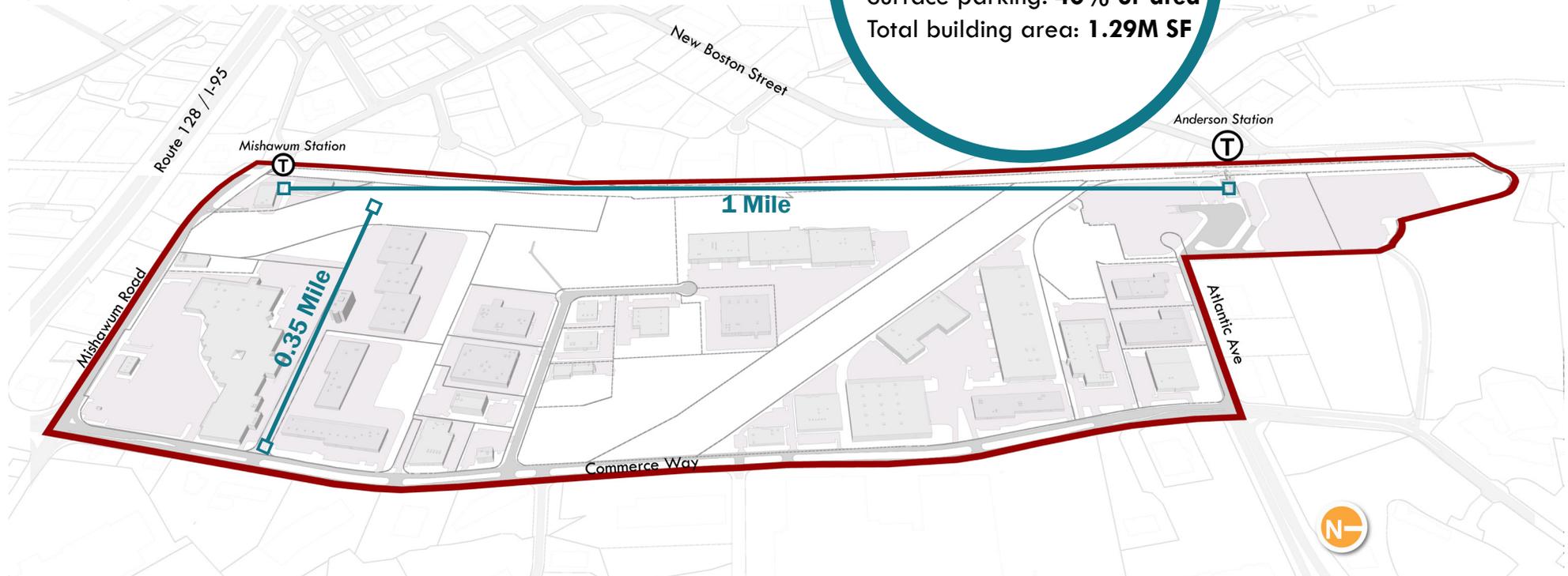


Figure 13. Study area photos



ZONING

Zoning is one of the primary tools that a municipality has to shape an area’s future by directly impacting future development. Zoning can be used to encourage and shape different types of uses, building dimensions, building design, site layout, and more. Examples where zoning can impact future development include:

- Types of uses allowed and the mix (or lack thereof) of these uses.
- The size, height, and location of a building within its parcel, such as: total buildable area; number of floors; front, side, and rear setbacks; and maximum lot coverage.
- Parking requirements, such as the amount, location, and landscaping of parking areas.
- Elements related to the exterior of the

building, such as location of parking, entrance locations, and landscaping.

The first step to formulating zoning recommendations is to understand the existing regulations and their implications. The study area’s base zoning contains three districts:

- 1. Industrial Park (I-P) and Industrial Park Two (IP-2).** The majority of the study area, as well as the majority of the surrounding area, is part of the I-P and IP-2 districts. Both districts allow by right light and heavy manufacturing (<15,000 SF), office (<15,000 SF), research and testing laboratories, biomedical facilities, medical and dental offices, as well as childcare, theater, and gyms. City Council may grant a special permit for larger manufacturing facilities, warehouse and distribution facilities, automotive repair and gas stations, and wholesale activities. The

primary difference between the I-P and IP-2 is that the latter allows medical marijuana facilities by Special Permit.

- 2. Interstate Business (B-I).** The Woburn Mall site, as well as two parcels near the north of the study area are within the B-I district. This district allows a variety of commercial activities. Examples of by-right uses include retail (<5,000 SF), office (<15,000 SF), restaurants, personal services, medical/dental offices, financial institutions, as well as childcare and gym uses. City Council may provide a special permit for residential above commercial uses, retail greater than 5,000 SF, office greater than 15,000 SF, a shopping center, fast food establishments, auto repair, gas station, theater, and bowling alley.

Table 1 provides the dimensional regulations for the three base districts comprising the study area.

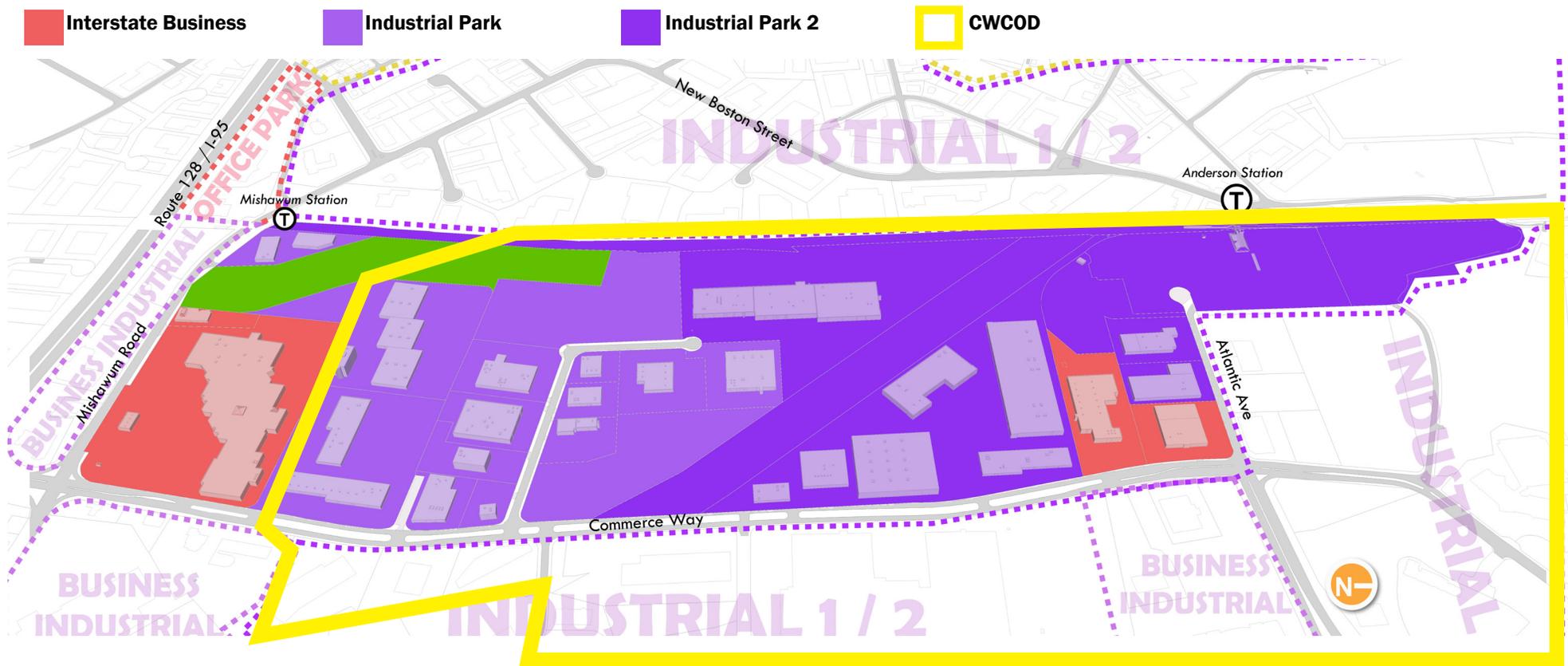
Table 1. Study Area Dimensional Regulations

District	Lot Size Min.	Lot Width Min.	Street Frontage Min.	Front Yard Setback	Side Yard Setback	Rear Yard Setback	Useable Open Space	Height (Feet)*	Height (Stories)*	Building Ground Coverage	Floor Area Ratio
B-I	12,000 SF	40 FT	125 FT	25 FT	25 FT	30 FT	15%	80 FT	7	N/A	0.5
I-P	40,000 SF	40 FT	125 FT	25 FT	25 FT	25 FT	30%	80 FT	7	N/A	0.5
IP-2	40,000 SF	40 FT	125 FT	25 FT	25 FT	25 FT	30%	80 FT	7	N/A	0.5

*Within 700 feet of Residential-One, -Two, and -Three the maximum height of structures is 35 feet and/or three stories.

In addition to the base zoning, the study area, with the exception of the Woburn Mall Parcel, is part of the Commerce Way Corridor Overlay District (CWCOD). The CWCOD is a product of the City’s Vision 2020 Master Plan (2005). Its purpose is to allow, by City Council Special permit, mixed-use residential, multi-family, retail, office and research uses, particularly around underutilized or environmentally challenged sites within a broader range of commercial areas. Other stated purposes include increasing the “opportunity for development in transit-served areas of the community” to encourage projects that provide “proximate access to highway and public transportation” and provide a mix of land uses that “will serve the community and regional interest in housing, employment and net positive tax revenue.”⁴ (See Figure 14.)

Figure 14. Study area zoning districts



⁴ Woburn Zoning Ordinance, Section 23.1, pg. 23-1

This overlay district followed the allowance of dwelling units above the first story in commercial buildings, first in the Downtown Business district (2001) and later (2007) in the Highway Business and Interstate Business areas. The CWCOD was adopted in 2009 over portions of the Industrial Park, Industrial Park 2, and the Interstate Business Districts.

As with all overlay districts, the underlying zoning uses and dimensions may still be used but only if the property owner chooses not to use the overlay uses and dimensions. Dimensionally, the CWCOD allows for greater density, in addition to a mix of uses.⁵ Minimum lot size of 100,000 square-feet is required and building heights of up to 130 feet or 10-stories are allowed, with height reductions to 45-feet within 150 feet of a residential district (not relevant to the study area portion of the CWCOD). Frontage (100 feet) and yard setbacks are similar to the I-P and I-P 2 underlying zoning with 80% lot coverage allowed for mixed use and commercial projects and 60% for residential only projects.

Allowed uses in the CWCOD differ significantly from the three underlying base zoning districts, particularly as they allow retail uses, shopping centers, mixed-use buildings, mixed-use

residential, mixed-use commercial and multi-family housing. Large retail projects of over 150,000 square-foot gross building area are a by-right use allowing higher density and subject only to Site Plan Approval.

Since its creation, the CWCOD has not generated the amount of proposals the City anticipated, which may be surprising given its strong location and generally well-thought through uses and dimensional regulations. One likely reasoning is the timing of the district's adoption, immediately after the Great Recession of 2008, which impacted development for years. In addition, the overlay's regulations may have been overly burdensome, which led to changes in 2012. The Recommendations section contains a number of modifications to further improve the usability of the regulations. Finally, the environmental challenges of the site may have hindered development.

Recently, a project was permitted under the CWCOD, suggesting there may have been a wait-and-see approach from developers.

LAND USE

The existing land uses in the study area largely reflect those allowed in the base zoning. Fifty-seven percent of the built area is classified as industrial, retail comprises 23% (most significantly the Woburn Mall), and office makes up 18%. Retail and offices are concentrated on the southern half of the site, primarily the 270,000 SF Woburn Mall. (See Figure 17.)

As noted above, the mixed-use focus of the CWCOD has not resulted in construction to date. There are, however, recent signs of changes to the area. A development at 120 Commerce Way (Figure 15) has been permitted for 289 residential units with ground-floor retail. Although construction has not yet begun, it illustrates the demand for mixed-use development in the area, that the CWCOD can provide viable means for achieving this style of development, and that environmental hurdles can be overcome. In addition, just outside the study area at 200 Presidential Way, a 200-unit multi-family development is under construction (Figure 16). Finally, the Woburn Mall, is under intense interest to convert a portion of the aging mall into a walkable, mixed-use development. (See page 55.)

⁵ The CWCOD allows for a floor area ratio of up to 1.0 by right, and greater through Special Permit. Many of the uses likely utilized under the CWCOD (e.g., mixed-use residential and multifamily residential) require a special permit, regardless of density.

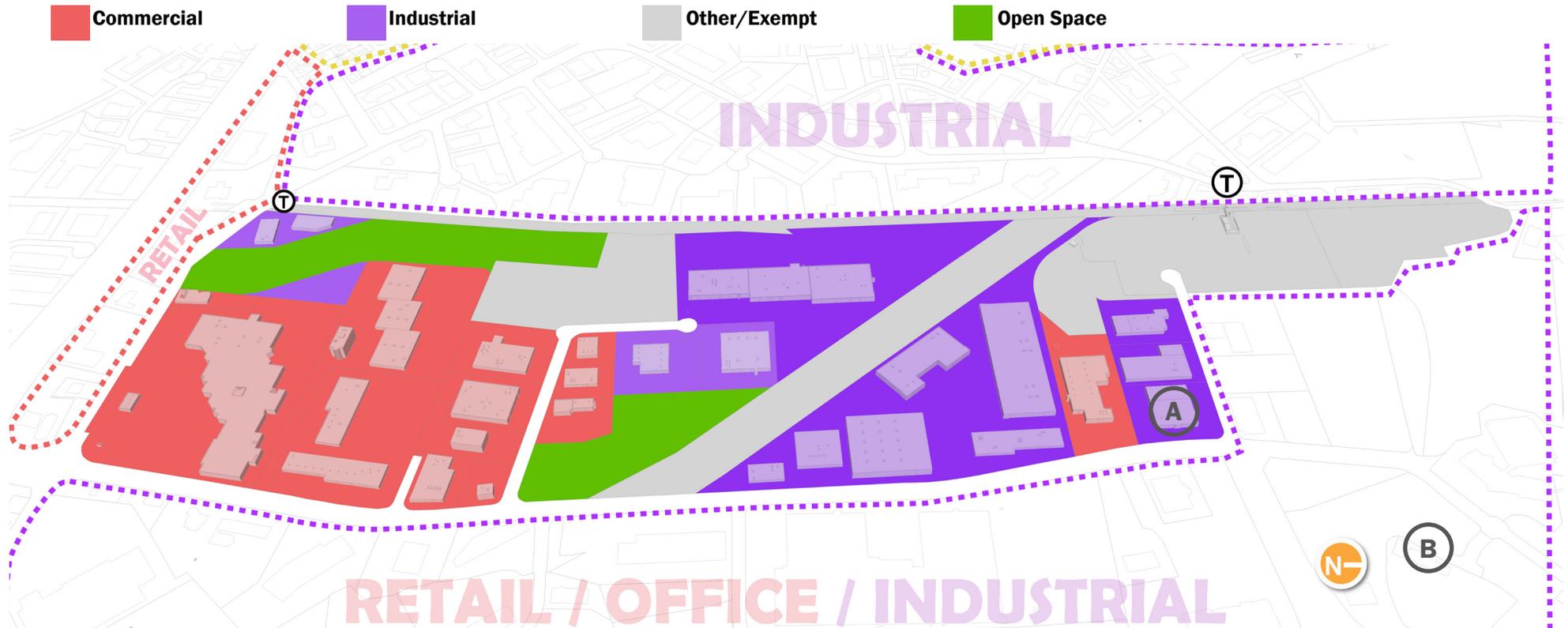
Figure 15. Rendering of 120 Commerce Way (Labelled "A" on Fig. 17)



Figure 16. 200 Presidential Way (Labelled "B" on Fig. 17)



Figure 17. Study Area Land Use



TRANSPORTATION

A neighborhood's roadways can have a tremendous impact on both the character and quality of life of the area. The designs, types of facilities, and streetscape elements can help unify a neighborhood, as well as make it safer, more comfortable, and accessible to all users. A safe and attractive environment for all users requires a high standard of design and should include quality pedestrian facilities and integration with surrounding buildings and activity centers.

There are two primary roadways that define the study area: Mishawum Road and Commerce Way. In addition, Atlantic Avenue provides access to Anderson RTC and Cabot Road provides access to a number of the study area's commercial and industrial properties. (See Figure 18.) All of these roadways are utilitarian in nature, serving primarily to move vehicular traffic as efficiently as possible. Commerce Way and Mishawum Road are both high volume roadways, with average daily traffic volumes (ADT) of 32,000 and 30,400, respectively. Atlantic has ADT of approximately 3,500.⁶

Three locations along these roadways are among the top crash locations in the entire MAPC region.

MassDOT provides crash clusters eligible under the Highway Safety Improvement Program (HSIP). These locations are designated based upon being among the top 5% locations for crash incidence and severity from 2013-2015. Figure 19 provides these locations: at the Commerce Way and Mishawum Road intersection (30 crashes), along Mishawum Road at the Woburn Mall entrance (42 crashes), and on Atlantic Avenue at the I-93 interchange (36 crashes).

Another significant aspect to the study area's roadway network is the upcoming New Boston Street Bridge replacement. (See Figure 20.) The former bridge, closed in 1978, provided a critical transportation link for both regional and local traffic.

The replacement of the New Boston Street Bridge will have local and regional traffic benefits. The bridge replacement would create an alternate parallel route for regional traffic using and destined for I-95 and I-93. It would also provide an alternative for motorists using such heavily congested roadways as Route 28 and Route 38. Based on transportation and traffic volume information provided by CTPS, over 20,000 vehicles would be projected to use the bridge on an average weekday. The project also enables

a new, secondary access/egress connection to the Anderson RTC to enhance increased use of the station. Currently there is no access to the Anderson RTC from areas west of the tracks without a lengthy detour along Mishawum Road.

The project is expected to be funded in 2021 as part of the state's Transportation Improvement Program.

⁶ MassDOT. Commerce Way and Atlantic Avenue traffic counts dated 2004. Mishawum Road counts from 1997.

Figure 18. Study area roadway photos (Commerce Way, Mishawum Road, Atlantic Avenue)



Figure 19. Study area transportation network and high crash clusters



*Highway Safety Improvement Program (HSIP) location = Top 5% in MAPC region crash incidence and severity

Anderson Regional Transportation Center (RTC) is the other key element of the study area's transportation network. (See Figures 21 and 22.) The commuter rail station is among the system's busiest: according to the MBTA's statistics there were 1,500 daily boarding (2016). This is the second busiest station along the Lowell Line and the 7th highest ridership among all commuter rail stations. As a regional transportation hub with easy access to I-93 and I-95, as well as its abundant parking, 78% of commuters come from outside the city of Woburn. The trip to Boston's North Station, which has service every thirty minutes during rush hour, takes approximately 20 minutes.

In addition to the commuter rail, Anderson RTC provides bus shuttle service to Logan International Airport. To accommodate these two uses, the site has almost 2,500 parking spaces. The commuter rail portion, which contains 1,100 spaces, is generally 85% utilized during the work week. The Logan Express area has 900 spaces and utilization varies widely by time of year. An additional 485 spaces serve a variety of other purposes.

On the other end of the study area is Mishawum Station. When Anderson RTC opened in 2001, operations at Mishawum mainly ceased, other than a few "reverse" commute stops per day.

Currently, there is no MBTA bus or private shuttle service operating in the study area, although Anderson RTC was designed to eventually accommodate pick-up/drop-off bus service.

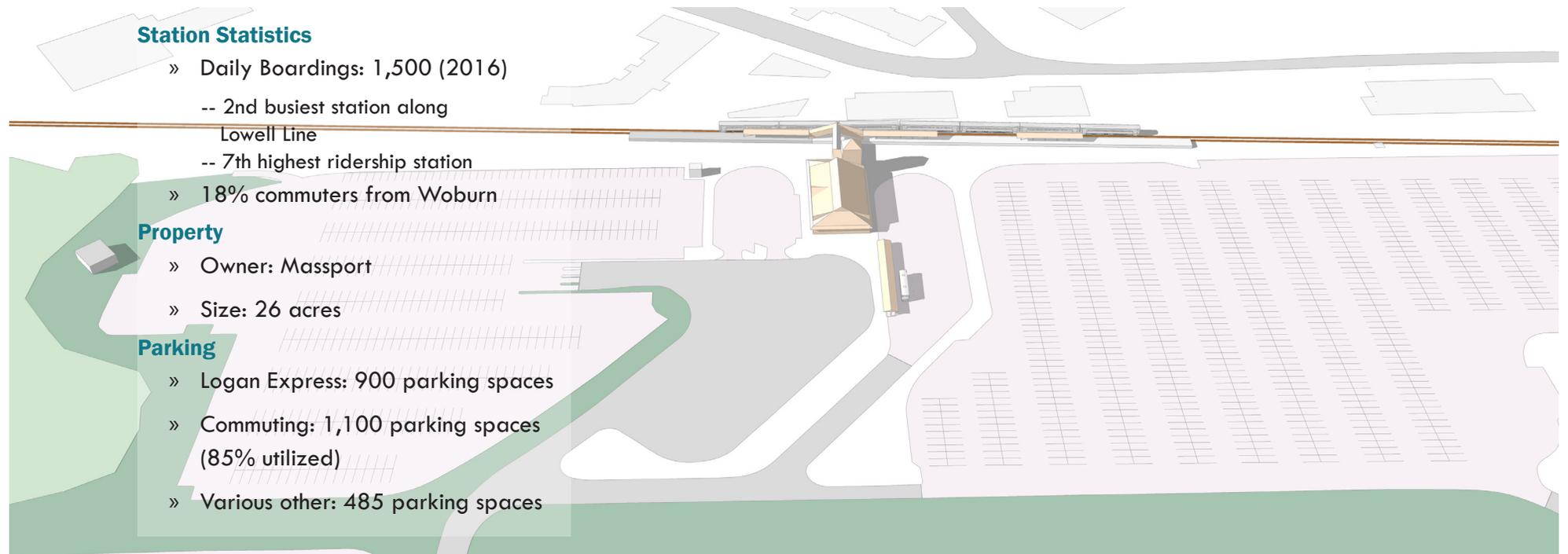
Figure 20. Renderings of New Boston Street Bridge



Figure 21. Photos of Anderson RTC



Figure 22. Diagram and statistics of Anderson RTC



SUPERFUND SITE

One of the top concerns among participants at the first public forum in February 2017 related to the study area's environmental conditions. With the exception of the Woburn Mall parcel, the study area is part of the Industri-Plex Superfund site.

Industri-plex was used for manufacturing chemicals such as lead-arsenic insecticides, acetic acid, and sulfuric acid for local textile, leather, and paper manufacturing industries from 1853 to 1931. Other industries on the site manufactured additional chemicals. Industri-plex was also used to manufacture glue from raw animal hide and chrome-tanned hide wastes from 1934 to 1969. The by-products from these industries caused the soils within the site to become contaminated with elevated levels of metals, such as arsenic, lead and chrome. During the 1970s, the site was developed for industrial use. During this period, residues from animal hide wastes used in the manufacture of glue were relocated on-site from buried pits to piles near swampy areas on the property. Many of the animal hide piles and lagoons on-site were leaching toxic metals into the environment.⁷

The site is divided into two distinct areas, called operable units (OUs). (See Figure 23.) The OU-1 parcels are categorized from Class A, which may contain contaminated groundwater, to Class D, which may contain contaminated ground water, soil, and cover, as well as animal hide piles. For each of these classes various controls are in place. Class D sites are unlikely to ever be developed. Anderson RTC is part of Class C land. This site has been capped to separate potentially contaminated soil from any development above.

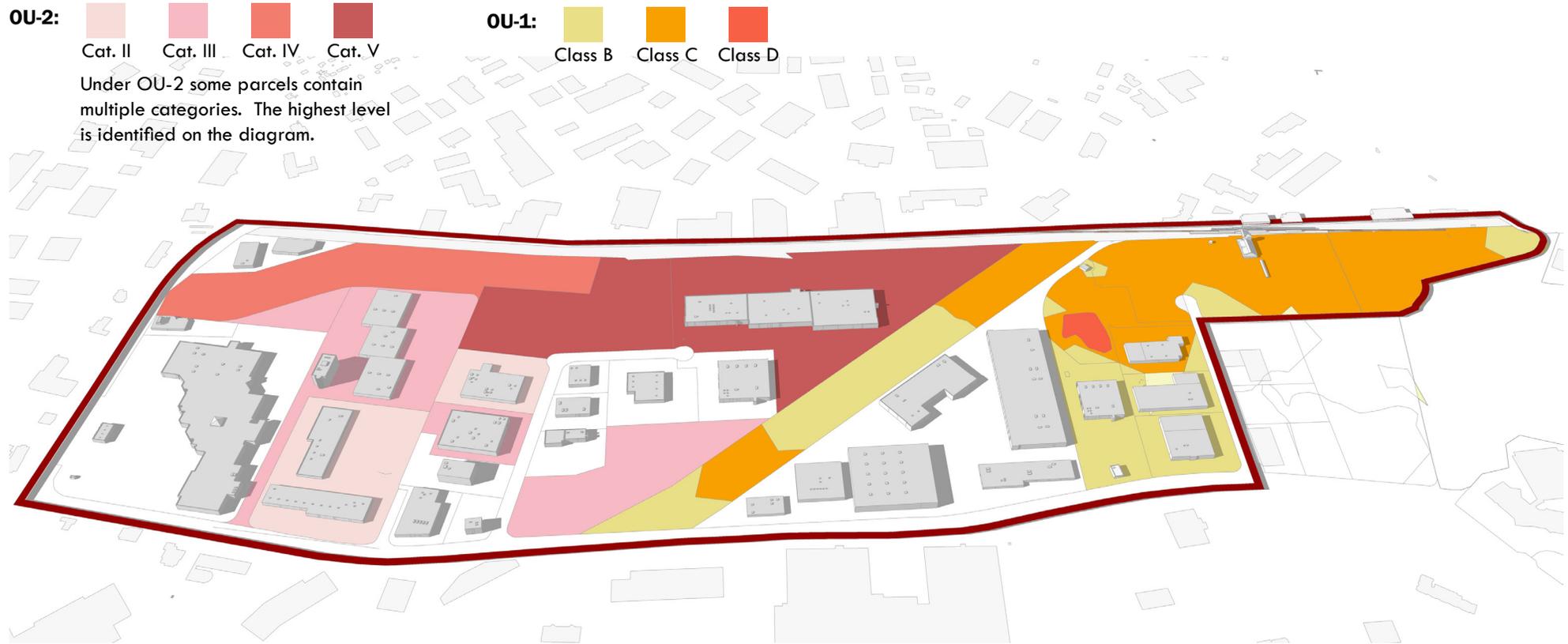
OU-2 has a separate categorization from Categories I-V, where properties may contain multiple categories. As with OU-1 land, various institutional controls are in place to ensure any development occurs in a safe manner.

Given the community's concerns, the City and MAPC met with officials from the EPA, Massachusetts Department of Health, and other stakeholders to discuss development within the Superfund site. Development of Anderson RTC, a Class C site, would be a challenge for residential development; however, by working closely with the EPA an experienced developer could potentially redevelop the site in a manner that ensures proper controls are followed.

Other sites can be redeveloped on a case-by-case basis. For example, the EPA recommended modifications to the OU-1 cleanup for 120 Commerce Way. A number of conditions were attached to allow for this property to be permitted for 289 residential units, based on environmental sampling and baseline risk assessments.

⁷ See the EPA's Superfund Site: Industri-Plex Woburn, MA page for detailed information on the background and clean-up activities of the site. <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=0100580#bkground>

Figure 23. Study area Superfund categorizations by Operable Units and associated categories / classes



INTRODUCTION AND SUMMARY

MAPC performed a market analysis of the study area to better understand the area's market potential for future residential, retail, and office development. This information can help inform future planning decisions and development opportunities.

For residential uses, the study area is a highly desirable location for multifamily and mixed-use residential development, underscored by 200 Presidential Way (under construction), 120 Commerce Way (permitted), and the Woburn Mall (planning process). There is moderate demand for retail uses, especially for restaurants and clothing stores. There is little demand for more "big box" stores selling electronics, etc. Given high quality office spaces in other parts of Woburn, combined with the low vacancy of existing light industrial and commercial spaces, there is likely little demand for significant new office space in the area.

The following sections summarize the analyses of the potential residential, retail, and office market opportunities.

RESIDENTIAL DEMAND

Given existing inventories, demographic changes, and shifts in housing preferences highlighted earlier, there is significant demand in the study area to develop housing that is attractive to a range of household types that could be categorized as “urban inclined.”

Urban-inclined households tend to include older households, both empty nesters and retirees, as well as younger households (singles, couples without children), and increasingly families with children, who are interested in living in walkable, amenity-rich (i.e., retail and restaurants), transit-accessible neighborhoods.

To identify the number of potential new units that could be supported in the study area, MAPC first defined a broader focus area of housing markets that might reasonably compete with Woburn in attracting residents. Based upon conversations with the City and residential developers, the focus area communities included Burlington, Lynnfield, Reading, Stoneham, Wakefield, and Wilmington. MAPC then considered projected housing unit demand from 2010 through 2030 by housing type. Because the study area would likely only contain multi-family units, projections for single family homes were not considered in the analysis. Within the focus area, demand is projected to be

approximately 10,760 multi-family units. (See Table 2.)

MAPC then assessed the new multifamily housing supply added to the focus area since 2010, which totals 3,560 units. (See Table 3.) Of these permitted units, Woburn captured 25%, second only to Burlington.

MAPC then subtracted the number of permits issued from the projected total demand. The balance provides the number of units that could likely be supported within the larger market – the unmet demand – between now and 2030, which totals 7,200 units. MAPC assigned capture rates for the future demand of 25% and 15%, based on Woburn’s historic capture rate and a slightly more conservative estimate, respectively, to estimate the portion of unmet demand that Woburn could potentially meet.

As shown in Table 4, based on the capture rates, Woburn may see demand for between 1,080 and 1,800 multifamily units through 2030. Given its transit-adjacent location, as well as potential for redevelopment, the study area could likely accommodate a large percentage of these units.

Unit Demand Mix

Given the diversity of households interested in living in walkable neighborhoods, it is crucial that new residential development include a mix of unit types, including studio, one-, two-, and three-bedroom options. One- and two-bedroom units will be most attractive to smaller households, including downsizing seniors and younger singles and couples, many of whom will likely use the commuter rail for commuting to work. Three-bedroom units would appeal to slightly larger households, such as families with young children and downsizing households that still seek guest bedrooms for family and visitors.

Table 2. Projected multi-family demand, selected communities

Projected Multi-Family Residential Demand (2010-2030 Total)	
Woburn	2,637
Burlington	370
Reading	2,039
Stoneham	528
Wakefield	1,411
Wilmington	1,580
TOTAL	10,761
Source: MAPC Projections	

It is important to note that this preliminary assessment of market opportunities is not a prediction of what will occur on the site. It is also not a recommendation for the amount of development that the City should pursue / allow in the study area. Instead, it is a representation of what may be possible should policies and market interest align given current data, trends and projections for future household growth, spending potential, and employment within in the study area over the next decade. It can help a community make informed planning decisions.

For example, understanding the residential market demand ensures that the community has all information at its disposal to best understand trade offs between meeting the demand or not. Even if housing demand is extremely strong, a community may not wish to build out to the full potential based on various factors. The trade off in this case is that not meeting demand could lead to increased housing prices and increasing unaffordability city-wide.

Table 3. Multi-Family housing supply added, selected communities

Multi-Family Housing Supply Added (2010-Present)	
TOTAL	3,563*
Sources: Census Building Permits, municipalities, MassBuilds	
*Excludes housing permitted as part of 40R process.	

Table 4. Woburn multi-family residential demand (range) through 2030

Balance Regional Housing Demand	Capture		Potential Woburn Multi-Family Residential Demand (Units)	
	Moderate	High	Moderate Capture	High Capture
7,198*	15%	25%	1,080	1,800
*10,761 total demand less 3,563 units built/permitted = 7,198				

RETAIL DEMAND

A strong retail sector can help ensure a vibrant neighborhood for both residents and visitors. In order to assess the demand for retail in the study area, MAPC examined existing conditions and sales and spending power to determine how much future retail the area could potentially support.

Public Input

At the first public forum in February 2017, participants provided feedback on the types of businesses that they would like to see in the study area. Many comments focused on the need for high quality, mid-priced restaurants, as well as coffee shops and bakeries. Others noted they desired more programming, including outdoor events. This feedback, combined with the following analysis, can help inform decisions on the types of retail opportunities to encourage.

Existing Conditions

The retail portion of the study area is primarily concentrated in the Woburn Mall. This aging, single-story mall has largely struggled in recent years. While anchor stores, such as the Market Basket grocery store, DSW Shoes, and TJ Maxx/Homegoods have remained popular, high vacancy rates and high turnover have been an issue on

the site. In 2017 the site was purchased for \$44 million from EDENS, a large real estate firm focusing on retail properties. Based upon its desire to remake the mall into a mixed-use environment with new retail spaces, the City has worked with MAPC on developing a vision, zoning, and design standards for this parcel. (See page 55 of the Recommendations for details on this process.) Initial discussions suggest a reduction of total retail space from 270,000 SF to approximately 240,000 SF.

There is also a pocket of retail uses on the northern section of the study area, which contains a Chipotle, Pet Smart, and Bob's Furniture store in a strip mall-style setting.

Trade Area

In order to estimate the amount of additional retail that the study area can support, a first step is identifying a trade area. The trade area is the geographic area from which a retail establishment generates sales. There are many factors to consider when determining a primary trade area, including the distance and time that people may be willing to travel in order to reach a destination, any physical or geographic barriers, and regional competition.

MAPC examined trade areas of 5, 10, and 15 minute drive times, as distances people

may reasonably be expected to drive to for various goods and services.⁸ Because of the site's immediate proximity to the highway these trade area geographies differ drastically (see Figure 24). A five minute drive time covers the area around the study area and along I-93 into Wilmington. The ten minute trade area covers approximately half of Woburn, a majority of Wilmington and Reading, and portions of Wakefield and Stoneham. A 15-minute trade area covers a much greater geography, including North Reading, Lynnfield, and Andover.

These differently geographies contain extremely different population sizes. (See Table 5.)

⁸ MAPC prepared this analysis using data from ESRI Business.

Key Findings

MAPC then analyzed ESRI Business Analyst data within the defined trade areas in order to conduct a retail gap analysis. A retail opportunity or gap analysis looks at the overall demand for retail goods and services within a designated trade area based on the spending potential of the households (demand), and the actual sales for those goods and services within the market area (supply). The difference between the demand and supply is called the retail “gap.” If the demand exceeds the supply, there is “leakage,” meaning that residents must travel outside the area to purchase those goods. In such cases, there is an opportunity to capture some of this spending within the market area to support new retail investment. When there is greater supply than demand, there is a “surplus,” meaning consumers from outside the market area are coming in to purchase these good and services. In such cases, there is limited or no opportunity for additional retail development. Thus, the retail gap analysis provides a snapshot of potential opportunities for retailers to locate within an area.

Within the 5 minute drive time the analysis suggests that none of the identified retail sectors have strong enough demand to support an individual establishment. Given that the five-minute drive time only includes approximately

1,500 residents, this is unsurprising.

Within the 10 minute primary trade area ESRI estimates a strong enough market demand to support approximately 13 clothing stores, 2 jewelry / luggage /leather goods stores, one book store, and one alcoholic drinking place. Within the regional (15 minute drive) time area ESRI estimates a strong enough market demand to support 12 clothing stores, 8 restaurants, and several other stores of in various sectors.

The lowest demand for additional stores include electronics and appliance stores, home furnishings, and building materials. Given the Lowes Home Improvement Store, TJ Maxx/HomeGoods, and general shift away from “big box” retailers, this is unsurprising.

The opportunity for additional stores, especially restaurants, matches both what residents said they wanted at the public forum and what the owner of the Woburn Mall parcel are interested in providing. The study area’s connection to multiple modes of transportation may make it attractive for use that could serve commuters as well as residents and visitors, such as restaurants, cafés, drycleaner, etc.

This analysis does not account for the population increase in the immediate area from upcoming development, including the Woburn Mall site,

200 Presidential Way, 120 Commerce Way, and any other future development in the vicinity. Depending on the number of housing units, and at what price point they are marketed, it is likely that additional retail demand that could be supported in the area.

See the Appendix for the detailed Retail Market Analysis.

CONCLUSIONS

Within 15-min. drive, highest demand for:

- » Clothing stores (12)
- » Restaurants (8)

Within 10-min drive, additional demand for:

- » Drinking establishments (1)
- » Jewelry and leather goods (2)

Additional residences in area could further increase demand

Lowest demand for additional hardware, home furnishings, electronics + appliances

OFFICE / INDUSTRIAL DEMAND

Context and Market Trends

The City of Woburn has long been a business center for the Metro North Area of the Boston region and is now a growing destination for businesses seeking a lower-priced alternative to the Boston, Cambridge, Waltham, and Watertown markets. The city has several office parks, and has seen substantial investment by local development firms such as National Development and Cummings Properties. Campus settings along Interstates 93 and 95 include Unicorn Park, Cummings Park, Trade Center, and Presidential Way – these areas represent the majority of the city’s modern office inventory.⁹

While a business center in its own right, the Commerce Way market is quite different from the campus office settings found in the areas cited above. While in close proximity to the I-93 and I-95 interchanges, the majority of the building inventory along Commerce Way is industrial or large-plate flexible office space, a legacy of the Woburn’s industrial history and a reflection of the underlying industrial zoning. The office inventory that is available within the study area is typically Class B or C and is home to business types

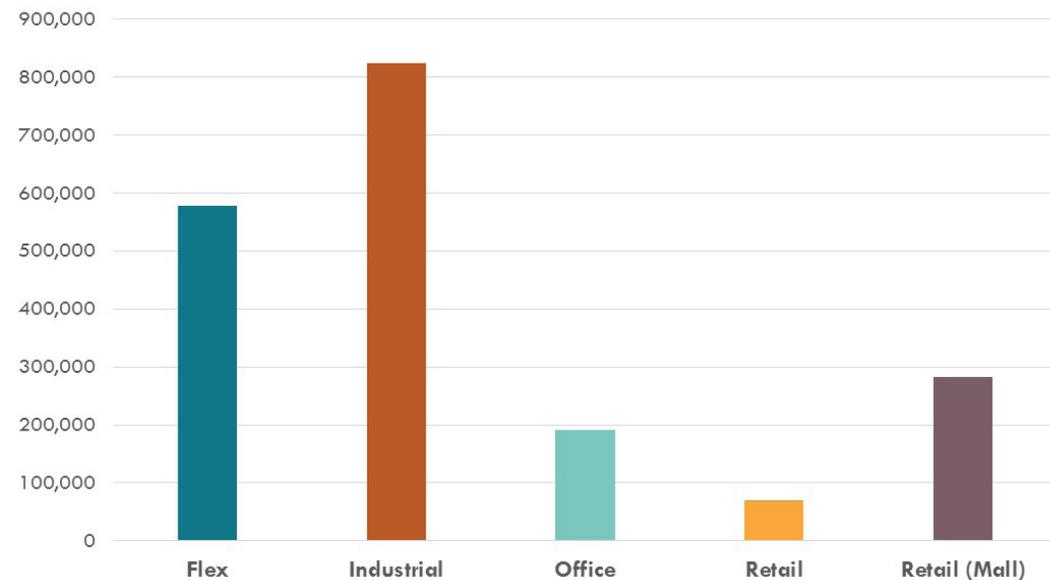
ranging from technology to legal services.

Maintaining the industrial properties along Commerce Way will ensure space remains available to support new businesses that may be being pushed out of the hotter Boston market. Currently, the stable industrial market along Commerce Way supports close to 100 businesses and nearly 2,000 workers, many of the jobs well paying and accessible to workers at a variety of skill and education levels. (See Figure 25.)

The large building footprints, affordable rental

rates, and excellent highway access make Commerce Way and the adjacent New Boston Street area strong locations for industrial businesses to locate, and as such the properties along the corridor are operating with negligible vacancy rates. (See Figure 26.) With industrial properties performing well along the corridor there is little incentive for property owners or developers to convert to office or other uses that return only marginally higher rents. In conversations with local developers, several said that the prospect of removing tenants, forgoing

Figure 25. Land Use by Square Footage (Source: Costar)



⁹Costar, 2018

consistent revenue, taking on additional debt, and construction/demolition costs would not make financial sense in a market-context such as Woburn, which has high quality, available, office spaces in other parts of the City.

While conversion of performing industrial properties to office spaces is not an immediate concern, the recent developments at Fitzgerald Tile Factory and the Woburn Mall offer insights into the conditions that do make redevelopment on Commerce Way feasible.

The Fitzgerald Tile Factory, an owner operator of the property, was sold in July of 2018 to a developer for approximately \$12M, around \$300 per SF. The developer plans to build 289 units of housing with an affordable and market rate mix. The Woburn Mall was sold in September of 2017 for approximately \$44M at about \$156 per SF.¹⁰ The Woburn Mall has faced the challenges that have impacted the entire retail sector in recent years, which has driven down the profitability of a traditional mall operation – thus the new development program which aims to support the commercial space with new housing.

The Woburn Mall and the Fitzgerald Tile factory

both offered developers an opportunity to purchase a property that was either currently under-performing in its current condition (Woburn Mall) or that was not currently reliant on rental revenue for operation (Fitzgerald). It should be noted that both properties’ redevelopment plans include high density residential, with no new office space, which indicate where the market might lead if future properties become available for sale.

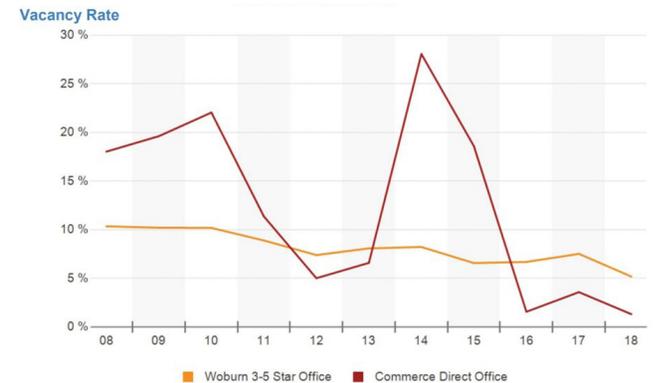
Rental Rates and Vacancy - Office

As Figure 27 illustrates, the rental rates along Commerce Ave for office space have trended downwards in the last few years after a spike in 2014. This spike and then fall in rental rates is likely a reflection of a long time user vacating a large office space followed by a re-lease to a new tenant at an adjusted rate. The precipitous drop in recent years may be a product of a saturated market in the area for high quality space. The suburban office market has seen a substantial amount of speculative high quality, amenity-rich space come on line in recent years – which may diminish Commerce Ave as a desirable office location for typical users.

Figure 26. Commerce Ave Office Rents Compared to Other Woburn Office Rents (Source: Costar)



Figure 27. Commerce Ave Office Vacancy Compared to Other Woburn Office Vacancy (Source: Costar)



¹⁰Costar, 2018

Existing Sub-Areas

While the overall building composition along the corridor tends towards industrial, MAPC has identified four distinct sub-areas within the Commerce Ave TOD study area – Commerce Way at Atlantic Ave, Cabot Road, 10-20 Commerce Way, and the Woburn Mall. (See Figure 28.)

The Cabot Road sub-area represents the most diverse building stock and also the highest concentration of office space along Commerce Way. The business composition along Cabot

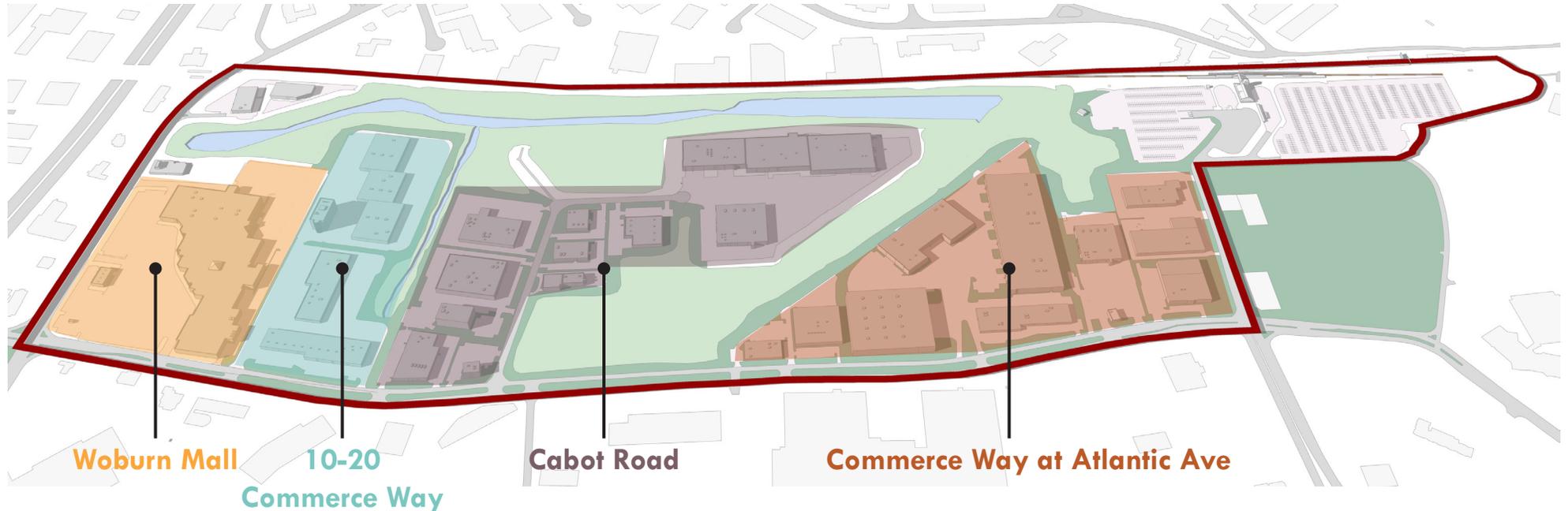
Road reflects that diversity in building stock, and includes businesses ranging from biotech manufacturing to PEAK Event rentals – a regional event production firm which employs about 300 people, accounting for 30% of the sub-area's employment.

10-20 Commerce Way is primarily low-rise industrial spaces home to firms primarily in the wholesale trade, distribution, and professional service sectors. The large employment concentration in the wholesale trade sector can be accounted for by the global headquarters

of L3 Security and Detection Services. As of the completion of this analysis there was some industrial and office space availability.

The northernmost sub-area, Commerce Way at Atlantic Ave represents the end of the Commerce Way Study Area. The sub-area is home to an industrial business mix interspersed with corporate retailers such as PetSmart, Chipotle, and Bob's Discount Furniture. There is an approximate even firm and employment split between retailers and industrial businesses. (See Figure 29 for a summary of types of firms and number of

Figure 28. Study area sub-areas



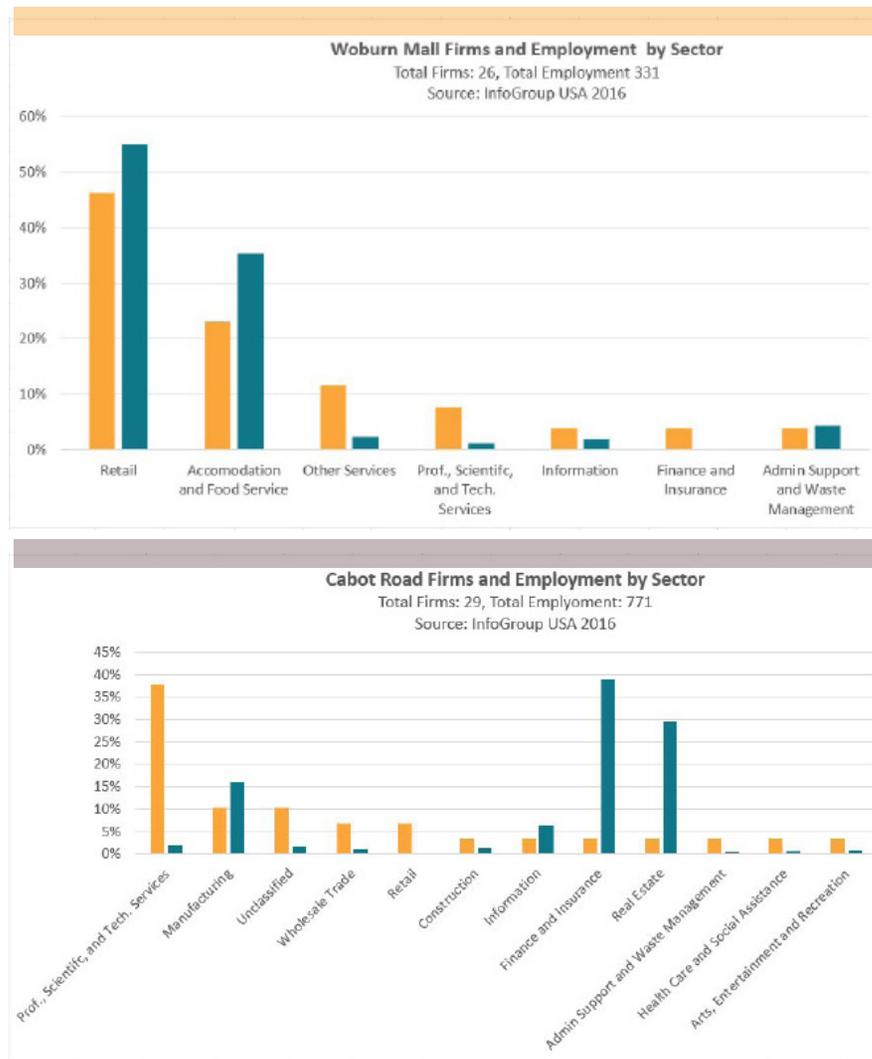
employees by sub-area.)

Just north of this sub-market, where Commerce Way turns into Presidential Way is a cluster of

office buildings, including the Metro North Office Park. National Development is in the process of constructing approximately 200 residences at

200 Way (Emery Flats). This parcel had initially been slated for office development, but the developer changed course to residential due to

Figure 29. Firms and employment by sub-area



the high supply of office already present in the area and the need for more affordable housing in Woburn.

Workforce

Similar to the New Boston Street area of Woburn, workers employed along the Commerce Way corridor come from across the region, with concentrations commuting from Boston, Lowell, Lynn and the Methuen/Lawrence area, in addition to local residents from Woburn. While MAPC did not survey businesses along Commerce Way as was done for New Boston Street, it is likely that a high percentage of workers commute via personal

vehicle.

The majority of jobs available on Commerce Way pay above minimum wage, with approximately 12.7% providing wages at \$1,250 per month or less.¹¹ When the Woburn Mall is excluded from the study area that number drops to 9%. When considering new housing options along Commerce Way the city should consider mandating that the affordability mix of new units reflects the different income levels of those employed along the corridor.

Reflective of the industrial nature of the area, employees in the Commerce Way / New Boston

Street section of Woburn have a range of educational attainments with the majority of jobs accessible to those without a college or advanced degree.

The demographic composition of the workforce trends toward primarily white, with 86% of all employees identified as white alone. Approximately 5% of area employees identify as Black or African American Alone and 8% as Asian Alone. Eighty-eight percent of corridor employees identify as Not Hispanic or Latino.

(See Figures 30 through 32 for a summary of the workforce statistics.)

Figure 30. Commerce Way / New Boston Street employees by home municipality (Source: US Census On the Map LEHD, 2015)

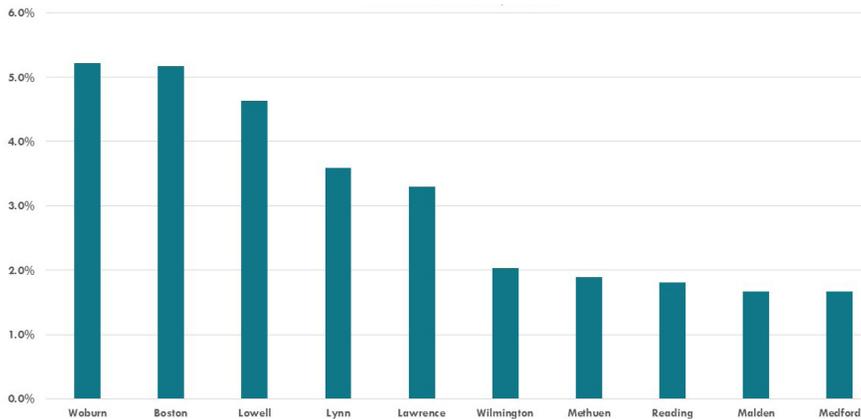


Figure 31. Commerce Way jobs by earnings (Source: US Census On the Map LEHD, 2015)

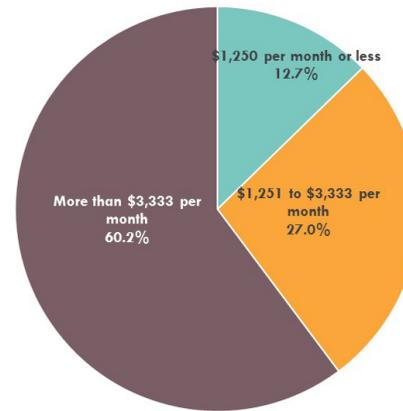
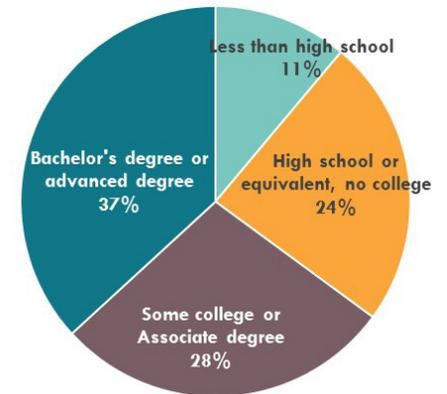


Figure 32. Commerce Way jobs by educational attainment (Source: US Census On the Map LEHD, 2015)



¹¹ Massachusetts minimum wage is \$11/hr, which at 35 hours / week would equal ~\$1,500 month. US Census LEHD data is broken out as equal to or less than \$1,250, between \$1,250 - \$3,333 and greater than \$3,333 per month.

PUBLIC INPUT

Public engagement and feedback are key components of the Commerce Way E-TOD plan. Working with the City, MAPC sought the ideas, opinions, and concerns of residents, employees, and business owners. In order to maximize participation across a wide audience, MAPC hosted a well-publicized interactive public forum in February 2017. The event, held at Woburn High School, hosted approximately 150 people, including numerous members of the City Council and Planning Board.

After registering, MAPC provided a presentation to the attendees, introducing the project, process, and context. The key component of the forum, however, was the hour after the presentation. During this period participants were invited to visit various stations and provide feedback on a variety of areas. The stations included:

- **Top Priorities.** Participants provided their thoughts on the top priorities and needs for the study area.
- **What makes a great neighborhood?** Participants provided input on what elements create a great neighborhood.
- **Visual Preference.** Participants were provided a visual preference and mapping survey to understand the types of buildings, uses, and open space the community prefers throughout the study area. (See Figure 34.)
- **Transportation.** MAPC staff provided information on “first/last mile” connections, i.e., how to get to area employers and the commuter rail station via shuttle buses and other means.
- **Economic development.** MAPC staff provided an overview of the area’s employers and invited participants to ask for the types stores and retail establishments they would like to see in the area.

- **General information.** Participants were provided more detailed information about the state’s Smart Growth Overlay District (40R) program, which was being developed for the Woburn Mall site, as well as general information relevant to the site.

In addition to the 150 forum attendees, numerous residents provided comments via email. While it is unrealistic to expect perfect consensus on any topic, there were several common themes that emerged.

A number of participants stated redevelopment, especially the area around the Woburn Mall, would be a welcome addition to the city that creates a sense of pride for residents. A number of attendees stated the need for good restaurants with the ability to walk around in the evening as critical to have a great neighborhood. Although one resident cited the need for a Walmart, a majority stated they did not want more “big box” stores in the area.

For housing, many noted the need for entry-level options near transit, more affordable housing, and housing for people of all abilities.

Public spaces should encourage gathering and relaxing. Similarly, streets should have wide sidewalks, bicycle facilities, and shuttle services to encourage less reliance on automobiles.

Generally, participants preferred contemporary, modern architecture. Numerous residents preferred multi-story, mixed-use buildings, generally around 6 stories. Between the Woburn Mall and Anderson RTC, there was some interest in high quality industrial-style spaces.

More important than the buildings themselves was the public spaces. Interest focused on “hardscape” open spaces, such as plazas, wide sidewalks, and places to gather. Adding a more “natural” multi-use path was also a high priority.

Figure 33. How often forum participants visit the study area

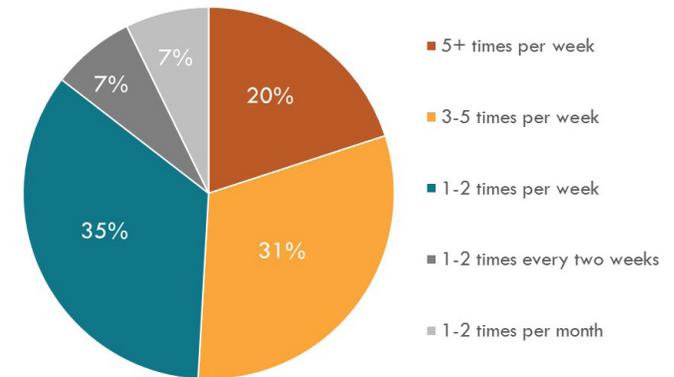


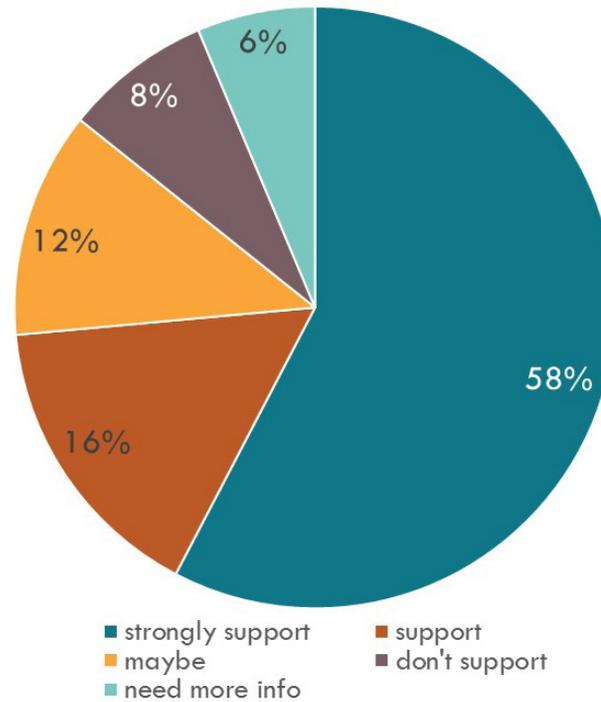
Figure 34. Selection of highly ranked photos from the visual preference survey



MAPC held a second forum in December 2018, as well as a follow-up survey for those unable to attend. The purpose of the second forum and survey was to present draft recommendations and gather feedback from the community to refine them. The recommendations covered a wide array of topics, from land use elements to open space. See the Recommendations chapters for details. Participants were invited to provide their thoughts on the various recommendations through a handout or online format. Each of the recommendations was overwhelmingly supported by participants. (See Figure 35.) There were, however, several residents concerned about the traffic impacts of any new development. Other residents felt that the illustrative plans presented did not take full advantage of the area and that development, including residential development, over the long term should be far more intense. Because redevelopment of the Woburn Mall site is a near-term opportunity, extensive public engagement was part of this concurrent process. For example, results of the visual preference survey from the first public forum strongly informed the Design Standards that a developer must adhere to. In addition, the 40R had its own public hearing hosted by the Mayor. There were also approximately 5 Planning Board meetings and 6 City Council meetings, all of which were

open to the public and received comments from residents and area employers.

Figure 35. Level of support for recommendations among all forum and survey participants, combined among all recommendations



VISION STATEMENT

The vision for the Woburn Commerce Way E-TOD study area is rooted in past planning processes, new public input at two well-attended forums, and conversations with City staff and officials. It is supported by city leadership and the community. The following statement communicates the vision for the future of the study area.

The Woburn Commerce Way E-TOD corridor is a dynamic neighborhood, a destination for citywide residents and home to those seeking a pedestrian-friendly, transit-oriented downtown environment. It has a strong sense of place defined by recreational opportunities along the Aberjona River and good architecture and design.

The E-TOD corridor offers a diversity of people plenty to do throughout the day and evening. Residents, office workers, and visitors of all ages and abilities find independently-owned shops, good restaurants, entertainment venues, and public spaces for interacting and relaxing. There are condominiums, accessible homes, and affordable housing for singles, seniors, and families with a range of incomes. There is a longstanding commercial and light industrial base that offers employment and contributes to the economy.

The E-TOD corridor is safely and comfortably navigated by foot and bike. It has sufficient but discrete parking. It connects Woburn residents to each other through activated spaces, and Woburn to Greater Boston through reliable public transit. It is a great place to live, work, and visit.

PRINCIPLES

The project team approached this E-TOD plan as an opportunity to transform the study area from an isolated, disconnected collection of parcels and developments into an integrated, cohesive neighborhood through (1) holistic rather than individualistic thinking among property owners and (2) the following design and development principles.

These principles are intended to provide high-level guidance for future development. Various factors – financial, engineering, timing – may prevent the various principles from being fully implemented; nonetheless, they provide a starting point for both the City and developers to incorporate to the extent feasible.

Distinct Sub-Areas

The E-TOD Plan has three distinct sub-areas within the study area: the Woburn Mall parcel in the south, Anderson Station to the north, and the area in between containing a mix of office, research, and light industrial uses.¹² (See Figure 36.) Each has a unique development strategy to achieve an overall mix of residential, retail, commercial, and industrial uses.

Sub-Area 1 consists primarily of the Woburn Mall parcel. When the planning process for this project began, the 23 acre parcel contained a dated, single-story mall anchored by a grocery store. In this Sub-Area the City has embraced the principles of E-TOD, and as part of this process has permitted 350 residential units, a quarter of which will be designated as affordable. Redevelopment on this site has the potential to catalyze development in the study area, through residential and retail development in the near term. Longer term, if parking is condensed into a structured parking facility, the site could house further retail, hotel, and/or office uses. The development has been designed in a “smart growth” manner, ensuring an inviting and safe atmosphere for pedestrians and reducing the need for automotive trips.

Sub-Area 2 is by far the largest sub-area, comprising 25 parcels. The sub-area currently consists of a range of office, research, and light industrial uses in an auto-dependent environment. Because of the numerous land owners and diverse needs of the existing businesses, change in this sub-area is expected to occur over a longer period of time. Because many businesses are

thriving, many parcels may not change at all. Still, the seeds of change are beginning, as one project has received a special permit to convert an industrial site into a multifamily residential complex with accessory retail uses.

Sub-Area 3 consists of the Anderson Station parcel, which consists primarily of two large parking lots, used for MBTA and MassPort commuter and employee parking. The development strategy could follow other commuter rail parking lots whereby a structured parking facility allows for new, mixed-use development focusing on residential. Because it is the epicenter of an EPA-designated SuperFund site, significant hurdles must be addressed to allow for residential development.

¹²Note that the sub-areas described in this section are distinct from those described in the Market Analysis chapter. Sub areas from the Market Analysis chapter categorized existing conditions based upon geography and use. The sub-areas described as a development principle in this section are intended to guide the strategies, timeline, and types of development throughout the study area.

Figure 36. Principle 1: Development through Distinct Sub-Areas

SUB-AREA 1

Existing primary characteristic: Woburn Mall Retail

Development strategy: 40R Smart Growth Overlay District

Future potential uses: Residential, retail, potentially other uses over long term

Timeline: Near Term

SUB-AREA 2

Existing primary characteristic: Office, Research, Light Industrial

Development strategy: “Suburban retrofit,” utilizing CWCOD zoning and infill

Future potential uses: Primarily commercial and industrial with some potential for residential and mixed-use

Timeline: Longer Term

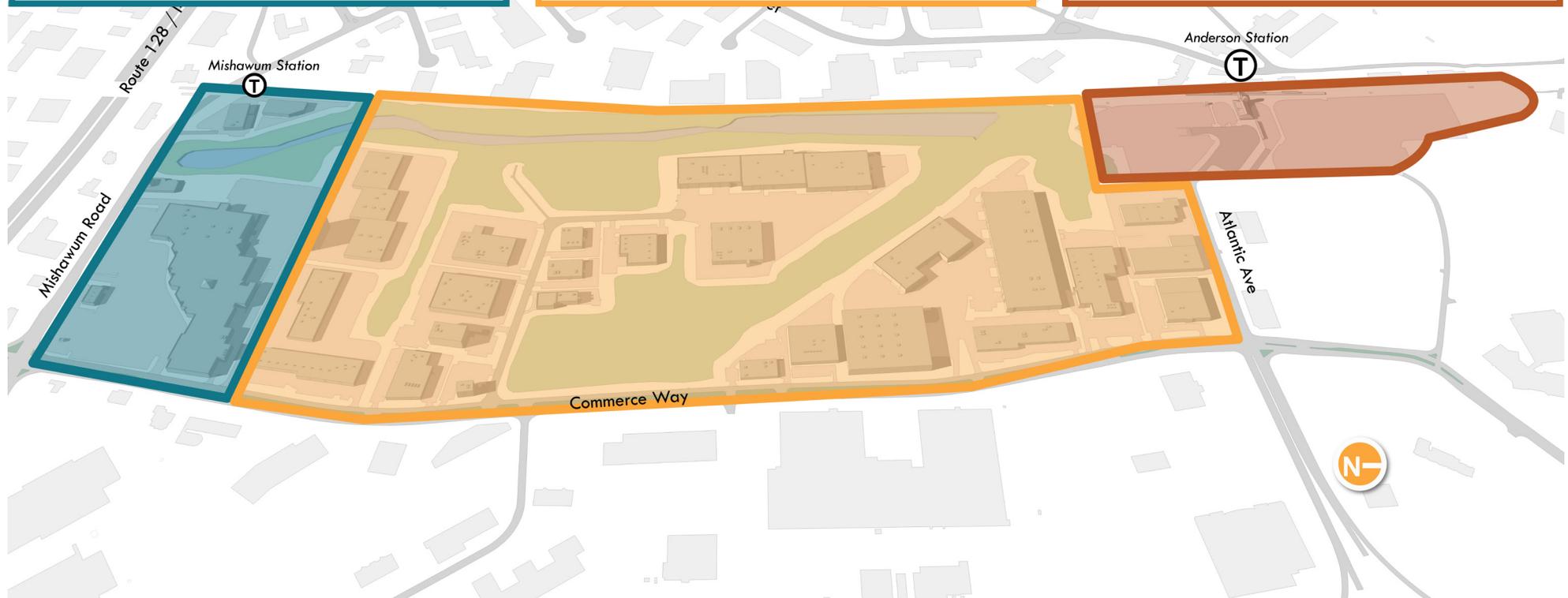
SUB-AREA 3

Existing primary characteristic: Anderson RTC parking lots

Development strategy: Utilizing portion of parking, potentially building structured parking facility

Future potential uses: Residential, commercial, hotel

Timeline: Medium Term



Connectivity

The E-TOD Plan seeks to introduce new connections and options to facilitate multi-modal travel within the study area (auto, shuttle, bike, pedestrian).

Commerce Way, the existing eastern boundary of both the WM-SGOD and larger E-TOD study area, is a high-volume roadway connecting Mishawum Road (and, by extension, I-95) with I-93. It provides access to heavy truck traffic from the adjacent distribution, warehouse, and industrial properties on both sides of the roadway. Although there is some potential to enhance pedestrian safety by ensuring a sidewalk along the entire route between Mishawum Road and Atlantic Avenue, this roadway will primarily serve to efficiently accommodate vehicular traffic for the foreseeable future.

A new “local roadway” between Commerce Way and the Aberjona River should be introduced to the E-TOD area. This internal connection would create a finer-grain block structure, improving the area’s walkability. It would primarily serve residents, employees, and visitors within the study area. It may also help divert local traffic from Commerce Way by providing an alternative connection, north-south within the study area. As a multi-modal local “street,” the roadway should provide safe, comfortable, and accessible travel

options for pedestrians and bicyclists, as well as vehicles. Various constraints may prevent a perfectly direct connection through the study area and/or may focus on pedestrian/bicycle access, rather than vehicular access.

Vehicular access, if provided, may follow a more circuitous route than for pedestrians. The site should also be designed in a manner that allows for a future connection to the adjacent northern parcel even if not provided at the outset.

Adjacent to the train tracks, the Aberjona River runs along the western edge of the study area. A multi-use path should be sited along this natural resource, helping to create a sense of place, as well as an additional connection between the Woburn Mall and Anderson Station. Project site planning should take into account this future connection, both through way-finding and safe pedestrian/bicycle connection to this future riverwalk. (See Figure 37.)

Figure 37. Principle 2: Connectivity, illustrating the three primary types of circulation in the study area

COMMERCE WAY

Characteristics: High volume; connection between Mishawum Rd, I-93, and new Boston Street bridge; truck route.

“LOCAL” ROADWAY

Characteristics: Serves local residents and employees in the study area, as well as local trucks; lower volume; multi-modal facilities provides comfort for all users

RIVER TRAIL

Characteristics: Shared multi-use path along Aberjona River and Mishawum Lake; helps create sense of place and connects development to natural amenity



External Connections

In addition to access within the study area, access to and from it is vital. Across from the Woburn Mall site is the Mishawum commuter rail station. Although today it operates as a limited service stop, potentially increased demand due to new residences at the Woburn Mall site could justify the need for increased service at the station. If that occurs, it will be vital that pedestrians are able to safely cross the roadway. Improvements such as crosswalks and pedestrian-scale lighting would make the walk more safe and comfortable.

A pedestrian overpass from Anderson RTC, recommended in the City's master plan, would greatly improve the pedestrian/bicycle access to the area. This connection, along with the soon-to-be-constructed New Boston Street Bridge, would further connect and help integrate the study area to other parts of Woburn.

The City has been working towards creating "first and last mile" connections, whereby people traveling to or arriving from Anderson RTC have mobility options between the station and their homes and employers. Site planning of large projects should take into account a potential future stop to allow for safe and efficient boarding and alighting.

In addition to pedestrian safety improvements, Mishawum Road in front of the Woburn Mall and at the intersection with Commerce Way are both classified as high-crash locations by MassDOT. Vehicular traffic safety improvements, therefore, are also needed. Commerce Way near the I-93 interchange is another high-crash location that may need safety improvements.

Safe pedestrian crossing options at the northeast corner of the study area will help connect a planned multi-family residential complex to the study area and Anderson RTC.

Development Orientation and Ground Level Environment

The final principle applicable to the study area is to create a pedestrian-friendly environment through urban design.

The Connectivity principle helps set the stage for orienting future development along the frontage of a new "roadway" or internal circulation network. To the extent possible, buildings should "frame" this street, giving the area a walkable, downtown environment. Where possible, ground-level retail, especially at the Woburn Mall site and any future mixed-use development, should activate the space, drawing both residents and visitors alike. Parking should generally be oriented away from the primary pedestrian

areas, with buildings shielding pedestrians from navigating extensive parking lots. (See Figure 38.)

A second aspect of the future development orientation relates to the integration of various uses. Given the light industrial nature of much of the study area, redevelopment that includes residential and retail should integrate in ways that minimize potential conflict (e.g., truck routes with pedestrians) and maximize walkability. As noted in the Recommendations: Principle 4 section on page 86, there are numerous examples of how this integration could occur.

Improving the ground-level environment does not need to be limited to full redevelopment projects. Smaller interventions, such as outdoor seating, improved landscaping, pop-up cafes, food trucks, etc., can all contribute to a more cohesive, vibrant neighborhood.

INTRODUCTION TO THE RECOMMENDATIONS

This and the following chapters provide a number of recommendations to achieve the City's vision for the study area. The recommendations are provided primarily through the lens of the four design and development principles summarized in the previous chapter. Some recommendations are specific changes, e.g., recommended zoning changes to the CWCOD. Other recommendations provide one option for how potential future development could help achieve the vision, e.g., ensuring that if a parcel redevelops it includes strong pedestrian circulation.

Furthermore, over a mile-long corridor, change is likely to occur incrementally. Some recommendations may be implemented in the near term, while others are likely to take longer. For example, redevelopment of Anderson Station is considered most likely medium term, but the site's environmental challenges may delay redevelopment into the long term.

Finally, many recommendations cross cut across multiple topic areas. For example, the presence of additional housing positively impacts the viability of restaurant and retail opportunities. A river-front path provides both multi-modal transportation options and increases the area's sense of place.

RECOMMENDATIONS

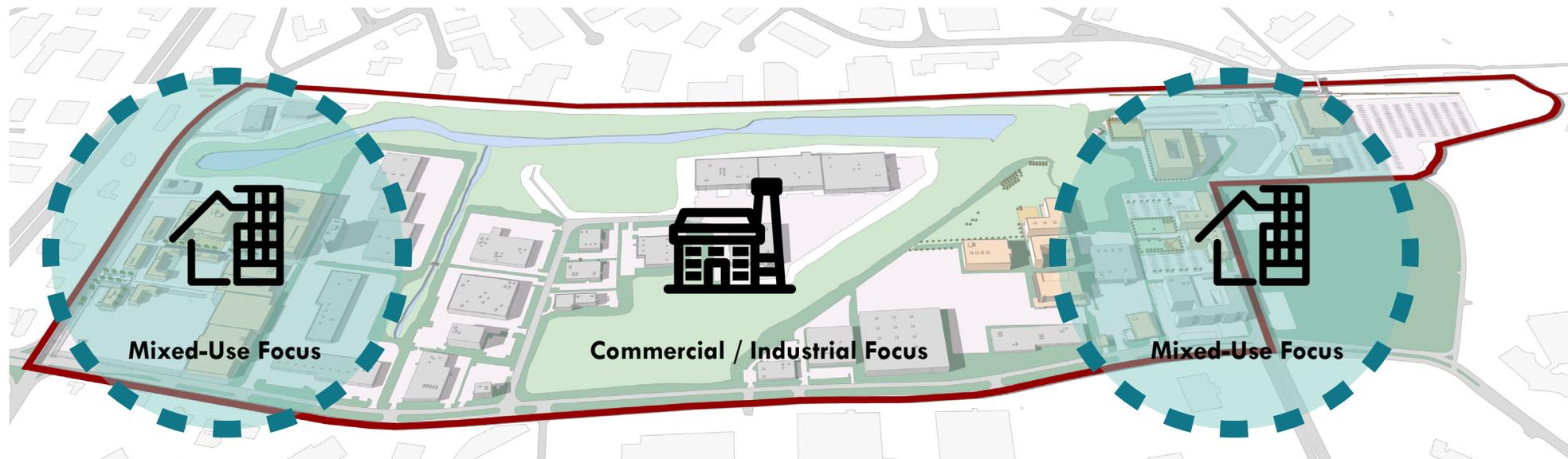
Principle 1: Distinct Sub-Areas

This chapter provides a diverse set of recommendations for how development could potentially occur within the three distinct sub-areas. Generally, the City envisions the concentration of residential and mixed-use development occurring at the south and north ends of study area with the central part maintaining its strong commercial and industrial presence, although in some cases residential may be integrated to these areas, as well. (See Figure 29.)

The recommendations begin with Sub-Area 1, the Woburn Mall site. MAPC worked with the City on developing zoning and design guidelines specifically for this area, which was adopted by City Council in January 2019. The second set of recommendations focuses on Sub-Area 2, the central portion of the site. These recommendations include alterations to the existing CWCOD zoning, as well as other strategies to improve the built environment and land uses. The final section focuses on Anderson RTC. As development in this area would be challenging and requires years of detailed planning, this section provides an overview of general principles and next steps to begin the process.

Note that diagrams in this section are for illustrative purposes only. They are included to illustrate concepts and/or test the effects of regulatory changes. They are not intended to imply or recommend specific proposals.

Figure 39. The City's vision focuses mixed-use opportunities at the north and south ends, with some potential infill in the central zone.



SUB-AREA 1: WOBURN MALL SITE

Shortly after this project's planning process began, the owner of the Woburn Mall sold to a developer eager to redevelop and revitalize the site. As a large (23 acres) and highly visible parcel (at the corner of Mishawum Ave and Commerce Way), redevelopment of the long-ailing mall has the potential to catalyze the development of a new neighborhood.

Working with MAPC, the Department of Housing and Community Development (DHCD), as well as the developer, the City led a community-driven process to create a state-designated zoning district, called a Smart Growth Overlay District. The process included a public forum for general input, a public hearing sponsored by the Mayor, 5 Planning Board meetings, and approximately half a dozen City Council meetings, all of which received substantial public input.

Smart Growth Overlay Districts, authorized under Massachusetts General Law (MGL) 40R, seek primarily to increase the supply of housing, including affordable housing, in "smart growth" locations. In addition to helping the City meet its high demand for housing and exceed the required 10% of units on the state's Subsidized Housing Inventory (SHI), Chapter 40R allows a community to incorporate a mix of uses and provides strong control on the district's urban design. Finally,

Chapter 40R incentivizes communities to adopt the district through financial incentives.

The Woburn Mall Smart Growth Overlay District Ordinance

Development of the Woburn Mall Smart Growth Overlay District (WM-SGOD) was a long and complex process requiring numerous calculations to estimate the minimum required number of residential units and future incentive payment. For multifamily residential units, Ch. 40R requires a minimum of 20 units per acre of developable land. "Developable land" in this case is defined by DHCD in a highly specific way, excluding designated open space and land DHCD deems already substantially developed. While the absolute minimum based on this calculation was approximately 280 units, the City settled on a maximum of 350 allowed in the district. This number allowed the project to better take advantage of its strategic location for more housing, increased the amount of affordable housing in the City, ensured the project was financially feasible for the developer, and increased the financial incentive.

Ch. 40R requires at least 20% of residential units be designated as affordable at 80% of Area Median Income. The WM-SGOD went above this minimum to 25%, which allows the City to count all units towards its 10% affordability requirement.

While at least half of the district's built area must be residential, Ch. 40R allows for mixed-use development. The City envisions a thriving mixed-use area with residences, restaurants, shops, and other amenities on site. While much of the existing Mall's 270,000 SF of retail space is vacant, some businesses, in particular the Market Basket grocery store, continue to thrive. Market Basket, as well as T.J. Maxx / HomeGoods, a DSW Shoe store, and potentially other existing businesses would be integrated into the development with new spaces. Most buildings would be one or two stories, while the residential building would be up to seven stories. Parking requirements reflect the smart-growth nature of the location and are set at 1.5 spaces per residential unit and 4 spaces per 1,000 SF of Net Floor Area.

Another key element of the ordinance, which was highly important to many members of the public, as well as City Council, was including strong requirements for understanding and mitigating any future traffic impacts. Supplementing this study was a provision from the Planning Board's recommendation to adopt the ordinance that many of the transportation recommendations in this plan be implemented as a means to reduce reliance on automobile trips.

The financial incentives to the City comes in two

parts. The first was an “incentive” payment for adopting the zoning and depended on the minimum number of units that could be constructed. For the WM-SGOD this provided a \$350,000 payment. This is followed by a “bonus” payment of \$3,000 for each unit permitted that is above and beyond the number of zoned units allowed under base zoning (which is zero at the Woburn Mall). Total payment to the City will be approximately \$1.4 million. The funds will be incorporated into the City’s General Fund.

The WM-SGOD Design Standards

Chapter 40R allows communities to develop design standards to which developers must adhere in order to receive plan approval. The WM-SGOD Design Standards incorporated the public feedback received through the public process. A key element was ensuring the site’s pedestrian focus, while acknowledging and incorporating the need for adequate parking and vehicular access. Sidewalks are required throughout the site. Buildings are intended to contain active store fronts along the sidewalks along with various architectural details, high quality materials, and interesting facades to create a walkable realm in a contemporary setting. The open space should generally be “hardscape,” such as public plazas with outdoors. (See Figures 40 and 41.)

Figure 40. Examples from the WM-SGOD Design Standards

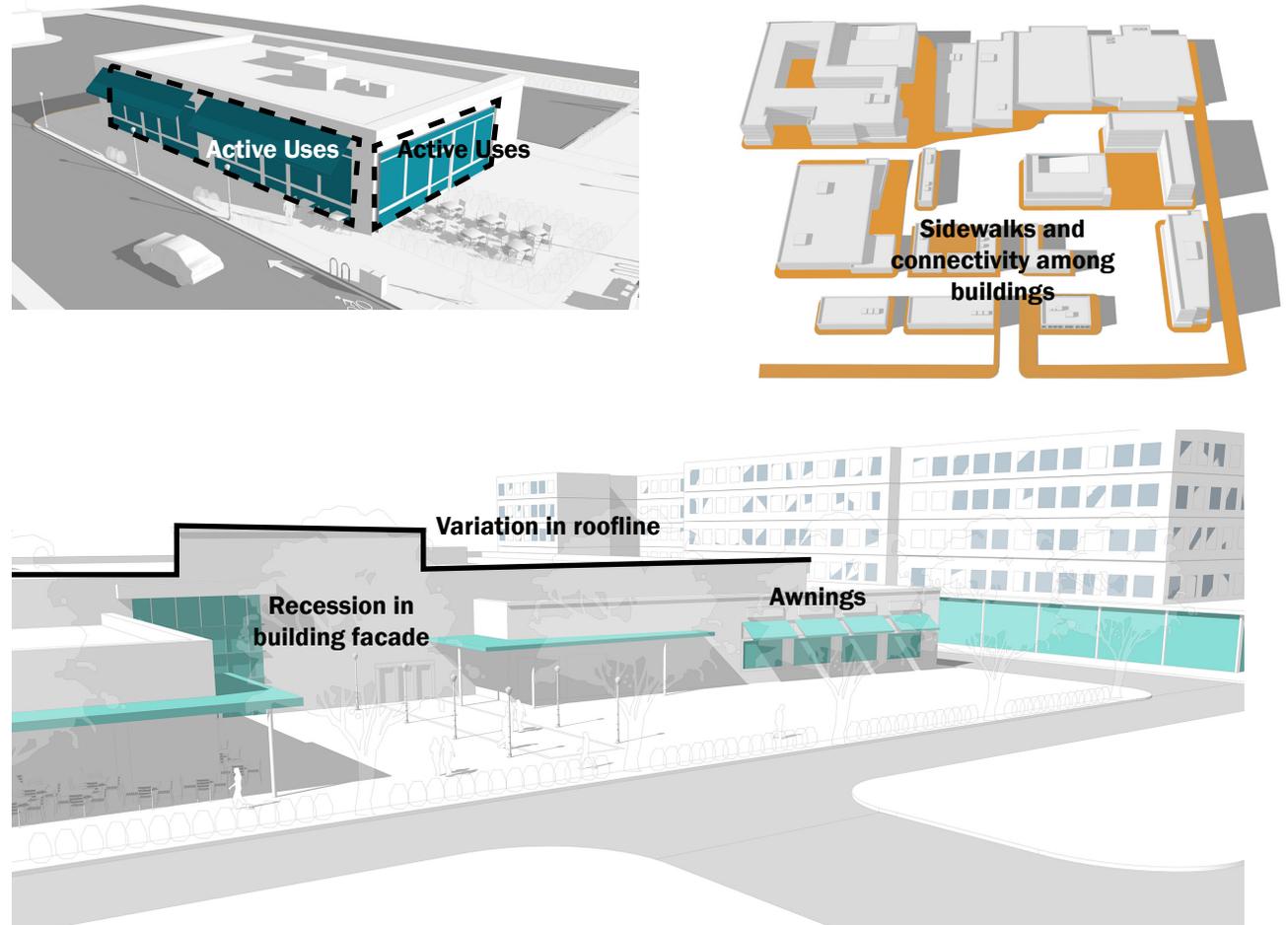


Figure 41. Initial rendering of Woburn Mall redevelopment and relationship to Design Standards (Source: EDENS)



- A.** Upper levels stepped back from facade
- B.** Mass of buildings separated into smaller bays
- C.** Frequent street trees
- D.** Wide, active sidewalks divided into “zones” for amenities, circulation, and business activity
- E.** Active storefronts with high percentage of fenestration
- F.** Varied, high quality materials
- G.** Visible crosswalks
- H.** Buildings aligned to both street frontages

SUB-AREA 2: THE CENTRAL ZONE

Between the Woburn Mall and Anderson RTC is a large area containing numerous parcels and businesses. The majority of redevelopment efforts in this area may occur through the CWCOD, as well as implementation of other strategies.

Zoning Recommendations

As noted in the Zoning section on page 19, the CWCOD is an an overlay district intended to allow for mixed-use development. To date, only one development has received permitting through the CWCOD over its 10 year existence. This is somewhat surprising, given its strong location and generally well-crafted ordinance. The reasoning is most likely partly due to timing, given that it was adopted at the onset of the 2008 real estate crash, which took years for areas such as Woburn to recover.

A second reason for the CWCOD's lack of use could be hesitancy to be the first developer in the area to redevelop under the district. With 120 Commerce Way permitted, as well as the upcoming Woburn Mall site and the nearby 200 Presidential Way multifamily residential complex, it is probable that the City could see more interest from developers for this area in the near future.

While those reasons were a part of macro-trends outside the City's control, the City also has the

opportunity to revisit the requirements of the CWCOD to ensure it is as strong as possible. Although largely well-crafted, there are a number of opportunities to incorporate minor but meaningful modifications to the ordinance to foster the type of development needed to achieve the City's vision for the area.

Connectivity

A critical element to the study area's success is its ability to foster connections for a variety of travel modes (see Local Internal Circulation in the Principle 2: Connectivity Chapter). One of the ways to achieve this goal is through intra-parcel connectivity. Doing so can help cut down on traffic along Commerce Way by providing additional options for trucks and other local vehicles. Currently, Section 5.2.4 of Woburn's Zoning Ordinance prohibits shared driveways and internal connectivity between parcels. The CWCOD could be amended to include a provision that it is excluded from Section 5.2.4. Additional language could be added to specifically encourage the creation of an internal network.

The Town of Saugus' recent overlay district along Route 1 provides sample language:

"Any streets or driveways internal to a development within the Business Highway District shall be connected with internal streets or driveways of

abutting properties zoned Business Highway. Streets or driveways shall be extended to abutting properties in logical locations, as determined by the Planning Board." See Appendix for the full by-law language.

Process

Some of the provisions in the CWCOD may add to the uncertainty that comes with larger-scale mixed-use development and could potentially act as a hindrance to redevelopment. Potential changes include:

Remove provision specifying that once CWCOD is used the property cannot ever revert back to underlying zoning. Although this stipulation may be well-intended, City staff estimate that approximately three potential developments fell through because of this provision. Including the provision hampers owners' ability to nimbly respond to market changes as it reduces the uses and types of development available to the owner.

Reduce Concept Plan Timeframe. The CWCOD provides an initial 90 day Concept Plan review before the Site Plan Approval process can commence. The Concept Plan allows members of the Planning Board to take part in the process at the outset, allowing for a potentially more well-developed plan. The timeframe, however, may be excessively long, given that it is an extra

step before the Site Plan and/or Special Permit process can begin. Reducing the Concept Plan review to 45 days can help facilitate high quality development by reducing the financial and time risks for developers.

Revise developer mitigation payments section.

The City has begun amending Section 18 of the Zoning Ordinance to ensure any mitigation achieves a nexus with proposed development. The CWCOD should be amended to reflect these updates and achieve the various transportation recommendations included in this report.

Uses and Other Provisions

Consider allowing mixed-use by right, but limit any residential uses to the area west of Commerce Way (i.e., the study area). To truly be a neighborhood, the study area needs people living in it. Furthermore, the study area is among the best locations in the City to accommodate the local residential market demand, which can help stabilize city-wide housing prices. To better control the amount of residential density throughout the City, the City Council recently enacted a 20 unit per acre (UPA) maximum. For the CWCOD this limit is 25 UPA, which could be increased up to 40 UPA, depending on the amount of non-residential development on-site. The City should consider allowing mixed use by right in a portion of the CWCOD. While these

uses are allowed in the study area, the special permit requirement could be an obstacle to their development due to the level of unpredictability it introduces. The City would still retain control over the design of the development through the Concept Plan Review and Site Plan approval processes. Special Permit could be retained for projects above a certain density threshold. Allowing residential uses only within the study area portion of the CWCOD will help ensure a more integrated neighborhood, ensure pockets of residential development do not become disconnected “islands” that require vehicles for every trip, and retain the employer base.

Reduce open space requirement. The open space requirements (20% for mixed-use and commercial projects and 40% for multifamily) are higher than necessary to achieve a vibrant, walkable area. Too much open space can lead to banal, boring areas that experience little use and provide little benefit. The City should consider reducing these percentages, e.g., to 15%, which is more in line with walkable, more urban downtown environments. The City could also consider allowing open space to be met through a contribution towards off-site open space and trails. This provision could help fund the various connectivity recommendations, such as a shared multi-use path along the riverfront. Finally, the

open space provision could allow rooftop gardens and the like to meet a portion of the open space requirement.

Reduce parking requirements for 3+ bedroom units. Parking requirements for most uses, including residential, is appropriate in the CWCOD. The one use that is higher than generally considered best practice for the context is for 3 bedrooms and higher. Three bedroom units could be lowered from 2 spaces per unit to 1.75 spaces. Units greater than 3 bedrooms require a space for each bedroom after three. While there is unlikely to be many 4+ bedroom units, this is higher than recommended and could be lowered to, e.g., an additional space per two bedrooms.

Encourage ride-share uses on-site. Ride-share services, such as Zipcar, are extremely popular in mixed-use areas. They can allow a two-person household to live with one car and may even allow some residents to live without a car, provided commuter options and various amenities can be met through walking. These uses should be allowed by right in the CWCOD and/or required as part of a standard suite of traffic mitigation measures a developer would need to implement to proceed with development.

Incentivize some three-bedroom units. As noted in the residential market analysis, a range of

Zoning “test” for the CWCOD

It is unclear to what extent the City will support future residential development in Sub-Area 2. Over 800 residential units will be built on three parcels in the area (Woburn Mall, Emery Flats, 120 Commerce Way) in the near term. It will be important for the City to understand the potential implications the overlay district may have on future development. To that end, MAPC examined a parcel within the study area and applied to the existing CWCOD requirements, including the recently implemented limit on residential density, to understand the implications on redevelopment.

MAPC chose 10 Atlantic Avenue as a test case. At 2.6 acres it is similar in size to a number of other parcels in the study area. It is also strategically located near Anderson RTC and adjacent to planned redevelopment at 120 Commerce Way.

Figure 42 shows how development could potentially occur on this site, taking into account the principles set forth in this plan.

The cap on **residential units per acre** in the CWCOD is 25 (this could be raised if additional commercial is provided on site). This allows for 65 units. The model also assumed a portion of **ground-floor retail space** (9,000 SF). **Required parking**, utilizing the district’s shared parking mechanism, is 111 spaces. **Floor Area Ratio**, a

measure of density, is 0.7, which in the context could be considered medium density. **Open space**, a 20% requirement, is a half acre.

Based upon the above, there is sufficient space to allow for development to occur. In order to take advantage of a higher residential units per acre cap, which could be as high as 40 units per acre, would likely require structured parking.

This analysis does not consider whether the development would be financially feasible from a developer’s perspective. And although it is feasible from a design perspective, the parking requirements, open space requirements, and limits on residential density, may hinder the development of a truly walkable, village-like area.

Figure 42. Hypothetical application of CWCOD requirements



bedrooms, including those with 3 or more units, should be provided in the study area in order to provide opportunities for families seeking to make a home in this part of Woburn. A large portion of demand for TOD comes from young professionals and those looking to downsize, but given housing supply constraints and the affordability challenges of single-family homeownership in Woburn and the region, it's also important that new TOD provides opportunity to for young families.

The Commonwealth's Interagency Agreement (between DHCD, MHP, CEDAC, MassHousing, and MassDevelopment) stipulates that 10% of units in developments benefiting from state funding, such as the Woburn Mall site, should have 3 or more bedrooms. For purely private development, the City can incentivize inclusion of multi-bedroom units in new development with a density bonus. Developers could make buildings taller and with a higher floor area ratio as long as all or a portion of the "bonus" area goes to three-bedroom units.

Miscellaneous

Add signage regulations consistent with 40R.

The City worked closely with the developer of the Woburn Mall site to craft signage regulations. These regulations could be applied to the CWCOD or incorporated city-wide.

Allow eating establishments and cafes by-right in underlying zoning.

As part of the related New Boston Street economic development study done in conjunction with this plan, a number of landowners and business owners expressed the desire for additional eating options close to their places of business. This can help attract and retain a diverse workforce for the numerous businesses in the underlying Industrial districts. A small eatery or cafe located in an office or light manufacturing facility could serve the employees working on-site and nearby. These uses should be clarified as to whether they fall under Restaurant, Full Service (which is allowed by right) or Restaurant, Fast Food (which is only allowed through Special Permit).

Amend the citywide Inclusionary Zoning Ordinance for development in the study area.

Inclusionary Zoning is one of the strongest tools available to create mixed-income housing and neighborhoods. Woburn amended its Inclusionary Zoning in 2018, requiring developers to set aside 15% of new units in multifamily development (those of two or more units) as affordable. Several key updates would strengthen this tool and increase its effectiveness in general and in the study area.

First, the City should provide incentives for Affordable Housing production under Inclusionary

Zoning through zoning relief, relaxed dimensional requirements, lower parking requirements, and/or other means throughout the city, but particularly in the study area. Currently, the City's Affordable Housing requirement does not include any incentives, and the Woburn Vision 2020 master plan specifically recommends that the City amend this to "provide developers beneficial treatment (such as increased density) in exchange for providing affordable housing." Incentive-based zoning has been shown to be more successful at producing Affordable Housing through mixed-income housing development than a mandate without financial encouragement, as the City currently does. New market-rate development in Woburn tends to be high cost. Without functional Inclusionary Zoning, it is likely this will be the case with all new development in the study area, contrary to the community's vision for the corridor.

Second, residential developers of projects in the study area subject to Inclusionary Zoning should be required to provide the units on site, rather than have the option to make a payment in lieu of units (PILU). Given Woburn's housing market and the high cost of new multifamily units, the study area should be exempted from the PILU option in order to create a mixed-income neighborhood. Otherwise, most new housing in the study area will be higher cost than what current Woburn residents can afford.

Third, current Inclusionary Zoning only applies to development seeking a Special Permit from the City Council. This plan’s recommendation to allow mixed-use and multifamily development in the study area by right, if implemented, must be paired with an amendment to the City’s Inclusionary Zoning requiring application to all such projects, regardless of permitting process.

See Appendix for a summary of the recommended zoning changes.

Encourage universal design of new housing. As with bedroom mix, it’s important that the design of housing in the study area suit a range of residents, including those with different physical abilities. Because a large portion of demand for TOD comes from older residents looking to trade large single-family homes for more maintainable units, it’s important that these units accommodate them as they age. At least a portion of new units in the study area should be developed in accordance with universal or inclusive design principles. These terms refer to design, including utility and safety features, that works for the widest spectrum of users without the need for specialized adaptation. There are several strategies municipalities can use to encourage universal design, including financial incentives, building certification, streamlined permitting, fee waivers, or other incentives to encourage developers to utilize universal design features.

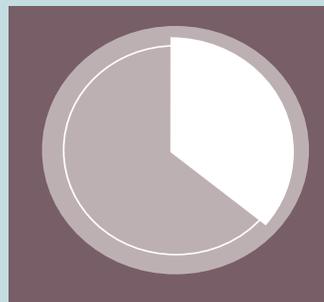
The Need for Housing

As noted in the Location Overview section (page 4), the study area is a strong location for equitable transit-oriented development. A key part of E-TOD is the inclusion of sufficient housing, which helps to create a neighborhood, provides transit access to those who need it most, and can support area businesses. While there are often concerns about potential impacts associated with an increase in housing, the benefits often outweigh the drawbacks. One major benefit of increasing the housing supply, especially of affordable units, is to meet the City’s housing needs. The Woburn Master Plan and Housing Production Plan establish the need for more affordable housing in the City.

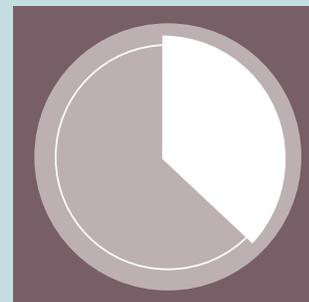
WOBURN RESIDENTS STRUGGLING WITH HOUSING COSTS

Cost-burdened households pay 30% or more of their incomes on housing. HUD considers a cost burden rate of 30% or higher to pose significant issues, ranging from challenges affording other necessities like food and medical care to lack of discretionary income to support local businesses.

Low-income households have incomes no higher than 80% of the Area Median Income, or \$54,750 for a 1-person households and \$78,150 for 4-person household. In Woburn, there are 1,419 housing units on the Subsidized Housing Inventory for these 5,493 households, or approximately 1 home for every 4 low-income households.



36% (5,509) of all households are cost burdened



37% (5,493) of low-income households are cost burdened



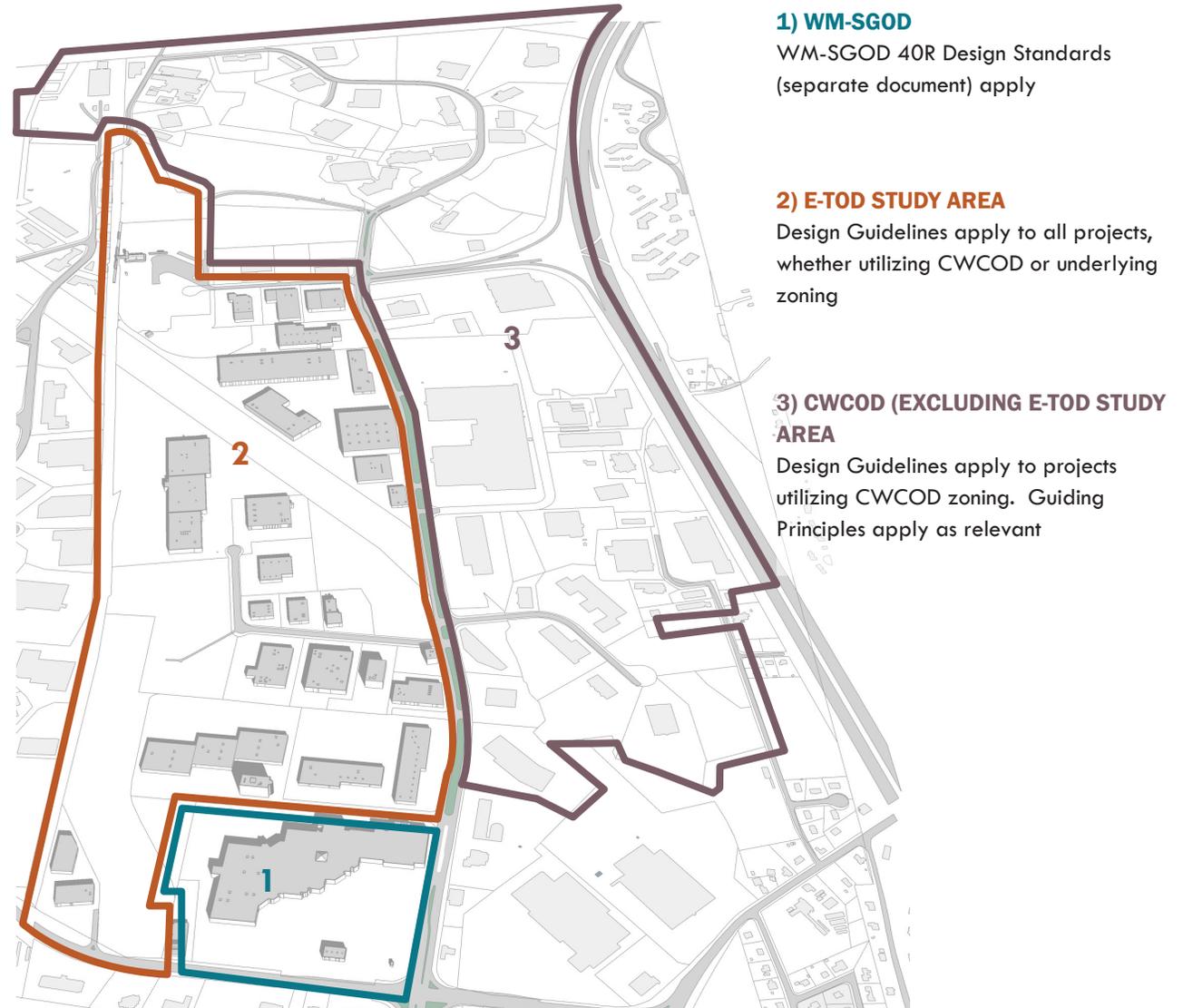
33% (1,796) of low-income households are cost burdened

Design Guidelines

The City worked with MAPC and the developers of the Woburn Mall site to create a detailed set of Design Standards that future development must follow. Complementing these standards, MAPC and the City have drafted Design Guidelines governing the CWCOD overall, and the study area in particular. Like the 40R Design Standards, these guidelines are intended to foster multi-modal connectivity, a strong public realm, and high quality, contemporary design. Although they are advisory in nature, they can communicate to any developers the City's expectation for the form of future development and assist the City Council in its Site Plan Approval process. (See Figure 43.)

See Appendix for the Commerce Way Corridor Design Guidelines.

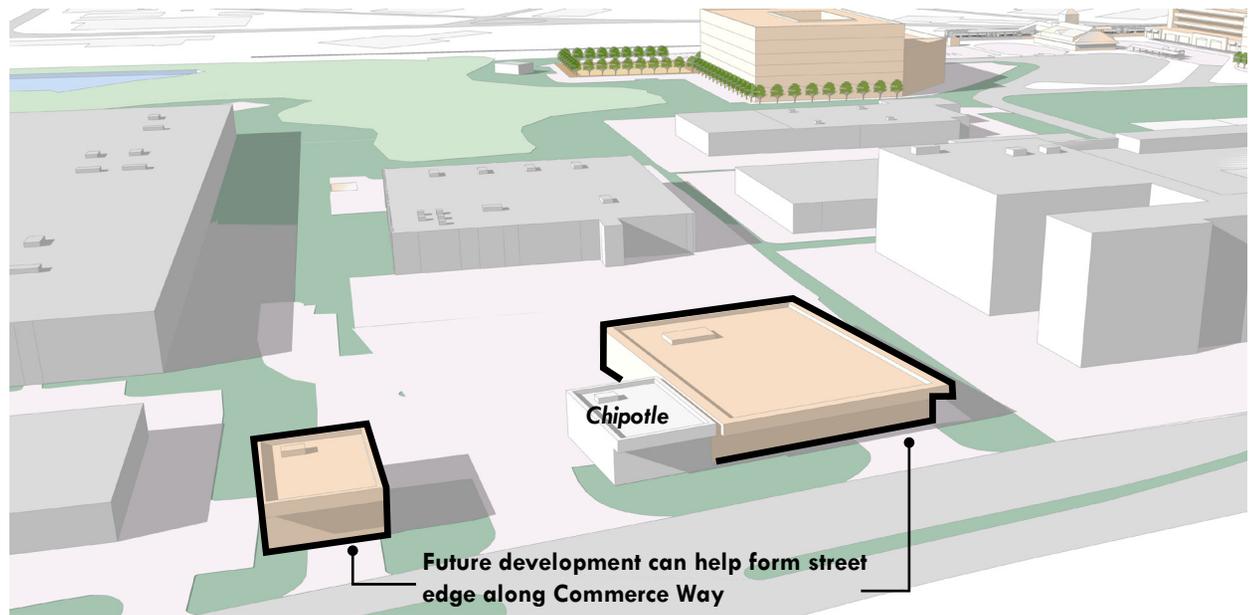
Figure 43. Design Guidelines jurisdictions



Infill Opportunities

The study area may have opportunities to add infill development to some properties, especially if there is excess parking. Smaller infill opportunities can provide additional amenities to visitors in the area, while also improving the public realm by reducing the preponderance of unsightly parking lots along Commerce Way. Examples include the Chipotle at 112 Commerce Way and the small retail building at the existing Woburn Mall containing a liquor store, barbershop, and Qdoba. (See Figure 44.)

Figure 44. Existing conditions at 114 Commerce Way and diagram illustrating the effects of infill along the parcel edge



Property Improvements

Property improvements, such as façade improvements, improving outdoor spaces, adding outdoor seating, and establishing small eateries, can foster stronger economic development by making the area more attractive to hiring and retaining workers. In addition, these improvements can increase the area's sense of place by adding vibrancy and interest to the area. (See Figures 45 and 46.)

Figure 45. Example of activating “passive” space at 20 Cabot Road through outdoor seating areas

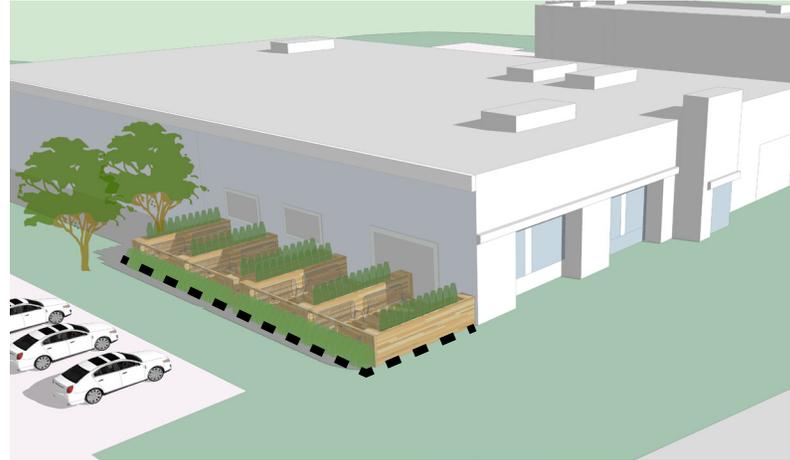


Figure 46. Property improvements focused on attracting and retaining a diverse workforce, can include a number of relatively low-cost improvements and initiatives.



SUB-AREA 3: ANDERSON REGIONAL TRANSPORTATION CENTER

At the northern end of the study area is Anderson Regional Transportation Center, a multi-modal hub with commuter rail, Logan Express shuttles, and the potential for additional MBTA bus and private shuttle service. The station has approximately 1,500 daily boardings (2016 figures), making it the second busiest along the Lowell line, seventh highest ridership in the entire commuter rail system. As a regional transportation hub, more than 80% of commuters come from surrounding communities outside of Woburn. The 26 acre site, larger than the Woburn Mall site, is potentially the strongest site in the study area for true transit-oriented development.

The site, however, has several barriers and constraints that would need to be overcome to unlock development. Unlike many commuter rail station areas, the parcel is owned by the Massachusetts Port Authority (Massport), not MassDOT. Massport is a quasi-government entity responsible for operating Logan Airport among other airports and ship terminals. Unlike MassDOT, which actively seeks out development opportunities throughout its land holdings, Massport's focus in the suburbs has

traditionally focused on its operations.¹⁴ Recently, however, Massport has embarked on exploring redevelopment options at another Logan Express shuttle service in Braintree. The lot, with 1,840 spaces, is similar in size to Anderson RTC and suggests that the agency may be willing to explore additional development opportunities.

In order for development to be a viable option, existing operations at Anderson must be maintained. The site is currently divided into a 900 parking space lot on the south side for Logan Express and a 1,100 parking space lot for daily commuters. There are also an additional other 485 spaces spread throughout the site for various uses. Because of its high utilization, the vast majority of these spaces would need to be maintained in addition to any spaces needed to accommodate future development. Operations for the two uses may need to be consolidated to make room for development, which adds a further complication.

As the epicenter of the Superfund site, the site also contains significant environmental hurdles. The EPA indicated that it would be willing to consider redevelopment on the site, including for residential, but this would require an extremely high level of working with the EPA to ensure proper safety and controls are maintained. It

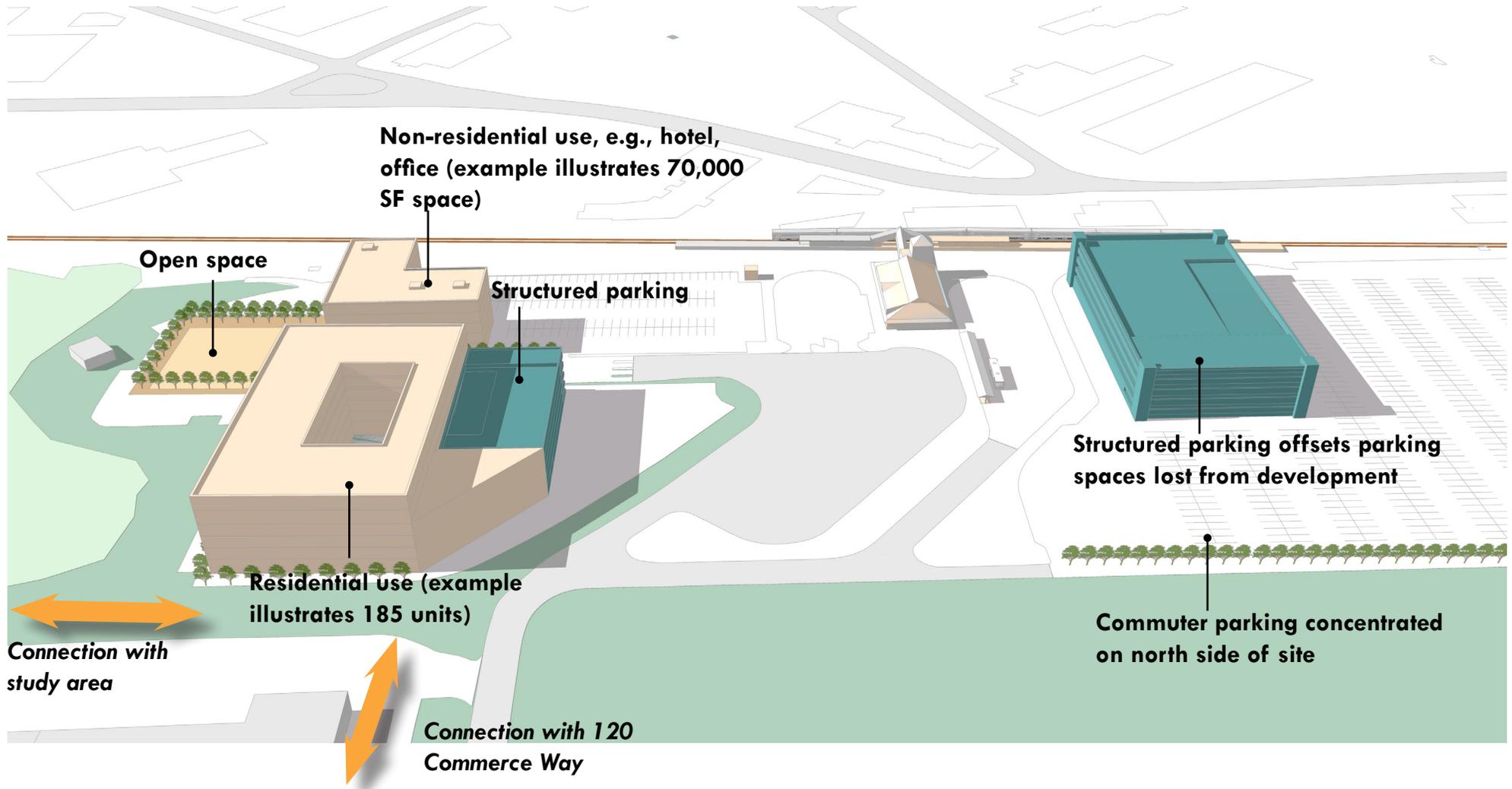
would require an experienced developer able to assume financial and time risks associated with the uncertainty of developing on the site.

The benefits of redevelopment could outweigh the barriers. Structured parking would likely be required to accommodate parking needs. The amount of residential development would need to be large enough to justify the costs associated with such a redevelopment. Because of the site's size, additional uses could likely be accommodated as well. Figure 47 shows one example that provides a modestly sized redevelopment that could potentially occur. Development is focused on the south side of the parcel, putting it in proximity to planned mixed use development on 120 Commerce Way and with the rest of the study area.

Redevelopment, if it is to happen, is likely years away. The immediate next step to explore redevelopment opportunities is for the City to meet with Massport officials to provide the agency with the City's vision and interest. The City should also explore the appropriate zoning mechanism to facilitate redevelopment. As part of the CWCOD, redevelopment could be governed by this district, but the City should also explore whether an additional 40R district or other zoning district specific to the site is needed.

¹³ Massport does own large swaths of Boston's Seaport District, overseeing major development that has transformed the area.

Figure 47. Example of mixed-use development at Anderson RTC. This example can serve as a starting point with officials at MassPort and potential developers. The example focuses development on the southern portion of the site, strengthening the connection among development in the E-TOD study area. The example provides a modest amount of development, in keeping with the City's existing vision for the area; however, the site could potentially accommodate a much greater degree of development if desired or if needed to be financially feasible.



INTRODUCTION

How people travel throughout the study area is one of the most important elements to achieving the area's vision. While improvements should be made to improve vehicular traffic flows, a thriving neighborhood relies on a strong pedestrian (and, increasingly, bicycling) realm. The following recommendations, therefore, go beyond an emphasis on moving people as efficiently as possible from one place to another – they also contribute to creating a distinct sense of place.

RECOMMENDATIONS

Principle 2: Connectivity

RIVERFRONT WALK

At the first public forum the project team introduced the concept of creating a shared multi-use path along the Aberjona River and Mishawum Lake, stretching from the Woburn Mall site at Mishawum Ave to Anderson Station. The concept received strong support from the public, City staff, members of the Planning Board, and members of the City Council. A path would provide a comfortable, direct connection traversing the study area, take advantage of this under-utilized natural amenity, and strongly contribute to the area's unique sense of place. (See Figure 48.)

Completing the design and construction of such a path will take years. The immediate next step is for the City to hire a qualified transportation engineering firm to undertake a feasibility analysis. The analysis should provide high-level cost estimates and potential barriers, such as rights-of-way ownership issues.

The study should also include design alternatives. For example, locating the path on the west side of the water would provide a more natural environment; however, it would require a crossing and add extra distance from the study area's development. Locating on the east side provides more proximate access to development but may have other drawbacks.

Figure 48. The Aberjona River provides an opportunity to construct a multi-use path, connecting the Woburn Mall site all the way to Anderson RTC



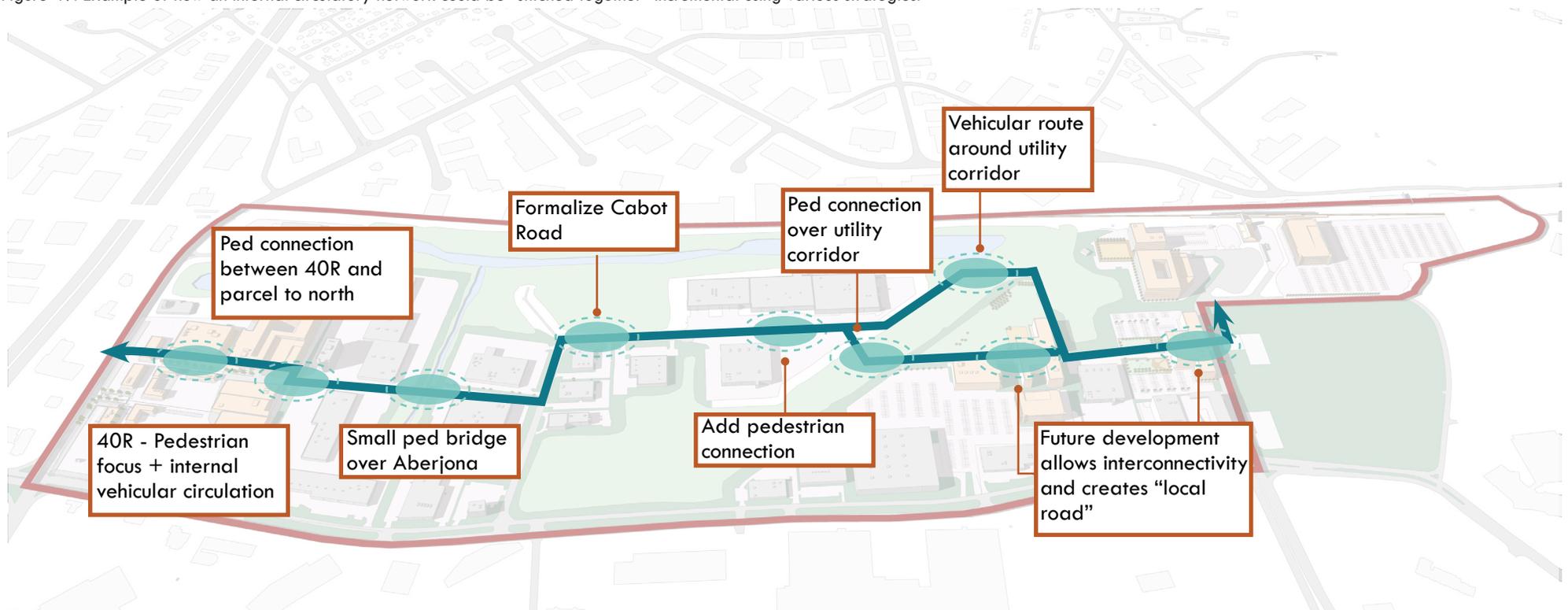
INTERNAL LOCAL CIRCULATION

Introduction

Whereas a riverfront walk is a longer term endeavor, an “internal” connection between Commerce Way and the train tracks can likely be implemented, at least in part, sooner. This is not an alternative strategy to the riverfront walk; rather, both strategies should be pursued concurrently. An internal connection divides the “superblock” distance from Commerce Way to tracks (more than a third of a mile) into a more walkable distance.

Figure 49 summarizes one way this concept could be achieved incrementally. Note that it is not the only possible solution but illustrates how a variety of strategies from multiple stakeholders could help realize this concept. To the extent possible the connection should provide accommodations for all users, including pedestrians, bicyclists, single occupancy vehicles, and trucks. This will result in a true complete street that best serves the community; however, in some locations the connection may lack vehicular/truck access due to various constraints.

Figure 49. Example of how an internal circulatory network could be “stitched together” incremental using various strategies.

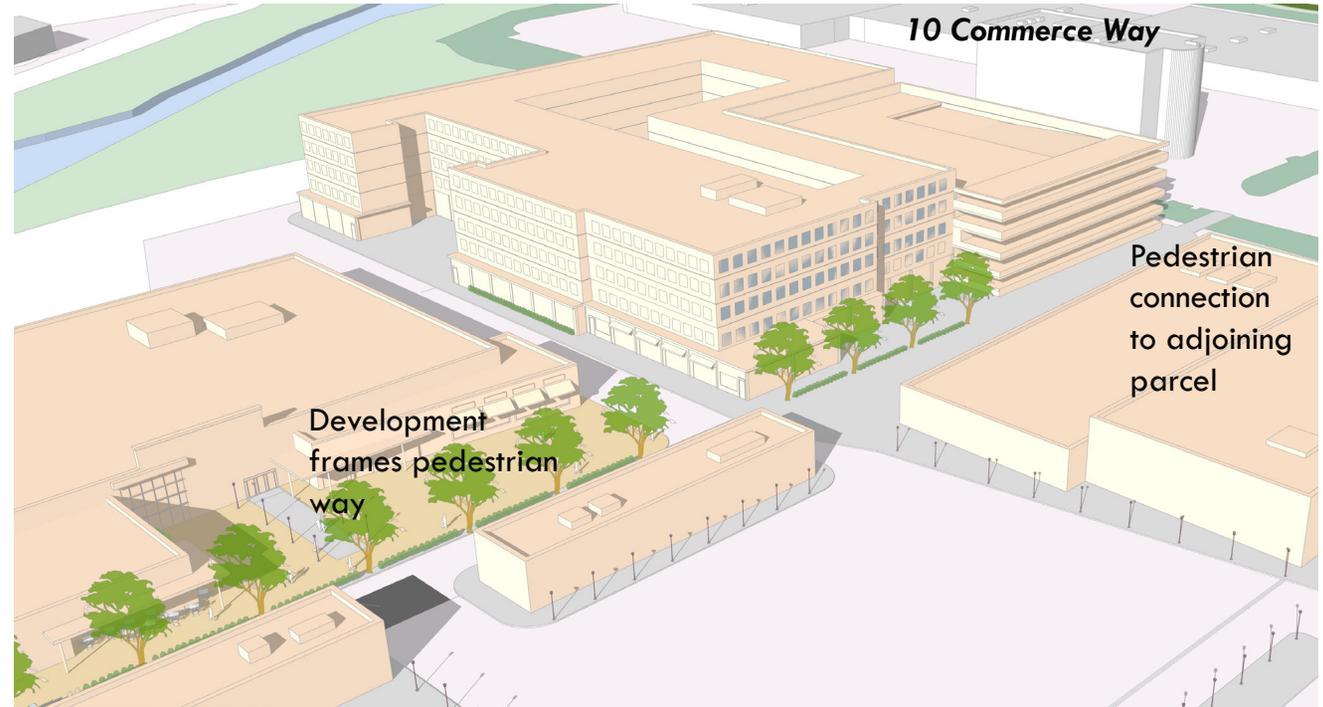


Woburn Mall Site Pedestrian focus

As noted in the Sub-Area 1: Woburn Mall Site section, the WM-SGOD Design Standards place a strong emphasis on pedestrian connectivity. Working with the developers, preliminary site plans suggest the district will to the degree feasible create a central north-south connection, especially for pedestrians.

Interconnectivity between parcels is critical to achieve this principle. Preliminary discussions with the developer of the Woburn Mall site suggest they will create a pedestrian connection with 10 Commerce Way immediately to the north. This will provide a strong benefit to the many employees working at 10 and 20 Commerce Way, who will now be able to walk directly to the restaurant and retail opportunities at the future development, rather than drive along Commerce Way. Ideally, potentially in the future, allowing vehicular access would further increase the area's connectivity and provide an alternative means of access/egress for the future development's residents and visitors. (See Figure 50.)

Figure 50. The WM-SGOD design standards have a strong focus on walkability and help create the beginnings of a north-south connection between Commerce Way and the commuter rail line.



Pedestrian bridge across river

To the north of 10 and 20 Commerce Way the Aberjona River swings sharply east. While the river may create a barrier to realizing a vehicular connection, at least in the foreseeable future, a much more cost-effective and realistic solution is to construct a small pedestrian bridge to the adjoining properties at 12 and 20 Cabot Road. (See Figure 51.)

Cabot Road improvements

Cabot Road, which runs perpendicular from Commerce Way before turning north, can be better designed to be safer and more comfortable for pedestrians. Bicycle and pedestrian infrastructure, as well as wayfinding signage, would enable this roadway to be a viable option for creating a north-south connection stretching from the north side of 12 and 20 Cabot Road to the utility corridor, almost a third mile to the north. (See Figure 52.)

Figure 51. Diagram of pedestrian bridge across Aberjona River and example of small pedestrian bridge. This relatively small intervention could greatly increase connectivity in the site area to upcoming mixed-use redevelopment at the Woburn Mall site.



Figure 52. Improving the pedestrian path at 12 Cabot Road (A) and then improving pedestrian conditions along Cabot Road (B and right photo) and through 36 Cabot Road can continue the pedestrian connectivity through the site.



Crossing the utility corridor

The elevated utility corridor, owned by Boston Edison Company, cuts across the study area between 35 Cabot Road and 74 Commerce Way. Numerous paths exist along the corridor, making it relatively easy to formalize a path(s) to connect between the parcels. Making a vehicular connection will be more difficult, but the most cost-effective and feasible option may be to formalize what appears to be an existing vehicular access point towards the north side of the parcel. (See Figure 53.)

Future development creating “local road”

In cases where parcels in the study area are redeveloped, the future development should strive to create an internal connection away from Commerce Way. As noted in the Zoning Recommendations on page 58, the CWCOD should be amended to allow for interconnectivity between parcels. In addition, the applicable Design Guidelines recommend internal connectivity, including pedestrian infrastructure. (See Figure 54.)

Figure 53. The City should work with Boston Edison on formalizing a pedestrian path over the corridor and the feasibility of constructing a vehicular route.

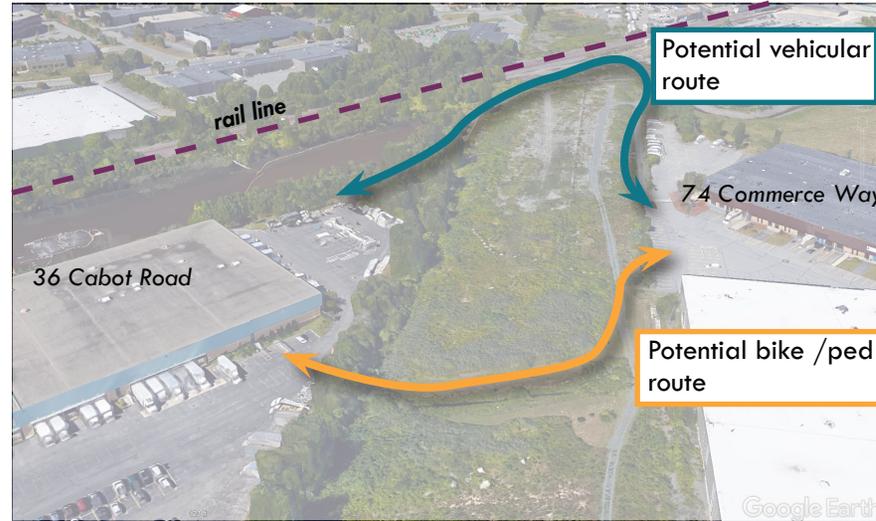
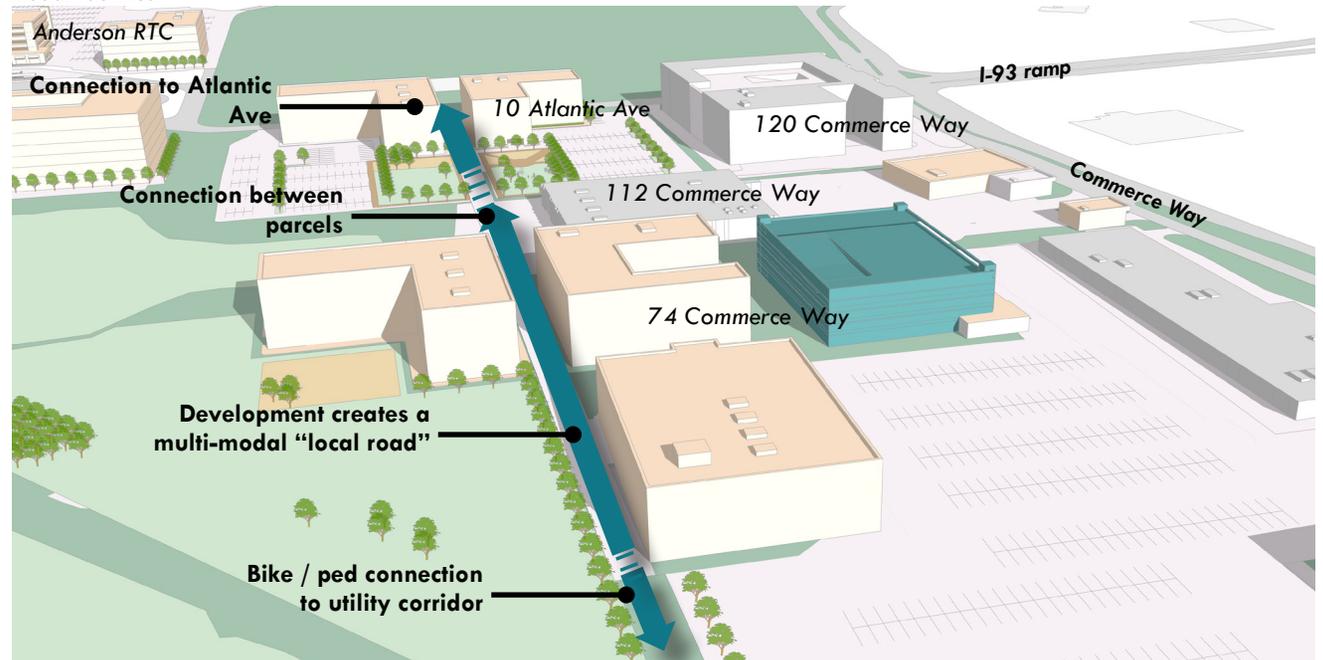


Figure 54. Diagram illustrating how any future development in the study area can foster the creation of an internal network of multi-modal facilities.



VEHICULAR SAFETY IMPROVEMENTS

While the study area's connectivity focus is on enhancing the pedestrian realm, it is also important to enhance the safety and operations of vehicular traffic. As noted in the Transportation Section of the Study Area Overview chapter, there are three locations along the study area boundaries that are among the top 5% of crash locations in the MAPC region (See Figure 55):

- » Mishawum Road at the Woburn Mall entrance
- » Mishawum Road at Commerce Way
- » Mishawum Road at Atlantic Ave (entrance to Anderson RTC)

The City of Woburn has recently begun a process of examining various high-crash and other dangerous intersections on its roadways. The result of this work will lead to recommendations to improve safety and traffic flow.

An additional step the City could consider is to contact the MassDOT District 4 office for a Road Safety Audit (RSA). RSAs bring together groups of transportation professionals to assess an area and provide near-, mid-, and long-term solutions. Improvements can be met through developer mitigation, city funds, and/or the State Transportation Improvement Program.

Figure 55. Images of high crash locations in the study area: A) Atlantic Ave at Commerce Way, B) Commerce Way at Mishawum Road, C) Woburn Mall entrance at Mishawum Road



INTRODUCTION

Not only is safe, comfortable, and efficient travel within the study area important, but getting to and from the study area is also critical: Woburn residents should have multiple ways to visit the study area's amenities and commuter rail station, Anderson RTC should realize its potential as a true multi-modal hub, and employees living in other communities should be able to access the area's employers without relying on a car. The following recommendations help achieve these aspirations, each of which can help reduce the area's traffic congestion.

RECOMMENDATIONS

Principle 3: External Connections

FIRST-LAST MILE CONNECTIONS

Woburn is one of the top employment centers in the North Suburban subregion with over 39,000 jobs. Most of this employment is in eastern Woburn, with a good portion near the Anderson/Woburn commuter rail station. Figure 65 shows the concentrations of jobs in Woburn.

This concentration of employment draws many residents from nearby municipalities as well as from within Woburn. Woburn is the top destination for workers commuting within the North Suburban subregion. Census data shows that many who work in Woburn also live in Woburn, but there are also concentrations of workers living in Lowell, Reading, Everett and Lynn. Nearly all of the MBTA transit services to Woburn, however, do not adequately serve these “reverse commute” and east-west travel patterns. The current MBTA bus services do not serve many of the employment concentrations in Woburn, nor are there good walking and bicycle connections from Anderson/Woburn to nearby employment areas.

MAPC recently completed a mobility study for the North Suburban subregion which noted that Anderson RTC has a high suitability for “reverse commute” based upon the number of jobs, existing transit connections, and potential for connections between the transit and job centers. (See Figure 57.)

The mobility study also found that Anderson RTC is a good candidate for becoming a “mobility hub,” given that the station is served by 26 inbound trains and 26 outbound trains per weekday, with trains approximately every 30 minutes each direction in the peak periods.

As a mobility hub, Anderson RTC should become a place where workers can find “one stop connections” to rail, extended MBTA bus routes (see below), local shuttles, ridesharing (taxis, Uber, Lyft), car share (e.g., Zipcar), scooter rentals and bike share. As the station area develops, the hub should include placemaking elements to support transit-oriented development.

A key element of this study is to implement local shuttles connecting Anderson RTC to nearby employment. The North Suburban Mobility Study recommended multiple shuttles connecting Anderson RTC to nearby employment, including one that would travel along Commerce Way to Mishawum Road and then loop along Industrial Parkway, Merrimac Street and School Street. This route would provide connections to the warehousing, light manufacturing and restaurant, retail and hospitality industries in the area.

Local shuttles are typically created via public-private partnerships between municipalities and local employers, usually through a Transportation Management Association (TMA). Shuttle

operations usually cost \$125,000 to \$150,000 per year per route. To help with implementation and operations, Woburn should work with an established TMA, e.g., Middlesex 3, and work to recruit sponsorships from businesses whose employees will benefit from the shuttle. The TMA may also help with finding sponsors and implementing bike share or other mobility options.

Figure 58 provides potential shuttle routes identified through the North Suburban Mobility Study (MAPC, 2017). The full report is searchable through a web-engine or at <https://www.mapc.org/get-involved/subregions/nspc/#projects>.

Figure 56. Employment density in Woburn (study area highlighted).

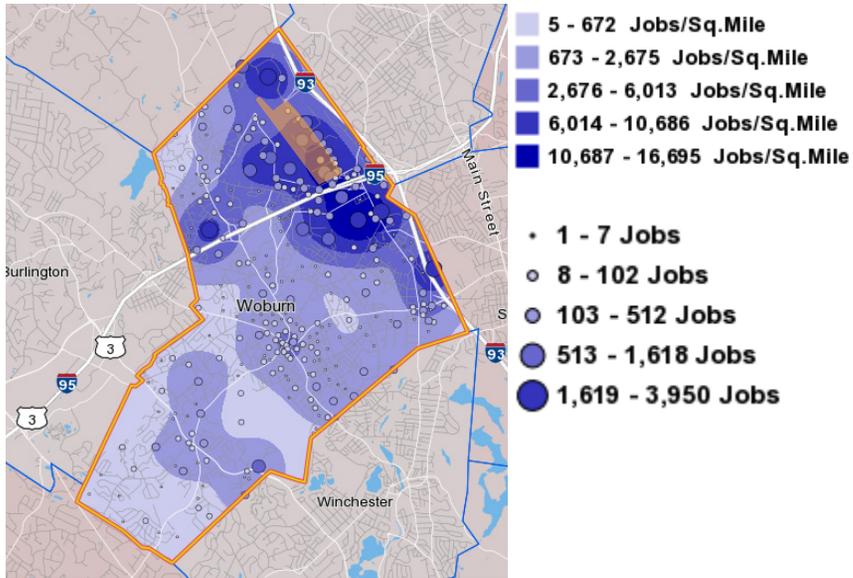


Figure 57. Reverse Commute Suitability Analysis (study area highlighted)

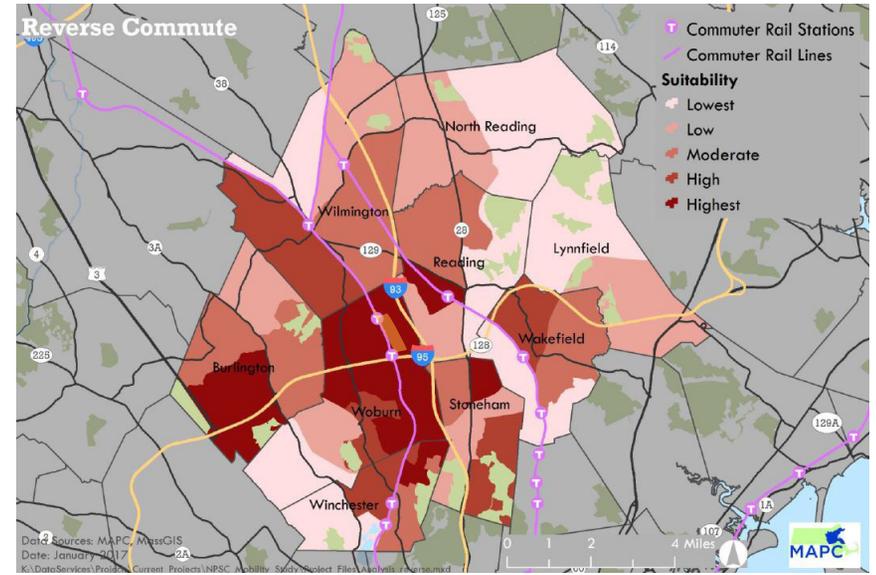
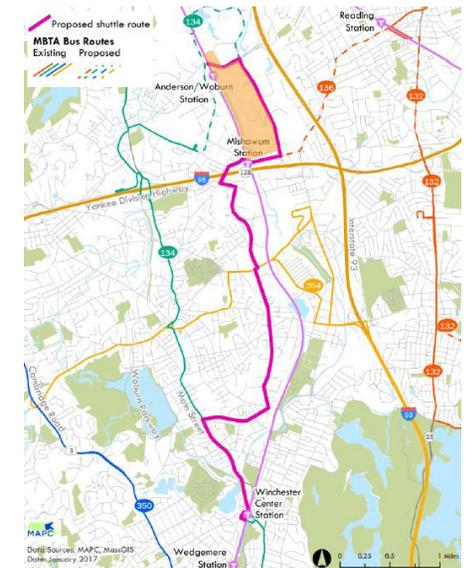
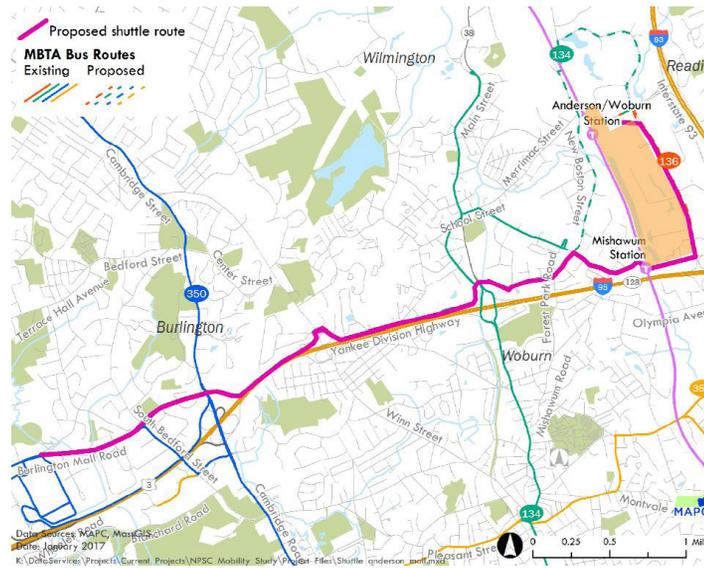
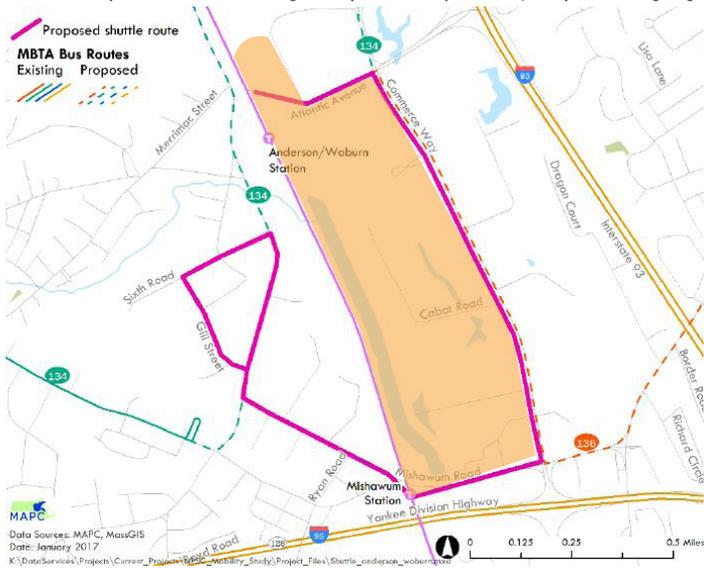


Figure 58. The maps below provide suggested private shuttle routes that include the study area, from a simple route operating during peak hours from Anderson RTC to area employers, to more in-depth service involving multiple municipalities (study area highlighted).



IMPROVE MBTA BUS ROUTING

In addition to private shuttles (see previous section), the North Suburban Mobility study recommended extending two key MBTA bus routes to terminate at Anderson RTC. (See Figure 59.)

These routes include:

- **Route 134.** This route currently ends west of the station at Main Street (MA Route 38). Extending the route to serve Anderson RTC would allow for reverse commuters to connect from commuter rail to employers along Presidential Way and Boston Street, as well as areas currently served by MBTA route 134. This bus route extension should be done once MassDOT constructs the extension of New Boston Street to pass over the railroad and connect with Presidential Way.
- **Route 136.** Extending this bus route west from Reading to Anderson RTC will provide an east-west transit connection to the employment cluster along Commerce Way both from the residential areas in Reading and for workers who travel via commuter rail on the Haverhill line.

Extending the MBTA bus routes to serve Anderson RTC will require close coordination with the MBTA as it undergoes a network redesign of the entire MBTA bus system (known as the Better

Bus Project (<https://www.mbta.com/projects/better-bus-project>). The City should contact the MBTA (betterbusproject@mbta.com) to discuss these changes. Similarly, Woburn should engage MassDOT and the MBTA while the Rail Vision study is ongoing to ensure that any proposed rail changes support the E-TOD plans for the area.

PEDESTRIAN BRIDGE FROM ANDERSON RTC

One of Anderson RTC's biggest deficiencies is its lack of pedestrian access. Creating ways for people to walk and bike to the station could make it a more attractive option for the community (currently, only 18% of station users are Woburn residents) and decrease vehicular traffic. The construction of the New Boston Street Bridge will help create this connection by providing sidewalks and bicycle lanes; however, its location is likely too far north to be a viable alternative for most Woburn residents.

A more direct link would be a pedestrian bridge over the tracks directly from the Anderson Station platform towards Merrimac Street would put Anderson RTC within walking distance of many residents in north Woburn and provide a safe bicycling option for an even greater radius. It could also make the location a viable shuttle option along New Boston Street as an alternative

to Commerce Way. (See Figure 60.)

The City has expressed a desire for a pedestrian bridge for a number of years. Recent conversations with the MBTA suggest the agency is interested in working with the City on including this important element into its upcoming capital planning process and has completed preliminary designs. An immediate next step is for City staff to meet with the appropriate MBTA officials.

Figure 59. Recommended extended MBTA bus routes (study area highlighted)

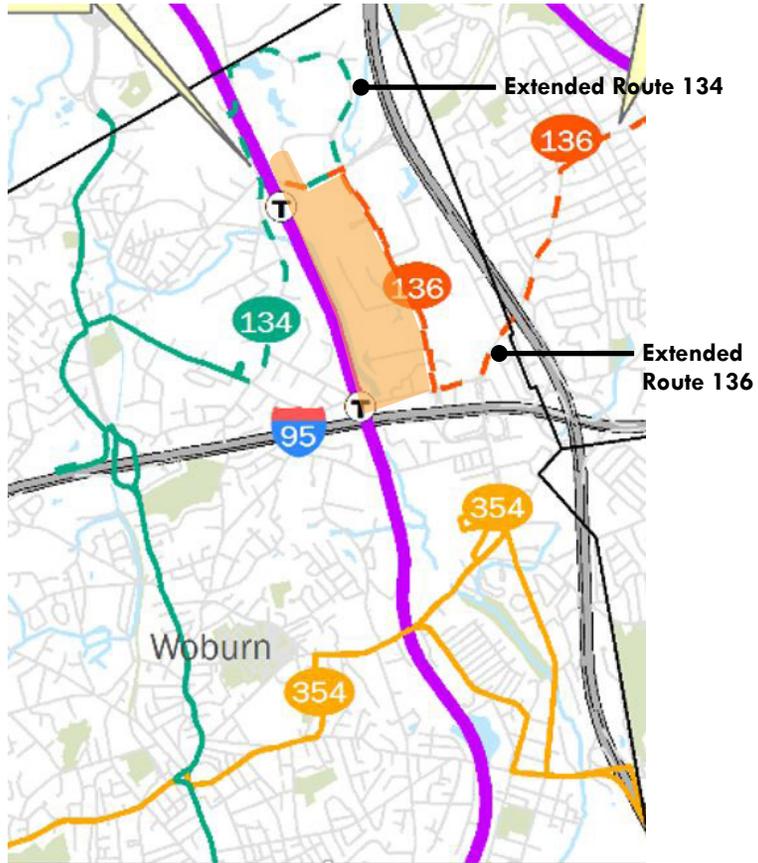
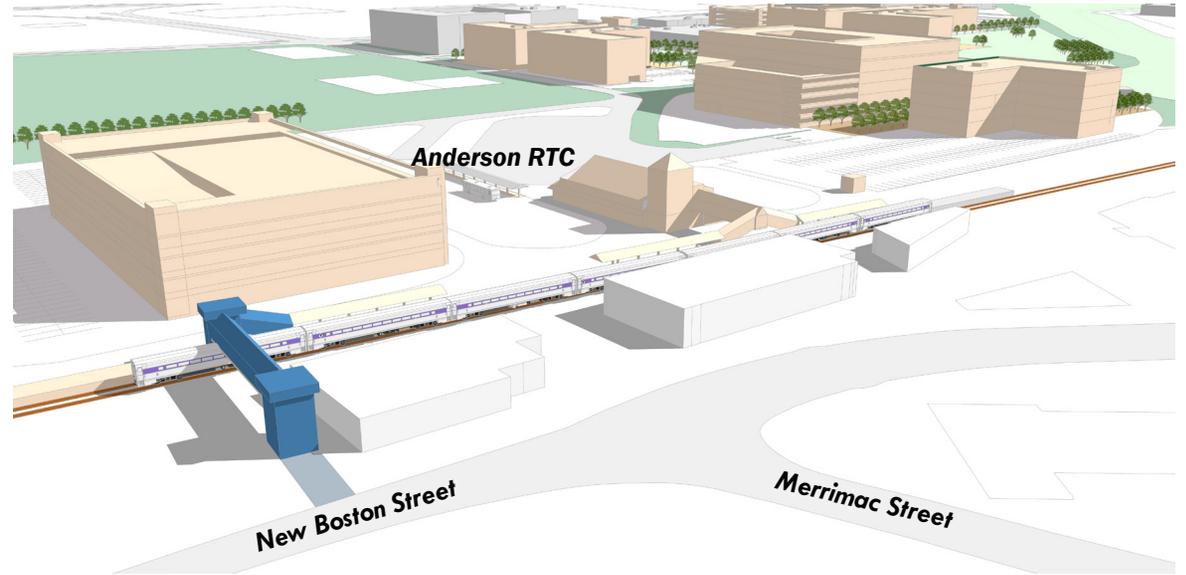


Figure 60. Diagram of potential pedestrian bridge connecting Anderson RTC to Merrimac Street (diagram includes potential future development at site). Below, example of a pedestrian overpass.

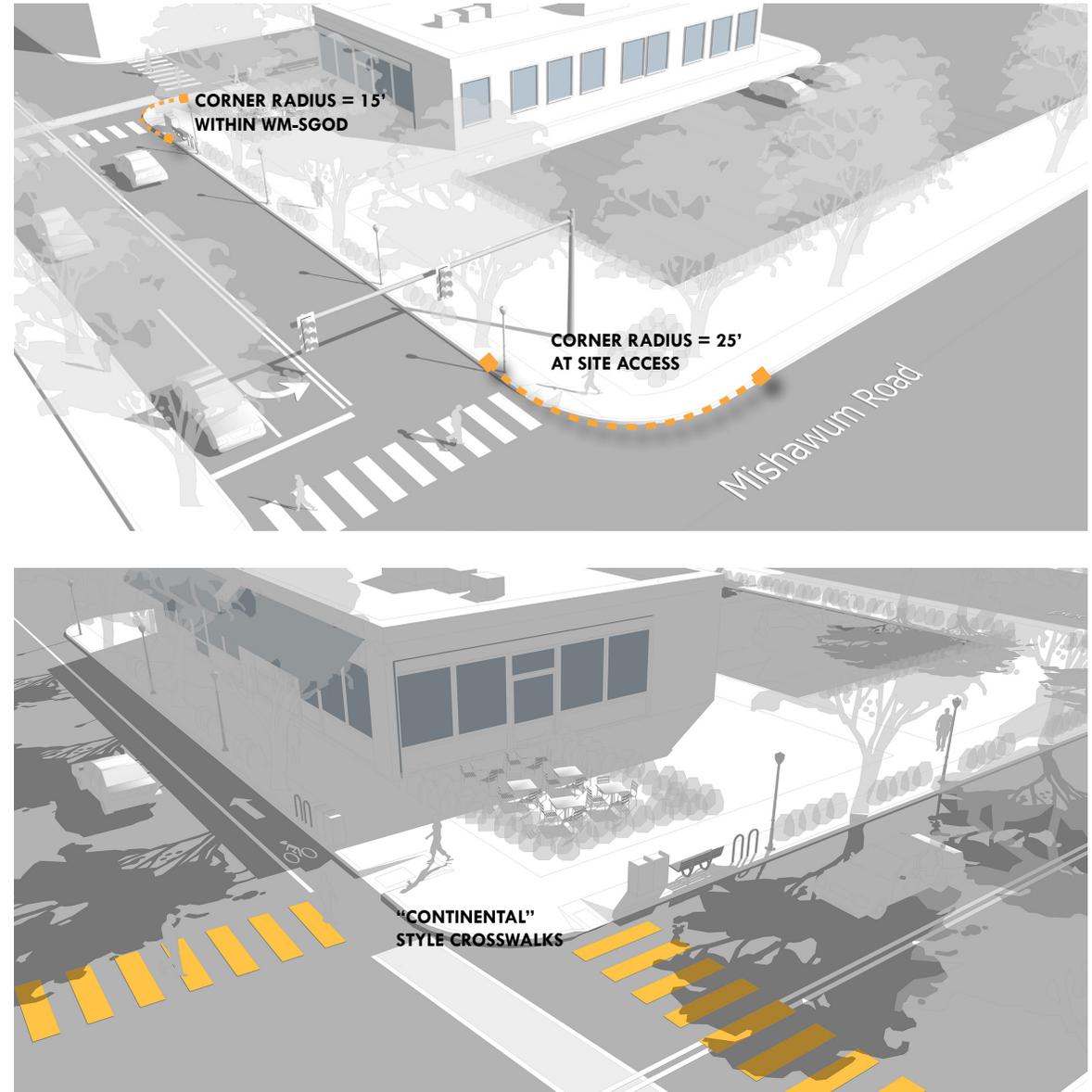


PEDESTRIAN SAFETY IMPROVEMENTS

Pedestrian safety improvements can greatly enhance the ability of residents to walk to the study area, especially from Mishawum Road. The WM-SGOD Design Standards seek to improve pedestrian safety by “calming” traffic entering the site through reduced curb radii (which slows turning vehicles, thus making it safer for crossing pedestrians) and reduced pedestrian crossing distances. The Design Guidelines applicable to the rest of the study area recommend similar measures, although on industrial sites curb radii must be sufficiently large to allow for large trucks to turn. A road safety audit along Commerce Way can suggest additional measures that would improve pedestrian safety, and developer agreements can ensure that any new development prioritizes the needs of pedestrians. (See Figure 60.)

In addition to relying on developer funding, the City should continue to pursue participation in MassDOT’s Complete Streets Funding Program. This program provides up to \$400,000 annually to qualifying communities to implement pedestrian and bicycle infrastructure. The City is currently undergoing the Tier 2 Prioritization Planning process, which creates a list of most important pedestrian and bicycle projects city-wide. While the funding amount cannot cover major infrastructure upgrades, it can help with a number of smaller improvements.

Figure 60. The WM-SGOD Design Standards ensure curb radii appropriate for a walkable neighborhood, highly visible crosswalks, and other elements focused on pedestrian safety.



TRANSPORTATION DEMAND MANAGEMENT

As new development is proposed, the applicant must agree to a number of traffic mitigation requirements. Traditionally, these have focused on ways to alleviate traffic congestion through widened roadways and similar measures. Often, these measures fail in their objective because rather than facilitate a freer flow of existing traffic, they induce more cars onto the roadway, resulting in a similar level of congestion.

Many communities now supplement these traditional roadway capacity measures with a broader suite of tools, collectively called transportation demand management (TDM). TDM seeks to provide alternative means of travel beyond single occupancy vehicles. Measures include a requirement that large employers or residences join a TMA, provide ride-share options on site, unbundle parking for residential uses, provide public transit subsidies, price parking at market rates (or higher), provide bicycle parking, and providing financial incentives to use alternative modes of commute.

TDM can be part of a traffic mitigation agreement on a case-by-case basis or could be included as part of the Zoning Ordinance. See Appendix for Town of Lexington by-law example, as well as a MAPC-produced TDM case study report.

RESUME MISHAWUM STATION SERVICE

Until 2001, Mishawum Station was the City's commuter rail station. With the opening of Anderson RTC, the station is largely dormant, only providing a "reverse-commute" stop a few times per day. While the above recommendations can greatly enhance access to Anderson RTC, Mishawum Station is much closer to the future residential development at the WM-SGOD, as well as other residential areas in the City.

MAPC and the City had initial conversations with the MBTA on the possibility of allowing more regular service at Mishawum Station. The MBTA Operations team noted multiple concerns, including the impact on stations further north along the line, Anderson RTC's relative proximity, and Mishawum Station is not fully accessible to people with disabilities.

Because of these concerns, resuming peak-period service at Mishawum Station is unlikely to be an immediate solution. The MBTA, however, is undergoing a visioning process for its entire commuter rail network. Given the potential benefits to a resumption of service, along with the fact that the station already exists (albeit potentially needing some upgrades), the City should advocate for this service, which would greatly enhance the transit-oriented nature of the WM-SGOD.

TDM Element: Unbundled Parking

A TDM strategy generally contains a number of options to help manage a development's associated traffic impacts. One element is to "unbundle parking."

Traditionally, the cost to provide residential parking incurred by a developer is passed on to the occupants of the associated housing; this is called "bundled parking" because the cost of parking is included in the cost of housing. Under this model, parking requirements increase housing prices both by forcing occupants to pay for parking whether they require a space(s) or not and by shrinking the supply of housing because land area that otherwise could go to additional housing must go to parking.

With proximate transit access, residents tend to be less reliant on automotive modes of transportation so developers can provide less parking without fear that this will make housing unattractive to occupants. Separating the cost to rent a parking space from the cost of renting or owning a home is a strategy to meet genuine parking demand and to encourage transit ridership. Residents can rent or buy a private parking space along with their unit if they so choose, and those without cars can rent or buy their unit without paying for a parking space that will go unused.

INTRODUCTION

As noted throughout this report, a neighborhood must be walkable. The orientation of future development can help accomplish this in two ways. First, as described in the Connectivity chapter, future development should help create an “internal” connection between Commerce Way and the train tracks. Buildings should frame this connection to create a human-scaled environment, with parking and large empty spaces oriented elsewhere on the site.

The second way future development orientation can ensure a comfortable pedestrian environment, described below, is to carefully consider how a mix of uses coexist on site. Given the amount of residential development under construction or planned in and around the study area, the City does not envision a significant amount of new residential development within the CWCOD. To avoid a patchwork of residential developments, any residential uses that may be proposed should ideally integrate commercial / light industrial uses and take place within the study area portion of the CWCOD (i.e., west of Commerce Way).

RECOMMENDATIONS

Principle 4: Development Orientation

INTEGRATE LAND USES

Many communities, both local and across the continent, are facing a similar dilemma: many industrial and commercial zones have a high demand for housing. Maintaining these jobs while also increasing residential supply are often competing priorities.

Some communities are recognizing that increasing residential supply versus maintaining industrial/commercial jobs need not be a zero-sum game. Heavy industrial uses, i.e., those emitting loud noises, noxious fumes, vibration, or hazardous byproducts cannot coexist in a mixed-use environment. But “light industrial,” which includes some manufacturing, wholesaling, warehousing and distribution, and research and development, can potentially work in a mixed-use environment. The study area primarily consists of these light

industrial activities, along with other commercial uses.

As noted previously, the City may not support significant residential development in Sub-Area 2. If this use is proposed, redevelopment of should, to the extent possible, integrate existing uses with the additional uses. Site planning should carefully consider how these uses integrate. In some cases it may be feasible to include a mix of uses in a single building. In others, it may be important to focus non-residential activities away from the residential portion of the project. Of particular concern should be the need for maintaining adequate truck operations, while creating a safe environment for pedestrians.

A local example where a variety of uses – ranging from light industrial to office to residential – are being integrated is the Hood Park redevelopment along Rutherford Avenue

in Boston’s Charlestown neighborhood. This 20 acre site is undergoing planning for a total of 1.7 million square feet of development, as well as significant open space. Although the intensity of development is far larger than would be appropriate for Woburn, the principles can be applied: existing light industrial spaces are largely maintained, while housing is located on one side of the site; office towers are sited near the highway, thus providing a buffer from the open space and pedestrian realm; and, sufficient parking is provided by structured parking facilities. The 200-residential unit comprise a relatively small portion of the total development, ensuring the site maintains its commercial and light industrial functions. (See Figure 61.)

Figure 62 illustrates how these principle could apply to a similarly sized site in the study area. See the Appendix for brief case studies of additional areas that have successfully integrated residential and light industrial uses.

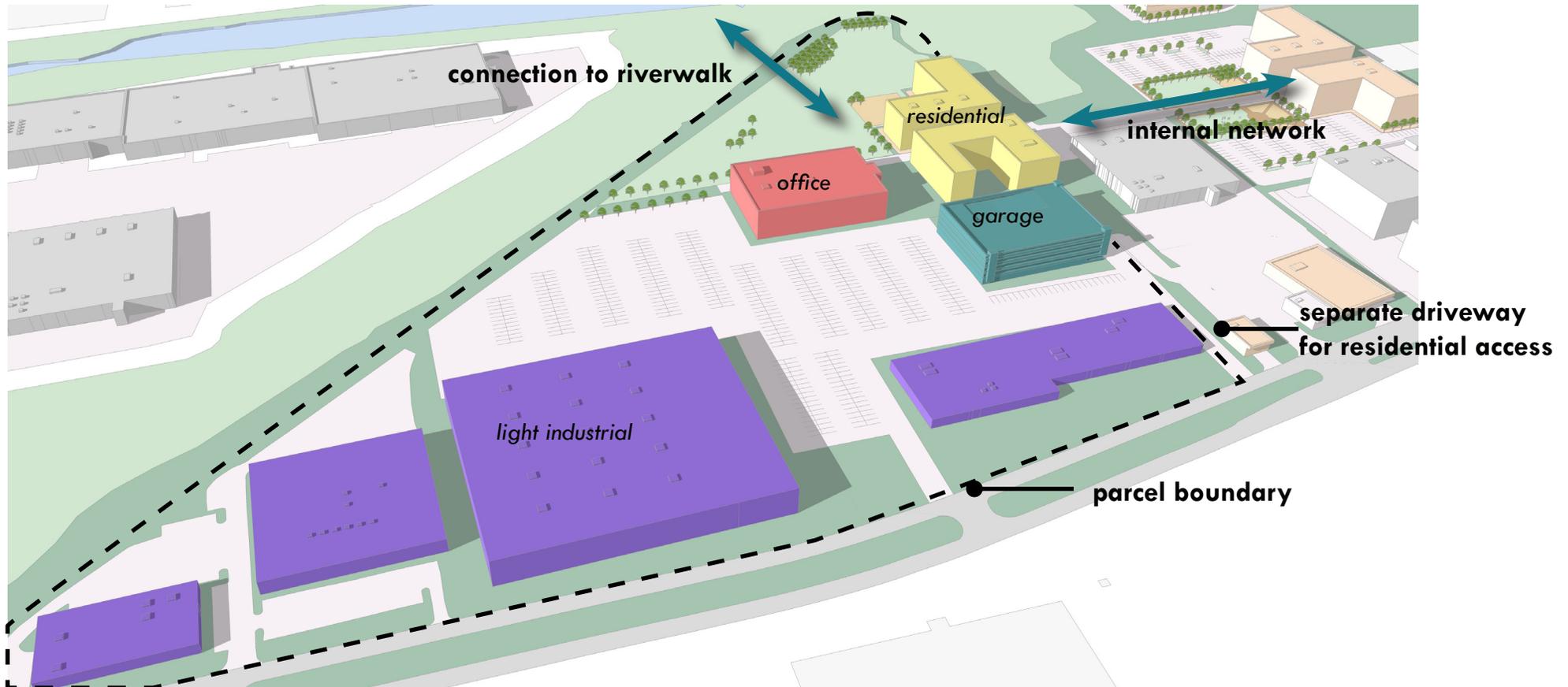
Figure 61. Renderings of proposed Hood Park redevelopment.





Figure 62. Example of Integrating Land Uses in the Study Area

The example below illustrates how disparate land uses could be integrated on a site that largely preserves the light industrial functions, while adding additional uses. 74 Commerce Way is a 27 acre site with light industrial uses (see left for existing footprint). Maintaining the uses along Commerce Way provides space for a redevelopment that is in keeping with the development principles. The example below shows 210,000 SF of light industrial space remaining, with an addition of 110,000 SF of office space, and 200 dwelling units. The non-residential area is 61% of the site. Open space (20%) is concentrated close to the river and units per acre is 7, far below the maximum allowed in the City. A structured parking facility would help meet parking requirements.



The Commerce Way E-TOD plan's vision and recommendations are intended to position the area for a thriving future that leverages its prime location and assets, such as the Aberjona River. As a major employment center, near-term redevelopment opportunities, and convenience to Boston, the study area has a strong foundation to become a mixed-use neighborhood that is a point of pride for residents and destination for the region.

IMPLEMENTATION

PHASED DEVELOPMENT EXAMPLE

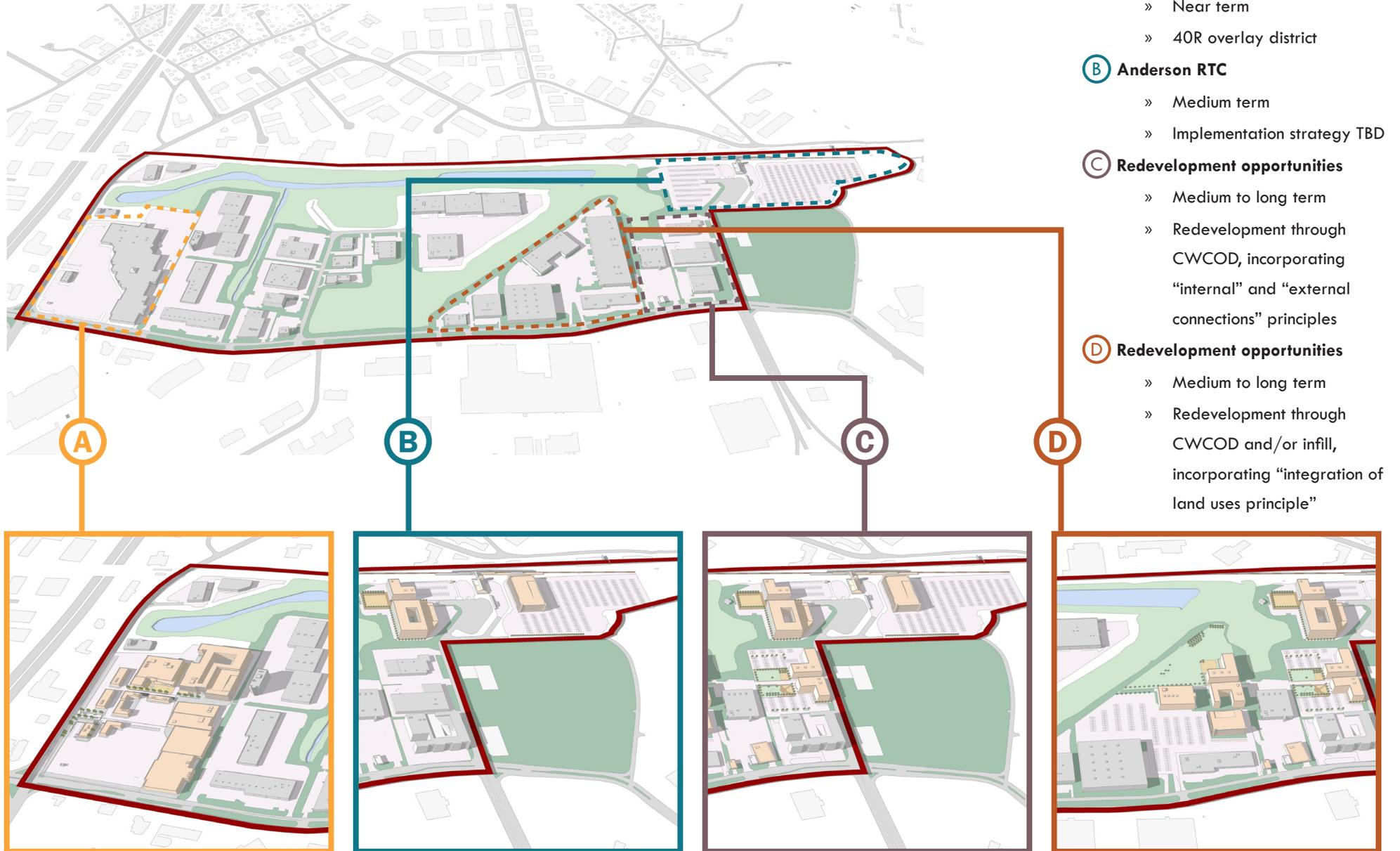
Figure 63 contains diagrams that illustrate a phased approach to development in the area. Note that this is illustrative and does not represent specific development proposals; rather, it provides one way that the vision may be implemented. While some residents expressed a desire for more development and others expressed a desire for no new development, this illustrative plan shows a balanced approach that concentrates development on the ends of the study area, retaining a large portion of the existing industrial uses, and connected by multi-modal facilities. As redevelopment occurs, in the future the City may wish to assess the vision and whether it desires more redevelopment than currently envisioned, fully taking advantage of its transit-oriented location.

IMPLEMENTATION SCHEDULE

For the plan to be realized, persistence and the creation of positive momentum is required. Implementation of the recommendations will take place at different times and involve different stakeholders. The following diagram provides a summary of the various recommendations, a suggested/probably timeline, and likely stakeholders involved.

See Actions and Implementation Summary Table, beginning on page 92.

Figure 63. Example of potential phased development in study area



Actions and Implementation Summary Table

<i>Principle</i>	<i>Strategy</i>
Distinct Sub-Areas 1	Sub-Area 1 Development: Woburn Mall Site →
	Sub Area 2 Development: Central Zone →
	Sub Area 3 Development: Anderson RTC →

Action	Detailed Action Steps	Potential Timeframe	Potential Lead/Partners
40R Smart Growth Overlay District	Draft + adopt ordinance	Complete	P, MO, MAPC, DHCD, D, CC, PB
	Draft + adopt design standards	Complete	P, MO, MAPC, DHCD, D, CC, PB
	Submit application, review, and implement	In Process	CC, P, PB, DHCD, D
Modify CWCOD	Draft zoning language, as appropriate	Near Term	P, PB, B
	Refine and adopt zoning changes	Near Term	P, PB, CC
Design Guidelines	Draft + adopt design guidelines	In process	P, PB, CC, MAPC
Infill Opportunities	Work to identify opportunities	Medium Term	P, D
	Identify zoning barriers (e.g., parking)	Medium Term	D
	Submit application(s) with needed relief	Medium Term	D, P, PB, CC
Property Improvements	Identify any relevant city policies/programs	Near Term	P, MO, CC
	Convene property owners	Near Term	P, D
	Implement improvements	Near-Medium Term	D, CC
Exploratory meetings	Meet with Massport re: City interest	Near Term	MO, P, MassPort
	Meet with EPA re: barriers and approach	Near Term	MO, P, MassPort, EPA
Determine regulatory mechanism	Choose CWCOD, 40R, or new overlay district	Medium Term	P, MO, PB, CC
Implement	Issue RFP	Medium-Longer Term	Massport, P, CC, EPA
	Review RFP and application	Medium-Longer Term	CC, P, PB, Massport, CC

LEGEND:

MO = Mayor's Office, **CC** = City Council, **PB** = Planning Board, **P** = Planning Director, **E** = Engineer, **D** = Developer, Landowner, and/or business owner, **B** = Building Inspector, **MAPC** = Metropolitan Area Planning Council, **MBTA** = Massachusetts Bay Transportation Authority, **MP** = MassPort, **DHCD** = Department Housing + Community Development, **EPA** = Environmental Protection Agency

Actions and Implementation Summary Table

<i>Principle</i>	<i>Strategy</i>
Connectivity 2	Riverwalk →
	Internal local network →
	Cabot Road improvements →
	Utility corridor access →
	Parcel interconnectivity →
	Vehicular safety improvements →

Action	Detailed Action Steps	Potential Timeframe	Potential Lead/Partners
Conceptual design	Seek / allocate funding	Near Term	E, P, CC
	Hire consultant to conduct study	Near Term	E, P, CC
Construct multi-use path	Work with abutting property owners	Medium Term	E
	Seek design and implementation funding	Medium Term	E, P, CC, MO, PB
40R internal connectivity	Ensure plans comply with Design Standards	Near Term	CC, PB, P
40R connection to 10 Commerce Way	Strongly encourage plan includes this connection	Near Term	CC, PB, P
Ped bridge over Aberjona	Meet with landowner	Near Term	P, E, D
	Explore funding options	Near Term	D
Improvements plan	Assess ways to improve bike/ped realm	Medium Term	E
	Fund and implement improvements	Longer Term	E, D
Pedestrian access	Work with landowner on potential path	Medium Term	E, D
	Formalize path and add signage	Longer Term	E, D
Vehicular access	Assess feasibility of vehicular route	Medium Term	E, D
	Pave roadway, if applicable	Longer Term	E, D
Amend CWCOD	See “Modify CWCOD”, above	Near Term	P, PB, CC
Implement	Ensure applications incorporate interconnectivity	On-going	P, PB, CC
High crash location improvements	Complete local study and/or conduct RSA	Near Term	E, CC
	Fund and implement changes	Near-Longer Term	E, CC

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Actions and Implementation Summary Table

<i>Principle</i>	<i>Strategy</i>	→
External Connections	First-last mile connectivity	→
	Improve MBTA bus service	→
	Pedestrian overpass at Anderson RTC	→
	Pedestrian Improvements	→
	Transportation Demand Management	→
	Mishawum Station service	→
	Development Orientation	Development frames local roadway
Integrate land uses		→

Action	Detailed Action Steps	Potential Timeframe	Potential Lead/Partners
Private shuttle service	Contact appropriate TMA	Near Term	P
	Allocate funding	Near Term	MO, CC
	Implement service	Near-Medium Term	MO, CC
Extend routes	Convene meeting with MBTA	Near Term	P, MO, MBTA
	Implement recommendations from Mobility Study	Near-Medium Term	P, MO, MBTA
Construct ped bridge	Contact MBTA	Near Term	P, MO, MBTA
	Finalize design and fund	Near-Medium Term	P, E, MBTA
Connectivity improvements to 4OR	Ensure plans and mitigation improves ped access	Near Term	CC, D
Roadway improvements	Assess opportunities on Commerce and Atlantic	Medium Term	E, CC, P
	Implement various public improvements	Medium-Longer Term	E, P
	Ensure future development improves ped safety	Medium-Longer Term	P, PB, E, D
Implement policy/ordinance	Review options for implementing TDM consistently	Near-Medium Term	P, PB, CC, E
	Adopt policy/ordinance	Near-Medium Term	CC, P
Resume service	Meet with MassDOT (e.g., Secretary) / MBTA	Near Term	MO, P, MBTA, MassDOT
	If feasible, resume service	Medium Term	MO, P, MBTA, MassDOT
Building orientation	Ensure development frames internal road network	Medium-Longer Term	CC, PB, P, D
Encourage mix of land uses	Encourage development to retain some existing uses	Medium-Longer Term	CC, PB, P, D

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LIST OF APPENDICES

1. CWCOD Zoning Recommendations
2. CWCOD Design Guidelines
3. Commerce Way E-TOD Retail Demand Analysis
4. Mixed-Use Case Studies Combining Residential and Industrial Uses
5. Saugus Route 1 Business Highway Sustainable Development Zoning District, Section 21.12.A General Layout and Street Pattern
6. TDM By-Law Example (Lexington, MA)
7. TDM Case Studies and Regulations (MAPC, 2015)