Wells Avenue Market Study
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A. Executive Summary

The purpose of the Wells Avenue Market Study is to review and analyze the existing business climate within the Wells Avenue Office Park as it relates to local and regional market conditions and trends so as to identify the most supportable and valuable uses for potential future development or redevelopment within the park.

1. Key Findings

Although office space within Wells Avenue is competitive and attractive in today's market, as evidenced by low vacancies and competitive rents, the future success and competitive position of the park is in question. In particular, given changing office location preferences in favor of amenity rich, mixed-use locations with transit access, the competitive position of the park may diminish, especially given new mixed-use (office, retail, and residential) development projects coming online in nearby Needham and in the region. Nonetheless, based on research and market assessments for office, retail and residential development, opportunities to create a more diverse set of uses exist within the Wells Avenue Park.

- **Office Potential:** Opportunity is strongest for continued office uses in the park – renovated, retrofitted, redeveloped or new development – that would appeal to small- to moderate-sized tech, healthcare or professional service companies. It is not likely to attract a large corporate headquarters which often look for highly visible locations.
- **Retail Potential:** Up to 15,000 sf of convenience retail and eating establishments could potentially be supported by current office park workers. However, despite opportunities for residents living within its trade area to support additional retail, a large retail development is not likely due to poor access, lack of visibility, and competition from established retail concentrations nearby. On the other hand, should more office space be constructed or better utilized, or should residential be introduced into the park, some additional amenity and convenience retail (e.g., restaurants, convenience store) could potentially be supported.
- **Residential:** Newton's housing market is highly competitive and could support considerable residential development. Specifically, with limited multifamily options and availability (market and affordable units), increasing prices for both owner and rental units, and growing senior and young professional populations, up to 1,000 units of multifamily housing could potentially be supported city-wide. Wells Avenue could accommodate some of this development, and should plan to do so in a strategic manner over time. However, from a market (and smart growth perspective), other areas of Newton (e.g., Needham Street and other transit-adjacent areas) hold greater promise given housing preferences that place a premium on existing proximity to transit and walkable amenities. Wells Avenue, which lacks both, would require additional physical improvements to provide such an environment.

Based on the above market opportunities, the highest and best use going forward for the Wells Avenue Office Park would be a mixed-use environment. Based on market demand and Wells Avenue's strategic location near Route 128, office should be prioritized, with residential and retail strategically developed as part of an overall plan to optimize the overall use of

What is a market study?

A market study looks to current market conditions and trends within a given study area to identify if potential exists to support additional growth and development within different industry segments (e.g. office, industrial, retail or residential). Unlike larger, more comprehensive planning studies, market studies specifically identify the market potential for each, along with market constraints and/or barriers. Market studies do not typically provide the final determination or plan for an area of study, or the goals, policies or actions to achieving it. However, recommendations and/or strategies to remove market barriers are provided.

the park. This conclusion was supported by interviews with local property owners and developers, a review of literature on office trends and efforts across the country to retrofit office parks, and development in and around Wells Avenue.

However, it must be emphasized that despite existing market support for various uses, additional development of any kind (or more concentrated utilization of existing office space) is currently limited due to constraints of the office park's internal design, and limited transportation access and options. Further, the deed restriction - and limited manufacturing zoning - restricts the type of uses and amount of development that is allowed within the park.

The above constraints, along with greater detail about market opportunities, are highlighted in the following sections.

1. Transportation and Access

A key impediment to unlocking the market opportunities and associated development is transportation access to, from and within the park – for automobiles, bicyclists and pedestrians, and especially public transit-dependent populations. Access and capacity is significantly limited by the park's relatively isolated location, its single point of entry, lack of public transit or shuttle service, and poor pedestrian and bike connections. Automobile traffic congestion during peak commuting hours is already a concern, in part due to ongoing construction at the nearby Kendrick Street/Route 128 interchange (2017 completion projected), but also due to the park's single entrance.

For significant additional development to occur, intersection improvements and a secondary point of entry should be explored to alleviate backups within the park, and to provide greater capacity and efficient public transportation (bus or shuttle) options. However, with protected open space running between the park and Nahanton Street, creating a second point of entry presents many challenges. Further, the park's internal circular road network and lack of internal connections, combined with large building setbacks and extensive surface parking lots, presents additional challenges to creating a more pedestrian–oriented, active, mixed-use environment preferred by many knowledge-based industry tenants and potential residents.

2. Opportunities and Constraints by Type

Office

As mentioned above, office holds the greatest potential given the park's current uses, its strategic location in the highly competitive Mass Pike/128 office submarket, its inclusion in the larger N^2 Initiative (N-Squared), and projected office-sector employment and associated space needs. However, given the age of existing structures, these office buildings require updates through rehabilitation, retrofit or redevelopment to allow for layouts and amenities needed to compete effectively in today's commercial real estate environment. Based on interviews and a review of literature on office park trends, a mix of uses in the park would be beneficial to attract more companies and workers. In particular, amenities such as convenience retail and restaurants should be prioritized to make the park more attractive to increased office development.

However, as previously stated, although some additional office development is proposed and could be accommodated, significant increases in office square footage or utilization rates per employee are limited due to transportation capacity concerns, particularly during peak travel times.

Retail

Retail opportunity remains limited for several reasons. First and foremost, retail requires visibility and access to attract trade area consumers, both of which are limited by the office park's layout, limited access, and the protected open space buffer surrounding it. Second, local employees can only support a limited amount of convenience retail, as there is no additional consumer base within the office park to support retail activity outside of typical office hours. Third, most parcels will continue to hold office uses, and infill areas would likely be too small to accommodate parking requirements for significant retail development. Finally, existing retail concentrations and proposed retail development nearby are likely to absorb much of the regional retail opportunity identified in the analysis. However, despite the above limitations, potential for limited additional amenity retail will likely increase if office square footage grows and if residential is added. New households would add additional spending power to support establishments during non-working and commuting hours.

Residential

Considering the strength of Newton's residential market, and market demand throughout the region, the opportunity for multifamily residential (market and affordable) within a mixed-use framework also holds considerable potential. However, in its current form, Wells Avenue's layout and reputation as an isolated business park presents market and marketing challenges, particularly in regard to for-sale properties (e.g., condominiums) – rentals would be more likely to succeed. Further, based on other office park retrofits analyzed in the literature review, residential often follows office and retail improvements to office parks, both of which have been proposed.

However, and once again, development potential is also constrained by access – particularly the lack of public transportation. While MBTA bus or private shuttle services would make the area more attractive, particularly to young professionals seeking alternatives to the automobile and to transit-dependent households including seniors, those interviewed suggested that transit service would need to be robust to be effective.

Finally, with successful office structures occupying most parcels, the current office space is likely to remain in place (and possibly become more concentrated) and additional office space is likely to be built. This means that there are limited opportunities to accommodate larger residential developments, particularly given parking requirements in an area that is currently highly auto-dependent. Of course, residential development could be incorporated into larger redevelopment projects (including mixed-use structures or adjacent development of residential, office, and retail). Shared parking strategies could make such development less expensive and more likely to succeed.

3. Market Opportunity Summary: A Mixed Use Wells Avenue

In summary, based on the analysis of market conditions and trends in and around the Wells Avenue office park, there is considerable market support for new and retrofitted office space, multifamily residential development, and limited amenity retail. Thus, to position the park to remain competitive in a regional office market that places a premium on connected, amenity rich, live-work-play environments, the overall value of the park would benefit from a greater mix of these uses. Should Wells Avenue continue in its current form as an insulated office park, its overall value and related tax revenues will likely decrease.

To take advantage of this market opportunity and maximize the future value of the park, MAPC believes the City should explore options to revise the deed restriction and allow for a greater mix of complementary uses. Additionally, given access and other constraints, the City should work with existing property owners and/or developers proposing new or retrofitted office, retail, or residential

developments to design infrastructure and programs that will support successful, mixed-use environments. These could include, without limitation:

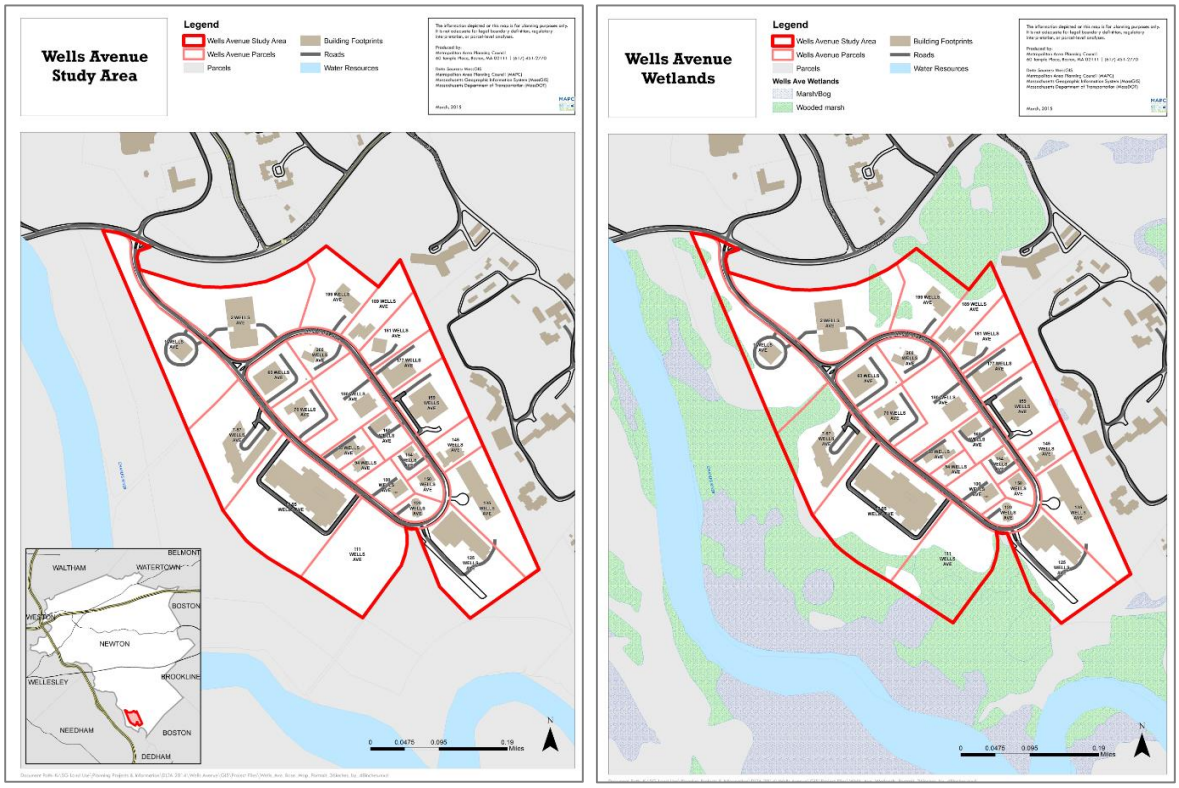
- Improving transportation access to and from the park, including additional entry points or other strategies to increase capacity;
- Advocating for or providing transportation alternatives including new MBTA bus routes, robust shuttle networks, and/or alternative solutions to better connect Wells Avenue residents and employees to their places of work or residences;
- Where feasible, developing internal connections – auto and/or pedestrian and bicycle – to create a more walkable, efficient and connected Wells Avenue environment attractive to workers and residents;
- Improving pedestrian and bicycle connections to nearby office and mixed-use areas (e.g., N^2 Needham and Newton initiative); and
- Designing structures that encourage mixed-use, such as pedestrian-oriented environments with ground floor retail (where supportable), wide sidewalks, minimal building setbacks, shared parking, and parking behind or on the side of buildings (or in structures), etc.

A. Study Context

1. Location and Study Area

The Wells Avenue Office Park is located in the Oak Hill village area of Newton off Nahanton Street near the Needham border. The study area includes 24 parcels totaling 105 acres of land. Of this, approximately 10% contains wetlands, somewhat diminishing total development potential. The park is also surrounded by City and State owned open space that abuts the Charles River and buffers the park and its uses from Nahanton Street.

Figure 1: Wells Avenue Office Park Study Area and Areas of Wetlands



Source: MAPC, MassGIS

2. Current Uses

Wells Avenue includes approximately 1.1 million square feet of development, of which 950,000 square feet is in office building types, 95,000 in educational building types, and 77,000 in indoor recreational building types. Within these buildings are various uses, including numerous office users such as technology companies and professional service firms including lawyers, accountants, real estate, and other professionals; a range of educational uses including the Massachusetts School of Professional Psychology the Solomon Schechter Day School, the Russian School of Mathematics, and a daycare facility; and indoor recreational facilities such as Boston Sports Club and Excell Gymnastics.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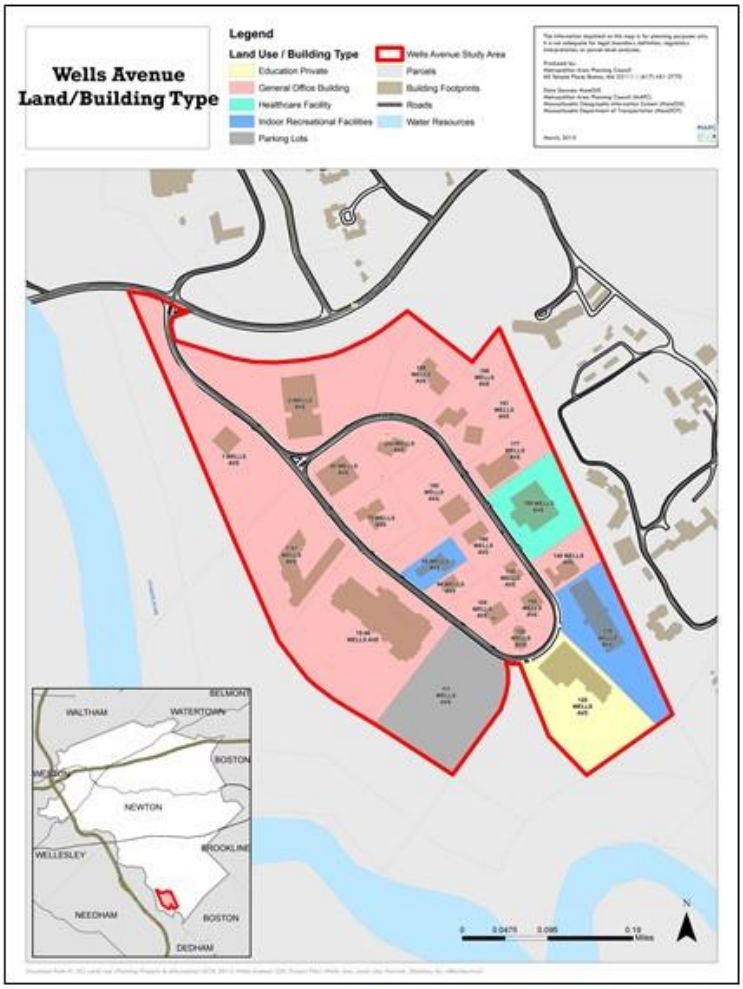

Wells Avenue
Land/Building Type
Legend
Land Use / Building Type
Education Private
General Office Building
Healthcare Facility
Indoor Recreational Facilities
Parking Lots
Wells Avenue Study Area
Parcels
Building Footprints
Roads
Water Resources
BELMONT
WALTHAM
WATERTOWN
BOSTON
NEWTON
WELLESLEY
BROOKLINE
NEEDHAM
BOSTON
DEDHAM

Table 1: Wells Avenue Property Details

Address	Land Use	Ownership	Built SF	Land Area	Yr Built	Total	Est Prop Tax
1 Wells	Office/Education	New England Dev	85,788	7.95	1971	$16,324,500	$365,342
2 Wells	Office/Healthcare	CCS Companies	68,800	10.01	1970	$11,340,600	$253,803
7-57 Wells	Office	Normandy Real Estate	116,086	7.80	1981	$12,782,500	$286,072
60 Wells	Office	Intrum Corporation	33,936	3.00	1970	$5,446,900	$121,902
70 Wells	Office/Healthcare	Wingate Companies	28,113	2.62	1978	$4,130,900	$92,450
75-85-95	Office	Normandy Real Estate	263,492	12.80	1988	$34,727,200	$777,195
88 Wells	Indoor Recreation	The Maggiore Co	14,612	1.33	1974	$1,685,600	$37,724
94 Wells	Healthcare	Good Shepherd	10,282	0.92	1975	$1,457,500	$32,619
100 Wells	Office	Wingate Companies	20,535	1.95	1978	$3,139,800	$70,269
111 Wells	Parking	Normandy Real Estate	0	8.16	0	$2,055,900	$46,011
120 Wells	Office	Southworth Dev	13,903	1.15	1972	$2,491,900	$55,769
125 Wells	Education	Solomon Schechter Sch	94,092	7.54	1970	$1,981,200	$44,339
135 Wells	Indoor Recreation	W. P. Carey	62,000	6.34	1973	$7,719,100	$172,753
145 Wells	Office/Education	Wells Avenue Bus Ctr	17,723	2.10	1970	$2,316,200	$51,837
150 Wells	Office	Wingate Companies	10,609	1.00	1972	$1,516,700	$33,944
154 Wells	Office	Poorvu Construction	10,804	1.00	1970	$1,449,100	$32,431
159 Wells	Office/Healthcare	SLD Wexford	50,600	4.67	1970	$3,899,200	$87,264
160 Wells	Office/Broadcasting	Wingate Companies	19,106	1.75	1970	$2,705,600	$60,551
177 Wells	Office	Deveaney Energy, Inc.	27,724	2.54	1972	$3,455,400	$77,332
180 Wells	Office	Intrum Corporation	54,960	5.05	1970	$8,676,900	$194,189
181 Wells	Office	Oasis Development	30,000	3.00	1979	$3,873,400	$86,687
189 Wells	Office	Oasis Development	30,528	3.00	1979	$4,095,100	$91,648
199 Wells	Office	The Bulfinch Companies	43,463	5.00	1974	$5,704,600	$127,669
200 Wells	Office/Education	Russian School of Math	21,243	2.00	1979	$3,671,500	$82,168
TOTALS			1,127,871	105		$146,647,300	$3,281,967

Source: L3 Parcel Level Data/MAPC Calculations

Properties within the park are assessed at nearly $150 million, and contribute an estimated $3.3 million in commercial taxes to the City of Newton annually.

3. History

To support economic development in the 1960s, land that is now the Wells Avenue Office Park was rezoned as Limited Manufacturing. To create minimal impact to surrounding residential areas, the site was surrounded by City-owned protected open space to buffer the development, and designed with a single entrance to attract a major single use tenant. After plans to build a state of the art R&D facility for Sylvania fell through, the owner of the site sold subdivided parcels to various entities, and the City developed and placed a deed restriction, or restrictive covenant, on the parcel to add additional use protections.

Wells Avenue Restrictive Covenant

Development within the Wells Avenue Office Park is limited to a specific set of uses. As highlighted above, in 1968, in addition to zoning the Wells Avenue Office Park Limited Manufacturing, the City of Newton placed a restrictive covenant on the park area. Under the deed restriction, only certain light manufacturing and office uses are allowed, including:

- Wholesale business or storage warehouses
- Telephone central office and exchange buildings
- Offices and banks
- Carpenter or woodworking shops

- Glass fabrication and installation
- Laboratory, research and development
- Machine shops, plumbing and blacksmith shops
- Metal fabrication (light)
- Molding, shaping or assembly from prepared materials
- Optical and scientific instruments and jewelry manufacturing
- Printing, publishing and reproduction establishments
- Wearing apparel, fabrication and processing

Other uses, including non- or for-profit educational, retail or residential uses are not allowed according to the covenant. Development in the office park is also guided by the Limited Manufacturing dimensional regulations as detailed in City of Newton zoning.

Table 2: Wells Avenue Office Park Dimensional Regulations

Heights	Front Setback	Side Setback	Rear Setback	Open Space Requirement	Maximum Lot Coverage	Maximum FAR
36 ft or 3 stories	25 ft	20 ft	40 ft	40%	25%	0.25

Combined, the deed restriction and existing zoning resulted in the development of a prototypical late 20th century office park, with a single access point leading to a circular access drive all within a park-like setting. This development pattern continues today.

Amendments to the Restrictive Covenant

Although the restrictive covenant limits the types of uses, it has been amended nearly a dozen times to allow additional uses to locate within the office park. Amending the deed restriction to allow a different use is a fairly simple process compared to zoning Special Permits in that it only requires a majority vote of the City Alderman and approval by the Mayor.

Over the years, several requests to amend the 1968 Wells Avenue restrictive covenant have been proposed and accepted, including educational and recreational uses such as:

- Massachusetts School of Professional Psychology
- Russian School of Mathematics
- Day Care
- Solomon Schecter School
- Boston Sports Club

Recently, a developer requested to amend the covenant to construct a 334-unit residential rental complex through a 40B Comprehensive Permit. In November 2014, the Board of Alderman recommended the deed restriction to stay in place, thus preventing the project from moving forward. An appeal has been filed.

4. Competitive Environment

Today, Wells Avenue has a strong locational advantage due to proximity to Route 128, and its Newton address. As an insulated office park – one of the last in the region – and given the age of its office buildings and limited uses allowed, the office park is at a competitive disadvantage. However, according to those interviewed for this project, other issues are more likely to hinder growth in the park.

Traffic concerns, in particular access into and out of the park are a big concern. The park already generates significant rush hour traffic, and no matter the type of development that may be supported –

office, retail and/or residential – traffic capacity and accessibility will need to be addressed for the park to remain competitive.

The age of the buildings is problematic, as they are (or may soon become) functionally obsolete. Few buildings in the park offer large, open, flexible, industrial-like spaces often preferred by today's tech and creative employers. Further, there are no walkable amenities in the park like restaurants or convenience shopping desired by today's workforce.

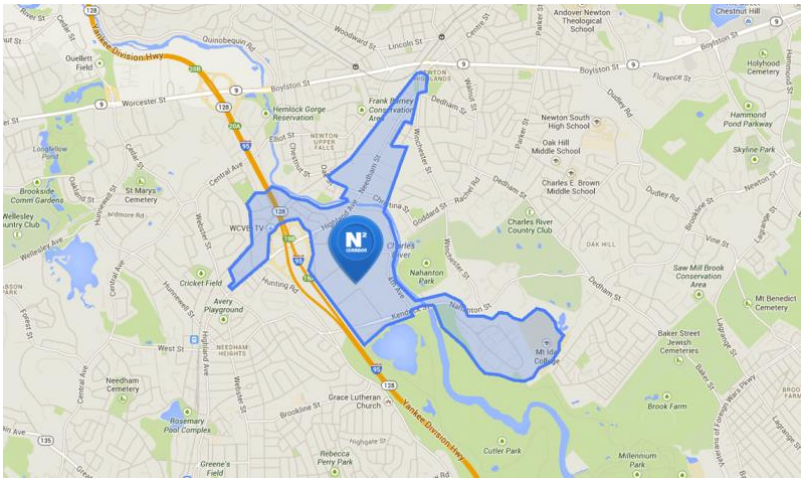
Thus, although the park's strategic business location continues to be a draw, Wells Avenue will be at a significant competitive disadvantage and lose value as new, amenity rich product comes online nearby in Needham, and along the entire 128 corridor.

Competing Areas

Numerous office concentrations line the Route 128 corridor between the I-95/I-93 junction in Westwood and the I-95/I-93 junction in Woburn. This includes highly competitive concentrations in Newton/Needham, Waltham, Wellesley, Lexington, and Burlington.

Based on current development initiatives (described in greater detail in subsequent sections), current trends in development throughout the corridor favor more urban-like, mixed-use environments with retail and residential in addition to office, even in suburban locations. To address these changes, many communities have changed zoning to reflect and meet this growing demand.

In particular, the N Squared Initiative (N^2) – an initiative of the City of Newton, the Town of Needham and the Newton Needham Chamber of Commerce – aims to create a destination for technology companies, start-ups and other firms in a mixed-use, live-work-play suburban environment. The goal is to compete more effectively with locations like Kendall Square and Boston's Innovation District. Wells Avenue is included in this initiative.



The Town of Needham has already amended and adopted zoning in the New England Business Center (the central core of the N^2 Initiative), to allow for greater densities through the allowance of increased heights, higher maximum lot coverage, smaller setbacks, and expanded allowable uses including office, retail and restaurants on the ground floor, hotels and other uses. These efforts, combined with a growing commercial real estate market have resulted in new and proposed development including:

- ***Center 128 West:*** Normandy Real Estate Partners project includes the new 290,000sf Trip Advisor headquarters, a new parking structure, and the potential for 350,000sf of additional new office development.
- ***General Dynamics Redevelopment:*** Normandy Real Estate Partners acquired 27-acre site in December 2014 including 500,000sf of office space. Normandy will redevelop much of the existing space, incorporate service retail and food vendors, and has proposed a 400-unit residential complex.

- ***Cutler Lake Corporate Center (117 Kendrick Street):*** The Bullfinch Companies recently purchased the property. A mix of uses, including residential, has been discussed for the property.

Newton has already completed a market analysis for the Needham Street portion of the N² corridor, which identified support for the mix of uses supported by the initiative. (This study was conducted to understand potential for future uses in Wells Avenue.)

C. Literature Review: Office Park Trends

As part of the analysis, a cursory literature review was conducted by the project team to better understand the strengths, weaknesses, and opportunities of office and technology parks in today's commercial real estate market.

1. Introduction

The commercial real estate (CRE) market in the United States is recovering from the 2008 recession. Outlook reports from industry watchers CB Richard Ellis (CBRE), Jones Lang LaSalle (JLL), and CoStar all point to CRE recovery, citing a steady increase in office construction, continuing net positive absorption rates, decreasing vacancy rates, and increasing rents over the past 5 years (Heschmeyer 2013; Hutchinson et al 2014; JLL 2015). In particular, office development in Boston has gained momentum, highlighted by the surge of real estate transactions (Krueger 2014) and the number of construction cranes visible in the downtown and Cambridge areas. While suburban office space construction in the U.S. is at the lowest in the past 5 years, concentrated growth in office development is still observable in Boston's suburbs. Despite some inward migration of high-profile corporate offices from suburban office strongholds like the Route 128 "technology highway" and I-495 to Boston's central business districts and Cambridge's Kendall Square, suburban submarkets have continued to see a positive net absorption rate, and new construction is underway or proposed.

Shifting demographics and market conditions have driven retrofits of declining suburban regional malls, known as greyfields (CNU-PWC 2001), into vibrant, mixed-use centers of commerce. To retain and recruit a younger skilled workforce, many suburban office parks and corporate campuses have looked to these retrofits strategies and best practices to make their campuses more appealing.

This literature review will explore the main drivers of decline in suburban office parks, provide examples of successful suburban retrofits as well as list best practices in transforming suburban office parks into attractive, mixed-use communities that offer a holistic and dynamic urban environment that people seek out today.

2. Historical Context

Following World War II, the United States was the only advanced industrial economy with an intact economy. Eager to expand after decades of economic depression, large corporations began to rationalize their organizational structures and transformed them into administrative hierarchies that called for a different type of office: the corporate headquarters (Monzingo 2011). Concurrently, with an increasing aversion to dense, industrialized urban environments and the rising popularity of the pastoral ideal upheld by American landscape architects (e.g. Olmstead and Downing), many companies and workers looked to the suburbs.

During this period, American workers valued the separation of the workplace and home life and sought out where to work before deciding on where to live. Other factors that led to the decentralization of land use included the acceleration of interstate highway construction into the suburbs over the 1960s and 1970s, which contributed to the proliferation of automobiles.

Post WWII development patterns gave rise to suburban clusters of growth that have been identified under many terms, including:

- "Edge Cities" – spread-out suburbs with more jobs than bedrooms, equipped with 5 million or more square feet of leasable office space and an accompanying 600,000 or more square feet of leasable retail space, surrounded by detached, single-family dwellings (Garreau 2011). Another term for these areas is "Urban Villages" – low-density areas similar to an edge city with business, retail, and entertainment as its town center, with boundaries stretching as far as 10 miles from its core (Leinberger 1988); and
- "Edgeless Cities" – suburban office parks that are scattered and lack a core or a physical edge, with a footprint extending over tens or hundreds of square miles, often located near highway exit ramps to improve automobile access (Lang 2003).

Suburban Office Typologies

The typology of suburban office development adapted to fluctuating market demands between the late 1940s and into the 1960s, often built-to-suit properties to satisfy specific functions of corporations. They can be distinguished under three larger categories:

The Corporate Campus: Modeled after the American university campus configuration, providing facilities for the corporate research division out of an industrial setting. Examples include Bell Labs, General Electric, and General Motors.

The Corporate Estate: A large building complex built specifically for top-level executives and their staff, accessed through scenically designed landscape of 200 acres or more.

The Office Park: In effort to reduce costs while still maintaining the suburban appeal, office parks began appearing in the late 1950s as an alternative to corporate campuses and estates, comprising of multiple buildings surrounded by surface parking and a mix of landscaped edges and medians.

The common threads that tie these 20th Century metropolitan forms together are lack of transit accessibility, configurations that promote auto-dependency, and zoning regulations that encouraged segregation of land uses, supporting the proliferation of a dispersed, low density landscape. A comparison between these areas is summarized in the table below:

Table 3: Suburban Development Types – Examples

Category	Scale	Office Density	Basic Units	Boundary	Examples in MA
Primary Downtown	A square mile or a few square miles	Very high to high	City block	Sharp; well delineated	Downtown Boston
Edge City/ Urban Village	Several square miles	Medium to low	Freeway interchange	Fuzzy, but with a recognizable edge	Area around Route 128 and I-90
Edgeless City	Tens or hundreds of square miles	Very low	Municipality or county	Indeterminate, very hard to delineate	I-95 interchanges near Westwood and Canton

Source: Edgeless City, Lang 2003

It was during the post-war period that the U.S. transition to a post-industrial economy began, shifting from a labor and manufacturing-oriented economy into a service and knowledge-oriented one (Bell 1976). The demand for large-scale research and development facilities coupled with corporations devising the serenity of the suburbs as a recruitment strategy for knowledge workers expedited the decentralization of job growth (Lang 2003; Monzingo 2011).

The rapid growth of jobs in the suburbs had substantial implications on the local and regional economies and their natural environment, including:

- decentralization of employment drew jobs and resources away from regional cores and led to stagnant job growth in the cities;

- suburban sprawl leading to rising cost of municipal services such as education, infrastructural maintenance, and capital improvements;
- smokestack chasing - local governments' desire to expand tax base created incentive packages to recruit industries, such as tax abatements, low interest loans, and infrastructure development. (These packages inevitably became uncompetitive when all communities developed the same incentives, and companies were not guaranteed to stay.);
- encroachment of arable land and open space; and
- mismatch of jobs and housing: lack of fair and affordable housing in the suburbs meant disadvantaged households in the cities did not have equitable access to jobs.

3. Emerging Trends: 2000 onwards

The Creative Class

Building upon Bell's theory of the post-industrial society shifting towards a knowledge-based economy, Richard Florida postulated at the start of the 21st century the rise of the "creative class": a fast-growing, highly educated segment of the workforce that are employed in a wide variety of industries including technology, design, finance, entertainment, journalism, and the arts. Other studies have also conceptualized this population as a knowledge-based workforce (Drucker 1969; Asheim & Hansen 2009).

According to Florida, the "creative class" not only value creativity and individuality, they also prefer to live in places that provide a diverse mix of people, and experiential options for entertainment and recreation. Most of all, today's young workforce favors a work environment that encourages interaction and collaboration among their peers. Unlike previous generations, this younger workforce often selects where to live before looking for employment. Florida also argues that cities with policies that successfully recruit and retain the creative class are often ones that prosper. Unique street level culture and diversity of cultural amenities are two of the most appealing attributes to the creative class (Cowart & Logan 2009; Florida 2002; Dunham-Jones 2005; Williamson 2013).

Recent studies on workforce migration imply that aging suburban, single-use office parks have become an outdated model of development that no longer appeal to younger, knowledge-based workers seeking dynamic work and living environments. The 2000 U.S. Census, for example, revealed that a higher number of younger, single, and college-educated people were moving into metropolitan areas than suburbs (Franklin 2003). American Community Survey data between 2006 and 2011 supported the trend, which showed positive in-migration of the creative class to metropolitan areas such as Boston-Cambridge and San Francisco-Oakland (Burd 2013).

Corporate Mobility

It's not just young workers who are moving away from suburban office parks and into more urban areas – so are businesses and larger corporations. For example, market conditions in Massachusetts show inward migration of corporate headquarters currently along Route 128 and I-495 into Boston or Cambridge.

Moreover, many large corporations have chosen to "smart size" by consolidating multiple locations into fewer or one smaller space (Hutchinson et al 2014). In their 2013 annual review and 2014 outlook, industry analyst CBRE reported that a 12.6% decrease in overall space was observed in the ten largest CRE deals that year, yet only 2 out of 10 transactions reported a decrease in headcounts. Among these companies were Converse, who will move its headquarters from North Andover to a renovated industrial building overlooking Boston's North Station; and pharmaceutical giant Sanofi, which sold its 1.2 million square feet office in Bridgewater, NJ and consolidated offices to Cambridge and Richmond, VA (Kusisto 2013).

Companies are also looking to maximize efficiency of their leased space – average space per employee has decreased over the past decade from roughly 250 to 125 square feet per worker (Heschmeyer 2013). Other corporate trends include lease flexibility, most notably an increase in shared, co-working or incubator spaces populating the small office landscape. Examples include the Cambridge Innovation Center, WeWork and WorkBar in Boston and Cambridge, all of which have recently, or have plans to, expand to additional locations.

Impact of Baby Boomers

It's not just young worker preferences that are driving demand for urban spaces. The aging of the "Baby Boom" generation will have considerable influence on development patterns in the suburbs, including office park retrofits offering a mix of uses, including residential, in walkable environments with amenities.

Studies showed that 71% of elderly households would prefer to live within walking distance of transit, and more than half of non-drivers aged 65 and over are unlikely to stay in their suburban homes due to limited transportation choices (Bailey 2004). Furthermore, a 2014 AARP study found that the most desired amenities within a walkable quarter-mile radius for adults 50 and over are bus stops, groceries, pharmacies, and parks (Harrell et al. 2014b). As these households continue to age, they will become increasingly dependent on accessible transit that is often lacking in the suburbs for essential needs such as medical appointments, errands, and social activities (Baker 2014). The general thinking is that suburban locations need to adapt to these changing needs and preferences.

Recent shifts in planning policies at the state and federal levels are also important drivers of changing development patterns in suburban areas. The U.S. Environmental Agency's Smart Growth program calls for growth management practices that include promoting reduction of land consumption, encouraging infill and redevelopment of older cities and suburbs (US EPA 2014). Smart Growth policies place a focus on transit-oriented development that minimizes automobile dependency and reduces vehicle miles traveled.

The rise of New Urbanism, a movement led broadly by architects Andres Duany and Elizabeth Plater-Zyberk, principals of architectural firm Duany Plater-Zyberk (DPZ) and co-founders of the Congress of New Urbanism (CNU), established a charter that called for design or redevelopment of suburban communities into more compact, walkable, mixed-use, and transit-oriented neighborhoods with a strong sense of place. These principles can and have been applied to office park retrofit projects.

4. Office Parks Today

Developers and proprietors of office parks are beginning to take notice of the changes in demographics, lifestyle preferences of the growing younger workforce, and a spike in the public's awareness around environmental issues. New suburban office development is at a two decade low – just 12 million square feet were built between 2011 and 2012 compared to 160 million in 1988 and 1989 (WSJ-CBRE 2012).

In Massachusetts, a number of tech companies that once blanketed the Route 128 technology corridor have migrated, or have plans to migrate, to the Boston-Cambridge area. Software companies Intuit and Adobe's recent moves from Waltham to Cambridge are the most resounding examples of businesses trying to maintain a competitive edge for recruiting the young and skilled workforce (CBRE 2013). Even Trip Advisor, who will relocate to its new headquarters along Route 128 has a satellite Boston office adjacent to North Station. According to Jones Lang LaSalle's 2014 Q4 report, office vacancy rates in Boston's suburbs (18.6%) are almost twice as high as Boston's CBD (10.3%) and more than double that of Cambridge (7.7%).

Meanwhile, concentrated demand for office spaces is popping up along Route 128. In response to stagnant supply, rents in office parks in some edge cities are rising steadily (average $21.77 psf), but still much more competitive compared to Boston's $51.97 psf (JLL 2014). Further, some communities along

Route 128 and I-495 are displaying a strong comeback in new office construction over the past two years (CBRE 2012 & 2013). For example, new development is underway in Needham including the Center 128 development (Trip Advisor headquarters), and mixed-use developments proposed by Normandy Real Estate and the Bulfinch Companies. Waltham has also seen significant retrofits, and Burlington's office parks are experiencing renewed interest from high-profile businesses such as Keurig, Sybase, and Veracode.

Proximity to the Boston and Cambridge hi-tech industries has further induced the emergence of powerful CRE submarkets in nearby municipalities such as Watertown, Malden, Somerville, Charlestown, and again, Needham, and Newton. Equipped with understanding of the knowledge-based workforce's lifestyle preferences, new constructions in these submarkets are overwhelmingly mixed-use and near transit, attributes that are marketed heavily to potential tenants (CBRE 2012 & 2013; FMI 2014).

Suburban Retrofits Challenges

To remain competitive and relevant, existing office parks and corporate campuses in the suburban environments have initiated efforts to retrofit their sites to meet the demands of today's workforce and businesses. However, despite these efforts, retrofits are challenged by constraints including:

- remote locations and limited or no access to public transit;
- lack of identity or sense of place;
- significant development and maintenance costs due to scale and infrastructural needs;
- NIMBY-ism (the more affluent the community, the higher the opposition);
- low density configurations of buildings with no core; and
- lack of architectural character.

Despite these challenges and constraints, other aspects of suburban office parks are advantageous or well suited for retrofits. This includes:

- existing infrastructure in place to support redevelopment;
- extensive surface parking lots that provide infill development opportunities;
- generally flat and well-drained land;
- mature landscaping; and
- proximity to highway and/or commuter rail lines.

Suburban retrofits have been applied to failing shopping and strip malls with some success. These sites, referred to as "greyfields", were first characterized by a joint study conducted by Congress of the New Urbanism (CNU) and Price Waterhouse Cooper (PwC) which identified the growing stock of aging regional malls with high vacancy rates (CNU-PwC 2001). According to the study, successful retrofits incorporated key strategies, such as:

- integration of multiple uses – commercial, residential, and civic;
- provision for public space;
- reorientation of activity to face the street;
- connectivity optimization – establishment of walkable block structures and scale;
- context sensitivity – attention to the needs of the community.

Among the most well-known retrofit examples are Mashpee Commons on Cape Cod; Mizner Park in Boca Raton, FL; and The Crossings in Silicon Valley. Retrofits continue today, like in Ohio's Miami Township, where a master planning process of the Dayton Mall area is underway.

Developers looking to retrofit suburban office parks and corporate campuses have embraced these strategies as best practices. According to the literature, and interviews conducted as part of this study, introducing a mixture of uses is the most vital strategy in an office retrofit. And according to the literature, redevelopments that have neglected to include a mix of uses eventually observed an increase in vacancy rates over time. One example is *Cloud 9 Sky Lofts* in Minnetonka, Minnesota. Originally built as an office building in the mid-1980s, it was retrofitted in 2004 as 162 luxury apartments. The building is situated next to a highway and had glass façade typical of office structures. The angled corners of the property were designed to allow for corner offices, which lend themselves well to great views in each unit. Ultimately, units were slow to fill, attributed in part to the lack of on-site lifestyle amenities such as shopping, restaurants, and entertainment.

Case Studies

University Town Center, Hyattsville, MD

In the early 1960s, a mixed-use, transit-oriented development, *Prince George's Town*, was planned on the outskirts of Hyattsville, Maryland, to counter the effects of suburban sprawl in the Washington DC metropolitan area. Only three office buildings were constructed, which were used as government offices between 1963 and 1971. The development was surrounded by surface parking.

In 1993, the arrival of a Metro station reinvigorated plans to retrofit the office park into its original vision of a mixed-use, pedestrian-friendly town center called University Town Center. An incremental process to retrofit the office park began in 2001 with refurbishment of the office building; façade improvements; a parking structure; and identification of infill sites around the buildings. Next, secondary streets were created on the site to improve connectivity and walkability, followed by mixed-use development including student apartment towers, retail, office, a cinema, and public space. Further, a mix of architectural styles was infused into the redevelopment plan to create an eclectic, more natural feel, and a public art program was created to enhance the street character. Today, residences at the University Town Center are in high demand, and considered by many in the area as their new "downtown".

The success of University Town Center is attributed to the developers' understanding and ability to capture the student market – a 90% closing ratio for the 900 bedroom Towers demonstrated pent-up demand for affordable student housing - of neighboring University of Maryland. Furthermore, developers combined thoughtful urban design with arts programming to nurture an organic street culture and a strong sense of place. Transit accessibility and a wide variety of restaurants, shopping, and entertainment have also made the area highly desirable.

Research Triangle Park, North Carolina

North Carolina's Research Triangle Park (RTP), the largest research park in the United States, is home to R&D organizations such as IBM, GloxoSmithKline, Credit Suisse, EMC and Cisco Systems. Conceived in the 1960s, RTP led the way in providing a diverse work environment for a knowledge-based economy and brought prosperity and attention to the region.

Recognizing changing workforce preferences, needs and economic trends – including booming tech start-up communities in downtown Raleigh and Durham – the proprietors of RTP decided to alter the park's development model in an effort to remain relevant and maintain a competitive edge in talent recruitment (Oliphant 2013). To implement changes, the RTP Master Plan was completed in 2012 to steer the transformation of the spread-out, 7,000-acre research park into a mixed-use community where its 40,000 employees could live, work, and play.

As identified in the planning process, RTP faces numerous challenges, including:

- lack of a central, defining place that nurtures the research community;

- lack of a socially dynamic setting;
- lack of connectivity between facilities;
- the need for retail;
- lack of, and need for, amenities where workers can meet informally outside of the workplace;
- the need to attract new kinds of companies and employees while retaining existing firms;
- regional development has reached the perimeters of the park and population growth has added to traffic congestion.

Nevertheless, RTP has assets that played to their advantage, such as:

- large sites with opportunity for infill development;
- existing open space on site to provide recreational opportunities for employees;
- existing public transit service to the park;
- extensive water, sewer, energy, and telecommunications infrastructure.

Key master plan objectives focus on increasing development density, improving amenities, diversifying research facilities, and sustainable design. Up to 3 million square feet of new residential, commercial and mixed-use development is proposed in three main districts:

- Triangle Common – the park's "downtown" mixed use center;
- Park Center – the business support/commercial hub; and
- Kit Creek Center – the large-scale research-focused area integrated with surrounding open space.

Additionally, noting the importance of public transit, a light rail line to connect the park to the three points of the triangle: Raleigh, Durham, and Chapel Hill is also proposed.

The plan's emphasis on providing housing, retail, recreation, and a place for socialization as added amenities to the employment center is again an example of aging suburban office parks reinventing themselves to better attract today's tech-savvy workforce.

Upper Rock District, Rockville, MD

The Upper Rock District is a 20-acre office park retrofit driven by identified needs of the surrounding community. The project was initiated in 2004 through a public charrette, which identified a desire for retail, public spaces, and housing for seniors and young singles. Redevelopment and new construction heavily employed LEED sustainable design principles.

As a result of the planning process, two original office buildings were torn down, while the remaining were upgraded with building facades and converted into residential lofts. The retrofit of Upper Rock followed principles of New Urbanism, reducing block sizes to promote walkability and connectivity, as well as lowering auto-dependency by providing on-site shuttle to the nearby transit station.

Massachusetts Retrofits

Several suburban retrofits are currently underway in Massachusetts. While not on the same scale as the Research Triangle, these projects all intend to take former office or industrial parks and convert them into

a more amenity rich, mixed-use environments attractive to today's younger workforce. A summary of these projects is found in Table 4 below.

Table 4: Ongoing Retrofits in Massachusetts

Proposed Project	Location	Former Use	Development Plan
Northwest Park	Burlington	1960s-era office park on 50 acres.	Rezoned for up to 3.2 M sf of mixed-use development. New development includes 3rd Avenue Shops, and 200 apartment units, with 200 additional units and new office spaces planned.
Elmwood Park/Crossroads	Hopkinton	160,000 sf headquarters of EMC Corp. and parking lots.	375 apartment units, 150-room hotel, new access roadway to site.
Marlborough Hills	Marlborough	750,000 sf of office and R&D vacated by Hewlett-Packard in 2011.	Remodel existing buildings and add 350 apartment units, 153-room hotel, 50,000 sf of retail and restaurant space.
East Mill/West Mill	North Andover	East Mill: 235,000 sf former office West Mill: 385,000 sf office – vacated by Converse and Schneider Electric	**East Mill:** Redevelopment included offices, restaurants, healthcare and 27 loft apartments. **West Mill:** Plans include loft-style apartments, retail and restaurant space, and office.
University Station	Westwood	130 acre former industrial park	**Phase I:** 500,000 sf of retail, 350 apartments, 64 assisted living units. **Phase II:** 350,000 sf of office, 160-room hotel.

Source: Boston Globe, Canton Citizen, Banker & Tradesman, Boston Business Journal

5. Best Practices

In the face of changing economies and shifting demographics, new residential and commercial developments that meet today's lifestyle demands are increasingly required for existing suburban-located companies to remain competitive, and for municipalities to attract additional investment. For edge and edgeless cities, aging buildings, lack of robust and reliable transit, and lack of vibrant mixed-use activity centers increasingly puts them at a disadvantage. However, in the face of these challenges, some communities and developers are working to retrofit these functionally obsolete locations with considerable success. To do so, several best practice approaches have been identified:

Transportation

- Invest in viable transit or connections to nearby transit through frequent shuttle buses or other methods.
- Provide alternative modes of transportation such as carshares, bikeshares, and/or bike facilities (secure storage, showers, etc.)

Development Patterns

- Start with a planning process to identify the right mix of building types and uses that offer eccentric urban fabric and create an active live, work, play environment.
- Identify infill sites for new developments to provide a better balanced mix of uses.
- Create a more urban street network with secondary streets to optimize connectivity and improve walkability.
- Implement shared parking strategies to increase development potential.

- Build parking that supports higher density and mixed use development – garages instead of surface parking.
- Identify a core "downtown" and incorporate public space and public art.
- Provide links to recreational areas.
- Adopt site design standards consistent with the plan's urban design goals.
- Encourage public-private partnerships. Create or change local regulations to ease restrictions such as introducing tax-increment financing or amending zoning to encourage and support more diverse and intense use and redevelopment.
- Build incrementally.

D. Market Assessment

As stated previously, the primary purpose of this document is to identify supportable market opportunities and future best land uses within the Wells Avenue Office Park, and to provide a general framework to encourage and attract the supportable development. Thus, this section looks at the existing and potential market conditions for office, retail and residential development within Wells Avenue Office Park.

1. Economic Trends

To best estimate demand for future office and retail space, it is essential to understand the larger economic and workforce trends within an area of study and its surrounding region. In particular, labor force, industry sector and employment trends, income and educational attainment data, along with existing and proposed development, are key inputs needed to determine a study area's economic draw and potential for supportable office (companies increasingly follow talent), retail and as detailed later, residential development.

Employment and Labor Force

Unemployment in Newton has historically and continues to track below State levels. This points both to a strong job market within Newton, but more specifically a highly skilled workforce in demand across a range of sectors.

Table 5: Unemployment, Newton and Massachusetts, 1001-2012

Year	Newton	Massachusetts
2001	2.7	3.7
2002	3.9	5.3
2003	4.1	5.8
2004	3.5	5.2
2005	3.4	4.8
2006	3.3	4.8
2007	3.0	4.5
2008	3.6	5.3
2009	5.6	8.2
2010	5.5	8.3
2011	4.7	7.3
2012	4.3	6.8
2013	4.8	7.1
2014*	4.0	5.9

Source: EOLWD, 2001-2014

**Annual rate not yet available. Number reflects the average of the 12 monthly unemployment rates.*

Income and Educational Attainment

Newton is generally an affluent community. As shown in Table 6, although lower than some of the surrounding communities like Weston and Wellesley, Newton's $120,000 median household income is nearly double the State median. Despite the high incomes, as shown in Table 7, there are significant differences in income by age. Incomes for those 25-44 years and 45-64 years of age are significantly higher than those under 25 or those over 65. This is expected, as the age bracket (25 and 64) includes the highest earning years – an attractive trait for retailers looking to locate in a community. However, these differences also show that younger and older populations may be less able to afford housing in Newton, given its high costs (See the Residential Analysis for more.) Given the growing trend of jobs following

talent, this could harm future business attraction efforts to Newton should units not be affordable to younger workers.

Table 6: Median Household Income, 2000-2013, Newton and Surrounding Communities

	2000	2013	Percent Change
Newton	$86,052	$119,148	38%
Brookline	$66,711	$96,488	45%
Dedham	$61,699	$84,704	37%
Needham	$88,079	$127,753	45%
Waltham	$54,010	$74,198	37%
Watertown	$59,764	$87,401	46%
Wellesley	$113,686	$159,167	40%
Weston	$153,918	$192,563	25%
Massachusetts	$50,502	$66,866	32%

Source: US Census, American Community Survey 2009-2013

Table 7: Median Household Income by Age, Newton 2013

	2013
15 to 24 years	$48,063
25 to 44 years	$127,957
45 to 64 years	$151,005
65 and over	$65,572

Source: American Community Survey 2009-2013

Newton's high incomes are reflected in the educational attainment of its residents 25 years and older. While a slightly higher percentage of Newton residents hold a bachelor's degree compared to Middlesex County and the State, a significantly higher percentage of residents hold a graduate or professional degree – just under half (49%) compared to 25% in Middlesex County and 22% in the State.

Table 8: Educational Attainment, Newton, Middlesex County and Massachusetts 2013

Highest Level of Attainment	Newton		Middlesex County		Massachusetts	
	Number	Percent	Number	Percent	Number	Percent
Population 25 and over	56708	100%	1,056,080	100%	4,510,714	100%
No High School Diploma	1,673	3%	83,226	8%	478,710	26%
High School Diploma	5,412	10%	228,192	22%	1,163,738	16%
Some College, No Degree	4,400	8%	144,231	14%	743,847	16%
Associate's Degree	2,008	4%	64,515	6%	348,097	8%
Bachelor's Degree	15,577	27%	274,137	26%	1,006,270	22%
Graduate or Prof Degree	27,638	49%	261,779	25%	770,052	17%
Percent High School or Higher	55,035	97%	972,854	92%	4,032,004	89%
Percent Bachelor's or Higher	43,215	76%	535,916	51%	1,776,322	39%

Source: American Community Survey 2009-2013

The high educational attainment of Newton residents is reflected in the high number and percentage of higher paying, office-inclined jobs in Newton (detailed later in this document), which require a higher level of education. Further, and as noted earlier, businesses are increasingly following talent. Newton's highly educated workforce is a strong attractor for investment (both office and retail).

Businesses, Jobs and Wage Trends

Business, job and wage trends within a community and its region were examined to inform, and help to predict future demand for space including office, industrial or retail space. To estimate future

development, MAPC looked at employment and wage trends within the City of Newton, and within the Metro West/South Workforce Investment Area, of which Newton is a part.

Jobs/Employment

The City of Newton has seen robust job growth over the last decade plus, pointing to a strong local economy and job market. Since 2001, the number of jobs citywide in office, retail and industrial sectors increased by more than 11%, a significantly higher rate that the larger Metro West/South WIA, which saw a 3% total increase.

Office & Institutional Sectors

All job growth in Newton was in sectors that occupy office buildings. The largest gains were seen in Administrative and Waste Services (+4,582 jobs, or +230%), Health Care and Social Assistance (3,625 jobs, +57%), and Educational Services (2,215 jobs, +30%). However, as shown in Table 9, there were also strong gains in nearly all office-oriented sectors, including information, finance and insurance, management of companies and enterprises and real estate. The only exception was Professional and Technical Services, down 25% or 1,544 jobs. Within the larger Metro West/South WIA, there were significant gains in all office-oriented sectors except information and finance and insurance.

This job growth is reflected in the low office vacancy and high absorption rates detailed later in this report.

Table 9: Employment by Sector 1001-2013, Newton and Metro West/South WIA

	Newton				Metro West/South WIA			
Sectors	2001	2013	Change	% Change	2001	2013	Change	% Change
51 - Information	2,158	2,445	287	13.3%	29,529	26,794	-2,735	-9.3%
52 - Finance and Insurance	1,258	1,683	425	33.8%	21,205	20,299	-906	-4.3%
53 - Real Estate and Rental and Leasing	1,246	1,493	247	19.8%	7,436	7,484	48	0.6%
54 - Professional and Technical Services	6,071	4,527	-1,544	-25.4%	58,665	69,733	11,068	18.9%
55 - Mgmt of Companies and Ent	932	1,399	467	50.1%	17341	24,412	7,071	40.8%
56 - Administrative and Waste Services	1,978	6,560	4,582	231.6%	29,537	32,090	2,553	8.6%
61 - Educational Services	7,390	9,605	2,215	30.0%	46,787	55,763	8,976	19.2%
62 - Health Care and Social Assistance	6,389	10,014	3,625	56.7%	50,518	67,556	17,038	33.7%
OFFICE/INSTITUTATIONAL: BLDG TYPE	27,422	37,726	10,304	37.6%	261,018	304,131	43,113	16.5%
44-45 - Retail Trade	6,093	4,345	-1,748	-28.7%	58,555	55,487	-3,068	-5.2%
71 - Arts, Entertainment, and Recreation	1,050	888	-162	-15.4%	7,732	11054	3,322	43.0%
72 - Accommodation and Food Services	3,567	3,381	-186	-5.2%	31,396	37,664	6,268	20.0%
81 - Other Services, Ex. Public Admin	2,619	2,375	-244	-9.3%	17,130	16,383	-747	-4.4%
RETAIL, COMM & OTHER: BLDG TYPES	13,329	10,989	-2,340	-17.6%	114,813	120,588	5,775	5.0%
23 - Construction	2,426	1,636	-790	-32.6%	23,450	21,001	-2,449	-10.4%
31-33 - Manufacturing	2,232	844	-1,388	-62.2%	76,880	51720	-25,160	-32.7%
42 - Wholesale Trade	1,400	1,109	-291	-20.8%	30,831	25,629	-5,202	-16.9%
48-49 - Trans and Warehousing	562	522	-40	-7.1%	10765	9859	-906	-8.4%
IND, WAREHOUSING: BLDG TYPE	6,620	4,111	-2,509	-37.9%	141,926	108,209	-33,717	-23.8%
TOTAL: ALL SECTORS - BLDG TYPES	47,371	52,826	5455	11.5%	517,757	532,928	15171	2.9%

Source: ES-202 2001, 2013

Retail and Commercial Sectors

Jobs in retail and commercial sectors decreased over the last decade in Newton. Specifically, retail jobs were down 29%, arts and recreation jobs were down 15%, accommodation and food services down 5%. In total, over 2,300 jobs were lost in these sectors, which may be a lingering impact of the recession or indicate a saturated market with little room for additional growth.

Within the larger subregion; however, the overall number of jobs in retail and commercial sectors increased by 5%. All growth was in arts, entertainment and recreation and accommodation and food services. Retail jobs were down. This may indicate changing spending habits to more online shopping but

more dining outside of the home, trends reflected in interviews conducted as part of this and other studies involving retail demand.

Industrial Sectors

Jobs in industrial sectors were down significantly both in Newton and in the larger subregion. Losses occurred in all sectors from construction to manufacturing and wholesale trades. Despite growth in some industrial sectors within the state, the declines in Newton may be indicative of high land costs in the city. Industrial sector businesses often require affordable land to build larger facilities.

Wages

Overall, wages for jobs located in Newton are somewhat lower than those in the larger Metro West/South WIA. In 2013, the average weekly wage for a job in Newton was $1,247 compared to $1,384 within the subregion. Wage growth in Newton also trailed the subregion, up 34.8% compared to 37.4%. Despite these lower figures, wages for Newton jobs are high compared to the State average. The key finding is that Newton is located in a highly competitive market for educated, high-skilled, and high wage jobs.

Wages and wage growth in Newton were strongest in office building oriented industries (higher than in the larger WIA), most notably in real estate rental and leasing which had the highest average wage of any sector, and the largest growth (up 257%). Other gains were experienced in Information, Finance and Insurance, Educational Services, and Health Care. And although job numbers decreased in retail/commercial and industrial industries, wages increased, particularly for retail (+40%) and manufacturing (+81%). Thus, although job numbers were down overall in these sectors, the quality of jobs has improved. Similar patterns were seen in the larger subregion.

Table 10: Average Weekly Wages by Industry Clusters

	Newton				Metro West/South WIA			
	2001	2013	Change	% Change	2001	2013	Change	% Change
51 - Information	$1,309	$1,940	$631	48.2%	$1,440	$2,047	$607	42.2%
52 - Finance and Insurance	$1,399	$2,601	$1,202	85.9%	$1,347	$2,248	$901	66.9%
53 - Real Estate and Rental and Leasing	$1,049	$3,747	$2,698	257.2%	$894	$1,720	$826	92.4%
54 - Professional and Technical Services	$1,507	$1,791	$284	18.8%	$1,538	$2,309	$771	50.1%
55 - Mgmt of Companies and Ent	$2,823	$2,079	-$744	-26.4%	$1,558	$2,310	$752	48.3%
56 - Administrative and Waste Services	$975	$731	-$244	-25.0%	$650	$877	$227	34.9%
61 - Educational Services	$728	$1,155	$427	58.7%	$751	$1,057	$306	40.7%
62 - Health Care and Social Assistance	$742	$1,045	$303	40.8%	$692	$1,041	$349	50.4%
OFFICE/INSTITUTATIONAL: BLDG TYPE								
44-45 - Retail Trade	$507	$707	$200	39.4%	$570	$607	$37	6.5%
71 - Arts, Entertainment, and Recreation	$563	$627	$64	11.4%	$582	$726	$144	24.7%
72 - Accommodation and Food Services	$377	$459	$82	21.8%	$336	$408	$72	21.4%
81 - Other Services, Ex. Public Admin	$510	$647	$137	26.9%	$580	$695	$115	19.8%
RETAIL, COMM & OTHER: BLDG TYPES								
23 - Construction	$1,020	$1,482	$462	45.3%	$1,042	$1,377	$335	32.1%
31-33 - Manufacturing	$1,048	$1,894	$846	80.7%	$1,329	$1,924	$595	44.8%
42 - Wholesale Trade	$1,828	$2,548	$720	39.4%	$1,466	$1,765	$299	20.4%
48-49 - Transportation and Warehousing	$776	$895	$119	15.3%	$727	$898	$171	23.5%
IND, WAREHOUSING: BLDG TYPE								
TOTAL: ALL SECTORS - BLDG TYPES	$925	$1,247	$322	34.8%	$1,007	$1,384	$377	37.4%

Source: ES-202 2001, 2013

Job Projections

Growth or decline in jobs helps to predict future demand for development. If growth is projected, companies and their workers will need locations to conduct business, thus additional development may likely be supported. If declines are projected, additional development is unlikely.

According to Massachusetts Department of Labor and Workforce Development projections, recent trends in employment growth are projected to continue over the next 5 to 7 years. Specifically, significant office-inclined employment growth is projected within the Metro South/West subregion. Over 20,000 new jobs are projected in these sectors, with the highest growth in professional, scientific and technical services, and solid growth in nearly all office inclined sectors. This job growth will likely drive new construction, particularly given low inventories detailed later in this report.

With the economy in recovery mode from the years of the Great Recession, retail and commercial jobs are also expected to rebound. Retail jobs, which fell considerably in the subregion are projected to increase 7%, or over 4,000 positions. At the same time, a stronger economy will boost accommodation and food services, which are projected to increase nearly 17%, or nearly 7,400 jobs. Combined, these increases could result in significant new development, particularly in mixed-use areas, where retail and restaurant uses are likely to be most in demand. (See Retail Demand section for additional analysis.)

Table 11: Employment Projections, 2012-2022

NICS Code		Employment		Change	
		2012	2022	Net	Percent
51	Information	25,886	27,099	1,213	4.5%
52	Finance & Insurance	20,358	21,535	1,177	5.5%
53	Real Estate and Rental and Leasing	7,207	7,653	446	5.8%
54	Prof, Scientific, and Technical Svs	64,541	79,289	14,748	18.6%
55	Mgmt of Companies and Enterprises	23,152	24,745	1,593	6.4%
56	Admin and Support and Waste Mgmt	31,308	32,242	934	2.9%
OFFICEL BUILDING TYPES		172,452	192,563	20,111	11.7%
61	Educational Services	55,089	60,140	5,051	8.4%
62	Health Care and Social Assistance	61,647	75,190	13,543	18.0%
INSTITUTIONAL BUILDING TYPES		116,736	135,330	18,594	15.9%
44-45	Retail Trade	54,611	58,657	4,046	6.9%
71	Arts, Entertainment, and Recreation	9,827	12,397	2,570	20.7%
72	Accommodation and Food Services	36,501	43,888	7,387	16.8%
81	Other Services (except government)	13,521	15,875	2,354	14.8%
RETAIL/COMMERCIAL BUILDING TYPES		114,460	130,817	16,357	14.3%
22	Utilities	1,493	1,002	-491	-49.0%
23	Construction	18,313	24,091	5,778	24.0%
31	Manufacturing	50,166	44,034	-6,132	-13.9%
42	Wholesale Trade	25,640	28,197	2,557	9.1%
48	Transportation and Warehousing	7,025	7,760	735	9.5%
INDUSTRIAL BUILDING TYPES		102,637	105,084	2,447	2.4%
TOTALS		**506,285**	**563,794**	**57509**	**11.4%**

Source: EOLWD, ES-202 2015

Interesting to note, growth is projected for jobs typically found in industrial building types, particularly in Wholesale Trade and Transportation and Warehousing. However, given the value of land in Newton, these uses would likely locate in areas with strong highway access and lower land costs.

2. Office Market Potential

The City of Newton, including Wells Avenue, is located within the 128/Mass Pike Office Submarket. To better understand Wells Avenue's competitive position in the regional office market, MAPC reviewed the recent office market reports from commercial real estate services firm, Jones Lange LaSalle, and spoke with several commercial real estate professionals with properties within Wells Avenue and throughout the Greater Boston region.

Market Position

Within the Metro Boston region, the 128/Mass Pike area is considered to be the premier suburban submarket. Within the submarket are several clusters. The largest of these clusters is Waltham, which includes several million square feet of space and is home to larger corporate offices including GlaxoSmithKline, Nova Biomedical, Novell Inc., and more. Wellesley has a significant office concentration at the Wellesley Office Park (sold to Manulife Financial Corp for $237 million in 2013), which includes numerous financial services firms including Putnam Investments. Needham's existing cluster adjacent to Route 128 is increasingly competitive with considerable interest from developers, in particular projects from Normandy Development (e.g. Trip Advisor headquarters), and the Bulfinch Companies, both of which have proposed large-scale mixed use developments.

At $29 psf, direct rents in the submarket are near all-time highs, and the vacancy rate of 10.3% is below pre-recession levels (initial Q4 reports show vacancy down to 8.0%). The Class A market in particular is extremely tight, with a direct vacancy now at 4.5% (down from 8.5% last year). This has led to increased competition for larger spaces, and hikes in direct rents, which are up over 2% quarter to quarter, and up 5.3% year-to-year.

Table 12: Office Statistics, 128/Mass Pike Subregion & Metro Boston Suburbs, Q4 2014

	128/Mass Pike	Waltham	Suburbs
Supply (msf)	20.1 SF	10.1 SF	89.0SF
% Class A	*58%*	*65%*	*59%*
Asking Direct Rent	$28.99	$28.48	$21.42
Year-Year Growth	*3.2%*	*-0.1%*	*2.7%*
Total Vacancy	10.3%	14.1%	18.8%
Year-Year Change	*-3.1*	*-2.7*	*-2.0*
Historic Average	*14.6%*	*17.9%*	*17.7%*
Total Absorption	199,241	56,284	572,428
As % of stock	*1.0%*	*0.6%*	*0.6%*
Historical Average	*326,246*	*129,345*	*770,050*
Availability	14.2%	17.6%	21.6%
Year/Year Change	*-1.64*	*-1.25*	*-1.12*
Historical Average	*16.8%*	*20.1%*	*20.1%*

Source: Jones Lang LaSalle, Office Outlook, 128/Mass Pike Q3 2014

Commercial Real Estate (CRE) trends are expected to continue into 2015. With continued demand and few contiguous Class A spaces available in the submarket, rents are expected to increase further, increasing demand for Class B space and associated rents. Further, according to brokers and property owners, vacancy in Newton/Needham is particularly low, thus new large tenants interested in the area (and the larger submarket) must wait for new spec development to come online (800,000sf is in the planning or construction phases), or look to other lower cost submarkets. Thus, spec office development is now supportable for the first time in almost a decade, with several projects in the pipeline.

In summary, with historically low inventory, near high rents, the area can potentially support additional office space. The increase in spec development in the area further supports this assessment.

Market Perspective: Interviews

MAPC conducted interviews with CRE professionals with interests both inside and outside the Wells Office Park. Similar to findings from the Jones Lang LaSalle office reports, all professionals interviewed were bullish on the Newton/Needham office submarket (a subset of the 128/Mass Pike submarket), including Wells Avenue, with some caveats described below.

Generally speaking, the area's access to Route 128 and the Mass Pike, high visibility, and underutilized commercial properties, has made the Needham/Newton area one of the most desirable locations for office and mixed-use development within the Greater Boston market. Notably, large projects in Needham including the Normandy Real Estate's Center 128 (including Trip Advisor's new headquarters), and the proposed redevelopment of the General Dynamics property, will add significant new or repurposed product to the market. More is likely to follow, including a proposal by the Bullfinch Companies. For Wells Avenue to compete with this development, changes to the park and its facilities will be needed.

Wells Avenue

Those interviewed noted that Wells Avenue's location – its Newton address and proximity to Route 128 - makes it highly competitive in today's office market. Proximity to retail amenities along nearby Needham Street is also a draw. Thus, despite "for lease" signs sprinkled throughout the park, vacancy is below 10% with at most 4 spaces of 5,000 sf or more contiguous space remaining.

Rents in the office park are competitive. Class A space currently leases in the upper $20s to low $30s, whereas Class B space (the majority of space) leases in the low- to mid-$20s. This is comparable to older spaces in the subregion, but significantly lower than new spaces coming online nearby in Needham, where space in Normandy Real Estate's new, amenity rich Center 128 project is likely in the $45/psf range.

Those interviewed expect Wells Avenue to remain competitive for the next several years, particularly once the new Kendrick Street interchange is completed and improves access to Route 128. However, most of those interviewed noted that as new, modern, amenity-rich, LEED-certified space comes on-line nearby (in Needham), Wells Avenue's appeal (in its current state) will likely wane. As noted by those with local expertise, not only is the concept of the insulated, single-use "office park" dated and out of favor (with employers and their employees), the office buildings themselves at 30+ years of age, are or soon will be functionally obsolete. They do not offer the large, open, flexible floor plans, high ceilings, or amenities (bike storage, walkable retail) desired and sought out by today's tenants. The isolation of the park, despite proximity to the increasingly amenity rich areas, will likely hurt its competitive position.

To remain competitive and relevant, the general consensus is that Wells Avenue properties must evolve. While some noted recent renovations have been completed and drawn interest from new tenants, redevelopment is likely a better solution. Office tenants today look for sustainable, energy efficient, amenity rich buildings and environments. Nearly all stressed that a greater mix of uses, especially restaurants and convenience retail, along with some residential, would make the park more attractive from an investment perspective as these are the environments companies, particularly marquee companies seek out.

However, most highlighted other impediments that must be solved in the short term. Chiefly, an impediment to drawing larger office tenants was traffic congestion into and within the park itself. With one entrance into the park, congestion is already a concern during peak travel hours, and tenants have expressed concern. Unless significant improvements can increase peak hour capacity (morning, lunch and evening), additional development is limited to small projects – office, retail or residential. Most said a second access point is needed to maximize investment in the park over the long term. All of those interviewed also said alternatives to automobile transportation are also needed, particularly to attract young professionals more prone to commuting by transit and/or auto alternatives (e.g. biking). Given the isolated nature of Wells Avenue, some noted that a robust shuttle network would benefit the entire area. Specifically, shuttles that not only connect the park to the Green Line, but to the larger N^2 areas, would be best, particularly through larger agreements with key employers throughout the N^2 area.

Office Development Potential

Given the low vacancy/availability of office space, and projected net job increases in office-inclined sectors, the Metro West/South subregion could potentially support anywhere between 3.5 and 5 million additional square feet of office development by 2022, depending on the average square footage per employee.

Table 13: Estimated Office Demand Based on Employment Projections, 2012-2022

NICS Code		Employment		Change		Estimated Office Demand (SF)	
		2012	2022	Net	Percent	Low (175sf)	High (250sf)
51	Information	25,886	27,099	1,213	4.5%	212,275	303,250
52	Finance & Insurance	20,358	21,535	1,177	5.5%	205,975	294,250
53	Real Estate and Rental and Leasing	7,207	7,653	446	5.8%	78,050	111,500
54	Prof, Scientific, and Technical Svs	64,541	79,289	14,748	18.6%	2,580,900	3,687,000
55	Mgmt of Companies and Enterprises	23,152	24,745	1,593	6.4%	278,775	398,250
56	Admin and Support and Waste Mgmt	31,308	32,242	934	2.9%	163,450	233,500
OFFICEL BUILDING TYPES		172,452	192,563	20,111	11.7%	3,519,425	5,027,750

Sources: EOLWD ES-202 Projections and MAPC

Based on current office development proposals in the region, there is room for additional office growth in and around Wells Avenue. A review of proposed or under construction projects in the area shows approximately 3.5 million square feet is planned. See Table 14. (Although included in the table, the total does not include the General Dynamics Redevelopment, which will retrofit existing office space.) This would potentially accommodate the low estimated sf of potential office demand. More is likely needed and supportable.

Table 14: Proposed Office Development

Project	City of Town	Proposed Office SF	Status
2 Wells Avenue	Newton – Wells Ave	110,000	Planning
Station at Riverside	Newton	595,000	Planning
Center 128/Trip Advisor	Needham	740,000	Construction
General Dynamics Redevelopment	Needham	500,000*	Planning
Atrium Mall Redevelopment	Newton	286,000	Construction
1265 Main Street	Waltham	120,000	Construction
40 Green Street	Waltham	400,000	Planning
168 Third Avenue	Waltham	129,000	Planning
900 Winter Street	Waltham	370,000	Planning
130/180 Third Avenue	Waltham	399,000	Construction
University Station	Westwood	340,000	Construction
TOTAL OFFICE SF		3,489,000	

Source: MAPC

Should access concerns be addressed, specifically intersection improvements and a second point of entry into and out of the office park, there is demand for additional office space in Wells Avenue. Without improvements, Wells Avenue is unlikely to support significant additional office space than currently exists or is proposed within the park. However, given the "dated" or "functionally obsolete" product, retrofitting existing development with more modern, lower psf per employee layouts, and amenity rich product is possible, and is needed to remain relevant in today's office market. While the current proposal for 2 Wells Avenue (approximately 110,000 sf of office with some amenity retail) and retrofits would not significantly increase total square footage, the properties would be more valuable given the improved ability to compete more directly with new product nearby.

Additional densities would likely be required to make some redevelopment efforts financially feasible, particularly given demolition and removal costs of existing structures, and increasing construction costs in the region. And with most existing office structures in the park at 1 to 3 stories, and significant areas reserved for parking and open space (within the office park), adding density is achievable should the local regulatory environment support it.

In summary, given Wells Avenue's competitive location, its potential for increased density or infill development, and the estimated office demand highlighted in Table 13, future office development can likely be supported. New or refurbished office space would also increase the overall value of the properties and increase commercial tax revenues. However, as noted, to compete most effectively and draw tenants, new or redevelopment should include a mix of uses – either on one parcel or across many – to create a more competitive and attractive business and lifestyle environment. Adding complementary amenity retail incrementally was considered essential, and some felt adding residential would benefit the park from a competitive standpoint. However, once again, improved access and internal circulation should be addressed to achieve desired results.

3. Retail Market Potential

Wells Avenue currently has minimal retail amenities. With the exception of Plate Café at 1 Wells Avenue, and some internal (likely subsidized) coffee locations and cafeterias, workers in the office park have little choice but to leave the grounds in their cars to purchase food or other retail goods and services. This lack of amenities is not only an impediment for workers, but for employers looking to attract employees. It also leads to increased reliance on the car to obtain lunch and other retail needs during the workday.

Based on the research of literature, and interviews conducted as part of this study, retail and other amenities are increasingly important to attract office (and residential) tenants, in large part due to worker preferences to be located in walkable, amenity rich environments. In a competitive employment market, where many companies are vying for the same workers, location and the amenities offered are a selling point. This puts Wells Avenue at a strategic disadvantage with other office clusters, particularly going forward as new office product comes on line nearby – notably in adjacent Needham – that will offer retail, dining, residential and other amenities in compact, mixed-use developments. As one developer noted, "Placemaking is critical in today's office market."

Unfortunately given nearby established and successful concentrations of retail, limited access, lack of visibility from Nahanton Street, the open space buffer between the park and Nahanton Street and other impediments (including the deed restriction on uses), Wells Avenue is unlikely to attract a significant amount of retail. However, based on interviews conducted, many indicated there is likely a market for a limited amount of amenity retail, in particular restaurants and limited service eating establishments in the park. Further, some of those interviewed felt that should the office park be redeveloped in the future, a greater mix of uses, especially amenity retail, must be included in the mix.

Retail Potential

Household incomes are important to retail development. Simply put, communities with higher incomes and more expendable income, are more likely to attract retail due to their buying power. As highlighted earlier, Newton households have high incomes, and thus the city is an attractive market for retailers.

Typically, retail demand is examined through a supply and demand analysis, or Retail Gap Analysis[1], based on spending potential of trade area residents. Given Newton's high incomes, it may be assumed the Gap Analysis would show strong potential for retail in Wells Avenue. However, given the absence of residential in the park itself, the limited access into the park, poor visibility from Nahanton Street (retail needs high visibility), and internal circulation constraints, a typical gap analysis is not likely to be effective. However, to demonstrate potential demand, a basic gap analysis was performed as highlighted Table 15.

As shown in the following table, not surprisingly, there is significant potential for most types of retail based on the demand within the Primary Trade Area. (For a typical auto-oriented retail area, a 10-minute drive time would be considered the Primary Trade Area in which local retailers would likely attract their customer base.) In particular, there are significant gaps (opportunities) within the Primary Trade Area for food and beverage stores, motor vehicle and parts dealers, building materials and supply stores, gasoline stations, general merchandise, and food service and drinking places. Most of these retail sectors – motor vehicle dealers, general merchandise, gas stations, and food and beverage stores – are regional in nature and typically look to locate adjacent to highway infrastructure or existing retail concentrations with high

[1] A retail gap analysis looks at the overall demand for retail goods and services within a designated trade area based on the spending potential of households (demand), and the actual sales for those goods and services within the market area (supply). The difference between the demand and supply is the retail "gap". When the demand exceeds the supply, there is "leakage," meaning 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 goods 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.

visibility and easy access. As noted earlier, access constraints combined with lack of visibility, would put Wells Avenue at a competitive disadvantage for these types of retailers.

Table 15: Retail Gap

	5-min Drive Hyper-Local Trade Area	10-min Drive Primary Trade Area	15-min Drive Secondary Trade Area
Motor Vehicle & Parts Dealers	-$1,498,838	$197,833,507	$496,954,614
Furniture & Home Furnishings	-$1,015,973	$5,115,012	$39,219,341
Electronics and Appliances Stores	-$5,817,117	$4,482,438	$851,490
Bldg Materials, Garden Equip & Supply	-$10,318,697	$37,539,522	$119,463,021
Food and Beverage Stores	$37,614,037	$254,482,510	$619,470,508
Health & Personal Care Stores	$14,687,686	-$3,141,965	$43,506,612
Gasoline Stations	$19,405,517	$129,374,990	$312,789,837
Clothing & Clothing Accessories Stores	$14,241,419	$51,658,480	$24,403,859
Sporting Goods, Hobby, Book & Music Stores	$461,728	$28,521,532	$61,041,046
General Merchandise	$29,707,018	$210,863,232	$280,677,839
Misc Store Retailers	-$949,475	$27,715,708	$57,208,104
Nonstore Retailers	$11,172,873	$116,900,611	$293,574,931
Food Service & Drinking Places	$4,136,366	$96,968,983	$268,617,487
Full-Service Restaurants	*$9,645,283*	*$44,161,825*	*$125,970,279*
Limited Service Eating Place	*-$246,336*	*$43,819,047*	*$132,085,691*
Special Food Services	*-$6,225,756*	*$2,530,048*	*-$4,535,842*

Source: ESRI Business Analyst

Additionally, several existing and nearby regional retail concentrations would compete for and likely attract these store types, including Newton's Needham Street[2] and Route 9 corridors (Chestnut Hill), and Route 1 in Dedham (Legacy Place). Further, some of the opportunities identified in the gap analysis will likely be absorbed by new retail development proposed as part of Normandy Development's General Dynamics property redevelopment in the Needham Corporate Park, in Waltham (1265Main), and at University Station in Westwood, now under construction.

Table 16: New and Under Construction Retail Development

Project	Location	Retail SF	Status
1265 Main Street	Waltham	160,000	2014
University Station	Westwood	510,000	Under Construction
General Dynamics Redevelopment	Needham	20,000	Planning

Source: MAPC and Boston Business Journal

There is potential to support some retail development in the park. In particular, there is opportunity for more eating and drinking places including full service and limited service establishments. These types of establishments are attractive to office workers, but typically need to attract a local residential customer base to support them during non-office peak periods (e.g. evening and weekends).

Worker Spending Potential

Office workers spend money, and typically prefer to spend it within proximity to their office, particularly food and convenience items. According to a report by the International Council of Shopping Centers (ICSC)[3], office workers on average spend approximately $100 per week in and around their offices during the typical work week. The majority of this is spent on eating and drinking (i.e. breakfast and lunch),

[2] MAPC's Needham Street Market Study, developed for the City of Newton, identified the potential to support additional retail along Needham Street based on the established concentration of establishments and reputation as an amenity rich retail environment.
[3] International Council of Shopping Centers

groceries and convenience goods. Thus, existing spending of park employees may present an opportunity to develop some initial amenity retail.

According to ESRI Business Analyst, there are approximately 2,790 workers within 0.4 radius of 100 Wells Avenue, the majority of which are office workers. As shown in Table 22, assuming that each worker would spend $40 per week on food and convenience goods at future retailers in the park, employees could potentially support anywhere between 4 and 5 total establishments – 3 restaurants (likely limited service and fast casual) and 1-2 small convenience stores.

Locating these establishments near the entrance of the park would be most feasible, as they would maximize visibility to capture employees and other visitors as they enter or leave the park. This location would also be most convenient for nearby residents who would access the area by car.

Table 17: Worker Retail Potential

Local Worker Spending		Eating/Drinking: Potential SF.# of Storefronts			Convenience: Potential SF/#Stores			Total Supportable	
# workers	Total Annual Spending Potential	50% Eating/ Drinking	Total Support-able Square Footage	# of Stores	50% Conven-ience	Total Support-able Square Footage	# of Stores	Total Square Footage	Total # of Stores
2,790	$5,365,800	$2,678,400	7,653	3	$2,678,400	7,440	1 to 2	15,093	4 to 5

Sources: ESRI Business Analyst and MAPC

Assumptions:

- *$40 average spending (40% of weekly total) per employee.*
- *50% of spending on eating & drinking, 50% on convenience goods*

Should additional office development occur, combined with residential, the potential for a small increment of additional retail space could potentially be supported. However, significant retail in the area is highly unlikely.

In summary, based on the gap analysis and office worker retail analysis, the potential for retail exists in and around the Wells Avenue office park. However, given the presence of established retail areas nearby and additional retail coming online in adjacent Needham mixed-use projects, limited auto access in and out of the park, and lack of visibility from Nahanton Street, current retail opportunities are limited to eating and drinking, and convenience retail establishments that would appeal to the existing workers in the park, and potentially to nearby residents. Furthermore, should office employment grow in the park, and residential be introduced, some additional retail could likely be supported.

4. Residential Market Potential

The first step in a residential market demand analysis is to research population and household trends, both of which impact the types of housing units likely to be in demand within a community.

Population

Population in Newton, and in its surrounding communities, has remained relatively stable over the last 10 to 15 years. Despite this stability, as shown in Table 18, the age of Newton's population has changed significantly – it is growing older, with the number of residents 55 and older increasing by 55%. Over the same timeframe, the number of residents between 20 and 54 have decreased nearly 20%, whereas children under 19 have increased.

Table 18: Population Change, Newton and Surrounding Communities

	2000	2013	Change	% Change
Newton	83,829	86,241	2,412	2.9%
Brookline	57,107	58,738	1,631	2.9%
Dedham	23,464	24,906	1,442	6.1%
Needham	28,911	29,240	329	1.1%
Waltham	59,226	61,321	2,095	3.5%
Watertown	32,986	32,352	-634	-1.9%
Wellesley	26,613	28,504	1,891	7.1%
Weston	11,469	11,538	69	0.6%

Source: MAPC

Table 19: Population by Age Over Time: Newton 2000-2013

	2000	2013	Change	% Change
Under 19	21,335	23,188	1,853	8.7%
20 to 34	15,942	14,475	-1,467	-9.2%
35 to 54	26,223	23,584	-2,639	-10.1%
55 to 64	7,689	11,294	2,605	46.9%
65+	12,640	13,700	1,060	8.4%

Source: MAPC

Compared to communities surrounding Newton, the median age of city residents falls about in the middle. Some communities like Waltham and Brookline are considerably younger, whereas more suburban communities like Needham, Dedham and Weston are older. Interestingly, some communities like Waltham and Wellesley are getting younger, but Newton and other more residential suburban communities adjacent to it, are getting older.

Of note, communities that are younger, or are getting younger, tend to have better public transit (e.g. Brookline), or combinations of commuter rail, MBTA bus and shuttle services (e.g. Waltham), connecting workers to job centers.

Table 20: Median Age over Time: Newton and Surrounding Communities, 2000-2013

	2000	2013	Change
Newton	38.7	40.1	3.6%
Brookline	34.5	35.1	1.7%
Dedham	39.6	43.0	8.6%
Needham	40.8	43.1	5.6%
Waltham	34.2	33.5	-2.0%
Wellesley	37.6	37.1	-1.3%
Weston	41.9	44.2	5.5%

Source: US Census, American Community Survey 2009-2013

Households

Understanding household composition, income and other trends is critical to understanding housing market demand. Every household resides in one housing unit, no matter the number of people in that household, and housing unit preferences typically differ based on age and size of the household. Thus, to better understand the future housing needs within a community or study area, understanding the number of existing and projected households, and their characteristics provides insight into the amount and type of housing units that may be needed to meet current and future demand.

Despite the small increase in total households over the last decade (Table 21), MAPC projections indicate a more significant increase in the number of households can be expected over the next 5 to 15 years (Table 22). This trend is not unique to Newton, as increases in total households are projected in each of the surrounding communities. However, Newton's projected increase is lower (by percentage) than other communities, with the exception of Wellesley.

Table 21: Household Change: Newton and Surrounding Communities: 2000-2012

	2000	2013	Change	% Change	2000 Avg HH Size	2013 Avg HH Size
Newton	31,201	31,295	94	0.3%		0.3%
Brookline	25,594	25,403	-191	-0.7%		-0.7%
Dedham	8,654	9,587	933	10.8%		10.8%
Needham	10,612	10,519	-93	-0.9%		-0.9%
Waltham	23,207	23,951	744	3.2%		3.2%
Watertown	14,629	14,159	-470	-3.2%		-3.2%
Wellesley	8,594	8,544	-50	-0.6%		-0.6%
Weston	3,718	3,769	51	1.4%		1.4%

Source: US Census, American Community Survey 2009-2013

Table 22: Household Change: Projected 2010 – 2030: Newton and Surrounding Communities

	2010	2020	2030	Change	Percent
Newton	31,168	32,798	34,409	3,241	10.4%
Brookline	25,092	26,700	28,489	3,397	13.5%
Dedham	9,651	10,665	11,643	1,992	20.6%
Needham	10,341	11,084	12,026	1,685	16.3%
Waltham	23,690	25,420	27,050	3,360	14.2%
Watertown	14,709	15,495	16,678	1,969	13.4%
Wellesley	8,695	9,062	9,369	674	7.8%
Weston	3776	4237	4327	551	14.6%

Source: MAPC Projections, Stronger Region

Understanding the age breakdown of projected new households in Newton is key to attracting companies to Newton who increasingly follow younger talent, and for estimating the type of residential units that will be needed within the community. As shown in Table 23, and based on MAPC projections, over 3,200 additional households are projected in Newton by 2030. All household growth will be in younger and older households. More specifically, households headed by persons 65 and older are projected to increase by nearly 65% (+5,291 households), and those headed by younger persons 20 to 34 are projected to increase by 20% (+693 households). Interestingly, housing unit preferences of these two cohorts are generally aligned. They are more likely to prefer smaller housing units, including multi-family units, than those headed by persons 35 to 65. These latter households, which are projected to decline, are more likely to have children residing at home, and more likely to prefer larger single-family homes.

Table 23: Households by Age: Projected 2010 – 2030: Newton,

	2010	2020	2030	Change 2010-2030	Percent
Under 20	298	309	274	-24	-8%
20-34	3,626	4,177	4,319	693	+20%
35-54	12,321	10,559	10,614	-1,707	-14%
55 to 65	6,625	6,487	5,613	-1,012	-15%
65+	8,298	11,266	13,589	5,291	+64%
TOTAL	*31,168*	*32,798*	*34,409*	*3,241*	*+10.4%*

Source: MAPC Projections, Stronger Region

Household Composition

Looking at household composition, nearly 70% of households are family households and 33% of all households have children under 18 residing at home, higher than the state percent. Additionally, only 25% of households live alone, lower than the State. This may indicate Newton lacks unit types attractive and affordable to smaller households.

Table 24: Household Composition, Newton v. State, 2013

	Newton		State
	Number	Percent	Percent
Family Households (families)	21,546	69%	64%
Families with Children	10,343	33%	28%
Married Couple, No Kids	10,005	32%	27%
Single Parent	1,632	5%	9%
Non-Family Households	9,749	31%	36%
Householder Living Alone	7,857	25%	29%
Living Alone 65+	3,910	12%	11%
Households with one or more 65+	9,466	30%	26%
Average HH Size	2.5	n/a	2.51
Average Family Size	3.03	n/a	3.13

Source: American Community Survey 2009-2013

Housing Stock

The City of Newton's housing stock is primarily comprised of single- and two-family unit structures (78%), considerably higher than other communities in Middlesex County and the State, which offer more multi-family options. For example, other communities within Route 128 with rail transit service, like Brookline for example, have significantly fewer single- and two-family residences (33%) and more options in structures with 10 or more units (40%). In Newton, smaller households looking for multi-family units have fewer options.

Table 25: Units in Structure

	Newton	Middlesex County	Massachusetts
Single Family	61%	55%	57%
Two Family	17%	13%	10%
3-4 Units	5%	9%	11%
5-9 Units	3%	5%	6%
10-19 Units	4%	5%	4%
20 or More Units	11%	13%	10%
Other	<1%	0%	1%

Source: ACS 2013, DP04

Newton's housing stock is considerably older than that of Middlesex County and all of Massachusetts. While a similar percentage of units have been constructed over the last decade, the percentage of older units – those built in 1939 or earlier – is significantly higher. Over 50% of Newton's housing stock was built before 1940, compared to approximately 35% for both the county and state.

Older housing stock can be viewed as both a positive and a negative housing characteristic. Whereas older housing stock may be appealing to households looking for a historic community, others looking for modern amenities like elevators for accessibility may not, and will look elsewhere. Given the increasing number of senior households projected for Newton and the region as a whole, newer more accessible units are likely in demand.

Table 26: Age of Housing Stock

	Newton	Middlesex County	Massachusetts
Built 2010 or later	<1%	<1%	<1%
Built 2000 to 2009	6%	7%	7%
Built 1990 to 1999	3%	7%	7%
Built 1980 to 1989	6%	11%	10%
Built 1970 to 1979	6%	12%	10%
Built 1960 to 1969	6%	10%	11%
Built 1950 to 1959	13%	12%	13%
Built 1940 to 1949	8%	6%	6%
Built 1939 or earlier	52%	35%	36%

Source: ACS 2009-2013, DP04

Tenure

The majority of occupied housing units in Newton are owner occupied, of which 80 percent are single family homes. This is a considerably higher percentage than in both Middlesex County and the State, which both come in at 63% for owner occupancy. Given the high incomes on Newton households, this is not surprising; however it may also point to a market demand for more multifamily housing to appeal to both older households looking to downsize, as well as Millennials (singles and couples) looking to establish an initial residence in Newton. Given the smaller percentage of multi-family rental units in Newton (24%) compared to Middlesex County and the State (both at 32%), more rental options are likely needed.

Table 27: Housing Tenure by Unit Type

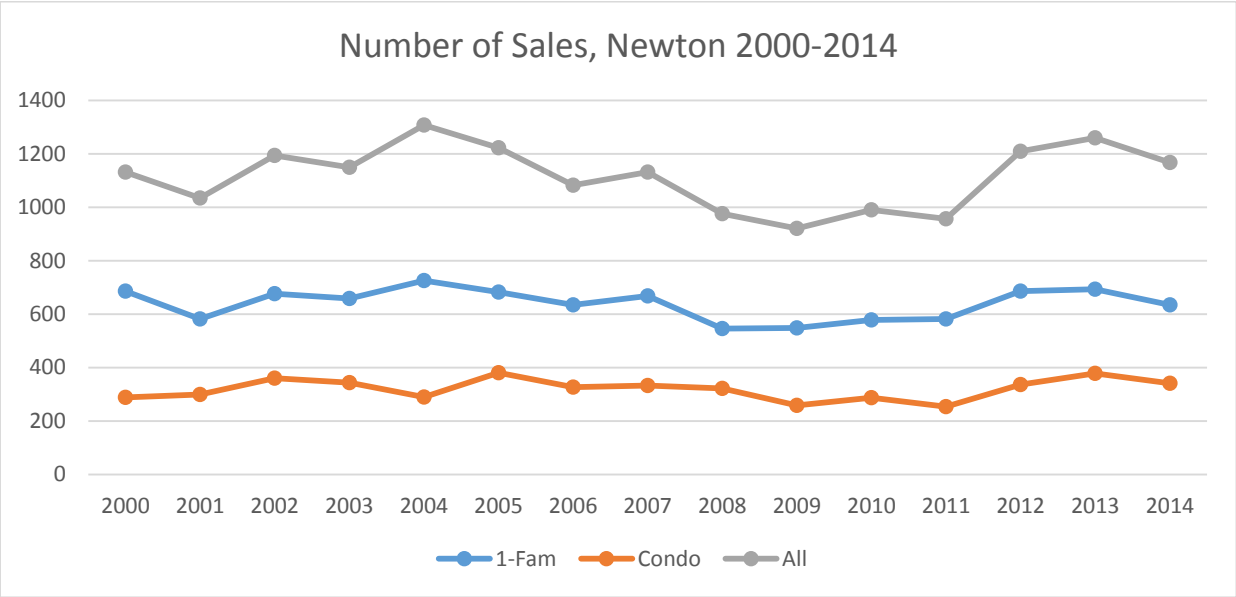
	Newton	Middlesex County	Massachusetts
Owner Occupied	**70%**	**63%**	**63%**
Single Family	*56%*	*51%*	*52%*
Multi-Family	*13%*	*12%*	*10%*
Other	*0%*	*0%*	*1%*
Renter Occupied	**30%**	**37%**	**37%**
Single-Family	*6%*	*5%*	*6%*
Multi-Family	*24%*	*32%*	*32%*
Other	*0%*	*0%*	*0%*

Source: ACS 2013

Housing Sales and Prices

Newton's for-sale housing market is highly competitive. Home sales have historically been strong in the city, and although total sales decreased during recession years, they did not decrease as significantly as in many communities, and have reached near peak levels over the last several years.

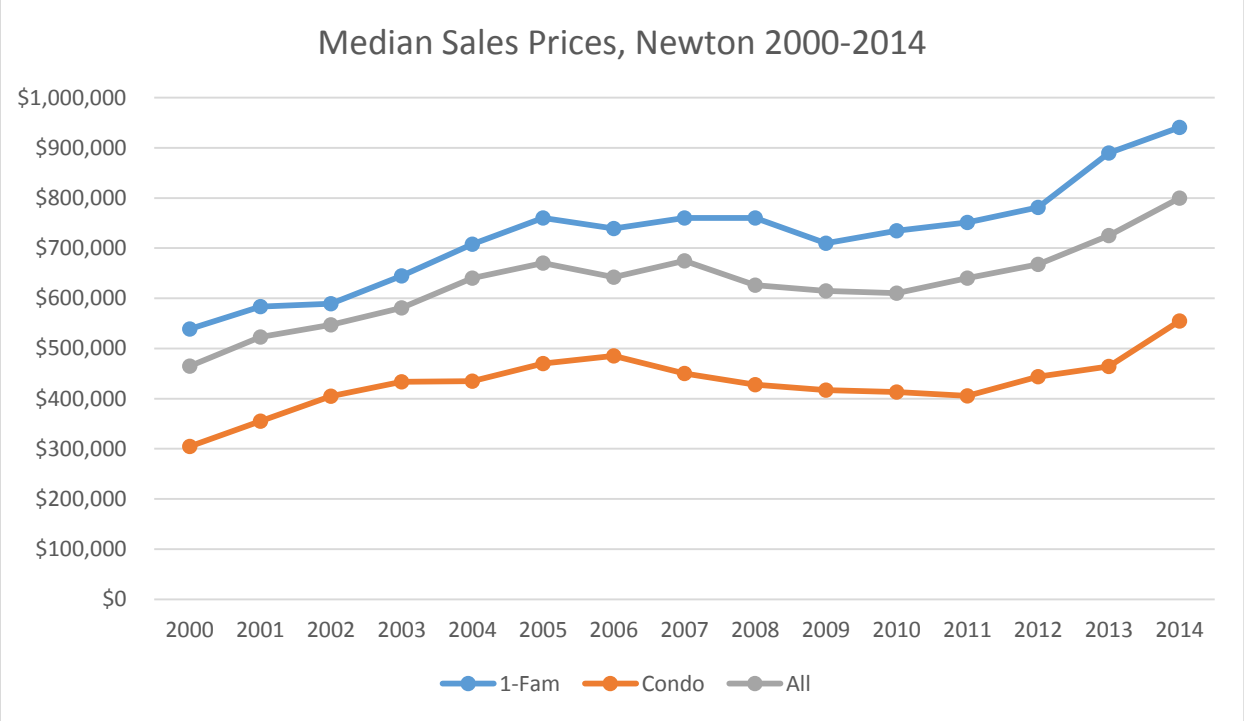
Figure 2: Number of Housing Sales, Newton 2000 – 2014



Source: Warren Group Town Stats, 2015

Sales prices reflect the highly competitive housing market. The median sales price for a housing unit in Newton hit an all-time high of $800,000 in 2014, up 72% since 2000. With a median sales price of $555,000, condominium units offer the more affordable option in Newton – the single family median reached $941,000 in 2014. However, condo median prices increased by a greater percentage since 2000 (+82%) than single family homes (+75%). In summary, demand is strong in Newton, but ownership is out of reach for those not in the highest income brackets. More affordable ownership units – market rate and affordable – are likely needed, including condominiums attractive to growing market segments.

Figure 3: Median Sales Prices – Newton Single Family and Condo Units, 2000-2014



Source: Warren Group Town Stats, 2015

As shown in Table 28, recent sales of multi-family condominiums in Newton within a short drive to Wells Avenue sell below the median condo price city-wide, typically in the $300K - $450K range for a 2-bedroom unit. However, the multi-family inventory in the area is low, and appears to be older - all units recently sold were built before 1990. As one broker said, new inventory that includes amenities such as elevator access, fitness centers, proximity to retail and services, as well as recreation is in high demand.

Table 28: Recent Multi-family Sales Near Wells Avenue

Address	Type	Beds	Bath	Sq Feet	Price	Avg per sf	Yr Built
210 Nahanton St	Condo	1	2	1,168	$399,000	$342	1980
210 Nahanton St	Condo	2	2	2,300	$829,000	$360	1980
210 Nahanton St	Condo	2	2	1,336	$330,000	$247	1980
210 Nahanton St	Condo	2	2	1,553	$518,000	$334	1980
655 Saw Mill Brook Pkwy	Condo	2	2	875	$320,000	$366	1982
655 Saw Mill Brook Pkwy	Condo	2	2	910	$320,000	$352	1982
76 Ober Road	Condo	2	2.5	1,667	$455,000	$273	Rehab
193 Oak Street	Condo	2	2	1,216	$410,000	$337	1988
183 Oak Street	Condo	2	2	1,195	$406,500	$340	1988
78 Ober Road	Condo	1	1	643	$372,000	$579	Rehab

Source: Zillow, Inc.

Discussions with residential brokers suggest that demand for multifamily in the city is strong, but that units are generally expensive. Inventory is "thin" and units on the market sell (or rent) quickly. In particular, the market for 1-bedroom units is particularly strong given limited options. The majority of units and sales are 2-bedrooms. Specifically noted was a need for more 3-bedroom condos.[4]

One broker felt Wells Avenue isn't well suited for condominium units. Wells is seen as a business district and those looking for ownership units typically prefer more of an established neighborhood feel, thus condominiums would be difficult to market and sell at levels required to make projects feasible. Rental would be more likely the market to start in an environment like Wells Ave.

Rental Market Characteristics

As shown in Table 29, compared to Middlesex County, renters in Newton are older than in Middlesex County and they are getting older. In particular, on a percentage basis, there are fewer renters under the age of 35 compared to Middlesex County (30% vs. 37%), and more renters 35 to 44 (24% vs. 20%) and 65 and older (22% vs. 16%). Renters 45 to 64 are comparable.

Further, the demographics of renters is shifting in Newton. In particular, the percentage of younger rental households has declined considerably since 2000, down almost 10%, whereas the percentage of all older households has increased, most notably those over 55.

Table 29: Age of Renters: Newton, Middlesex County

	Newton		Middlesex County	
Age of Renters	**2000**	**2013**	**2000**	**2013**
Under 35	39%	30%	40%	37%
35 to 44 years	23%	24%	23%	20%
45 to 54 years	14%	15%	14%	17%
55 to 64 years	6%	9%	8%	11%
65 and over	19%	22%	16%	16%

Source: US Census and ACS 2009-2013

[4] Demand for 3-bedroom units was also highlighted during research for the Needham Street Market Analysis completed in 2013.

More specifically, when looking at numbers, the total number of rental households actually declined between 2000 and 2013, although minimally (-2 households). Significantly, there were 803 fewer rental households under 35 over the timeframe, and 575 more over the age of 55. Beyond trends showing an increase in senior households, data indicates that younger renters are looking to other communities for rental opportunities more affordable to them.

Table 30: Newton Renters by Age, 2000-2013

Age of Renters	2000	2013	Change	
			#	%
Total Renter Households	2,509	2,508	-2	0%
Under 35	3,665	2,862	-803	-22%
35 to 44 years	2,137	2,282	145	7%
45 to 54 years	1,321	1,407	86	7%
55 to 64 years	587	884	297	51%
65 and over	1,799	2,073	274	15%

Source: US Census and ACS 2009-2013

Existing Rental Units

Brokers and property managers noted that multifamily rental units in the Wells Avenue area and region are in demand and command high rents. This was confirmed through a review of nearby rental complexes that offer amenities like pools, underground parking, and fitness centers attractive to smaller households including Millennials and seniors. As shown in Table 31, one bedroom units at both Charles River Landing (approximately ½-mile from Wells Avenue in an office park environment) currently rent for more than $2,500, and two-bedroom units rent for over $3,700. Avalon Newton Highlands on Needham Street commands similar rents; but offers 3-bedroom units starting at $3,400. And while similar properties in Dedham near the Legacy Place lifestyle center command lower rents, they are still quite high.

Vacancy rates (units available to rent for the next month) at all developments were consistently low, with approximately 5% to 7% of units available for rent at any given time - units typically rent as soon as they come on market. This points to unmet demand in the area.

Table 31: Rental Complexes and Rents

Property	Location	Units	1BR Rent	2BR Rent	3BR Rent	Year Built
Charles River Landing	Needham	350	$2,570 and up	$3,720 and up	None	2008
Avalon Newton Highlands	Newton	294	$2,640 and up	$2,605 and up	$3,390 and up	2002
Avalon Bay Dedham	Dedham	285	$1,850 and up	$2,260 and up	$2,850 and up	2007
Jefferson at Dedham	Dedham	300	$1,950 and up	$2,200 and up	None	2008

Source: MAPC via Property Manager Interviews

A range of household types reside in these developments. Avalon Newton Highlands noted that while there are college and graduate school students (from Mt. Ida, Babson and BC), there are also many seniors ("downsizers"), medical professionals, and many young families. In Dedham, the majority of tenants are young professionals and seniors, but few families with children. No tenant information was provided for Charles River Landing.

At all developments, property managers cited proximity to retail and amenities as the top draw for tenants, with access to Route 128 jobs second. For Needham and Newton properties, Needham Street shopping was a big draw, and for Dedham properties, Legacy Place was the draw. Only Avalon Newton Highlands said proximity to the Green Line/public transportation was a key driver.

Building Permits

Building permit data supports the predominant single-family character of Newton, as well as the overall absence of new multifamily options, particularly since the recession. According to US Census Building Permit data for Newton, approximately 1,116 residential building permits were issued between 2001 and 2014. The overwhelming majority of these permits (88%) were for single family homes, 5% for 2-family residences, less than 1% for 3- to 4- family, and 6% for multifamily (structures with 5 or more units).

Looking at total units permitted; however, tells a slightly different story. (See Table 32.) Although a far smaller percentage of permits were issued for multifamily (5 or more units), the 742 units represent 40% of total units permitted over the timeframe. However, as shown in Table 33, all multifamily permits were issued prior to the recession, and few were for large projects. For example, in 2002, 370 units were permitted, of which approximately 300 were at Avalon Newton Highlands. The only other 100+ unit project permitted over the last 15 years was in 2006 (180 units). Further, the overall lack of new multifamily inventory is likely driving the high demand and resulting low inventory of multifamily within Newton.

Table 32: Building Permits Issued, Newton 2000-2014

Units	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1-family	51	82	81	81	79	66	67	40	34	82	74	68	123	55
2-family	11	11	1	1	0	0	2	15	11	3	0	0	0	6
3-4 family	0	0	0	0	0	0	0	0	0	2	0	0	0	0
5 or more	62	3	2	1	0	1	1	0	0	0	0	0	0	0
Totals	124	96	84	83	79	67	70	55	45	87	74	68	123	61

Source: US Census Building Permits Survey

Table 33: Total Units Permitted, Newton 2000-2014

Units	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1-family	51	82	81	81	79	66	67	40	34	82	74	68	123	55
2-family	22	22	2	2	2	0	4	30	22	6	0	0	0	6
3-4 family	0	0	0	0	0	0	0	0	0	8	0	0	0	0
5 or more	73	370	65	65	10	180	44	0	0	0	0	0	0	0
Totals	146	474	148	148	93	246	115	70	56	96	74	68	123	61

Source: US Census Building Permits Survey

(Important to note, permit data does not reflect net gain in units - no matter the type - as permits counted by the US Census include tear downs, and do not account for condo conversions.)

Recent Development and Pipeline Projects

Online research combined with a review of MAPC's regional development database shows that several residential projects are proposed within Newton and surrounding communities. In total, just over 2,250 units are either under construction, planned or proposed in larger multifamily complexes within the communities (several smaller multifamily developments were also identified). With over 8,300 additional households projected in Newton and surrounding communities by 2020, demand for new housing is strong – there aren't enough units planned, proposed or under construction to accommodate the household growth.

The majority of these projects have been proposed in mixed-use, and/or transit-oriented developments. Moody and Main in Waltham is located in the city's downtown, whereas Station at Riverside and University Station are both located along public transit. Both the Chestnut Hill Square residential, and General Dynamics Redevelopment are later phases of larger mixed-use projects, and follow the retail and office development portion. Only the Needham Mews project is not tied to mixed-use.

Table 34: Proposed Multi-family Residential Projects

Project	City of Town	Proposed Units	Status
General Dynamics Redevelopment	Needham	400	Planning
Station at Riverside	Newton	240	Planning
Chestnut Hill Square	Newton	91	Planning
Wells Avenue	Newton	334	Proposed
University Station	Westwood	650	Construction
Needham Mews	Needham	268	Planning
Moody and Main	Waltham	269	Construction
TOTAL PROPOSED		2,252	

Source: MAPC Development Database

Residential Demand in Newton

To estimate future residential demand in Newton, MAPC used its Stronger Region projections to identify a rough number of supportable housing units in Newton. By 2020, Newton is projected to have over 1,600 additional households. As mentioned previously, all growth will be in households headed by persons 20-34 and those over 65. Both of these cohorts are more likely to prefer smaller housing units with amenities (including accessibility features for senior populations).

Table 35: Households by Age: Projected 2010 – 2030: Newton,

	2010	2020	Change 2010-2020	Percent
Under 20	298	309	11	4%
20-34	3,626	4,176	550	15%
35-54	12,321	10,560	-1,761	-14%
55 to 65	6,625	6,4,88	-137	-2%
65+	8,298	12,266	3,968	48%
TOTAL	*31,168*	*33,799*	1,631	5%

Source: MAPC

Based on our analysis, market demand could potentially support at a minimum 650 new multifamily units. This is a conservative estimate based on future Newton demand reflecting current housing occupancy in the city (approximately 40% of projected additional households would reside in multifamily structures), nor does it include potential capture of household growth in surrounding communities most likely to reside in multifamily units.

Based on trends among younger and senior households – preference for smaller, often multifamily units – new multifamily unit demand by tenure may be larger than current inventories suggest. For example, should occupancy reach 60% multifamily for net new households only, 980 multifamily units could potentially be supported based on Newton household projections.

(Looking out between 2020 and 2030, based on the same assumptions continuing, the market could potentially support an additional 240 to 365 multifamily units.)

Table 36: Estimated Multifamily Unit Demand, Newton 2020 and 2030

	2012	2020 SR	Change 2010-2020	2030 SR	Change 2020-2030
Households	**31,168**	**32,798**	**1,630**	**34,409**	**609**
Multifamily Capture (40%)	***n/a***	***n/a***	***650***	***n/a***	***244***
Multifamily Capture (60%)	***n/a***	***n/a***	***980***	***n/a***	***364***

Source: MAPC

In summary, based on this analysis, Newton could potentially support between 650 and 980 multifamily units by 2020, and even more by 2030. Given current market conditions, new for-sale or rental construction would likely be feasible based on the high for-sale median condo prices, as well as the high rents at nearby amenity-rich residential properties in Newton, Needham and beyond. (A feasibility analysis was not conducted as part of this study.)

Given housing preference trends of younger and older households, the review of literature, and input from brokers, those most interested in living in smaller units prefer to reside in walkable, amenity-rich, mixed use environments with access to frequent and reliable transit and/or alternatives to the automobile (e.g. bike facilities including dedicated lanes, secure parking, etc.). Thus, multifamily development should prioritize areas that offer these attributes. For example, a recent study by the City of Newton and MAPC for the Needham Street corridor, identified demand for significant mixed-use residential based both on residential demand city-wide, but also on the proximity to (and a proposed multi-use path to) the MBTA Newton Highland Green Line station, local MBTA bus service, as well as retail and dining amenities.

However, Wells Avenue Office Park would benefit from a more diverse mix of uses, including residential. Thus given market support for it, multifamily residential should be included in the future to maximize the overall value and competitive positioning of the office park. However, given that Wells Avenue currently lacks the pedestrian-friendly layout and many amenities (e.g. retail, dining, and transit) that attract people to mixed-use environments, incremental changes that incorporate best practices for creating a mixed-use environment as described in the literature review should be encouraged.

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