

MEMORANDUM

DATE: May 3, 2019

TO: Honorable Newton City Councilors

FROM: Barney Heath, Director, Department of Planning and Development
James Freas, Deputy Director of Planning
Shubee Sikka, Urban Designer

RE: **Riverside Vision Plan**

CC: Planning & Development Board
Jonathan Yeo, Chief Operating Officer

Riverside is an important site for the City and the region. The area has been and is currently subject of private development efforts. The City of Newton, led by the Planning and Development Department, with the assistance of the planning consulting firm, Civic Moxie, engaged the broader community in winter-spring 2019 in informing the development of a vision plan for the Riverside site.

The goal is for the Vision Plan to be used as a reference to support decision-making for the Riverside site. The intent is for the Vision plan to provide the City with guidance regarding the mix and types of land uses, physical and social connections to the adjacent neighborhoods and the city as a whole, and other best practice design and sustainability standards for desirable and beneficial development. The Vision Plan is organized into five sections:

- Section 1 – Introduction
- Section 2 – Background
- Section 3 – Getting to the Vision
- Section 4 – The Vision Principles
- Section 5 – Putting the Plan to Use

Please go to the webpage below for more information and a digital copy of the Vision Plan:
www.newtonma.gov/riversidevision

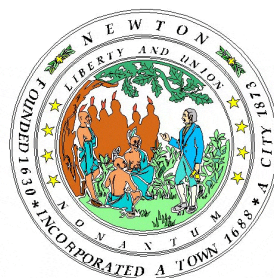


RIVERSIDE

Vision Plan

May 2019

CivicMoxie
experts in place



Acknowledgements

The City of Newton would like to thank the many community members who attended our vision planning events and provided their input through the Newton Riverside Visioning Process website throughout the visioning process.

Stakeholders

Joshua Krintzman, Ward 4 Councilor-At-Large
 Leonard J. Gentile, Ward 4 Councilor-At-Large
 Christopher J. Markiewicz, Ward 4 Councilor
 Lower Falls Improvement Association
 MassDOT/MBTA
 Auburndale Neighborhood Association
 Riverside Greenway Working Group
 Livable Newton

Newton Villages Alliance
 Green Newton
 Newton-Needham Regional Chamber
 Planning & Development Board
 Town of Weston
 Town of Wellesley
 Mark Development

City of Newton

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 Barney Heath, Director of Planning and Community Development
 James Freas, Deputy Director of Planning
 Shubee Sikka, Urban Designer/Project Manager
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 Marshall DeGarmo
 Michael Rosenberg

Urban Focus, LLC

Alexandra Stroud, Principal

WILLIAMS ELEMENTARY SCHOOL

Thanks are given to Williams Elementary School for hosting two community meetings.

LASELL COLLEGE

Thanks are given to Lasell College for hosting a community meeting.

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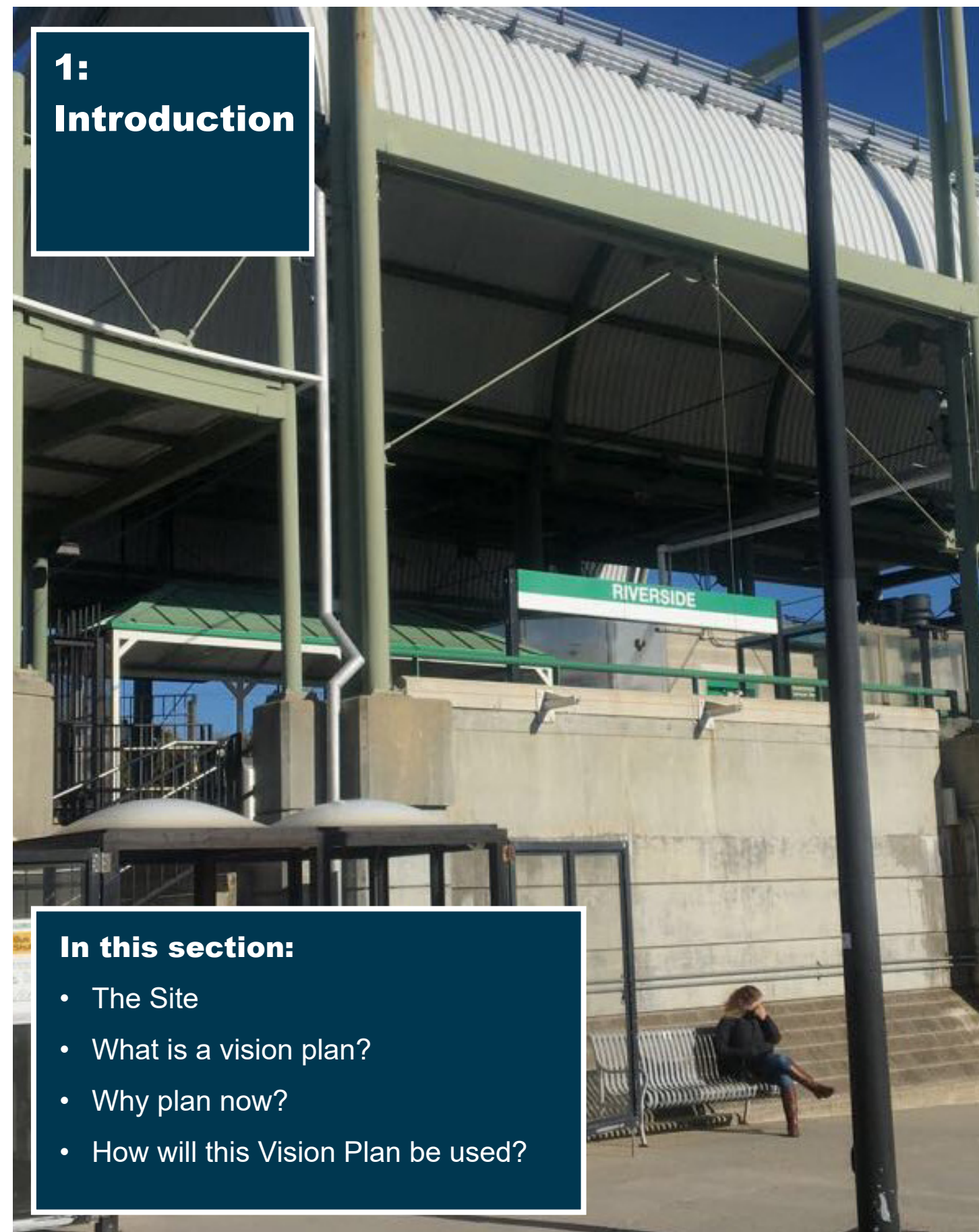
APPENDIX A

(Separate document)

1: Introduction

In this section:

- The Site
- What is a vision plan?
- Why plan now?
- How will this Vision Plan be used?



The Site

The Riverside site is an MBTA-owned parcel of land that is located at the end of the Green Line “D” Branch and at the interchange of I-95/Rte. 128 and I-90/Mass Pike. At approximately 14 acres, the site is a highly visible and accessible transit-oriented development parcel and has been highlighted as a prime economic development opportunity for Newton. In addition to being adjacent to major transportation infrastructure, the site sits between two predominantly residential Newton villages, Lower Falls and Auburndale, making the decisions surrounding development, transportation, and uses at Riverside of particular importance as the City balances overall goals with the local residential context.

What is a vision plan?

A vision plan is a guide to assist future decision-making regarding preservation and enhancements to a specific area in the context of nearby community needs and desires and citywide policies and goals.

Specifically, the Riverside visioning process by the City of Newton's Planning Department and its consultant team, led by CivicMoxie, has resulted in a vision plan that sets out principles for the future of the Riverside site. Community input has been reviewed along with a study of existing conditions, planning and design best practices, and the current real estate market to create a vision plan that helps the City review development proposals and better integrate the site into the greater community, and address citywide goals.

Why plan now?

The Riverside site is currently the subject of private development efforts. While the City is encouraged to see interest at this location after many years and would like to see improvements, economic development, and housing at this site, the City understands that there continue to be diverse perspectives on how and what type of development might best occur.

The Riverside site is important to all of Newton, and the visioning process has focused on what characteristics and components would be needed to make not just a suitable development but an advantageous one for Lower Falls and Auburndale as well as the entire city. The City opened the visioning process with the hypothesis that the existing parking lot at the Riverside site is not the best it can be, nor the highest and best use of the site, and is optimistic that improvements to the site can provide many more benefits to the community and the city. This Vision Plan builds upon the past community efforts with an eye to the future.

How will this Vision Plan be used?

The Planning Department will provide the *Riverside Vision Plan* to the City Council at the culmination of the planning process at the beginning of May 2019. The goal is for the Vision Plan to be used as a reference to guide decision-making for the Riverside site, understanding that a new development proposal for the site would require a Special Permit that includes extensive review. The intent is for the Vision Plan to provide the City with direction regarding the mix and types of land uses, physical and social connections to the adjacent neighborhoods and the city as a whole, and other best practice design and sustainability standards for desirable and beneficial development.

Analyses and studies specific to a developer's proposal will be reviewed by the City with additional requests for further study or assessments to be requested during the Special Permit process and not as part of the Vision Plan. (See following Anticipated Riverside Special Permit process diagram.)

What is in this Vision Plan?

This Vision Plan is organized into four sections:

1 - Introduction

- The Site
- What is a vision plan?
- Why plan now?
- How will this Vision Plan be used?
- What is in this Vision Plan?

2 - Background

- History
- Past Site Planning
- A Changing World

3 - Getting to the Vision

- Community Input
- Methods
- What we heard
- The Larger Context

4 - The Vision Principles

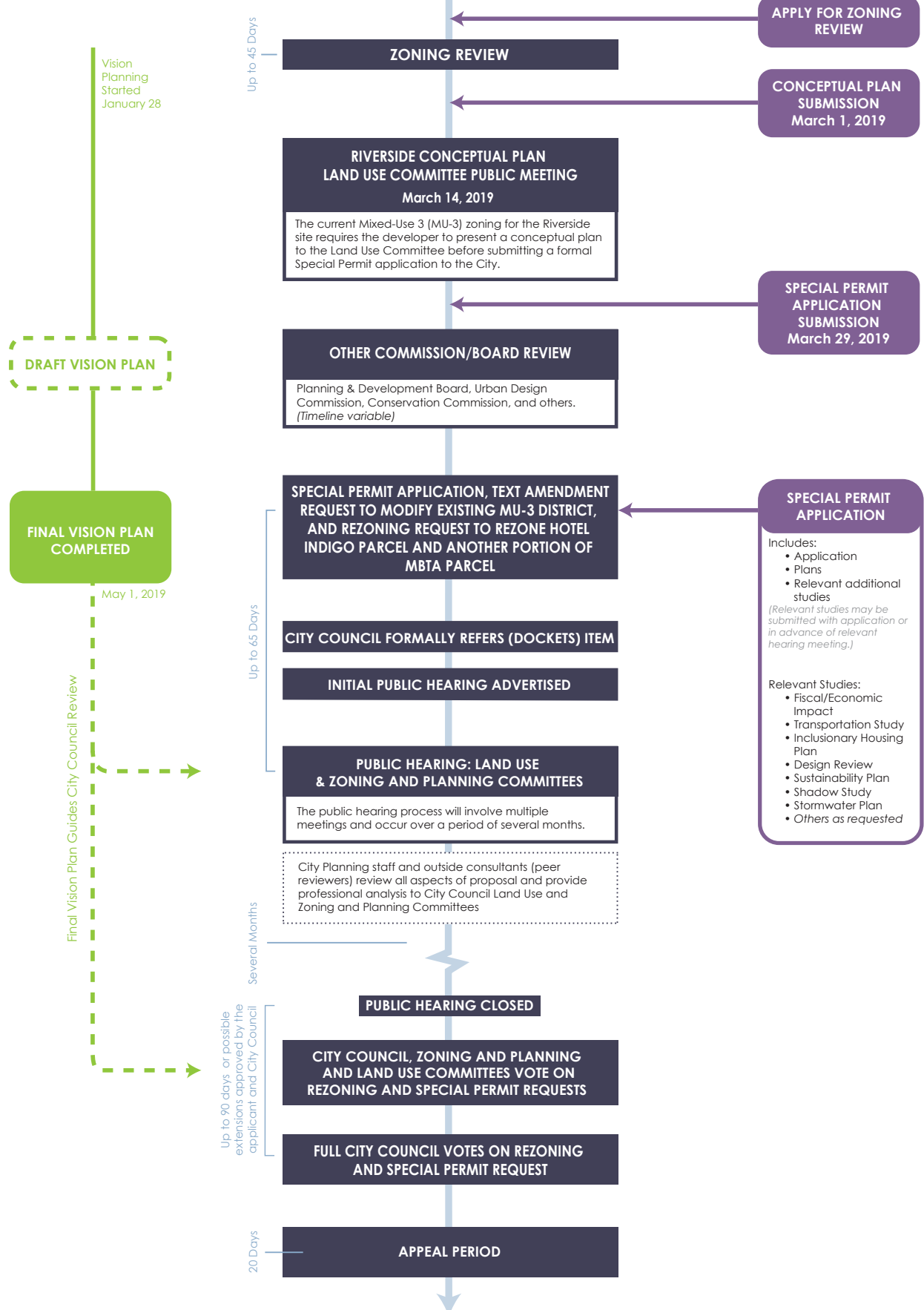
- Newton Community Connections (C)
- Housing for Newton (H)
- Model for Sustainability (S)
- Quality Design (D)
- Robust Newton Economy (E)
- Transportation Hub (T)

5 - Putting the Plan to Use

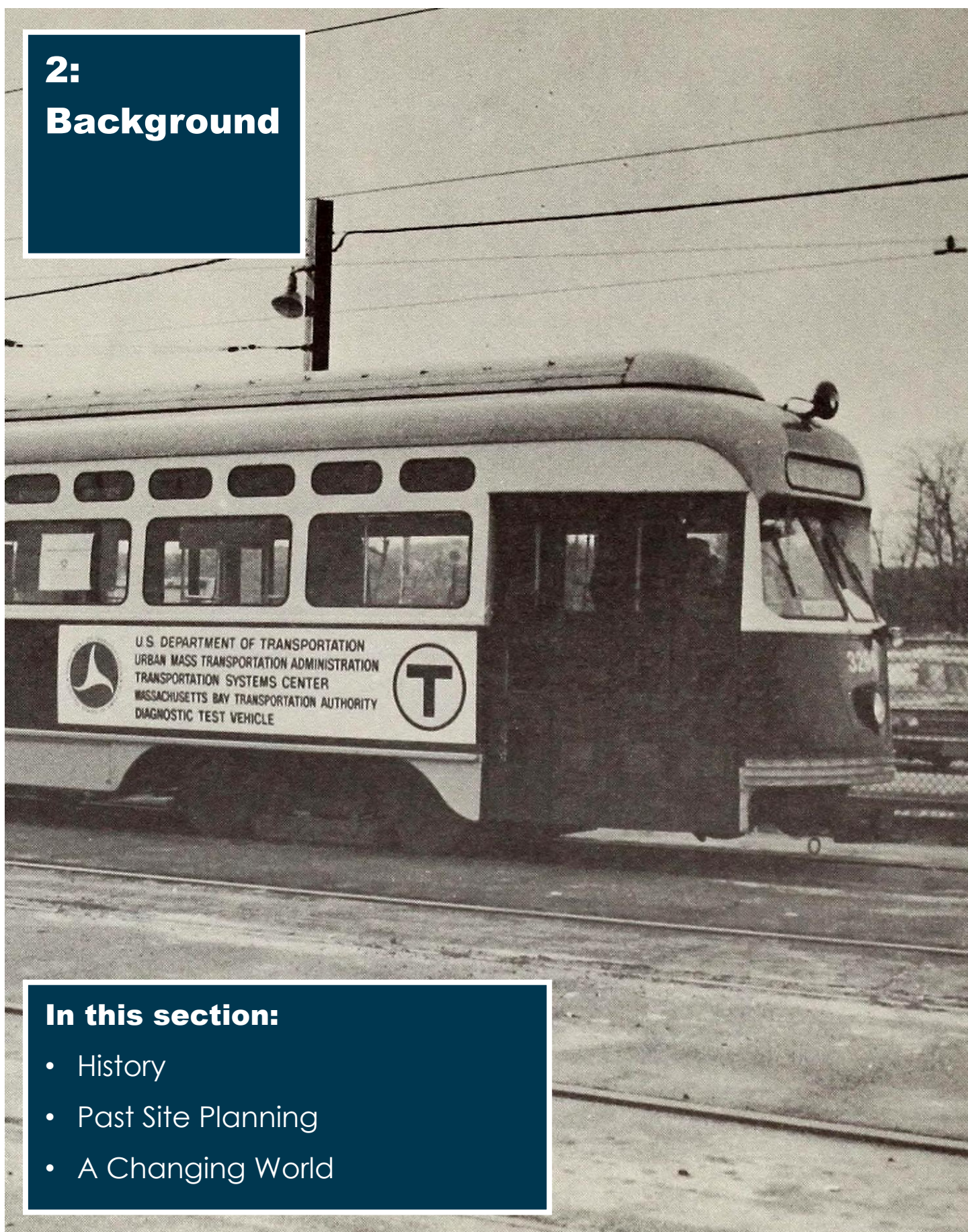
- A Guide for Riverside
- Next Steps

ANTICIPATED RIVERSIDE SPECIAL PERMIT PROCESS

VISION PLANNING PROCESS



2: Background



In this section:

- History
- Past Site Planning
- A Changing World

History

The Riverside site can be better understood when taken in context with the development of the regional rail network and the related settlement patterns in Newton and, specifically, the neighborhoods of Lower Falls and Auburndale. The histories of both villages are closely tied to the Charles River as well as the expansion of the railroad. Auburndale is a “railroad village,” as the opening of the station there prompted nearby subdivisions and development.¹ Although the Riverside station was not relocated to the current site until 1959, the preceding history is certainly relevant and worth noting as aspects are important to provide context to recommendations listed in this plan and potential future uses on site.

Newton

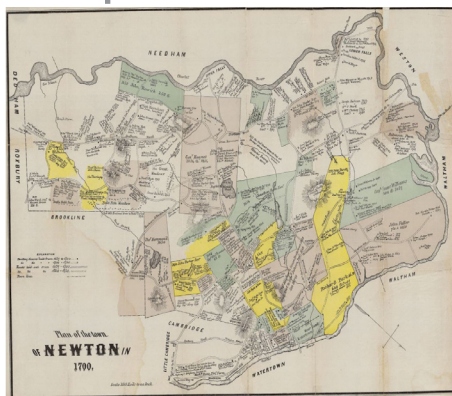
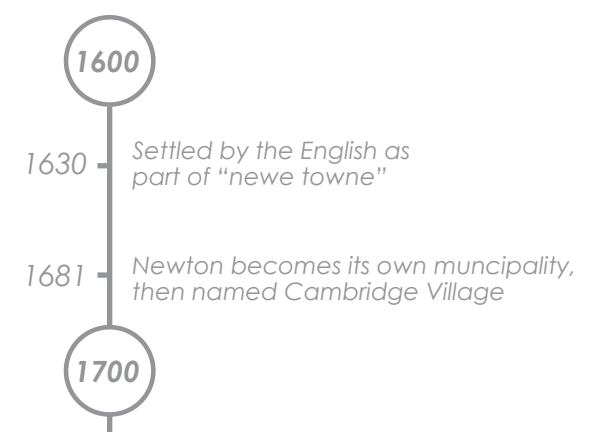
Newton was first settled by the English in 1630 as part of Cambridge, which was then known as “the newe towne,” and became its own separate municipality in 1681.² The town was called Cambridge Village and then Newtown before the change to its current name of Newton in 1766. Apart from the mills along the Charles River at Upper and Lower Falls, the town remained largely pastoral and woodland until the 1830s, when the Boston and Worcester Railroad reached into West Newton, allowing Bostonians to live outside the city, and establishing Newton as one of America’s earliest commuter suburbs.³

Through the nineteenth century, Newton continued to grow with villages developing around the newly opened railroad stations. The villages along the Boston & Worcester (later the Boston & Albany) line are described in *Newton Massachusetts 1688-1988*:

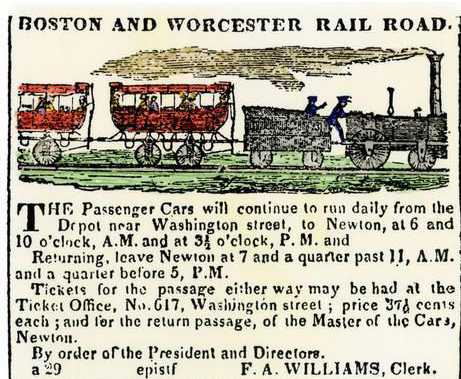
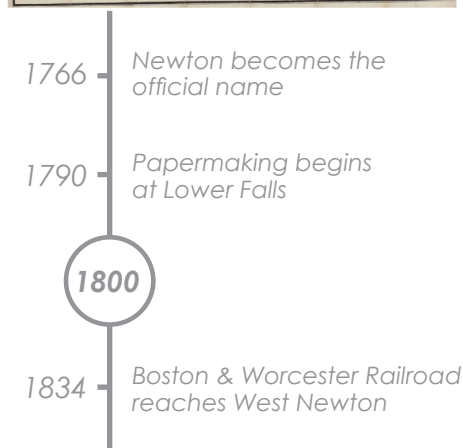
¹ *Newton Massachusetts 1688-1988*, p. 66.

² *Historic Newton*, <http://www.newtonma.gov/gov/historic/research/history>

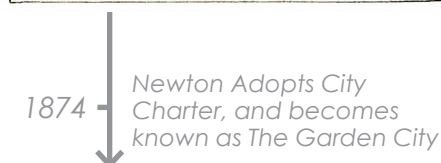
³ *Historic Newton, Rivers, Roads & Rails: Mapping Newton* (2001) www.newtonma.gov/documents/historic/Mapping_Newton_PDF.pdf



A plan of Newton in 1700



An advertisement for the Boston & Worcester Railroad appeared in the newspapers in 1834



"With few exceptions, the new houses were close to railroad depots, on land newly subdivided into building lots, first in established villages of Newton Corner and West Newton, and then in what became Auburndale and Newtonville."

(p. 37)

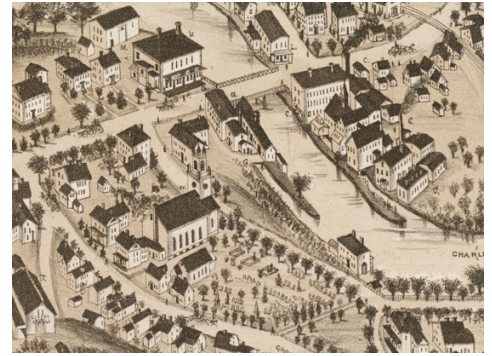
Before the arrival of its first railroad, Newton had five established villages and just a few more than 400 houses; this number grew quickly as the town became more accessible and eventually transformed into a mostly residential suburb.⁴ Newton officially became a city in 1874 and soon thereafter the arrival of "the Circuit" line with regular, express service to Boston further fueled development. Today, Newton often refers to itself as a city of villages, with thirteen villages recognized, though this number has been fluid over time.

Lower Falls and Auburndale

Lower Falls and Auburndale are the two villages in closest proximity to the current Riverside site and were profoundly shaped by the railroad. Prior to the 1830s, residents were attracted to both villages primarily by the industry at Lower Falls and agriculture in Auburndale. Lower Falls was built around the Charles River and its water power, which allowed industry to take shape, and through the years included a bloomery producing iron ore from bog ore, a sawmill, and the chief industry of papermaking, which lasted until the 1870s.

This area became known as a recreational destination after Norumbega Park and the Riverside Recreation Area opened in 1897 in Auburndale.⁵ Using the wide median along Commonwealth Avenue, the Middlesex and Boston Street Railway brought visitors to enjoy canoeing, picnicking, theater-going, and more. It is said that thousands of canoes would be afloat concurrently in this section of the river, known as the "Lakes District" of the Charles, between Newton,

*Bird's-eye view
map of Newton
Lower Falls in
1880*



The Circuit Railroad opens 1886

1900

*Riverside Station
and lines in the
early 1900s*



*A postcard from
Norumbega Park
in 1918*



*A view of
Auburndale
taken from an
airplane in 1928*



⁴Newton Massachusetts 1688-1988, p. 37.

⁵Historic Newton, <http://www.newtonma.gov/gov/historic/research/history>



*7:55 express train
leaving Riverside
Station in 1933*

Waltham, and Weston.⁶ Both the neighborhoods of Lower Falls and Auburndale have always been closely tied to the Charles River and, today sections are recognized as historic districts by the National Register of Historic Places.

Riverside Station

A Riverside railroad depot has existed since the mid-1800s when the Boston & Worcester Railroad, and later the Boston & Albany Railroad, passed through West Newton. The original depot was located along this section of rail, what is today the Framingham/Worcester Commuter Rail line, a couple thousand feet northwest of the current station. In 1884, the section of the B&A RR between Riverside and Boston was expanded to four tracks to allow improved service and, by 1886, the Highlands Branch had connected to Riverside via Brookline and Newton Highlands.⁷ This loop became known as "the Circuit" and provided commuter service between Newton and Boston with as many as 49 trains traveling the route on a daily basis.⁸ Passengers no longer had to wait for the "inbound" or "outbound" service and such convenience in local travel brought what *Newton Massachusetts 1688-1988* calls an explosive phase of residential development." (p. 65)

1959

MTA takes over service on today's Green Line D branch



*A trolley leaves
Riverside in 1965*

1974

The "Carhouse" is built to service subway cars



*Riverside depot
in 1988*

1993

Track renovation along the D branch

2000

⁶ NorumbegaPark.com

⁷ *The Rail Lines of Southern New England*, p. 280.

⁸ Historic New England, <https://www.historicnewengland.org/explore/collections-access/capobject/?gusn=171267>

Track and signal
replacement begins

2018

The Riverside station was moved to the current location in 1959, after the Metropolitan Transit Authority (MTA) acquired the rail line from the Boston & Albany RR and authorized the expansion of rapid transit along the Newton Highlands Branch.⁹ Since then, light rail service has operated on this line as the Green Line “D” branch with continuous service from Riverside to downtown Boston. In 1974, the MBTA constructed the “carhouse” on site to service the growing number of subway cars.¹⁰ The current platform and overhead structure were built in 1995, with few changes made to the site within the last 25 years. The MBTA is currently in the process of upgrading and replacing signals along the “D” branch, with further investments planned.

*Riverside MBTA
Station in 2019*



⁹ MBTA, <https://www.mbta.com/history>

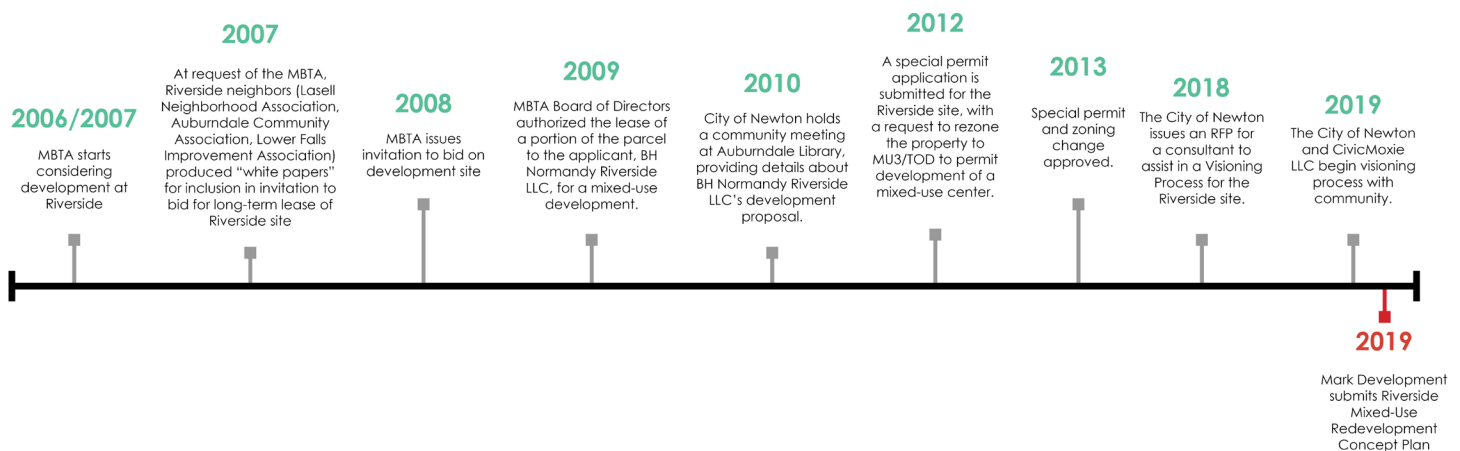
¹⁰ 2008 MBTA Invitation to Bid

Past Site Planning

Site Planning Timeline

The recent planning history of the Riverside site is marked by long-standing attempts at development. As seen on the timeline below, the City of Newton and the MBTA had previously engaged in initial outreach activities in the early 2000's, leading up to a Special Permit application for a mixed-use development by BH Normandy LLC in 2012; the application was ultimately approved in 2013. Development efforts stalled due to financing difficulties surrounding the MBTA parking structure (See Appendix A). In 2018, the City of Newton issued an RFP for a consultant to assist in the visioning process that resulted in the creation of this document, which will help to assist the City in its review of a current development proposal, which was filed on March 29, 2019.

The City, elected officials, and residents all contributed significant time to the project that received the 2013 Special Permit for development on the site. This Vision Plan recognizes that process and outcomes and builds upon that work, acknowledging that approximately ten years have passed since the initial development proposal was made. Since the 2013 permitted project was not financially feasible, that project is not used as a baseline for developing this Vision Plan. For a detailed understanding of the 2013 Special Permit and development proposal for the site, see Appendix A.



Zoning: Mixed Use 3/ Transit-Oriented Development

The Riverside site is zoned as a Mixed Use 3/Transit-Oriented Zoning District.

As defined by the *Newton City Ordinances – Volume II, Chapter 30: Zoning Ordinance (12/31/17) – Section 4.2:*

"The purpose of the Mixed Use 3/Transit-Oriented district is to allow the development of a mixed-use center on a parcel of no less than 9 acres near the terminus of a mass transit rail line, an interstate highway, a scenic road, and the Charles River, commonly referred to as the Riverside MBTA station, pursuant to the City's Comprehensive Plan, particularly the mixed-use centers and economic development elements. This district shall encourage comprehensive design within the site and with its surroundings, integrate complementary uses, provide enhancements to public infrastructure, provide beneficial open spaces, protect neighborhoods from impacts of development, allow sufficient density to make development economically feasible, foster use of alternative modes of transportation, and create a vibrant destination where people can live, work and play."

(p. 4-10)

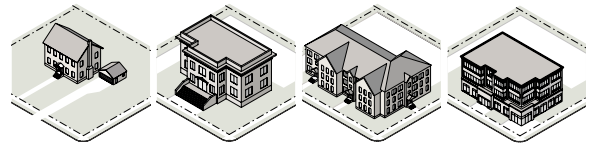
The building and development standards provided in Article 4.2 Mixed Use Districts pertaining to MU3/TOD and 4.2.4 Additional Standards of MU3/TOD were amended during the 2012-2013 Special Permit process to allow desired components of the 2012 BH Normandy's *The Station at Riverside* development proposal.

Newton City Ordinances Volume II

Updated 12-11-18

Newton, Massachusetts Chapter 30: Zoning Ordinance

December 31, 2017



A Changing World: Six Years Later

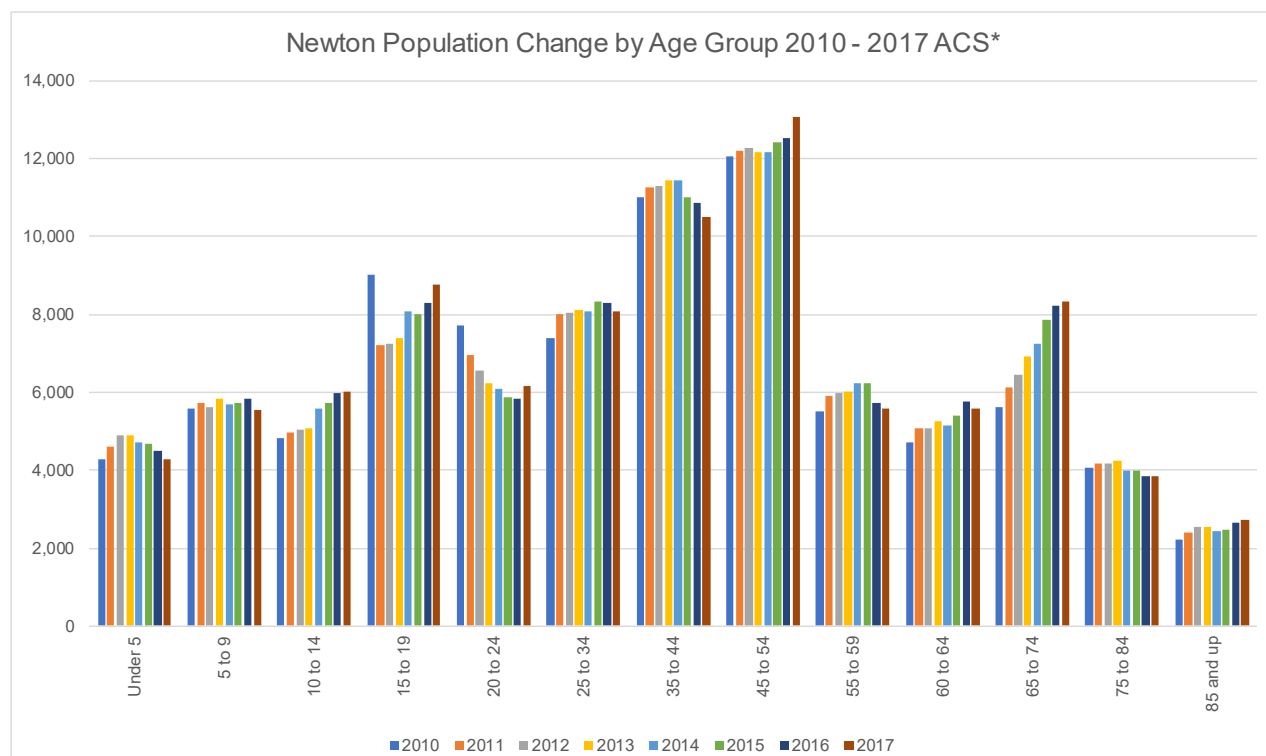
Newton and the Region

Since 2013, the City of Newton and the greater region, have continued to undergo substantial changes in terms of population demographics as well as physical development and economic health. The overall economy has largely recovered following the 2008 recession, bringing new and different commercial growth to Boston, Newton, Cambridge, and the surrounding cities and towns, including ongoing expansion of the technology, medical, and life sciences sectors. Job growth in Newton, the Longwood Medical Area, and Back Bay, accessible on the Green Line from Riverside, has continued over the last 6 years to increase Riverside's draw for commuters from the western suburbs.

According to American Community Survey (ACS) 5-Year Estimates, Newton's population grew approximately 3.9% from 2010 to 2017 with the State growing slightly slower (3.7%) and Middlesex County growing more rapidly (5.3%). Regionally, the Greater Boston metropolitan area (including Boston, Cambridge, Newton, NH-MA) has had even stronger growth, with a population increase of approximately 6.4% from 2010 to 2017.

The percentage of residents 65 years old and over has grown from approximately 15.2% to 16.8% in Newton between 2010 and 2017, with the County also growing from 13.1% to 14.4%, and the State percentage rising from almost 13.8% to 15.5%.

Household incomes have risen across the state, with the ACS 2017 5-Year Estimate for Newton's median household income at \$133,853, compared to \$92,878 in Middlesex County, and \$74,167 for the State.



Source: American Community Survey 5-Year Estimates (2017)

The number of net total housing units has not risen steadily in Newton since 2010, even with the construction of hundreds of new housing units built over the past several years. According to the 2016 *Newton Housing Strategy Report*, “The disparity in total development versus net new units reflects the impact of demolition-rebuild activity, where single units are being demolished and built back as 1-3 units on the same lot,” as well as the fact that not all of the proposed residential developments that have been permitted have been completed.

From the June 2016 *Newton Leads 2040 - A Blueprint to Promote Affordable, Diverse Housing & Economic Growth* study, there are several factors surrounding the housing issue in the city. The median price for a single-family home has risen dramatically from approximately \$715,000 in 2010 to over \$1 million in 2016.

The expensive housing market, along with inadequate public transportation, traffic congestion, and the shortage of workforce candidates, were cited as major concerns for Newton's businesses in a Fall 2018 Newton-Needham Regional Chamber survey.¹¹ The Newton-Needham Regional Chamber of Commerce's members report difficulty finding employees at all ranges (high-wage knowledge workers as well as service workers in hotels and dining establishments), which mirrors the trend across the region. Greg Reibman, President of the Newton-Needham Regional Chamber of Commerce stated, “It's easy to spot the interconnection between the labor shortage, traffic and transportation. If you can't find housing here and if getting here is difficult, you look elsewhere [for work].”¹¹

¹¹ <https://newton.wickedlocal.com/news/20190109/column-newtons-hiring-crisis-weighs-heavily-on-our-local-businesses>

Newton's Residential Housing Market

Newton's housing market is dominated by single family units on very valuable land. Through the ups and downs of the housing market since 2003 Newton has demonstrated extremely strong market desirability and this trend is likely to continue.

Single Family Home Sales Prices

The median sales price for a single family home in Newton has nearly doubled since 2003. Source: The Warren Group

MEDIAN SINGLE FAMILY HOME SELLING PRICE IN THOUSANDS, CITY OF NEWTON 2003-2016



Source: *Newton Leads 2040 - A Blueprint to Promote Affordable, Diverse Housing & Economic Growth*

Trends and Disruptors

In addition to local demographic and job trends, major changes in technology and broader demographic trends have also created a different context for any potential development in the city.

Some of the changes in trends and new disruptors that are present now include:

Aging Population

More than 10,000 baby boomers turn 65 every day, and this will continue for another decade. By 2030, nearly one in five Americans will be over 65 years old. Major employment sectors and considerations in the future include health care, social services, meal delivery, and age-appropriate housing. In Newton this trend is seen in the growing proportion of residents who are older adults and in community requests for appropriate housing choices to allow residents to age in community.

Diversity

During the past 25 years, the U.S. population has become increasingly diverse and the trend will accelerate. Today, more than half of all children born belong to a minority racial and ethnic group.¹² Those regions and companies that embrace diversity will be the most economically successful.

¹² 2015 Census Bureau Report - *Projections of the Size and Composition of the U.S. Population: 2014 to 2060*

Preference for Urban Living

While much of the U.S. population has been flocking to metropolitan areas for decades, the process has accelerated in recent years. Unlike in years past, recent metropolitan area population gains in many regions extend to the urban core. The resurgence of city centers and the continued vitality of metropolitan areas are reshaping the way Americans live. Successfully navigating these changes in activity centers will require a more thoughtful approach to regional collaboration and regional solutions to challenges such as housing and the provision of services.

Young professionals and empty nesters have been increasing the demand for housing choices that support the concept of Smart Growth, that includes a higher concentration of housing within walking distance to public transportation, shopping and dining, work, and open spaces.

Autonomous Vehicles

The approaching era of self-driving cars promises to transform our economy, our communities, and the way we live. Instead of purchasing cars outright, future consumers are likely to rely on car-sharing services, changing their housing needs and locational choices for living.

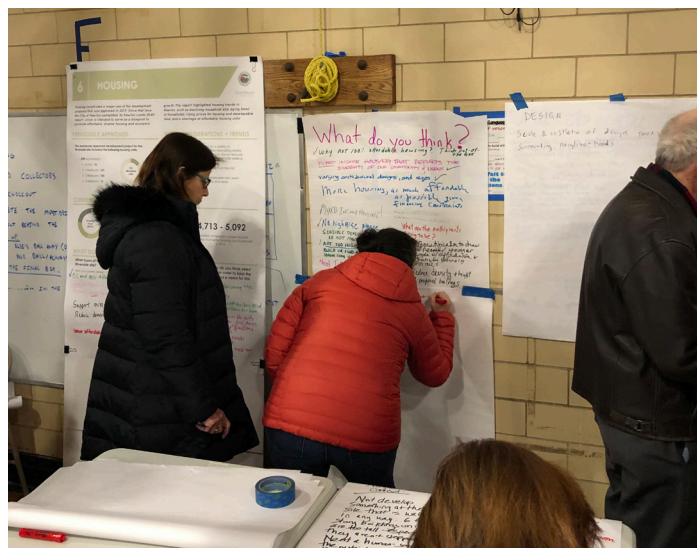
Climate Change

The scientific consensus is that climate change is occurring, largely due to the burning of fossil fuels. Rising sea levels and increased storm activity are likely to threaten a growing number of individuals and the businesses they support. Cities are poised to fill the void left by a withdrawal of the federal commitment to address climate change. In the decades to come, the most successful regions are likely to include communities whose economies are less reliant on a carbon-based economy. Economies fueled by human capital will be more insulated from policies aimed at addressing climate change and are also more likely to produce the innovations necessary to reduce carbon production.

Newton is among many local municipalities and communities that have been proactively working to reduce carbon usage through a variety of wide-ranging policies and programs: from energy and water conservation programs to revised building construction standards to recycling and promoting electric vehicle/bike and carshare use, and many other strategies.

Housing Affordability

While not a new issue, housing affordability continues to be an increasing challenge locally, regionally, and across the nation.



As detailed in the following section - 'Getting to the Vision' - information gathered from public engagement efforts spanning public meetings (above), interviews, and the dedicated Vision Plan website was crucial to identifying trends, disruptors, and providing context to the overall planning process.

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Getting to the Vision

In this section:

- Community Input
- The Larger Context

Community Input

This Vision Plan represents feedback from a diverse group of stakeholders – from residents of Lower Falls and Auburndale, to community groups, to city wide organizations, nonprofits, and neighboring towns. The Plan also incorporates and reflects recent studies and planning documents of the City of Newton regarding housing, economic development, sustainability, and transportation.

As with any community process, there was a wide range of diverging opinions on many matters including the appropriate size and scale of future development at the Riverside site. Most agreed on the need to minimize impacts regarding traffic and congestion and many were concerned about the size and height of buildings in any development. This Vision Plan attempts to address the issues and concerns raised during the planning process while leaving room for evaluation and assessment of specific development proposals so that the City may weigh tradeoffs and specifics as addressed through site programming, design, materials, and massing. The range of comments and opinions is offered in the “What we heard” section of this chapter.

While community input of all types is an essential component of any planning project, it is not the only input into a vision. The planning team also relied on professional analysis, best practices in development issues, and the professional judgment of team members through study of the site and its context. Overall City goals and recommendations from other City planning initiatives were also considered and incorporated.

Methods

A number of engagement methods were used in order to provide the public with various opportunities to contribute their opinion based on their availability and preference. The engagement methods allowed for stakeholders to offer input both online and in-person to allow for the greatest level of access to all members of the community and ensure that concerned residents were given the chance to express their perspective on the potential redevelopment of the Riverside site. At the two public meetings and the project website (hosted by coUrbanize), Newton residents and other stakeholders demonstrated their deep-rooted interest in their community while displaying widely varying opinions on the future of Riverside.

Public Meetings

Two public meetings were conducted during the planning process, with a third scheduled to present the Vision Plan on April 30, 2019. Both initial public meetings helped to generate feedback that was valuable to the planning process, with attendees offering a range of opinions that helped the City's Planning Department and consultant understand the various issues and expectations of the community.

The first public meeting, held at Williams Elementary School on February 10, 2019, took the form of a public open house. Attendees were encouraged to participate at a number of work stations detailing potential visioning topics, and to communicate their hopes and concerns for potential development of the Riverside site. Additionally, the City's Planning Department and consultant presented their initial findings on the existing conditions of the Riverside site, as well as contextual information about nearby neighborhoods, the City of Newton, and the region as a whole.

The second public meeting, held at Lasell College's Winslow Academic Center on March 28, 2019, consisted of a public workshop and discussion of the City and its consultant's analysis of feedback from the first public meeting, additional site analysis, and a full list of draft guiding principles for the Vision Plan. All of the above were presented by the City and its consultants, with a Q&A session following. Individual comment booklets, and stations that allowed attendees additional ways in which to give feedback were provided.

Vision Plan Website

Throughout the visioning process, residents were encouraged to follow project updates and contribute their input on the vision on a dedicated website hosted by coUrbanize: <https://courbanize.com/projects/riverside-visioning>. coUrbanize is a company specializing in online community outreach for planning and development efforts. Through the online platform, users were able to review meeting materials, leave feedback on selected topics, and participate in online community dialogues.

Use of the project website greatly expanded outreach efforts, with 275 comments generated, and over 600 unique visitors, 126 of whom signed up for regular project updates through the online platform.

Written comments were also accepted by the City of Newton via a dedicated email address, and by regular mail.

Interviews

A number of interviews were conducted by the CivicMoxie team during the visioning process. Feedback surrounding the Riverside site and potential development was obtained from the following officials, municipalities, interest groups, and organizations:

- Ward 4 City Councilors
- Lower Falls Improvement Association
- MBTA/MassDOT
- Auburndale Neighborhood Association
- Riverside Greenway Working Group
- Livable Newton
- Newton Villages Alliance
- Green Newton
- Newton-Needham Regional Chamber
- Planning & Development Board
- Town of Weston
- Town of Wellesley
- Transportation Advisory Group
- Mark Development (Developer)

Note: The Town of Waltham did not respond to a request for an interview.



The second public meeting took place at Lasell College's Winslow Academic Center.

What We Heard

As with most planning efforts and development proposals, there was a wide range of opinions on the redevelopment of the Riverside site, especially given the amount of effort around the previously approved Special Permit in 2013. There was largely a consensus that the Riverside site represents a key opportunity for a mixed-use development within the City of Newton, though some stakeholders did express their hope that the site remain as it is today. Amongst others, the following were key topics of debate and discussion amongst the community:

Scale/Context

Concerns were expressed about the best-fit of density and scale for any development on the Riverside site. While some stakeholders preferred to maximize benefits on-site with higher levels of density and a larger scale, many respondents expressed concerns about the effects of a larger-scale, dense development on the existing character of the Auburndale and Lower Falls neighborhoods.

Housing

There was a shared desire to see development at Riverside address housing needs for particular Newton populations. Many identified a need for smaller scale housing for early-career professionals, empty-nesters, and the elderly looking for more accessible options, in addition to scaling back their living arrangements while remaining in the community. Affordability was a major desire for many stakeholders.

Traffic

There was widespread concern about the potential impact of traffic on the neighborhoods adjacent to Riverside, with potential impacts on Grove Street emerging as a key concern of many members of the community. Residents of Lower Falls were particularly concerned about current and future conditions along Grove Street as this serves as a major connection to the rest of Newton. The outward effect of traffic and congestion beyond the immediate area of the site was also a concern.

MBTA Green Line “D” Branch Capacity and Service

While there was general support for a mixed-use, transit-oriented development on the Riverside site, there were concerns about the effects of any such development on the capacity of current MBTA service at Riverside Station. Despite these concerns, there was a general desire to see increased regional transit options originating from the Riverside site, including commuter rail and additional bus service.

Impact on services and schools

Concerns were expressed by a number of community members about the effect of any proposed development on the capacity and resources of Newton's school system, as well as other public services.

Summary

Despite the range of opinions expressed above, the majority of stakeholders did agree that the Riverside site was well-suited for development. General consensus was reached on access to the Charles River and nearby trail networks, access to a variety of housing options, the creation of publicly-accessible open and community spaces, and opportunities for city wide economic benefits generated from office and retail spaces included within a mixed-use development.

In the sections that follow, a range of comments are presented that are specific to each vision category of the plan. These, in addition to the various outreach methods detailed above, helped to inform the planning process by providing insight into the various factors and public opinion surrounding the potential development of the Riverside site, and were crucial to the development of this plan's guiding principles.

The Larger Context

MBTA and Regional Transit

The Riverside site sits at a unique cross-section of local and regional transit corridors, which provide access to nearby employment centers in addition to an array of destinations in downtown Boston. During the visioning process, understanding the role of the Riverside site through the lens of regional transit needs was paramount to ensuring that the vision for the site was informed not only by the local and city wide context, but also within a broader perspective of the region as a whole.

I-95/Rte. 128 Commercial Development

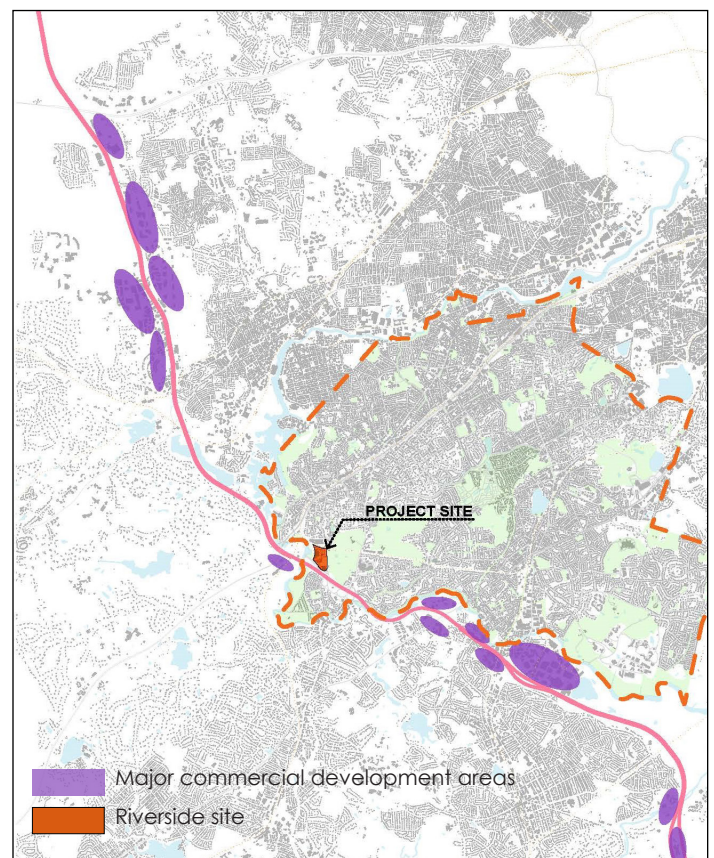
The Riverside site sits along I-95/Rte. 128, one of two beltways that encircle the Boston Metropolitan Region, and intersects with the east-west Mass Pike (I-90) just across the Charles River from Weston.

I-95/Rte. 128 is lined with major employment centers for various tech-based industries – in fact, the presence of these major technological employment hubs has long garnered comparisons to Silicon Valley¹ and has boasted a positive contribution to the local and statewide economy. The Riverside site is the only location along the single mile of Rte. 128 that runs within Newton's city limits that provides potential to establish an employment hub within the City of Newton along this established technology corridor.

¹ <http://journal.c2er.org/2013/05/silicon-valley-and-route-128-the-camelots-of-economic-development/>



Clarks headquarters along I-95/Rte. 128 in Waltham.
Source: BusinessInsider.com



This map illustrates the major commercial development areas along I-95/Rte. 128 in the vicinity of the Riverside site (purple). Riverside (red site) is on the only development site in Newton along I-95/Rte. 128.

MBTA Green Line

The MBTA Station at Riverside is the terminus of the Green Line “D” branch, which provides an east-west connection to multiple stations within Newton, Brookline, and Boston. The Green Line allows for both local and regional transit opportunities, with direct access to employment centers in Newton Centre, Chestnut Hill, Brookline, the Longwood Medical Area, Fenway, Kenmore Square, Back Bay, and Downtown. The station's location at the confluence of Route 128 and the Mass Pike, along with its ample parking spaces, make it the premier park-and-ride option for Boston-bound commuters and visitors from the western part of the state.

The MBTA has made a commitment to a number of improvements to the Green Line, in addition to improvements specific to the “D” Branch. These are discussed further on page 105.

MBTA Commuter Rail

The MBTA is undergoing its own visioning process known as Rail Vision, which is exploring strategies to improve its commuter rail network that services the Boston metropolitan area. The MBTA's Rail Vision will “identify cost-effective strategies to transform the existing Commuter Rail system into one that better supports improved mobility and economic competitiveness in the Greater Boston region.”² The Auburndale commuter rail station is located roughly a half mile north of the site. The alternatives presented by Rail Vision and their relationship to the Riverside site are discussed in more detail on page 107.

Future Improvements

The following improvements to the MBTA Green Line are included and described within this vision plan in the Transportation Vision Principles:

- Track and Signal improvements (Fall 2019)
- Green Line Track and Signal Replacements (2018-2020)
- Green Line Extension (GLX) (2014-2021)



The MBTA Rail Vision visioning process is exploring strategies to improve the MBTA Commuter Rail network.

Source: MBTA

² <https://www.mbta.com/projects/rail-vision>

4

**Vision
Principles****In this section:**

- Newton Community Connections (C)
- Housing for Newton (H)
- Model for Sustainability (S)
- Quality Design (D)
- Robust Newton Economy (E)
- Transportation Hub (T)

NEWTON COMMUNITY CONNECTIONS 	Code	Principle
	C1	Provide a variety of usable public open spaces
	C2	Energize the site with vibrant ground-floor retail, art, and activity
	C3	Include dedicated community space with active management and oversight
	C4	Provide activities and businesses for all ages
HOUSING FOR NEWTON 	Code	Principle
	H1	Help address Newton's current and shifting housing needs
	H2	Provide a significant number of permanently affordable housing units
	H3	Prepare for implications of housing on all City services
MODEL FOR SUSTAINABILITY 	Code	Principle
	S1	Provide options for residents to live low-carbon lifestyles
	S2	Prioritize energy-efficient building principles
	S3	Protect and improve the Charles River through site design
	S4	Improve Newton's climate resiliency
	S5	Reinforce connections to nature
QUALITY DESIGN 	Code	Principle
	D1	Provide an appropriate mix of uses and sufficient density to support a great, vibrant place
	D2	Utilize existing site topography and landscaping for creative and contextual site planning
	D3	Require high-quality architectural and urban design
	D4	Highlight the Riverside MBTA station
	D5	Embody the Garden City through street-side landscape design within the site and along Grove Street
	D6	Celebrate the Charles River and recreation opportunities
	D7	Evaluate development at a human-level to understand human-scale experiences
ROBUST NEWTON ECONOMY 	Code	Principle
	E1	Pursue best fit of local retail and services
	E2	Provide an array of commercial space types
	E3	Support new and existing locally-owned businesses
	E4	Ensure development supplies fiscal benefit to the City
TRANSPORTATION HUB 	Code	Principle
	T1	Advocate for improvements to the Green Line and Riverside MBTA Station to support increased ridership
	T2	Support potential expansion or connection of the commuter rail to Riverside
	T3	Enhance neighbor experience and safety along Grove Street
	T4	Link to and expand the trail network
	T5	Improve and manage traffic flow to and from Riverside
	T6	Maximize efficiency of on-site parking and minimize neighborhood parking overflow
	T7	Prepare for future transportation trends and technology



Newton Community Connections (C)

Vision: *The Riverside site should create social connections and physical spaces that benefit people living and working on site, as well as residents and workers of the nearby neighborhoods and all of Newton.*

Overview

Any development at Riverside must take into account the greater Newton community and the values that it espouses. As noted on the City website, “Newton is the sum of its parts. Its villages and neighborhoods came into being at different times and for different reasons: some developed at crossroads, some at mill sites, and some owe their origin to the railroads;” however, they all share certain characteristics and elements that make them essentially Newton.¹ Whether or not Riverside is eventually considered its own village, the site should embody the standards and values shared by the City and its community even if the development pattern is different from other Newton villages.

Community life is strong in Newton and one of the reasons why the city has frequently been voted as one of the best communities to live in both in Massachusetts and nationwide.² The development at Riverside should promote a safe, healthy environment that builds community and enables social interactions by emulating the opportunities for community connections in Lower Falls, Auburndale, and all of Newton’s villages. It can do so by incorporating human-scale design attributes, providing community amenities and services, and integrating high-quality public spaces that allow a wide-range of uses (all of which are described in the principles of this Vision Plan). There should be designated community space – both indoor and outdoor – where gatherings can occur and residents can interact with other members of the Newton community. Taken together, these elements can help shape a strong community life at Riverside that leads to greater social resilience and connections with the greater Newton community.

Guiding Principles

C1

Provide a variety of usable public open spaces

C2

Energize the site with vibrant ground-floor retail, art, and activity

C3

Include dedicated community space with active management and oversight

C4

Provide activities and businesses for all ages

¹ http://www.newtonma.gov/gov/historic/redirect_to_research/history/villages.asp

² <http://www.newtonma.gov/about/default.asp>; <https://livability.com/best-places/top-100-best-places-to-live/2018/ma/newton>; <http://realestate.boston.com/news/2018/12/17/newton-ranked-best-place-live-massachusetts/>

What we heard...

"Access to the Charles River. Pedestrian, bike, boater with secure bike parking."

"Expand and enhance public spaces."

"I would like to see the connection between the villages of Newton Lower Falls and Auburndale strengthened instead of severed. I think this is an opportunity for the two communities to have the gap (128) bridged in a way that has not yet been presented."

"Bike paths and green space along the river."

"Small concerts, group bike rides, village picnic, free exercise classes."

"Community Center with indoor and outdoor space to accommodate community meetings and events, and community education and classes."

"Consider creating a variety of spaces and activities that are available year-round and accessible to all community members and a site that is easily reachable by a host of transportation options."

"Need to preserve the Charles River Watershed and nature trails and the river."

"Coffee shops and public restrooms!"

"Project is a great opportunity for improved river access... maybe a public boat house."

"I'd like to see concrete ideas for how a new development at Riverside would connect, rather than isolate, Lower Falls -- e.g., indoor and outdoor gathering spots, buildings set back so they don't create a walled-off effect, traffic limited to what Grove Street can bear, etc."

Quotes were selected to show a range of comments received.

Key Takeaways:

- Desire to see a mixture of active and passive recreational opportunities on site.
- Strong interest in improved access to the Charles River with additional programming and conservation measures.
- Ambition to see a dedicated space for community activities included in the overall program of the site, taking the form of a community center, dedicated recreational space, or educational facility.
- Potential for development at Riverside to further connect Lower Falls and Auburndale rather than further divide these villages.

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C1: Provide a variety of usable public open spaces

Riverside should offer a variety of public open spaces that not only support the people that live and work on site, but also provide benefits to the entire Newton community. Lower Falls and Auburndale residents referred to Hamilton Field and Lyons Field respectively as key neighborhood open spaces where their villages gather together. While the Riverside site might not have a community park with a baseball diamond in the same style as these neighborhoods, it needs civic spaces that serve a similar role.

Key Considerations

- › Provide traditional and nontraditional forms of open space
- › Enable physical activity and healthy living
- › Include open spaces that benefit the larger Newton community
- › Provide electrical, water, and data hookups at public spaces



While serving a larger regional role, the Chestnut Hill Reservoir serves as a valuable resource to nearby communities.
Image Source: Wild Newton



Publicly-accessible rooftop garden in Kendall Square.
Image Source: Common Boston

ADDITIONAL INFORMATION:

C1

Open spaces are vital gathering places in most communities and can come in the form of parks, plazas, gardens, playing fields, public squares, and more. Known as “the Garden City,” Newton is no stranger to high-quality parks and open spaces with a rich history of park planning and conservation by landscape architects/planners such as the Olmsted and Charles Eliot. During the visioning process, many residents were adamant about the need to incorporate ample park space at Riverside given the potential size of any future development and the site’s location alongside the Charles River. Riverside offers a special opportunity to add to Newton’s green space in addition to spurring investment in the nearby parks and trails, including Riverside Park and the right-of-way along the defunct Newton Lower Falls Branch railroad.

“Newton is the Garden City – a mix of suburban villages, residential neighborhoods, and open green spaces. The City is committed to preserving large natural areas and parks as part of this housing strategy. In addition, in the context of high land costs, it is important to create pocket parks, plazas, and similar community spaces as part of creating housing. These types of gathering spaces add strength and quality to our village centers.”

(Newton Leads 2040: A Blueprint to Promote Affordable, Diverse Housing & Economic Growth, p. 10)

As the Riverside site is zoned MU3/TOD, the City requires by Special Permit that, at minimum, 15 percent of the site be used as “beneficial open space,” with at least 50 percent freely open to the public.³ Newton as a city reflects this commitment to open space, as 15.5% of the entire land area of the City is dedicated open space.⁴ The Riverside site is large enough to offer a variety of open spaces, from a public plaza near the T station to open lawns to small parks with seating and plantings. A diversity of open spaces offers something for everyone. In addition to ground-level open space, a green roof or rooftop garden would offer views of the Charles River and provide a type of public space not found anywhere else in Newton.

An interesting rule of thumb:

The general rule of thumb for park/open space in cities is 1 acre for every 100 people (or 10 for 1,000)⁵. Newton currently has 1 acre of public open space per 65 residents

³ “Beneficial open space” is defined as “Areas not covered by buildings or structures that are available for active or passive recreation, which shall include, but are not limited to: landscaped area, including space located on top of a structure, gardens, playgrounds, walkways, plazas, patios, terraces and other hardscaped areas, and recreational areas” Article 8.3

⁴ This calculation comes from the public and private open space land totals included in Newton’s Open Space & Recreation Plan from 2014. Using data from the Newton Assessor’s Database, the total open space was found to be 2344.41 acres before subtracting land occupied by privately-owned golf courses (542 acres), which are not free to the public. This total was then divided by Newton’s total land area of 11,596 acres. .

⁵ <https://www.planning.org/pas/reports/report194.htm>; <https://www.nrpa.org/publications-research/ParkMetrics/>



Cira Green in Philadelphia offers an acre of public green space with views of the Schuylkill River and downtown from atop a parking garage. Green roofs offer a nontraditional form of open space that can be made publicly accessible. While the Riverside station site offers a very different setting, a green roof could provide additional open space and help manage stormwater.

Source: Brandywine Realty Trust.

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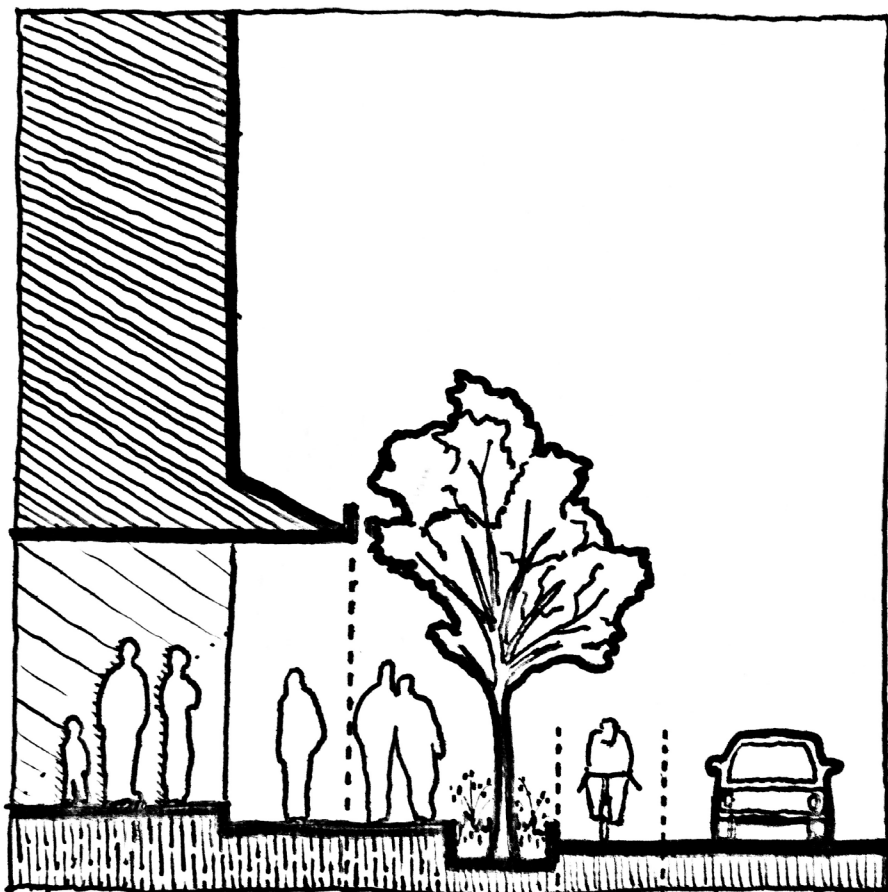


C2: Energize the site with vibrant ground-floor retail, art, and activity

In addition to open spaces, ground-floor retail and programmed activities will contribute to a vibrant public realm on site. Similar to many of Newton's village centers, Riverside can serve as a local destination and be made more inviting through the use of public art, placemaking, and outdoor events which should be accounted for in the design of the street network and open space plan for the site. Riverside can also serve as a launching point for the nearby recreation opportunities along the Charles River and surrounding park lands, with the potential for facilities and rentals that support these uses.

Key Considerations

- ▶ Provide active and publicly accessible ground-floor uses
- ▶ Welcome community-wide events and gatherings
- ▶ Incorporate public art and placemaking on site
- ▶ Provide spaces and facilities for recreational rentals and storage (bikes, kayaks, paddleboards, etc.)
- ▶ Dedicate a minimum of 1% of construction costs to public art



Active ground floor uses bring the public realm to life and create a community that supports physical and social connections at all times of the day and week.

ADDITIONAL INFORMATION:

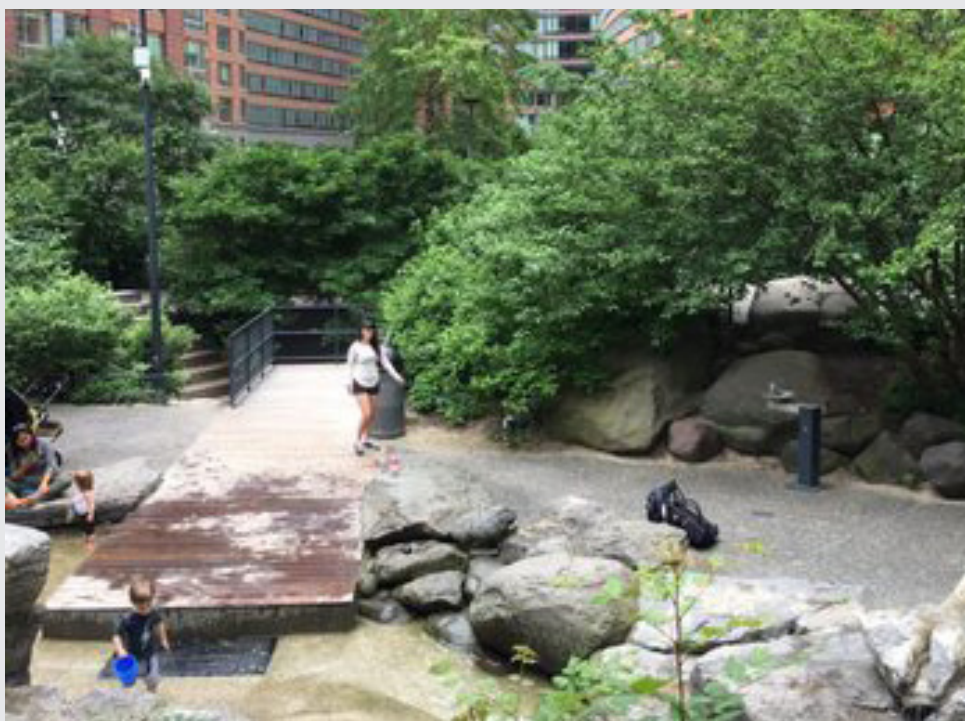
C2

Many of Newton's villages have a main commercial street where residents can pick up a quart of milk or meet a friend for coffee. Such places help give life to a community even though the mix of businesses – retail, dining, banks, office, etc. – varies as does the ratio of local, independent businesses to chain stores. If done well, ground-floor retail at Riverside can offer an inviting 'Main Street' experience. Shops and restaurants can include both indoor and outdoor gathering spaces that are incorporated into the public realm.

Art and programming in the public realm can also help to build community and engage visitors to the area. In the site design, locations should be identified for public art installations, pop-up events, and regular community activities, such as outdoor concerts or farmers' markets. In addition, wayfinding and infrastructure should elevate the connections to the nearby natural areas, where there are facilities like boat launches and rental services. These kinds of amenities will help Riverside become a destination in its own right, and will support the dining, services, and retail on site.

Examples of programming and placemaking that could occur on this site include:

- Coordination with the Newton Cultural Council or other designated art organization for events and shows
- Provide opportunities for local artists to display works
- Provide rotating display space
- Consider landscape design strategies as public art
- Include data/electrical hookups at some public art installation sites for maximum flexibility in curating works
- Pop-up spaces for seasonal retail and dining
- Food truck areas for "food truck Thursdays" or a weekend event once per month
- Boat launch and rentals nearby on Charles River
- Rotating restaurant space



Battery Park City landscape design in lower Manhattan uses natural forms and sustainable landscape design to incorporate pathways, gathering places, and play spaces within the overall outdoor areas of this mixed-use development.

Source: Yelp.com

1% for the Arts

Since the 1960's communities around the county have invested in public art via "percent for arts". Cities near Newton, like Cambridge, MA dedicate one percent of their annual capital budgets to public art, leading to the creation of public art collections that include both permanent physical pieces as well as programs. This requirement can be considered for private developments of certain sizes. Riverside could dedicate a minimum of 1% of construction costs to public art. These investments should be incorporated into the overall site design early in the design process, so the considerations can be as integral to the site as possible. Dedicated public art funds could also include non-permanent, ephemeral arts at Riverside as well as permanent public art.



The Street at Chestnut Hill is a local example of a development that has incorporated ground-floor retail and dining with scheduled activities and designated pedestrian spaces.

Source: Prellwitz Chilinski Associates

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C3: Include dedicated community space with active management and oversight

Designated community facilities support public interaction and cohesive neighborhoods. With any substantial development at Riverside, the City of Newton should require dedicated community space with predetermined management and oversight. Such facilities could be overseen by an on-site property manager or via a partnership with a local nonprofit to ensure there is a lasting framework for success. This community space could be one large space or a series of smaller spaces. The space can host art exhibitions, lectures, events, and other activities,

Key Considerations

- › Offer space and programming for on-site community activities that is complementary to nearby community spaces
- › Create and implement a framework for management of community spaces and programming
- › Create and publicize a calendar for booking community space and events
- › Site community spaces near the T station in a highly visible area
- › Provide restrooms and a kitchen in at least one community space on site



Hyde Park Community Center in Newton Highlands provides event space for community performances.
Image Source: hydecenter.org

ADDITIONAL INFORMATION:**C3**

Most of Newton's villages provides some kind of community space, whether public or private. The Lower Falls neighborhood has the Lower Falls Community Center at the old Hamilton school, which offers a variety of programming and activities for children and families, such as Super Saturdays.⁶ In Auburndale, neighborhood activities are centered at the Auburndale Community Library, which is a nonprofit community run library formed in 2009 at the former library branch of the Newton Free Library.

As was included in the 2013 Special Permit for site development, a certain amount of square footage in the new development should be earmarked for community facilities.⁷ In addition to allocating space, the City should also ensure that there is a management framework in place to identify how it will operate and function. Ideally, an onsite management professional in charge of rentals, maintenance, etc., would also have responsibility for booking events and activities and managing the calendar for the space. This facility or facilities should be available for use by community groups, schools, nonprofits, and others, looking for meeting and event space, as well as performance and exhibit space.

Examples of community uses or needs that could be provided:

- Community meeting room
- Art studios and maker spaces
- Job training associated with a coffee shop/café or consignment shop
- Indoor children's play space
- Public restrooms with clear visibility/access from pathways connecting to the Charles River
- Small fund for use by tenants for community gatherings (happy hours, poetry nights, BBQs, dog days, etc.)
- Community center/library/nonprofit space

⁶ http://www.newtonma.gov/gov/historic/redirect_to_research/history/villages.asp

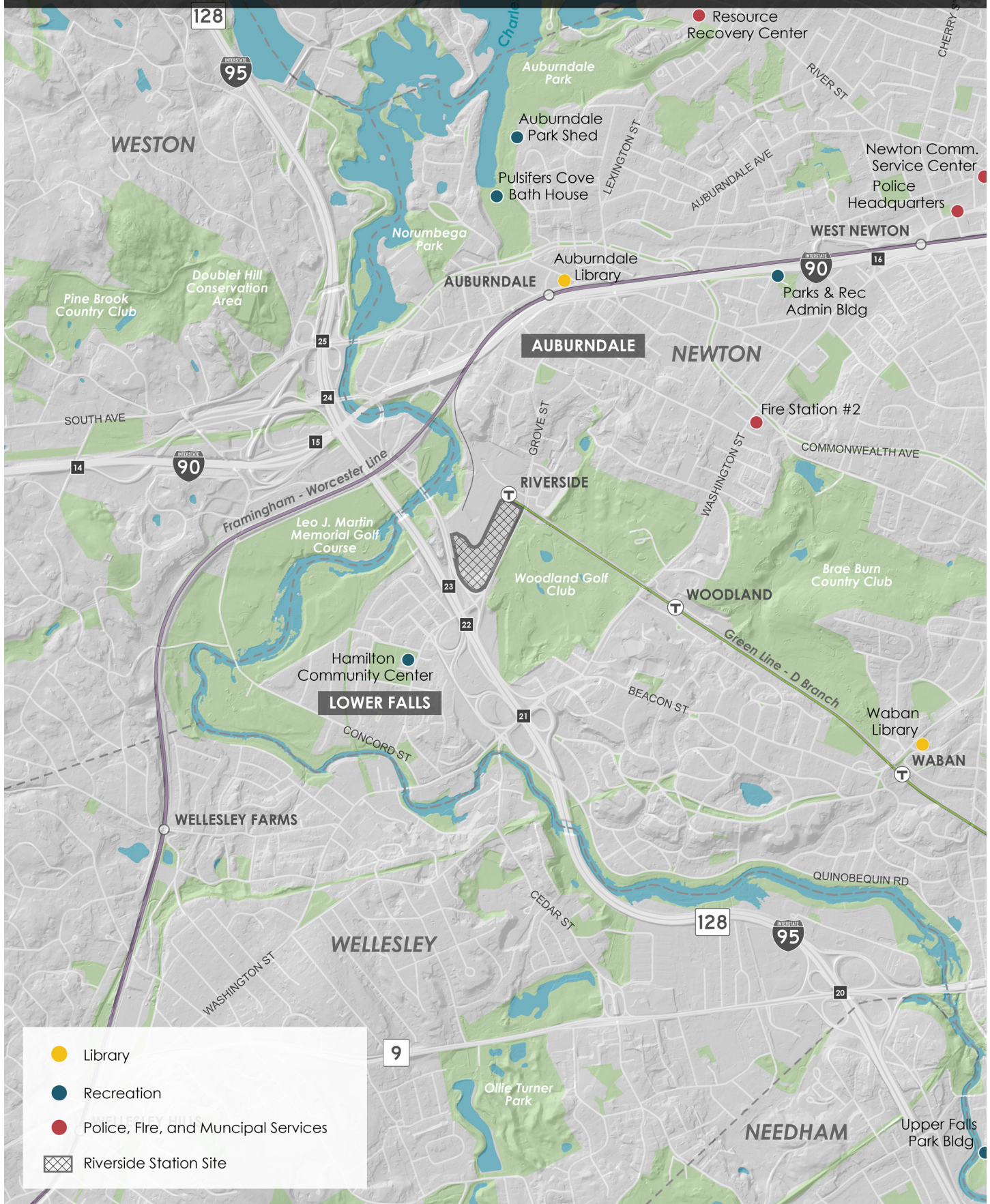
⁷ The 2013 development proposal allocated 11,000 sf to a community center.



The TAXI mixed-use development in Denver, CO embraces placemaking as a way to energize public spaces and create community. Events, poetry nights in the office complex, an on-site pool, and developer funded BBQ's and other activities support a vibrant community that is also a destination for the surround neighborhoods.

Source: Zeppelin Development

Map of Surrounding Community Facilities in Newton



Map: CivicMoxie | Data Source: City of Newton GIS, (2018) City Facilities [Data Files].
Retrieved from: <http://www.newtonma.gov/gov/it/gis>

0 0.125 0.25 0.5 0.75 1 Miles

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C4: Provide activities and businesses for all ages

A cornerstone of healthy communities is intergenerational interaction. Riverside has the potential to facilitate such interactions and, by extension, contribute to the health⁸, vibrancy, and integration with surrounding neighborhoods. Most of Newton's villages support a diversity of resident ages and the range of activities and businesses on site should replicate the organic mix of ages and demographics that occur throughout the city by providing activities and offerings in an accessible public realm that invites interactions.

⁸ Voglino, G. (2017) *The impact of intergenerational programs on children and elder adults*. European Journal of Public Health. https://academic.oup.com/eurpub/article/27/suppl_3/ckx186.023/4555653

Key Considerations

- ▶ Serve Newton's aging population and locate at least some of the activity areas near the T station
- ▶ Provide best-fit of cross-generational activities
- ▶ Offer desirable activities and uses that draw a variety of populations
- ▶ Design public spaces with youth and elders in mind as well as their caregiver



Source: City of Newton

ADDITIONAL INFORMATION:

C4

Similar to many communities, Newton is seeing an increase in the number of older residents as the Baby Boomer generation ages. Between 2000 and 2013, the number of Newton residents 55 years and older increased by nearly twice the amount of total population growth in the same time period.⁹ Providing access and activities for seniors at the Riverside site will be critical for this population and invite nearby residents from Lasell Village, Golda Meir House, and elsewhere throughout Newton. At the same time, younger residents and families can also benefit from open space and recreational opportunities and event and programming on the site, creating a vibrant intergenerational mix. By joining the AARP Network of Age Friendly States and Communities, the City of Newton and its elected leadership have made a commitment to “actively work toward making their town, city, county, or state a great place to live for people of all ages.”¹⁰ Age-friendly places have many of the same characteristics as transit-oriented-development – walkable, active streets that support a mix of uses and are easily accessible support age friendly and diverse communities.

⁹ *Newton Leads 2040: A Blueprint to Promote Affordable, Diverse Housing & Economic Growth*, p. 4.

¹⁰ <https://www.aarp.org/livable-communities/network-age-friendly-communities/info-2014/member-list.html>

¹¹ <https://www.aarp.org/content/dam/aarp/livable-communities/livable-documents/documents-2018/Parks%20Guide-LR-091018-spreads.pdf>

Useful information regarding parks, open space, and pedestrian friendly design can be found in the AARP publication, *Creating Parks and Public Spaces for People of All Ages*.¹¹

Goals and strategies in this document that are relevant to Riverside include:

- Improve Existing Parks
- Connect People to Parks (particularly trails and pathway connections)
 - Put Pedestrians First:

Allow for safe pedestrian routes, which leads to health benefits for all ages. Suggestions include ensuring parks are within walking distance, slowing down adjacent streets, and thinking at a human scale.

Additional concepts might include:

- Use universal design strategies to create buildings and open spaces that are accessible to all ages and abilities.
- Build welcoming and frequent seating/benches in Riverside site open spaces for both older adults and caregivers of young children.



Housing for Newton (H)

Vision: *The Riverside site should include the variety of housing types and prices needed to respond to the changing needs of the Newton community as it grows and matures within the city. The amount of housing should support needed affordable housing stock while not creating a financial or service burden on the City.*

Overview

Newton has long been a highly desirable city in which to live, creating ever-increasing demand for more and different types of housing to suit the changing needs of Newton residents. The City has been applying strategies to increase the diversity of housing types and costs to meet and support the demand from the city's diverse resident population. The *2007 Comprehensive Plan* states that: "Riverside has the capacity, access to highways, public transportation and location to attract several million square feet of high-quality mixed-use development. In fact, it is important to develop a dense enough project on this site to help pay to solve the access issues."

The Riverside Station site's location with transit access and its size create an environment favorable for active mixed-use development that would blend residential, commercial, and public uses. Higher concentrations of well-designed housing within walking distance of jobs, convenience retail, and community amenities next to a transit station are more sustainable in their efficient use of land. Housing should provide for a wide range of ages and family structures, including accessible housing for seniors and family-sized units for downsizing older adults and young families. Housing should support transit-oriented goals by providing incentives for public transit and access to car-share and rideshare options that reduce residents' car dependency and parking needs. As with any new housing, demands on City services need to be factored into reviewing development suitability.

Guiding Principles

H1

Help address Newton's current and shifting housing needs

H2

Provide a significant number of permanently affordable housing units

H3

Prepare for implications of housing on all City services

What we heard...

"More housing, as much affordable housing as possible given financing constraints."

"Condos, not apartment buildings."

"Affordable housing should not be used to justify housing densities and heights that are not consistent with the city of Newton."

"Perfect site for dense housing development! A true TOD opportunity!"

"Lower income housing is good, but there is no way that it can ever come in a quantity to change the basic economic reality that Newton has become an enormously valuable location that will command high prices. Do not sacrifice Auburndale and NLF to this idea. Yes, to affordable housing, but at a respectable scale for our villages."

"This is a great opportunity to create innovative housing options that are currently unavailable in the area (Micro units, etc.?) Be Bold!"

"We need more housing stock, especially affordable housing, to keep young professional and the elderly in Newton."

"Attractive affordable housing [to create] options for seniors, millennials, and families."

"A community where our seniors can comfortably age in place, with easy access to shops, transportation, and outdoor recreation."

"The city could really use more mid-market condos and/or apartments."

"Great opportunity to diversify Newton housing stock."

Quotes were selected to show a range of comments received.

Key Takeaways:

- › Desire for a variety of housing types to address demand for housing that accommodates a range of populations and incomes.
- › Potential to increase needed affordable housing.
- › General recognition that the site is well-suited for multi-family housing units.
- › Concerns about additional housing contributing to Newton's school system capacity question.
- › Differing opinions on types and quantity of housing desired on-site.
- › Concern that need for housing will drive scale of development beyond that in neighboring villages.



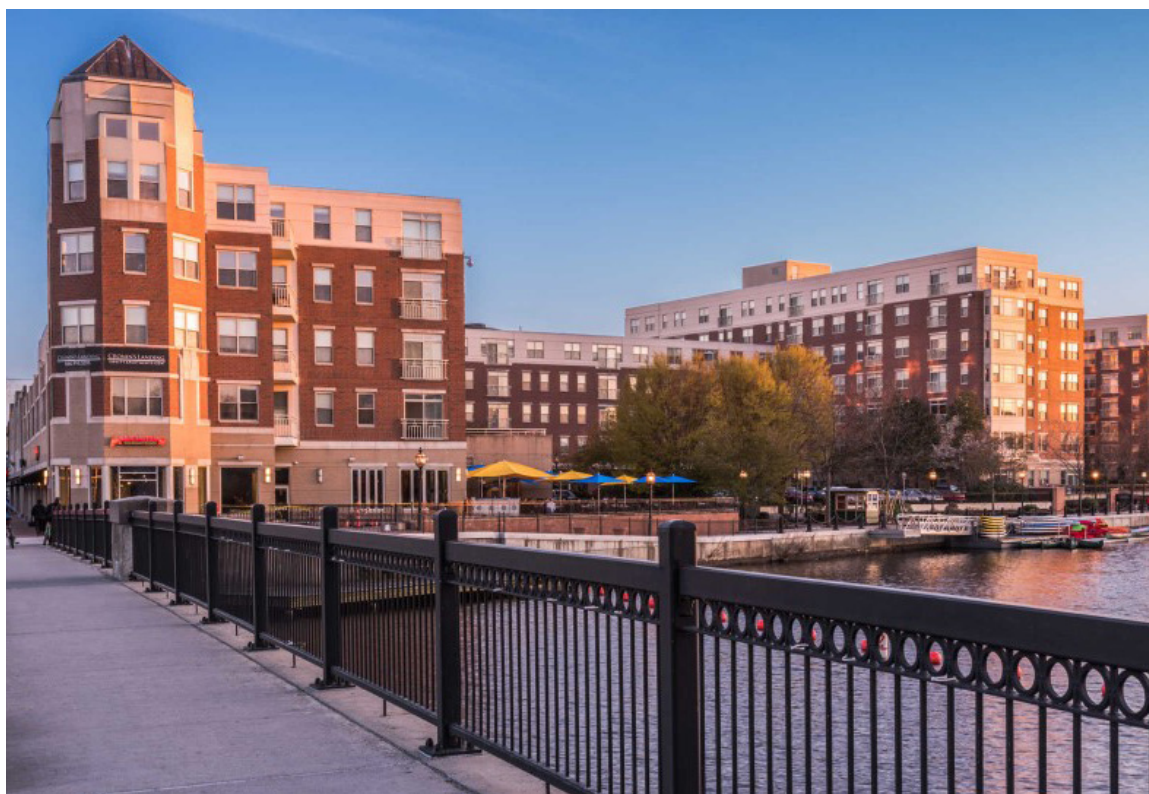
H1: Help address Newton's current and shifting housing needs

Newton's senior population has been growing faster than the state average, and simultaneously, the City is looking for ways that all of its residents can grow and age here¹. The Riverside site is an opportunity to add age-friendly housing, as described in the 2017 Council on Aging's *Newton Housing Workbook*, that includes a variety of housing types from townhouse-style walk-ups to single-floor layouts in elevator buildings and provides various sizes from studios to 3+ bedroom housing units to accommodate growing and downsizing households.

Key Considerations

- Provide a variety of housing types
- Include housing units of varying sizes (studios to 3+ bedroom units)

¹ The City of Newton's Council on Aging's vision is, "To provide sustained leadership that helps Newton be a livable and age friendly community for all who choose to age here." Through the COA, the City is also actively engaged in all-age-friendly planning.



Cronin's Landing Apartments overlooking the Charles River in Waltham, MA near Waltham Commuter Rail Station. This project is a good example of a mixed-use building located a short walking distance from a Commuter Rail line.

Source: equityapartments.com

ADDITIONAL INFORMATION:

H1

The City of Newton is looking to increase the diversity of housing types available in the city to accommodate residents throughout their lives. Diverse housing types also support diverse communities that accommodate and welcome single professionals, empty nesters, seniors requiring accessible units, and families, whether they are homeowners or renters.

- Require a range of housing types, such as townhomes or 3-unit-style homes, traditional apartments, or condo-style buildings
- Construct a mix of unit sizes, from studios to 3+ bedroom units, to accommodate residents and households of different sizes
- Include age-friendly units that are floor-throughs or single-level units in elevator buildings with universal design features.



Apartments at Woodland Station along the D Branch of the MBTA Green Line.

Information from the Newton Council on Aging and Newton Department of Senior Service's *Housing Criteria for a Livable and Friendly Newton for Everyone* should be a guide for all new development, infill, and redevelopment in the city:

"The Newton Council on Aging (NCOA) and the Newton Department of Senior Services (NDSS) work to create and sustain Newton as an Age-friendly/Livable Community. Essential to this vision is adequate and appropriate housing for people of all ages; age-friendly homes are suitable and desirable for all members of the community. We believe that housing built to accommodate changing health and safety needs for a growing older population is essential for enhancing Newton's future as a diverse community. In general, we support the creation of a diversity of housing that accommodates a wide range of household incomes within the city."

The Housing Criteria were created as a guide for developers as well as seniors to determine what general environmental and specific building design features are more amenable to seniors but are universal in accommodating people of all ages.

The general and community environment characteristics called out in the document include energy efficiency and lower maintenance with pedestrian access to food shopping/pharmacies, public transit, social/ community gathering spaces, and parks/ open spaces.



H2: Provide a significant number of permanently affordable housing units

One of the key housing issues in Newton is the cost of housing and the need for more affordable housing in a range of price points as well as rental and ownership options. Newton's 2017 median single-family home sales price was \$1.2 million². The 2016 *Newton Housing Strategy Report* indicated that approximately 5,000 low- and moderate- income households in Newton were "cost-burdened," paying more than 30% of their incomes on housing costs.

There is an opportunity at Riverside to make progress toward addressing the need for low-income housing options and also address the gap in available "workforce"/middle-income housing. With a higher concentration of housing at an appropriate TOD location such as Riverside, the City's inclusionary zoning requirement could produce a substantial number of low and moderate income units, meeting an important need for diverse housing in the city.

Key Considerations

- ▶ Encourage a mix of rental and ownership opportunities for a diverse range of income levels
- ▶ Offer housing that is priced to be affordable to low to middle income individuals and families
- ▶ Provide affordable housing in conformance with the drafted update to the inclusionary housing ordinance

² Information source: Boston Magazine with data sources from Massachusetts Association of Realtors (marealtor.com) and MLS Property Information Network (mlspin.com)

2018 Housing Income Limits for Affordability Requirements

Area Median Income %	# Persons in Household					
	1	2	3	4	5	6
AMI 30%	\$22,650	\$25,900	\$29,150	\$32,350	\$34,950	\$37,550
AMI 50%	\$37,750	\$43,150	\$48,550	\$53,900	\$58,250	\$62,550
AMI 80%	\$56,800	\$64,900	\$73,000	\$81,100	\$87,600	\$94,100
AMI 100%	\$75,500	\$86,300	\$97,100	\$107,800	\$116,500	\$125,100
AMI 110%	\$83,050	\$94,930	\$105,810	\$118,580	\$128,150	\$137,610

Affordable Units
(≤ 80% AMI)

Middle-Income
(Workforce) Units
(81%-110% AMI)

Household incomes at 80% AMI and below qualify for affordable housing units. Households with incomes above 80% to 110% are considered "workforce" or middle income.

Source: City of Newton | HUD

ADDITIONAL INFORMATION:

H2

To continue being a welcoming and inclusive community, the City of Newton is committed to increasing the housing options available to those of low to moderate incomes. This includes seniors on fixed incomes and young adults who are early in their careers.

These residents represent the shifting needs of an aging population and the smaller, more affordable units needed to retain/gain younger millennials and other early-career populations. The Riverside site has the unique potential to contribute to Newton's response to these housing needs. Development at the Riverside site should include smaller, more affordable housing offerings. This type of housing can account for and bridge the gap between traditional affordable housing that is also needed in the city (reserved for households earning at or below 80% of the area median income) and the current market. By adapting to the shifting needs of these populations at the Riverside site, the City would be making a commitment to its residents to age-in-community, as well as retain younger residents of the community and provide housing for new employees at any office/commercial development on site.

Community feedback included a desire for affordable condos for Newton residents who are downsizing and wish to remain in the community. The desires of empty nesters and seniors, as well as younger professionals and millennials are in alignment when it comes to amenities and lifestyle choices.

"According to the National Association of Realtors, walkability is fast becoming one of the most important factors in choosing where to live. People of all ages want easy access to amenities such as stores, businesses, cultural centers, and transit."³

Smaller, more dense housing types don't need to be in a necessarily 'urban' center – walkable lifestyles are achievable in quieter village neighborhoods. Millennials and early-career singles and couples are increasingly forgoing car ownership, while seniors see large health benefits from walkability. These interests in reduced car ownership are tied into housing affordability as well. Development at Riverside should not include parking in the cost of a unit, so that those who choose to live car-free at Riverside do not have to pay for keeping an empty parking space.

For more information, visit:

- <http://missingmiddlehousing.com/about/demand-trends/>
- June 2016 [Newton Leads 2040 - A Blueprint to Promote Affordable, Diverse Housing & Economic Growth](#) study

³ via MissingMiddleHousing.com

2018 Maximum Affordable Rents, City of Newton (all utilities included in rent)						
Unit Type	Household Size (# of BR +1)	30% AMI	50% AMI	80% AMI	99% AMI	110% AMI
Studio	1	\$566.25	\$943.75	\$1,420.00	\$1,868.63	\$2,076.25
1 BR Unit	2	\$647.50	\$1,078.75	\$1,622.50	\$2,135.93	\$2,373.25
2 BR Unit	3	\$728.75	\$1,213.75	\$1,825.00	\$2,403.23	\$2,670.25
3 BR Unit	4	\$808.75	\$1,347.50	\$2,027.50	\$2,668.05	\$2,964.50
4 BR Unit	5	\$873.75	\$1,456.25	\$2,190.00	\$2,883.38	\$3,203.75

Source: City of Newton

2018 Maximum Affordable Sales Prices, City of Newton					
Unit Type	Household Size (# of BR +1)	70% AMI	80% AMI	100% AMI	110% AMI
Studio	1	\$172,000	\$197,000	\$247,000	\$271,000
1 BR Unit	2	\$197,000	\$225,000	\$282,000	\$310,000
2 BR Unit	3	\$222,000	\$253,000	\$315,000	\$349,000
3 BR Unit	4	\$246,000	\$282,000	\$352,000	\$387,000
4 BR Unit	5	\$266,000	\$304,000	\$374,000	\$418,000

Source: City of Newton

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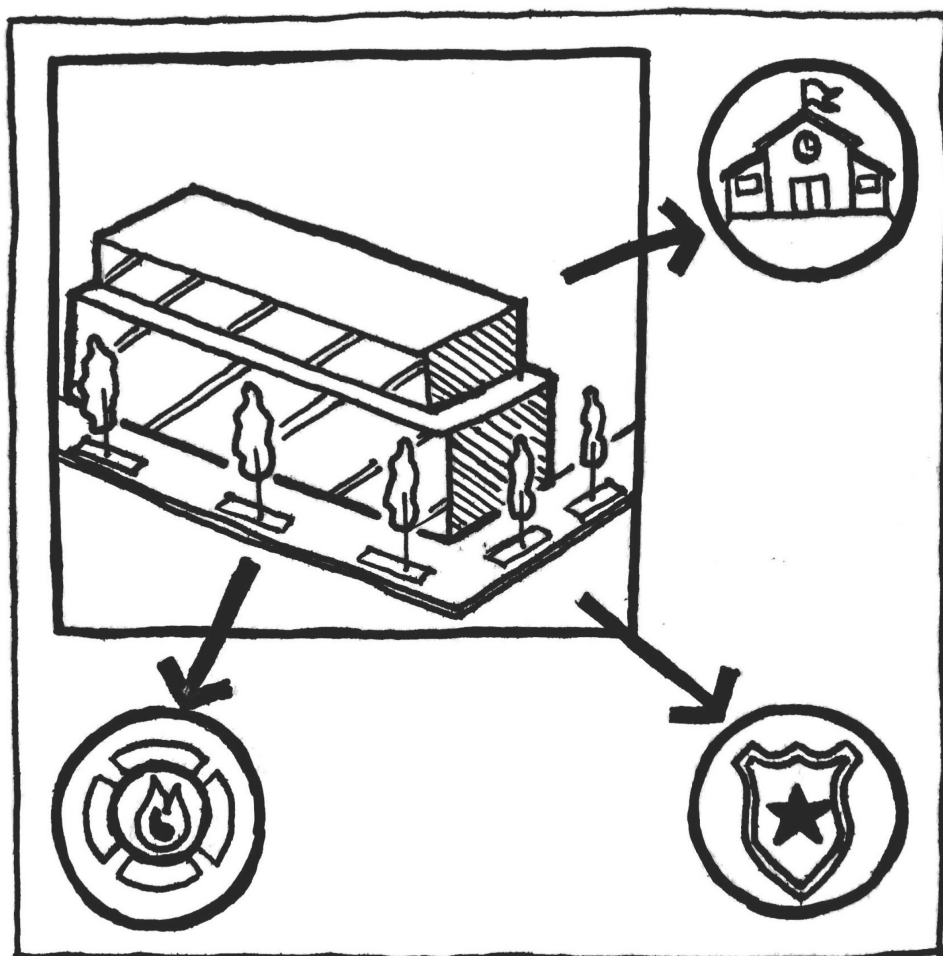


H3: Prepare for implications of housing on all City services

Preparing for the implications of additional housing and other development on all of Newton's services should include schools, emergency and safety services, and also public utilities and other infrastructure maintenance. To this end, any proposed housing development must include net zero or net positive financial benefits to the City, when weighed together with the requirements placed on schools, public safety, and utility infrastructure.

Key Considerations

- › Understand the impact on the public schools and the City's commitment to educational excellence
- › Quantify added requirements and infrastructure/equipment needs for fire, police, and emergency services
- › Understand the need for public utilities



Evaluating the impact of additional housing on City services will be crucial to determining the viability of any development proposal.

ADDITIONAL INFORMATION:**H3**

One of the main sources of pride in Newton is its excellent public school system and its high quality delivery of City services. The City also recognizes, in its *2016 Newton Housing Strategy*, the need to provide housing for students and their families. The 2016 report recommends multifamily dwellings along major roadways and transit lines (p. 78) and the Riverside site in particular as “potentially suitable for high density mixed-use/multifamily residential development.” (p. 98)

One concern identified with any proposed building project at the Riverside site is the potential impact development might have on a number of public services, including but not limited to:

- Newton Public Schools
- Newton Fire Department
- Newton Police Department
- Emergency Medical Services
- Sewer Infrastructure
- Social programs and services

When considering development proposals, it will be necessary to ensure that proper impact studies for the above, as well as any other services/infrastructure, are completed before approval. Avoiding an imbalance of impacts to the public resources of adjacent neighborhoods and the city as a whole will be crucial to determining the fit of any proposed development.



Model for Sustainability (S)

Vision: *The Riverside site will exemplify sustainable development standards, improve local climate resiliency, and enhance ecological health and connections to nature.*

Overview

Known as “the Garden City,” Newton has long been a leader in environmental practices from its Olmsted-designed parks dating back to the nineteenth century to its more recent designation as a “Green Community” by the Massachusetts Department of Energy Resources. Recent planning studies have reiterated the City’s commitment to sustainability standards and have included goals to reduce greenhouse gas emissions, improve water quality, adapt to climate change, and provide access to parks and green spaces. As of the date of this Vision Plan, the City has completed its [Climate Change Vulnerability Assessment Plan](#) (2018), has released the first draft of its [Climate Action Plan](#) (2019), and has completed a draft of its updated [Hazard Mitigation Plan](#) (2019). Newton residents have also been very involved in advocating for improved environmental outcomes with such local nonprofits as Green Newton, Newton Conservators, and the League of Women Voters of Newton.

Due in large part to its location, the Riverside site offers an excellent opportunity for the City to advocate for many sustainability principles in action. The adjacent Riverside “T” station means that future on-site residents, businesspeople, and visitors will have the option to forgo private automobiles in favor of public transit, the hallmark of any transit-oriented development project. In addition, the nearby Charles River and surrounding public open space means that the site can offer much-desired visual and physical connections to nature

Guiding Principles

S1

Provide options for residents to live low-carbon lifestyles

S2

Prioritize energy-efficient building principles

S3

Protect and improve the Charles River through site design

S4

Improve Newton’s climate resiliency

S5

Reinforce connections to nature

and a regional trail network. Buildings can minimize greenhouse gas emissions through construction methods and materials while the landscape design and green infrastructure can improve water quality in the Charles River. Taken together, these principles can result in the Riverside redevelopment serving as a regional model for sustainability.

What we heard...

"Buildings that are very energy efficient (passive house, heat pumps, low embodied carbon)."

"Recreation space, connecting to trails and paths, river."

"Transit-oriented development, Not Traffic-oriented development."

"Stormwater infiltration, green space, open areas, play areas, shade."

"Would love this to be a model for sustainable development. Maximize solar, capture rainwater, etc."

"I think that the Riverside site gives Newton an opportunity to be a model for the future of development by having Riverside be a Zero Energy District."

"No matter how green - 657 plus residences will pollute and endanger the ecology."

"We have a housing crisis and a climate crisis. We need a lot of energy-efficient units at this smart growth site."

"Need to preserve the Charles River Watershed and nature trails."

Quotes were selected to show a range of comments received.

Key Takeaways:

- › Desire to see buildings and development meet specific green building and low impact development standards.
- › Immense interest in better pedestrian and trail connections to the Charles River and nearby parks and conservation lands.
- › Recognition that the Riverside site is ideal for transit-oriented development and smart growth, but concern about adequate public transit capacity.
- › Concern about environmental impacts – water quality and emissions – of large-scale development on site.
- › Desire for recreation areas and green space on the Riverside site.
- › Aspiration to see the entire site apply sustainability principles and not only singular buildings.



S1: Provide options for residents to live low-carbon lifestyles

Providing options for residents to live low-carbon lifestyles can help reduce individuals' environmental footprints and help foster a culture of sustainability that contributes to both local and regional environmental awareness and health. While a car-dependent lifestyle is very much part of American living, particularly in the suburbs, providing amenities and services on site such as restaurants, a small grocery store, and a cleaner can help to attract residents who rely less on car-focused transportation and more on public transit and other low-impact transportation options. By focusing on including a desirable mix of uses and amenities on site, potential development can help discourage

Key Considerations

- ▶ Provide needed amenities and services on-site
- ▶ Support carless residents, employees, and visitors

unnecessary trips off site, potentially reducing traffic and reducing green house gas emissions, and improving public health. Providing car sharing and other amenities can help attract a carless population and support fewer vehicle trips generated.

Greenhouse Gas (GHG) Emissions by Sector

The below graph shows Newton's greenhouse gas emissions by sector as compared to Massachusetts and the entire United States. The GHG inventory completed for Newton in 2013 found that 64% of emissions within the city came from the building sector (35.2% residential, 26.2% commercial/industrial, 2.2% municipal). Passenger vehicles also contributed greatly to citywide emissions with nearly 200,000 tons of CO₂ emitted (or 24% of the total) in 2013.

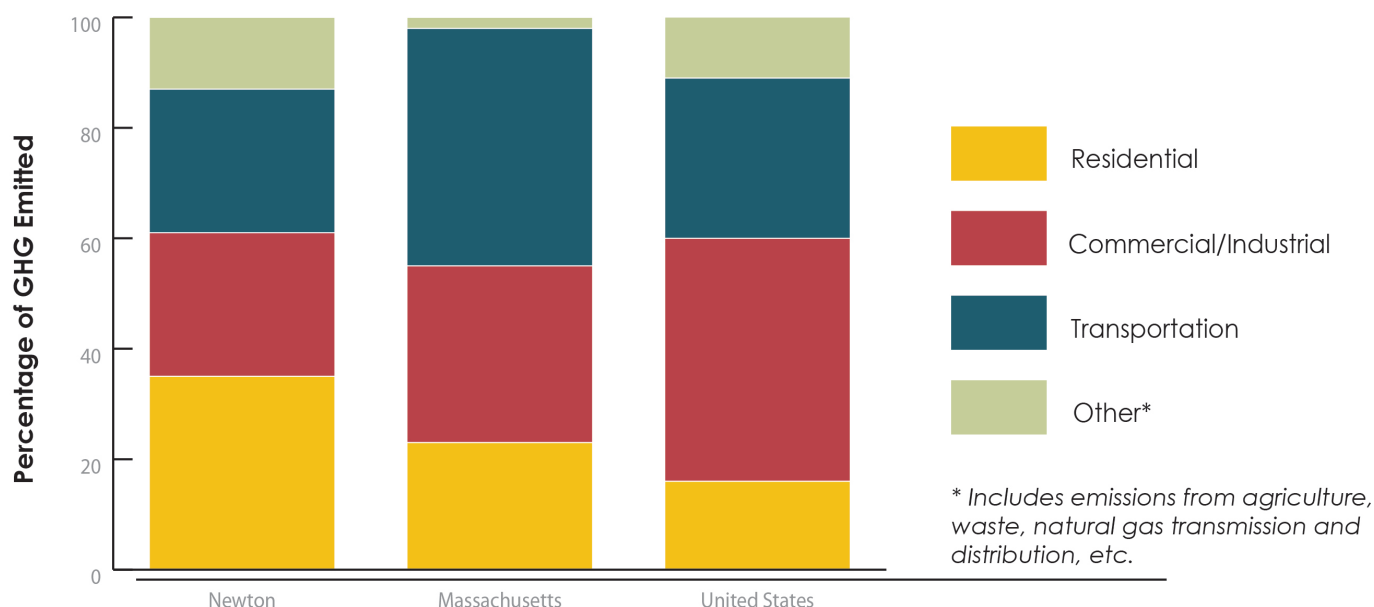


Chart: CivicMoxie, LLC - Source: City of Newton Greenhouse Gas Inventory (2013); Massachusetts DEP Greenhouse Gas Inventory (2016)

ADDITIONAL INFORMATION:

Increasingly, individuals are adapting their lifestyles to address the threat of climate change. Progressive members of all generations are working to reduce their individual carbon footprints by changing what they eat, how they travel and commute, and ultimately, where and how they live. Taken together, these lifestyle changes can contribute to lower carbon footprints. As detailed in the GHG Emissions by Sector chart on the previous page, the two main contributors to Newton's local emissions are those from the building sector (64% of total local emissions) and transportation sector (24% of total local emissions). Focusing on adjustments to these main contributors may prove most effective in the context of the Riverside site.

Given its ready access to public transit, particularly the Green Line "D" branch with direct connections to Newton, Brookline, and Boston, the Riverside station site is intended to offer residents opportunities for low-carbon living. Local and intercity bus and shuttle services connect the site to other destinations. While building emissions will be specifically addressed in Principle S2, the unique context of the Riverside site has potential to impact current and future residents' transportation and lifestyle choices.

For more information on mobility and reduction in carbon footprint, see:

<https://www.sharedmobilityprinciples.org/>

S1



Providing for lower-impact transportation options, like biking and public transit, can help to reduce an individual's carbon footprint.

Source: Commuter.com (above); MBTA (below)

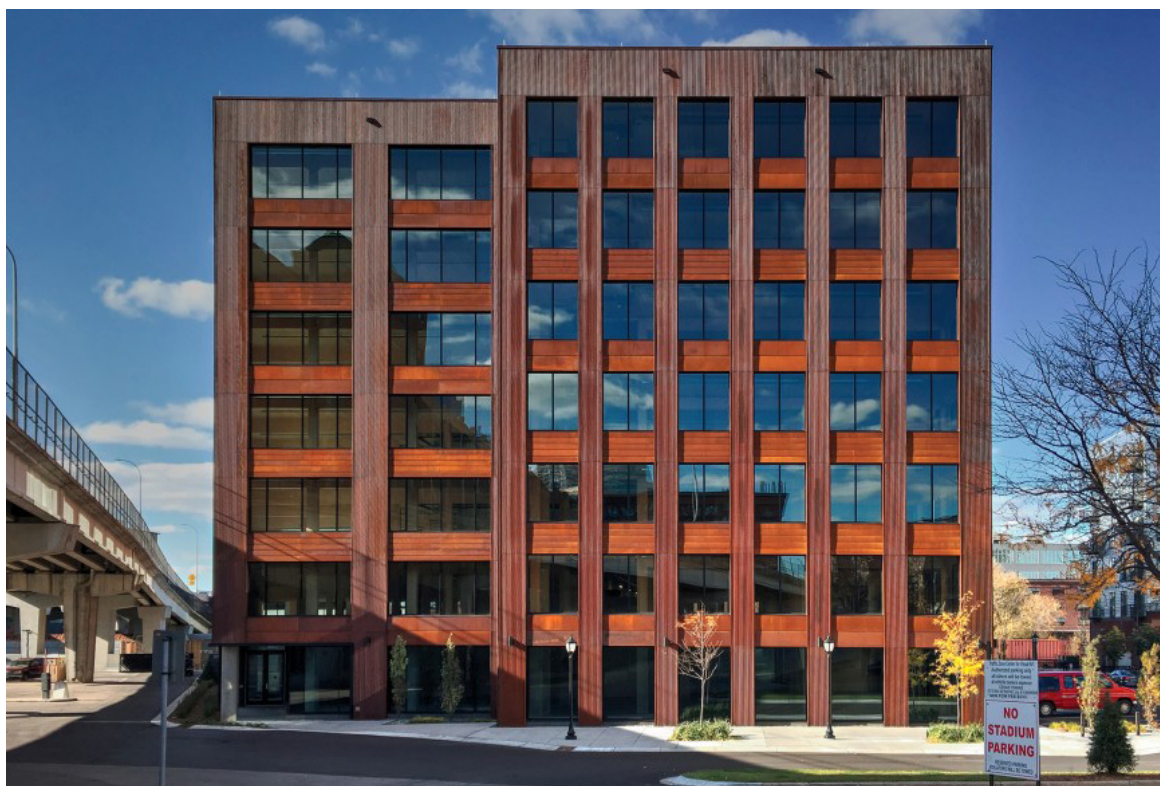


S2: Prioritize energy-efficient building principles

It will be crucial to ensure that any redevelopment project meets the highest environmental sustainability standards and serves as a model for sustainable development. Currently, over 60% of the City of Newton's total emissions are generated by buildings. Requiring any development proposal includes energy-efficient building principles – for both construction and operation – will be necessary to ensure that development on the Riverside site minimizes its overall impact on the environment and climate change.

Key Considerations

- › Minimize building operating energy
- › Use low-carbon materials
- › Minimize carbon footprint for transportation to/from buildings
- › Provide a minimum number of fast charge and /or level 2 charging stations for electric vehicles and the electrical infrastructure to expand to include more charging stations.



Located in Minneapolis, T3 (standing for timber, transit, technology) is the largest modern mass timber building in the US and was completed in 2018. A timber structure affords distinct sustainability advantages over concrete or steel structures, including that it is less energy-intensive to extract and process, renewable, and sequesters carbon throughout its lifetime. The timber design, coupled with energy-efficient technologies and its location adjacent to the Cedar Lake Bike Trail, commuter rail, light rail, and a pedestrian skyway system, delivers a LEED Gold certified, green building that could serve as inspiration to for what is possible at the Riverside site.

Source: Michael Green Architects

ADDITIONAL INFORMATION:

S2

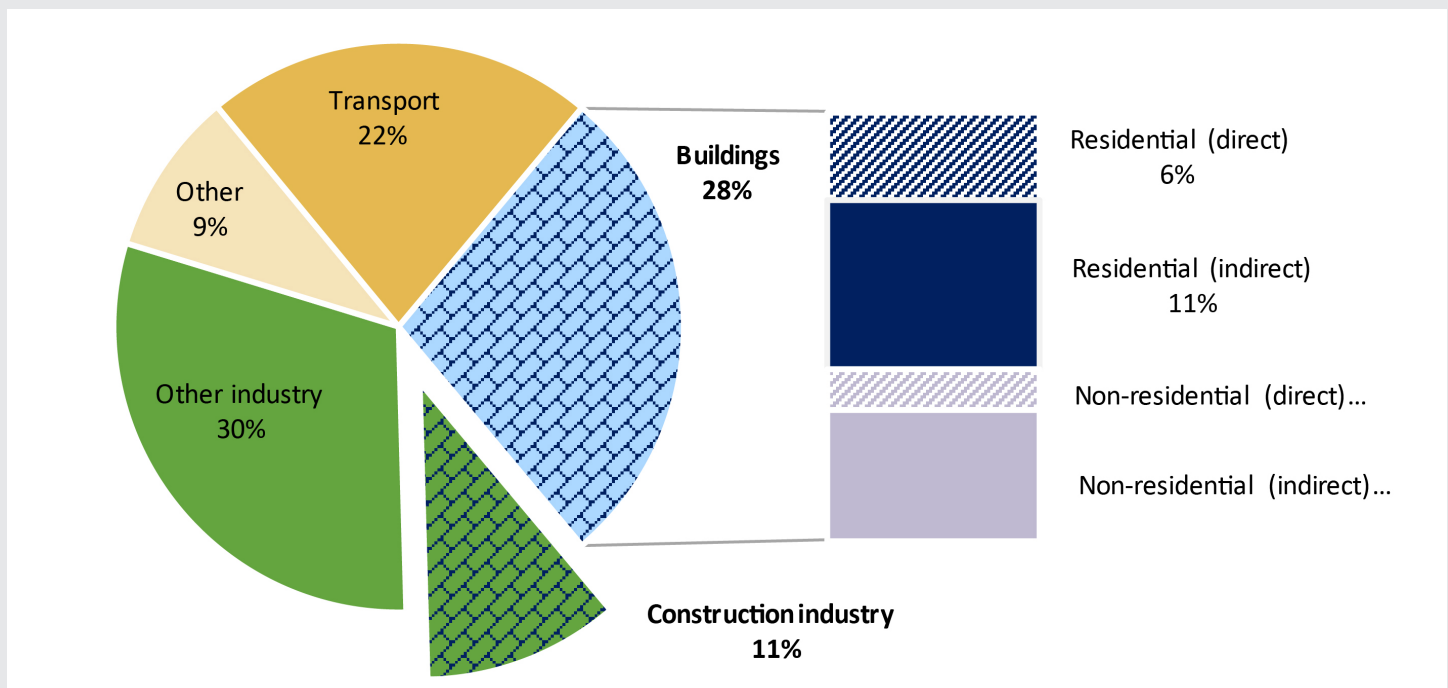
Buildings and the construction industry have a big role to play in reducing CO₂ emissions and ensuring a climate-safe future. A 2017 report by the International Energy Agency (IEA) found that the building sector is the largest contributor to global warming because of the combined effects of emissions from building operations and the construction industry (represented in the accompanying graphic). An inventory of Newton's 2013 greenhouse gas emissions found that 64 percent of the city's total emissions stem from building operations, without even taking into account emissions related to material sourcing and construction (Source: MAPC, *Newton Climate Action Plan Discussion*, Dec 2018).

What is embodied carbon?

Embodied carbon is the total greenhouse gas (GHG) emissions generated to produce a built asset. This includes emissions caused by extraction, manufacture/processing, transportation and assembly of every product and element in an asset. In some cases, it may also include the maintenance, replacement, deconstruction, disposal, and end-of-life aspects of the materials and systems that make up the asset. It excludes operational emissions of the asset.

¹ Information source: Boston Magazine with data sources from Massachusetts Association of Realtors (marealtor.com) and MLS Property Information Network (mlspin.com)

Share of global energy-related CO₂ emission by sector, 2015



Source: Greenbuilding.com (graphic) and IEA (2017), World Energy Statistics and Balanced, IEA/OECD, Paris, www.iea.org/statistics (data).

Green Newton is a local nonprofit that works to enact sustainable solutions to environmental problems facing the city and the world. The nonprofit has a Green Building Working Group that specifically focuses on reducing the environmental impacts of buildings and the construction industry by promoting the following four principles:

1. Minimize building operating energy
2. Minimize embodied carbon
3. Buildings must be all-electric and off the natural gas grid
4. Minimize the carbon footprint for transportation to and from buildings

In addition to its ready access to public transit, any future development at the Riverside site should prioritize these green building principles and strive to meet cutting edge sustainability standards, such as Passive House, Envision, the highest LEED, or Zero Net Energy certifications.

In a December 2018 community meeting regarding Newton's *Climate Action Plan*, participants selected "Requiring high performance or net zero new construction for residential and commercial buildings" as the third most important action to reduce greenhouse gas emissions in the city, while "Increasing the share of renewable energy supplied to residents and businesses" was deemed the most important action (Source: MAPC, *Newton Climate Action Plan Discussion*, Dec 2018).

New development in Newton should prioritize construction measures that mitigate climate change, such as the use of PV panels for on-site energy generation, energy conservation measures, energy-efficient technologies, and low-carbon construction materials.



The Massachusetts Division of Fisheries & Wildlife Headquarters in Westborough, designed by Architerra, was one of the first netzero buildings in the state. The LEED Platinum certified building achieves zero net energy use by utilizing technologies that include photovoltaic panels and a geothermal system.

Source: <http://architerra-inc.com/web/dfw.html>

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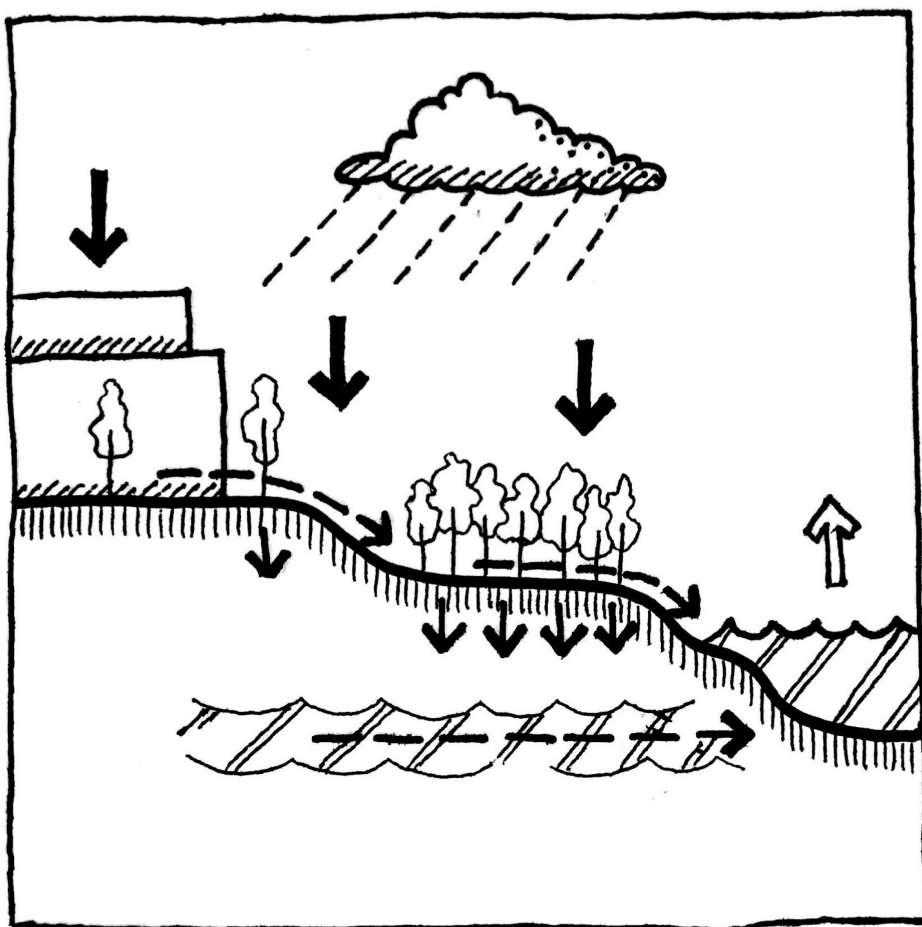


S3: Protect and improve the Charles River through site design

Due to its close proximity to the Charles River, the Riverside site has the potential to integrate green infrastructure improvements and ecological restoration that would help to mitigate stormwater runoff impacts on the water quality of the Charles River. By infiltrating and treating stormwater runoff from paved surfaces, these improvements can help to lessen the transmission of pollutants into the river. The thoughtful and strategic integration of green infrastructure and restoration of nearby natural areas should be incorporated in all development proposals for the Riverside site. [The Newton Street Design Guide](#) (2018) lays out strategies and guidelines for green infrastructure measures and best practices related to stormwater management.

Key Considerations

- › Use green infrastructure to reduce stormwater runoff
- › Support restoration of nearby natural areas



Integrating green infrastructure improvements and ecological restoration within and along the edges of the Riverside site can help in the filtration of stormwater runoff, lessening the transmission of pollutants to the Charles River.

ADDITIONAL INFORMATION:

S3

The Riverside site abuts the Charles River corridor and is located about 15 miles upstream from the mouth of the river in downtown Boston. For those familiar with the history of the Charles, it may come as a surprise that the river received a water quality rating of A- in 2017, meeting the state's bacterial water quality standards for boating 95% of the time, and for swimming 72% of the time.² The revival of the health of the Charles River is a regional success story and, while residents of Boston may "love that dirty water," they undoubtedly love a clean river even more.

As part of its federal National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer (MS4) general permit obligations, the City of Newton is required to "reduce the discharge of pollutants and protect water quality."³ Stormwater runoff from the current site likely contains heavy metals, gasoline, oil, de-icing materials, rubber, and other particulates given its current use as a surface parking lot.⁴ Redesigning the Riverside site would allow for green infrastructure measures that reduce pollutants draining to the Charles River and improve overall water quality downstream. Such measures might include green roofs, rain gardens, vegetated streetscapes, swales, porous pavements, restoring existing natural areas, and more. Because stormwater from the site discharges to the 200-foot Riverfront Area, the Conservation Commission will review proposed stormwater infrastructure and impacts on water quality.

**This principle purposefully aligns with that in the Needham Street Vision Plan (2018) given the common concerns of residents and need to address development within the entire Charles River watershed.*

Low impact development measures should ideally align with the Stormwater Objectives laid out in the *Newton Street Design Guide* (2018):

- Reduce flood frequency, intensity, and damages;
- Protect receiving waters from pollution, erosion, flooding, and other negative impacts;
- Improve water quality;
- Improve physical and mental health;
- Utilize sustainable materials;
- Maximize life-span sustainability of the built environment;
- Improve air quality;
- Reduce urban heat island effect; and
- Create a sense of place.

² Environmental Protection Agency, June 2018 - <https://www.epa.gov/newsreleases/charles-river-water-quality-improvements-earns-second-time-past-five-years>

³ Via *Newton Street Design Guide* (2018)

⁴ EPA, *Green Parking Lot Resource Guide*, Feb 2008



Alumnae Valley at Wellesley College is an ASLA-award winning effort to mitigate brownfields on site and manage stormwater run off to Waban Lake.

Source: Michael Lutch Studio

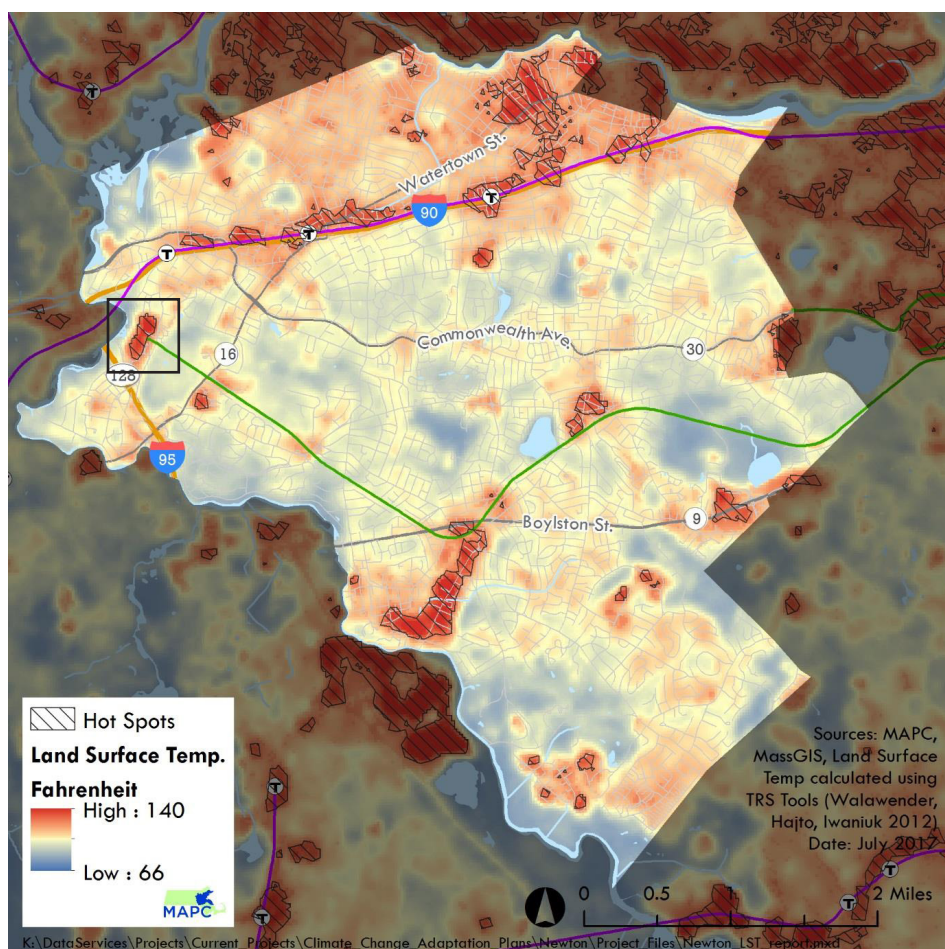


S4: Improve Newton's climate resiliency

Any development proposal should ensure that the Riverside site contributes to Newton's climate resiliency. While the majority of the site itself is not currently at risk for flooding, parts of the site with key infrastructure are at risk of flooding during extreme weather events. In addition, the site has been identified as a major "hot spot" in the region. High land temperatures generated by the prevalence of asphalt and paved areas on the site ("Heat Island Effect") can create a risky environment for vulnerable people during heat events. Considering these risks, landscaping and design strategies should address these concerns by maximizing shading through tree plantings and flood resiliency.

Key Considerations

- › Reduce urban heat island (UHI) effect
- › Ensure flood resiliency
- › Consider vulnerable populations



The Riverside Site was identified as a major Hot Spot by in the Newton Climate Vulnerability and Action Plan (2018).

ADDITIONAL INFORMATION:**S4**

In the 2018 *Climate Change Vulnerability Assessment and Action Plan* completed for the City of Newton by the Metropolitan Area Planning Council (MAPC), Riverside is recognized as a “hot spot” - an area within the top 5% of land surface temperatures in the Boston Metro Region. High land temperatures can pose a severe risk – particularly to young children and seniors – and, with rising annual temperatures due to global warming, the heat index at Riverside will only worsen unless conditions are improved.

With redevelopment, the Riverside site has an opportunity to reduce the risk of flooding, which can be caused by failing infrastructure and extreme weather events (anticipated to be more frequent and severe as a result of climate change). Although the site is located high above the Charles River and so is not immediately threatened by riverine flooding, sections of the Riverside site and critical infrastructure are located within historic wetlands and were thus considered at risk in the 2018 *Climate Change Vulnerability Assessment and Action Plan*.

Flooding along other sections of the MBTA Green Line “D” Branch has impacted transit service to and from Riverside in recent years (most notably in 1996 and 2010). The City should work with the MBTA to coordinate with the agency’s current resiliency efforts along the Green Line. Green infrastructure improvements and smart design choices can help address heat impacts and flooding from extreme weather events, improve stormwater runoff (as described in S3), and create an improved public realm (as described in S5).

**This principle purposefully aligns with that in the Needham Street Vision Plan (2018) given the need to increase climate resiliency citywide.*



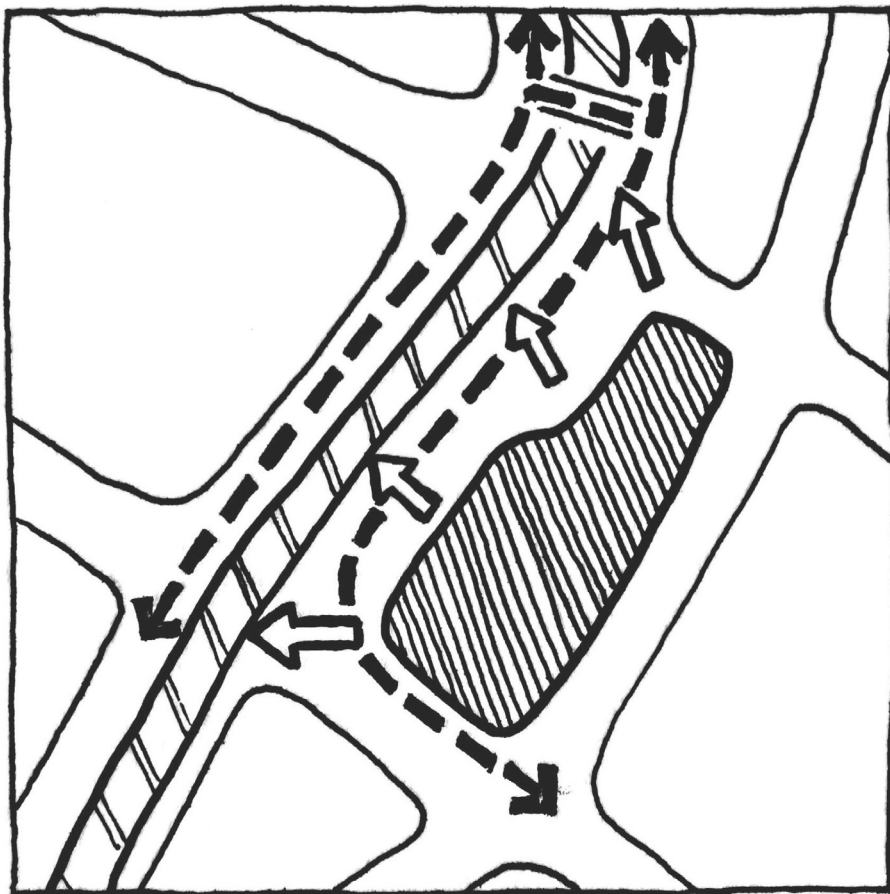
S5: Reinforce connections to nature

The Riverside site sits alongside the rich natural resource of the Charles River corridor. Reinforcing connections to and potential interactions with that resource will enhance the quality of life for residents, employees and visitors, offer educational opportunities, and improve personal and public health. Paying tribute to the site's namesake, Riverside, can help support a cohesive identity for the site, promote environmental stewardship, and future sustainability efforts both on-site and throughout the surrounding area.

The Riverside Greenway Committee has been working with City staff, volunteers, and other organizations to identify opportunities for improved pedestrian connections to and along the Charles River. These efforts should be incorporated in any redevelopment project.

Key Considerations

- › Celebrate local ecology on-site with views and landscaping
- › Provide connections to nearby natural and managed open space



Establishing connections to the Charles River can offer opportunities for recreation, mobility, and help to promote environmental stewardship.

ADDITIONAL INFORMATION:**S5**

It is important to improve and expand bicycle and pedestrian connections to the wonderful natural resources near the site. Having connections to nature is often what prompts humans towards ecologically sustainable actions. In a 2018 article in *Sustainability Science*, the authors found that reconnecting people with nature can play a critical role in addressing many of the current ecological and sustainability challenges.⁵

⁵ Ives et. al, "Reconnecting with Nature for Sustainability" (2018), *Sustainability Science*, 13:5

Today, the Riverside site lacks real connections with the adjacent natural areas of the Charles River corridor and other nearby parks and open spaces. While trail connections (mentioned more in T4) are important, it is also important to embrace and celebrate nature and ecology on site by creating natural areas and views to adjacent natural areas. By allowing visitors to the site opportunities to connect with nature, the site will help create a positive feedback loop that will lead to further sustainable actions.



The Newton Centre Garden on the Green has been designed, planted, and tended by volunteers since 1990 and is designated an All-America Selections Display Garden. At Riverside, the addition of gardens, plantings, and water features can reconnect visitors to nature and relate to the nearby Charles River and its wetlands.

Source: newtoncommunitypride.org



A guided walk sponsored by Historic Newton and the Newton Conservators crosses the Pony Truss Bridge in 2015.

Source: Newton Conservators.



Quality Design (D)

Vision: *The Riverside site should embody its status as a transit hub and important development site, with design and scale informed by the local context, thoughtful design principles, and the current and anticipated needs of Newton and the region.*

Overview

The Riverside site will be a distinctive part of Newton that celebrates its status as a local and regional transit hub that welcomes residents, commuters, workers, and visitors. The scale and design of buildings should be mindful of neighboring villages as well as the adjacent six-lane interstate highway, while recognizing this site is unique in the city and a prime transit-oriented development opportunity. Buildings and the open space network should create an active ground level experience for pedestrians that extends to Grove Street and links to the Charles River.

Quality design addresses the scale of buildings, their placement on the site, and architectural expression through materials and design details. Quality design also includes the spaces between buildings and requirements for a human-scale street network and comfortable open spaces within the site. Design should take into account the surrounding context but also acknowledge the specific features at the edges of the site, major highways, the large-format/scale of the site, the importance of lower-scale housing along Grove Street, and open space.

Guiding Principles

D1

Provide an appropriate mix of uses and sufficient density to support a great, vibrant place

D2

Utilize existing site topography and landscaping for creative and contextual site planning

D3

Require high-quality architectural and urban design

D4

Highlight the Riverside MBTA station

D5

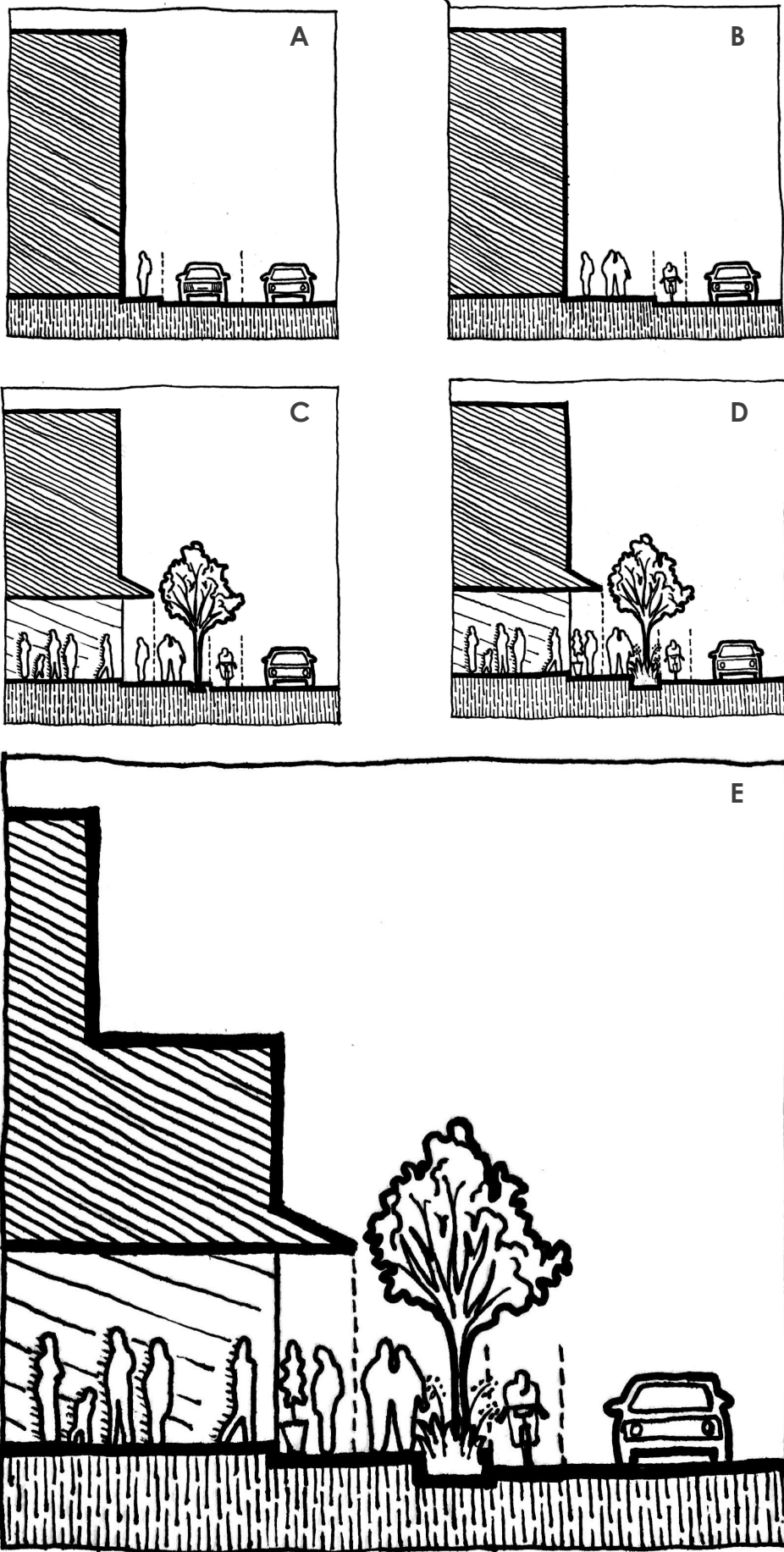
Embody the Garden City through street-side landscape design within the site and along Grove Street

D6

Celebrate the Charles River and recreation opportunities

D7

Evaluate development at a human-level to understand human-scale experiences



This sequence demonstrates how thoughtful design and streetscape elements can be used to create a vibrant, human-scale public realm and reduce perceptions of height and massing. From (A) to (E), the sketch is altered to include setbacks (B), active street frontage (C), landscaping (D), and set-backs in upper levels (E).

What we heard...

*"High towers with mixed income housing...
Housing for millennials!"*

*"Want a development that meshes with
[surrounding] neighborhoods."*

*"A true village-scale; small buildings
with 3-4 stories, parks, and open space
with reduced density and impact on its
surroundings."*

*"Views from Auburndale/Lower Falls
matter more than view from highway."*

*"Given the highway, transit and potential
commuter rail access, it would be
unfortunate to limit the scale to the
surrounding low-scale residential
density. Newton has few places for
substantial commercial and multi-family
development. This is one of them."*

"Large scale please!"

"Smaller scale!"

*"Make sure there isn't a wall of buildings
along Grove St. Any development should
be set back from the road and stepped
back too."*

*"Turn an eyesore of asphalt into a vibrant
place -but one that fits within the scale of
the neighborhood."*

*"If buildings are too large, they will isolate
the abutting neighborhoods. Building
size needs to reflect the community the
buildings exist within, not the highway that
bisects the community."*

*"Eyesore currently! Use topography -
Strong Design on 128! Need density to get
mix use amenities."*

*"The architecture should be unique, not
cookie-cutter. And buildings should be set
back and stepped back to give the site
breathing room."*

Quotes were selected to show a range of comments received.

Key Takeaways:

- Desire for development to complement and integrate within context of adjacent neighborhoods.
- General sentiment that the current site is not visually appealing, though some stakeholders preferred status quo to development.
- Desire for setbacks and step backs to limit visual impact of buildings and provide variation in architectural features.
- Need for thoughtful approach especially along Grove Street.
- Range of opinions about scale and nature of possible development.
- Desire for aesthetically pleasing design and scale that respects Newton's villages.

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D1: Provide an appropriate mix of uses and sufficient density to support a great, vibrant place

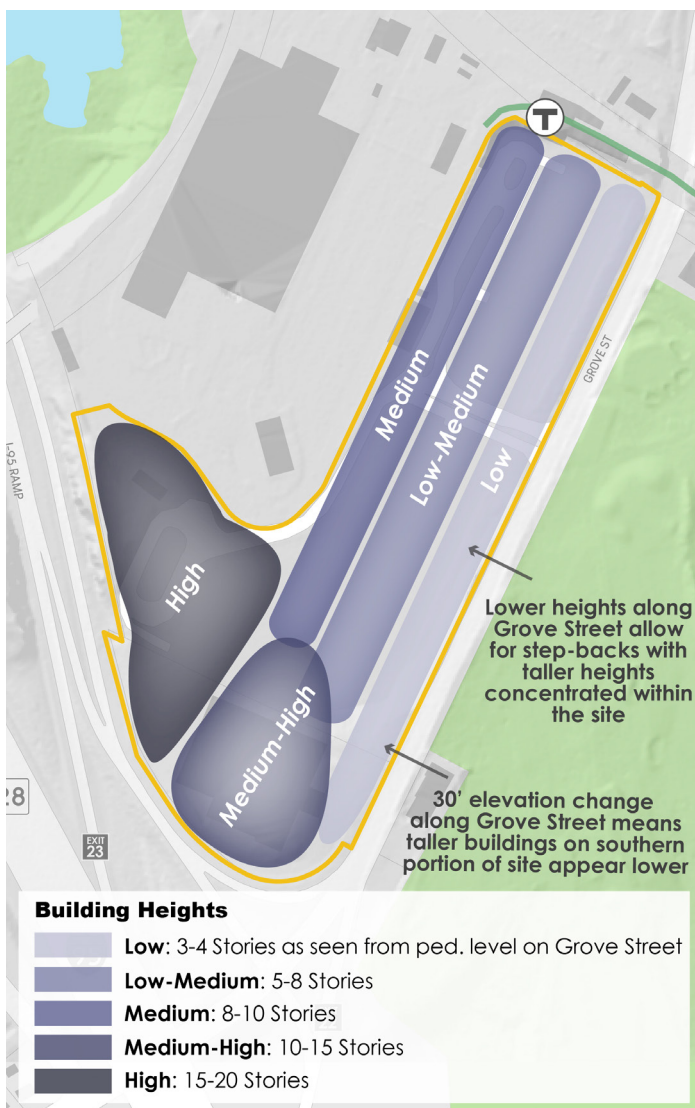
Numerous City plans have earmarked the Riverside site for higher-density and economic development including the *Newton Comprehensive Plan* and the *Newton Economic Development Action Plan*. The *Newton Comprehensive Plan* references this site as a “regional business area” – those areas containing, or intended in the future to contain, one million or more square feet of commercial floor area.¹ This focus on development on Riverside is based in large part on its unique attributes including its size, proximity to transit, and its adjacency and proximity to two major highways that make this parcel unique in Newton. The site’s designation by the City, in recent planning

Key Considerations

- Ensure a mix of residential, office, and retail uses on site
- Locate greater densities and heights along the highway and rail tracks

efforts, as a transit-oriented development site, also means that best practices and guidelines for TOD should be applied to the site, while considering how this parcel and future development, relate to the surrounding neighborhoods and contribute to the city as a whole. The site density and mix of uses should be robust enough to ensure that this community at Riverside is vibrant and that the commercial, retail, and office uses are supported, and occupancy and the number of customers is high enough to ensure the health of the community.

¹ <https://www.pps.org/article/placemaking-and-the-human-scale-city>



This diagram illustrates recommended heights (and corresponding massing) on the site. Taller buildings should front the highway and setbacks/lower buildings should be located along Grove Street. These recommendations acknowledge the importance of maintaining the lower-scale experience of Grove Street for pedestrians and as a Scenic Road. At the same time, taller buildings at the interstate and adjacent to the rail yard take advantage of the site's prominence for high visibility for office and hotel uses while ensuring height is not immediately adjacent to lower-scale residential areas. A change in topography at the southern and western ends of the site can also help mitigate some height for buildings here.

ADDITIONAL INFORMATION:

D1

Transit-oriented development only works at higher densities that support a mix of uses and vibrancy adjacent to transit. Sustainability goals, the provision of more housing, and economic development are made possible through applying TOD principles in a sensitive and consistent manner. While all rules of thumb and guidelines should be considered within local context, which is the purpose of this Vision Plan, there are a number of organizations in the U.S. that provide data and assistance in discerning the densities and mixes of uses that help support successful TOD.

While every TOD project has a different level and mix of densities, depending on the market, site size, and location, what is common to all is that the density of TOD is usually greater than the surrounding areas. TOD principles encourage greater density in order ensure

these projects can work and that transit and other sustainability and quality-of-life features are supported. For instance, without high residential densities, on-site amenities, retail, and services such as dining and convenience shopping don't have sufficient market to support success. Likewise, a high mix of commercial and residential uses helps support shared parking which can lower the total number of parking spaces needed and allow other uses to be provided on site, including open space.

The following chart illustrates some regional TOD projects and the number of housing units and square footages for other uses on site. Not every project has available information for all categories but across the projects, what is clear is the trend to a mix of uses and higher density uses.

Regional TOD Projects

Project	Housing Units	Commercial Office	Commercial Retail	Hotel	Forms of Transit Available
Hingham Intermodal Center	479 Units, 24 affordable	240,000 SF			MBTA Ferry
Boston Landing, Allston-Brighton	275 Units	650,000 SF	80,000 SF	175 Rooms	New MBTA commuter rail station
Assembly Row, Somerville	2100 Units	1.75 million SF	500,000 SF		New Orange Line station
Parcel U, Forest Hills	120 Units, 50% affordable		25,000 SF		Orange Line
Waterfront Square, Revere: Wonderland Station	900 Units		40,000+ SF ground floor retail, fine dining, entertainment	150 Rooms	Modernized Blue Line Wonderland Station
Northpoint, Lechmere/Cambridge	2,800 Units	2.1 million SF combined retail, office, research			Green Line
Station Landing, Medford	650 Units	165,000 SF	100,000 SF	190 Rooms	Orange Line

Height Guidelines

D1

Greater densities on site translate to greater height. There is significant concern in the adjacent communities about tall buildings on the Riverside site. This Vision Plan looked to precedents for height within Newton and also at how height can impact quality of life for Auburndale and Newton Lower Falls.

The current tallest buildings in Newton are The Towers at Chestnut Hill which are 190' high and 16 stories. These buildings are situated along Route 9 and adjacent to a commercial shopping area and lower density single-family dwellings beyond. Route 9 is not Grove Street, and heights along this Scenic Road should reflect the character of the road, as shown in the Recommended Height map on page 71. The Towers at Chestnut Hill are shown to illustrate the possibility of locating height adjacent to a low-scale residential neighborhood, particularly when mitigated by tree plantings both at the tall buildings and in the adjacent neighborhood.

The Crowne Plaza Hotel on I-90 in Newton Corner is the third tallest building at 12 stories and 146 feet in height and the Marriot Newton and Indigo Hotel, both situated adjacent to I-95/Rte. 128 are seven stories and 85 feet tall.



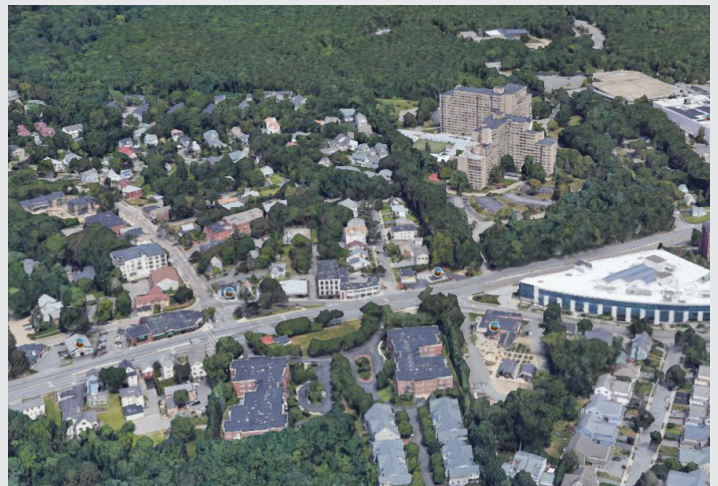
Station Landing in Medford, MA, adjacent to the Wellington MBTA Station on the Orange Line. This TOD includes several buildings of mixed-use development that range from 6 to 12 stories with 460 units of housing.

Source: Cranshaw.com



The Towers of Chestnut Hill rise 16 stories and are adjacent to a low-scale residential neighborhood, as well as a major shopping center on Route 9 in Newton.

Sources: <http://www.the-towers.com/photos/>; Google Earth





View of CityPoint from I-95/Rte. 128 that shows the structured parking incorporated into the topography.

Source: loopnet.com



View of CityPoint office building in Waltham (first LEED Gold office building in Waltham) from 3rd Avenue where the building height is just five stories.

Source: Google street view

Along I-95/Rte. 128, in the commercial and high-tech centers, there is a mix of low-rise, mid-rise, and high-rise buildings on sites adjacent to the highway. Some structures, such as CityPoint in Waltham, rise high above their combined building and parking deck height of 13 stories because of the rocky promontories and topography of their sites. Others such as the six-story Trip Advisor headquarters, sit adjacent to I-95/Re 128 at road level. Given the prominence of this site along the interstate, which is six lanes and 145 feet wide at this location, as well as the goal for transit-oriented development here, appropriate building heights include 15-20 stories on portions of the site. The diagram shown earlier in this section illustrates the portions of the Riverside site that would be appropriate for the tallest buildings while the Grove Street edge of any development here should be of lower scale of 3-4 stories at the property line with setback heights of no more than nine stories. Buildings should be 3-8 stories in height at the southwestern corner of the site at Grove Street.

Principle D2 addresses ways to minimize the perception of height. The adjacent communities are very concerned about the effect of the Riverside development on their day-to-day quality of life and experiences. Height should be assessed based on its impact to the quality of life in their homes and neighborhoods. These impacts are generally measured by shade and shadow studies. As recommended by Principle D7, the experience of the development, and particularly building height, should be measured and evaluated based on the concerns of the human experience – through what people experience on the ground at human-level from their communities, not from a bird's eye/plane perspective of the development, to get an accurate understanding of the impacts on quality of life.

It is also important to retain human-scale development along Grove Street where pedestrian activity should be encouraged. Buildings at the property line can help define the pedestrian space and a 1:1 ratio between building height at the property line and the width of the road can provide a sense of enclosure and safe space. This 1:1 ratio is recommended in other Newton guidelines and area studies.



D2: Utilize existing site topography and landscaping for creative, contextual site planning

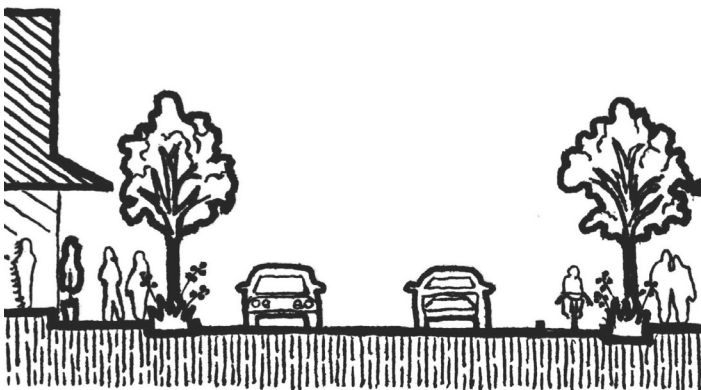
The topography of the Riverside site has the potential to reduce the perceived height and scale of any proposed development. Due to grade changes along Grove Street, the strategic massing of buildings along the western and southern edges of the site could serve to lower the visual impact of any larger or denser buildings proposed. Additionally, utilizing setbacks or upper-story step-backs of buildings along Grove Street and adjacent to residential areas could help to reduce this perceived impact and assist in maintaining the current character of surrounding neighborhoods. Topography should also be considered when determining siting and height for buildings along the interstate. The rock outcropping on the western edge of the site the highway will obscure buildings less than nine stories. To create a prominent office or hotel structure here, the height can and should be greater.

Key Considerations

- ▶ Use site topography to minimize perception of building height by locating taller buildings at the lower portions of the site
- ▶ Ensure the Grove Street edge of the site has contextual landscape-focused design and direct street access for buildings to activate the street
- ▶ Use strategic massing and height to limit visibility from adjacent neighborhoods

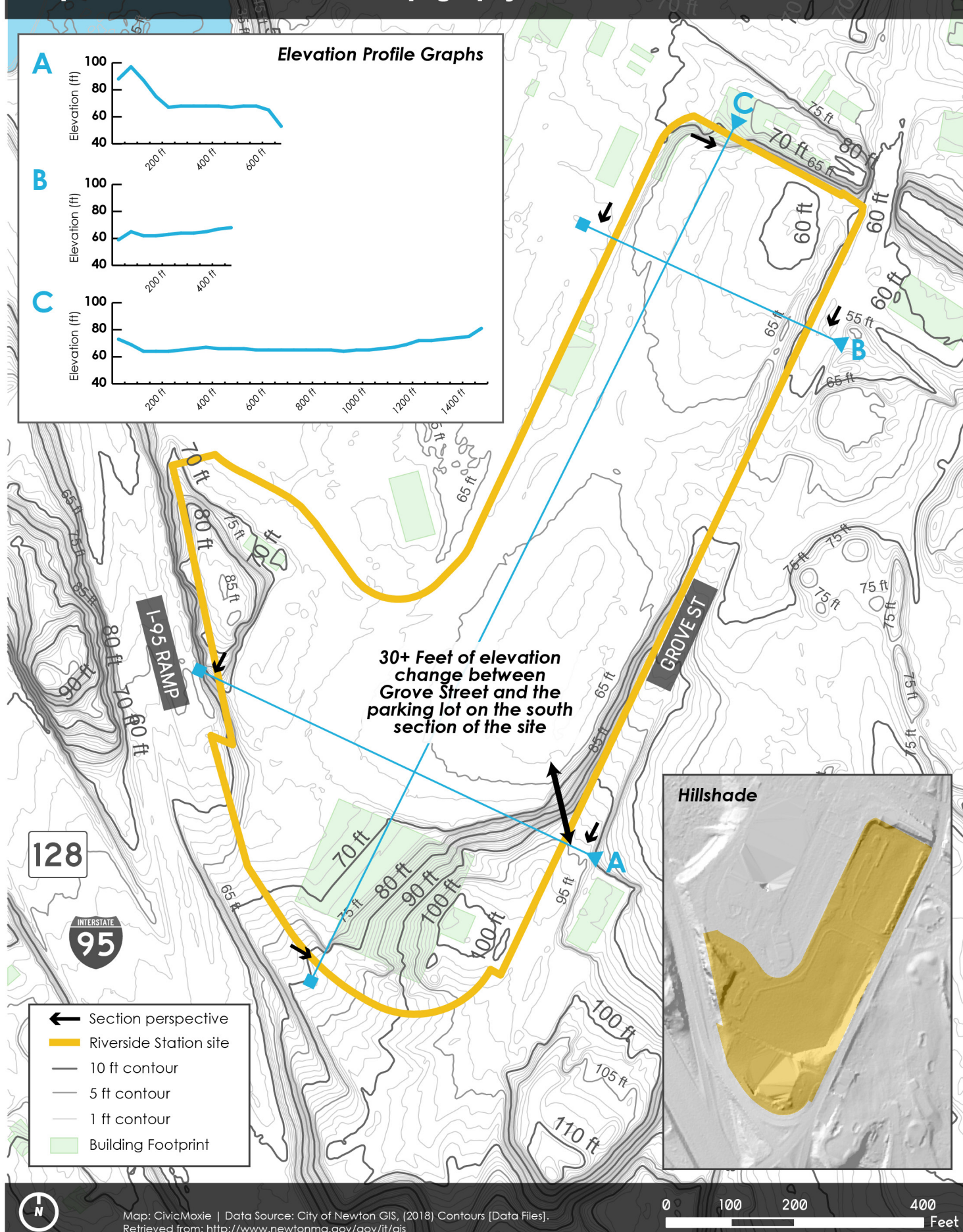


The Indigo Hotel is almost obscured by the rock outcropping along the interstate. Any class A office building at this site will need to be prominent enough to be seen from the highway.



Along Grove Street and in interior blocks, height setbacks, active ground floor uses that blend outdoor and interior spaces visually and physically, and the use of landscaping and trees can dramatically shift the perception of height for pedestrians and motorists.

Map of Riverside Station Site Topography

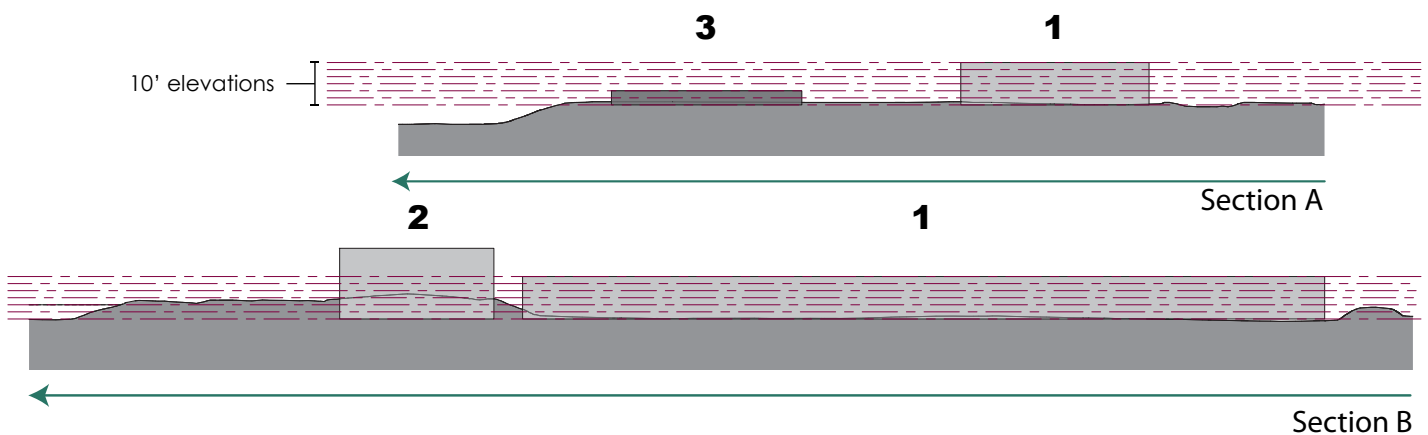
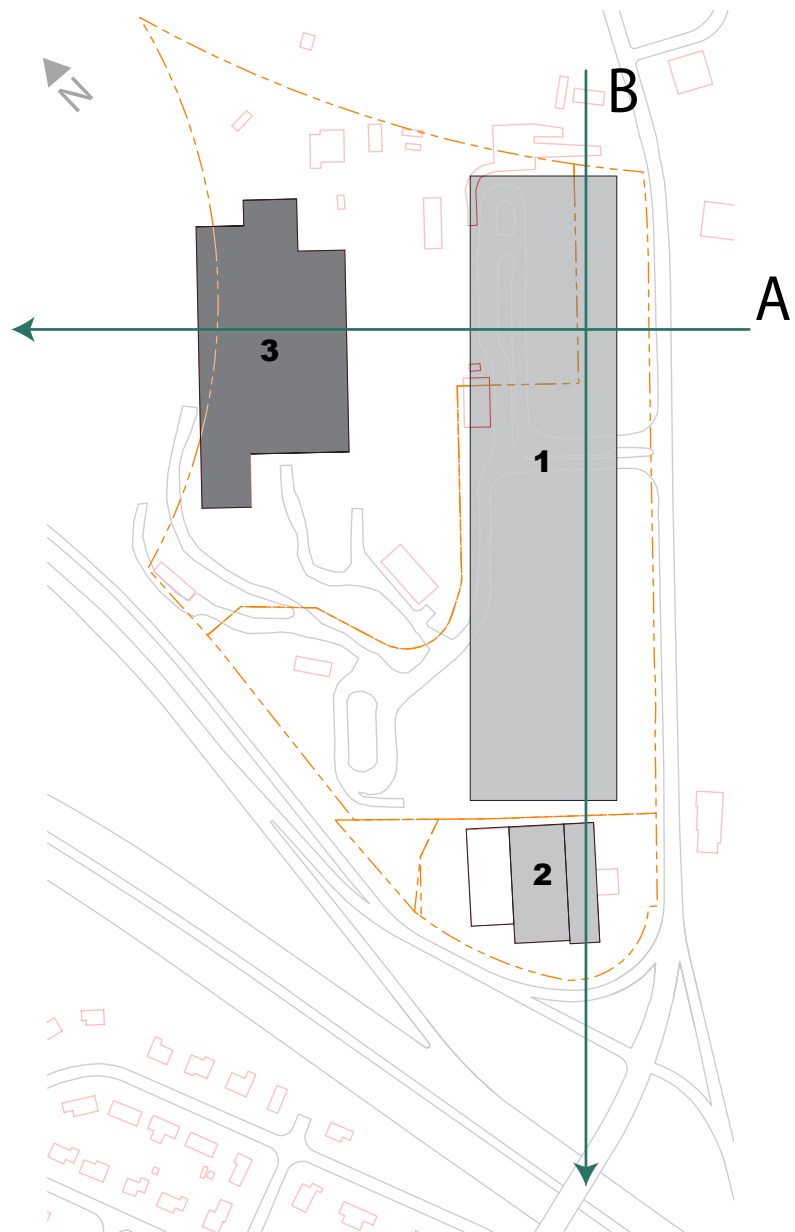


Riverside Site Topography

The site's topography allows for strategic massing at certain locations throughout the site that exploit site topography, reducing the perception of building height.

The examples below and to the right illustrate how the topography of the site affects the perception of existing and diagrammatic structures of varying heights and mass.

-  Diagrammatic structures
-  Existing MBTA maintenance facility



ADDITIONAL INFORMATION:**D2**

The site's unique situation and varied topography should be incorporated into design to mitigate the development's presence along Grove Street. During the visioning process, many stakeholders asserted that limiting the height and massing of the buildings was most important along Grove Street since this is how most neighborhood residents experience the site. Concentrating buildings of greater height and scale along the western edge of the site against the railyard and highway interchange would help to mitigate the perceived height of these buildings, allowing for taller structures to be imperceptible or less noticeable from Grove Street for pedestrians. Working with the site's topography, the best place for height along Grove Street is the southwestern edge of the site, where the Indigo Hotel's surface parking area is today. The grade there is approximately 30 feet below Grove Street, the equivalent of more than two stories. A building at that location would appear shorter from Grove Street than it actually is.

In addition to being away from Grove Street, taller buildings should be located at the western edge of the site because visibility from the highway is an important part of attracting offices to the Riverside site. This economic development interest is weighed against concerns from Lower Falls residents about visibility of any new building from their homes. Strategies to achieve highway visibility and address residents' concerns about glare and building lights should be explored through view studies. It is recommended that view perspectives be completed from both Lower Falls and Auburndale for any proposed building designs to understand the extent to which those buildings are visible from the neighborhoods.

Grove Street is a scenic road and creating an engaging

landscape to the standards of the scenic route is a design priority for this edge of the development. Throughout the process, residents highlighted how much they liked the front entry landscape design of the adjacent Riverside Center office development. Intermixing landscape and buildings with doors and windows onto Grove Street can together make the Grove Street edge of the Riverside site an engaging scenic walk. The setback provision in the MU3/TOD section of the zoning code, which is specific to the Riverside site, should be revisited as the suburban/rural treatment of the road, with buildings setback, doesn't address the goals of a safe, pedestrian friendly experience along the street. The goal should be development that engages with Grove Street, at the appropriate scale, to create a walkable and interesting public realm to connect the site and T station with the surrounding communities, that places high emphasis on enhancing the pedestrian experience along the street. Building set-backs should still be required for upper floors of buildings along Grove Street to maintain the lower scale environment of the street.

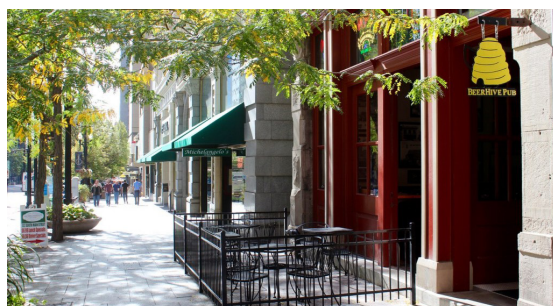
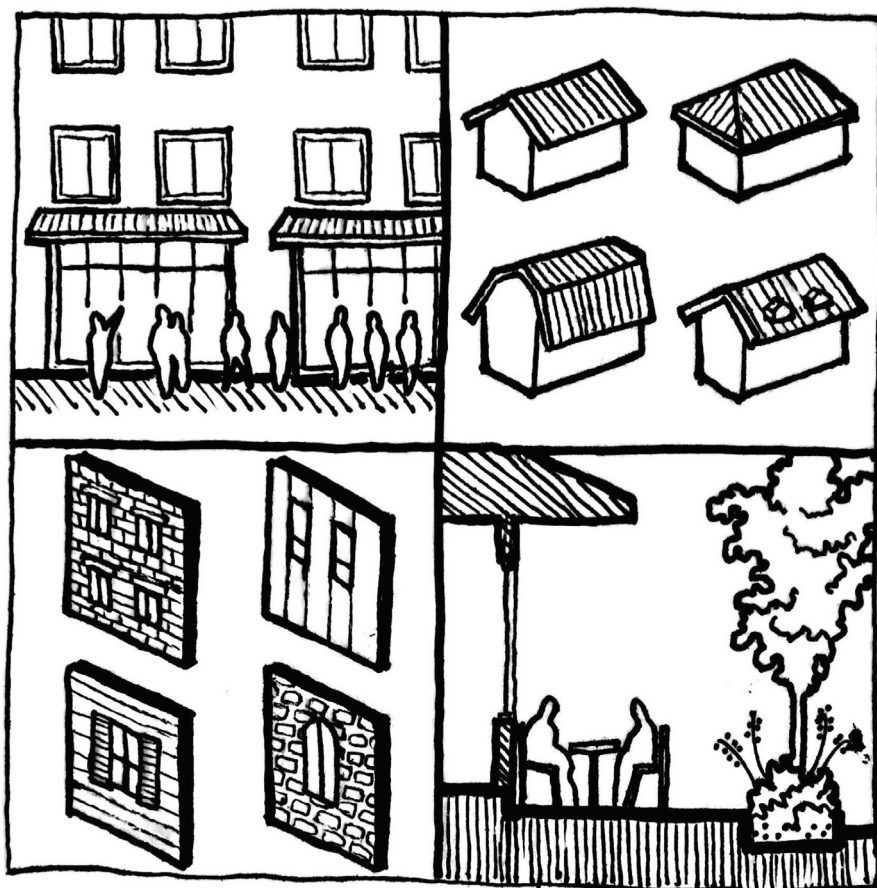


D3: Require high-quality architectural and urban design

Ensuring that architectural massing and details are not jarring or misplaced within this context will be of key concern. However, while architectural design should be respectful of existing context, it would be inappropriate for the site to replicate antique building styles. In addition, care should be taken to consider the highway presence of any potential development scenario along I-95/Rte. 128, as the site represents a key opportunity to visually establish a Newton presence along this major technology corridor.

Key Considerations

- › Be respectful of adjacent design context without mimicking architectural styles
- › Create human-scale, walkable blocks
- › Give special attention to materials and details at ground level
- › Create design guidelines and conduct design review for the site
- › Acknowledge business and economic development value of creating a presence on the highway



Various materials and facade details used at the ground-level can ensure a vibrant pedestrian experience and more walkable blocks. The images on the top provide examples of varied, activated streetscapes in Salt Lake City, UT
Source: Isaac Riddle (top and bottom right)

ADDITIONAL INFORMATION:

D3

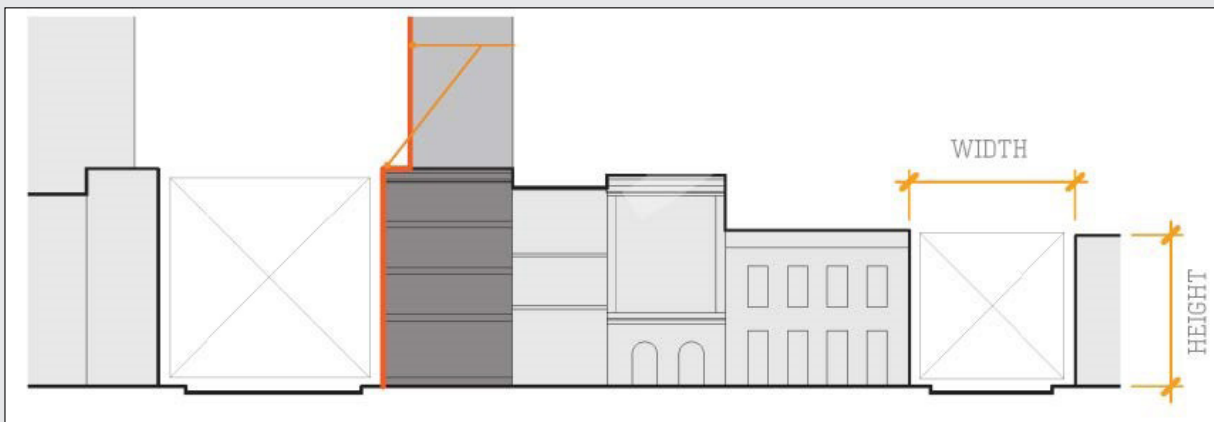
While the City of Newton should pursue high-quality architectural design for all its projects, the Riverside site presents a unique opportunity given its location, transit access, and visibility. Development on this site will need to be respectful of the character of Grove Street while also responding to the scale, width, and nature of the adjacent highway and rail yards. The visual and physical prominence of the site from I-95/Rte. 128 provides an opportunity for Newton to establish a visual welcome mark to the city.

At a more granular level, building designs and materials should be complementary with one another while still being distinguishable based on their uses. Structures should avoid being homogenous by integrating an assortment of materials and treatments, and varied heights and rooflines. As discussed in Model for Sustainability, green building principles should also

be required by the City to minimize environmental impacts through low-impact development and energy-efficiency measures.

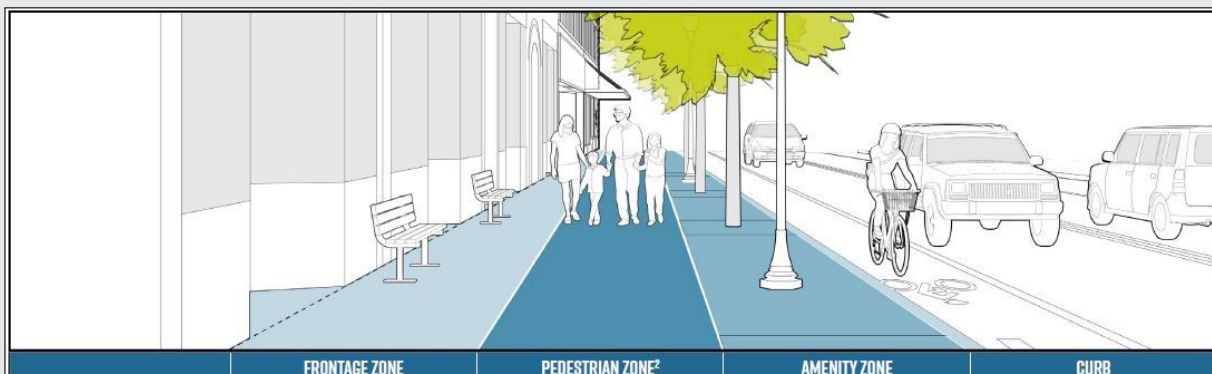
Where through streets and physical blocks cannot be created, buildings should be designed to visually break up longer street walls, particularly within the first two stories of buildings as this is what is most relevant to pedestrian experience. The site can avoid the feeling of mega-blocks by including additional building entrances, varying facades, and assorted materials in its structures in these instances.

Sidewalks should also be designed in the manner of a village center as outlined in the *Newton Street Design Guide*, utilizing a frontage zone, pedestrian zone, amenity zone, and curb to enhance pedestrian safety and the overall public realm.



The site can avoid the feeling of mega-blocks by including varying facades and structural materials.

Source: Needham Street Vision Plan, p. 38



Sidewalks designed in the manner of a village center can enhance safety and the overall public realm.

Source: Newton Street Design Guide (2016): p.15

Creating human-scale, walkable blocks

D3

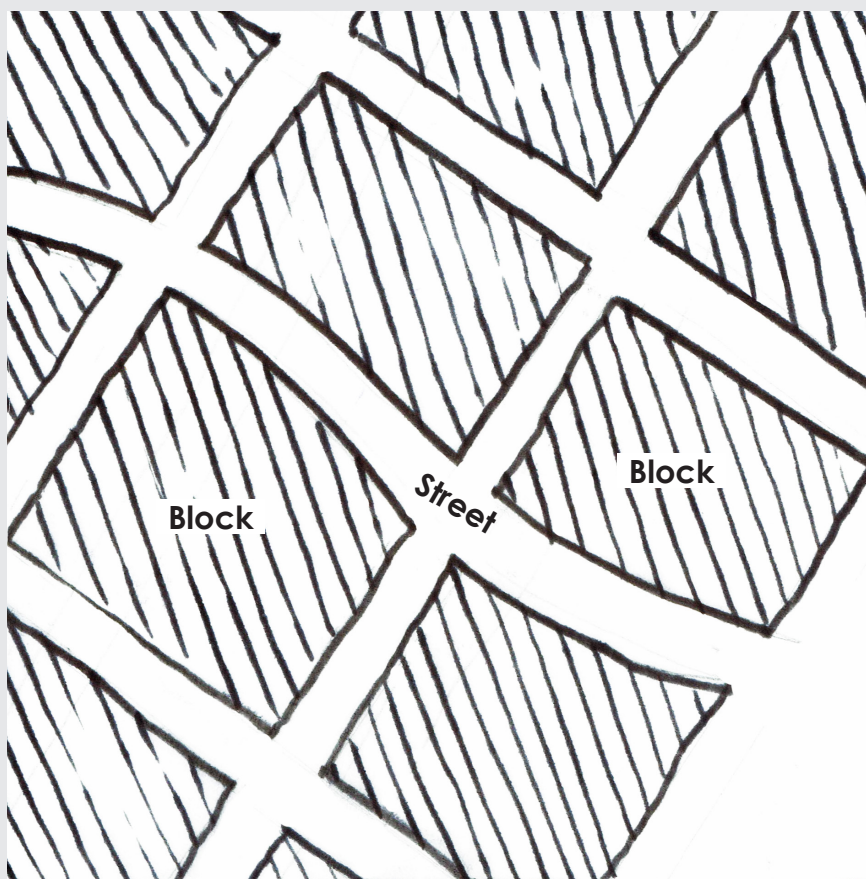
As part of ensuring that any development scheme on the Riverside site supports a human-scale built environment, special care should be taken to create a street network that supports not only vehicular access, but prioritizes pedestrian and cyclist connections to ensure safety and mobility at all scales throughout the site. By implementing shorter, more active blocks, and active design elements along facades, the site can promote social interaction, ease of navigation, and mobility both to and from the site. To create human-scale blocks, the following design principles should be employed:

- Prioritize pedestrian/cyclist safety
- Encourage social/community interaction through street and public space design
- Use shorter and smaller blocks to create a dense, walkable street network with multiple intersections and movement choices

“Often, we use the term “human scale” to distinguish between those accessing the city on foot and those viewing it through a car window. Although both involve people, we use human scale to refer to pedestrians”

- Stephen Burke, Project for Public Spaces ²

² <https://www.pps.org/article/placemaking-and-the-human-scale-city>



The Riverside site should be laid out with a clear internal street network that includes multiple blocks easily navigable by pedestrians, bicycles, and automobiles. Shorter blocks and more intersections improve cyclist and pedestrian safety and also increase opportunities for human social interaction. A legible network of pedestrian pathways and public spaces, including indoor spaces open to the public, should connect throughout the site and have clear access points to villages and areas adjacent to Riverside.

Design Guidelines and Review

D3

Creating design guidelines and conducting design review of a proposed development will be important steps in ensuring adherence to the principles of this vision. It is likely that any development at this site will be constructed in phases, and design guidelines should also be employed to ensure good design decisions at a more finely grained level are made on the site. Design guidelines should cover architectural issues of ground

floor materials, the placement of and use of glass in windows and doors, and guidance around ensuring variety of building forms. Design guidelines should also address internal site organizing principles related to setbacks between buildings on the site, wayfinding to public spaces, among other considerations.

Public Realm

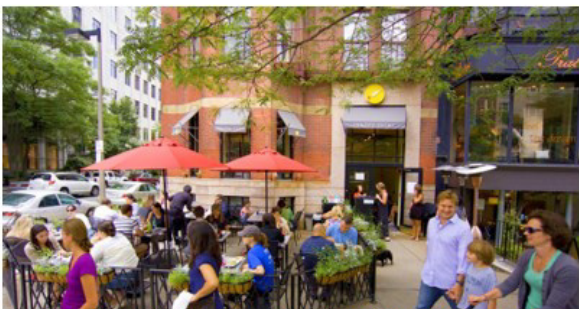


Design public open space as an extension of the streetscape and maximize comfort and visual access

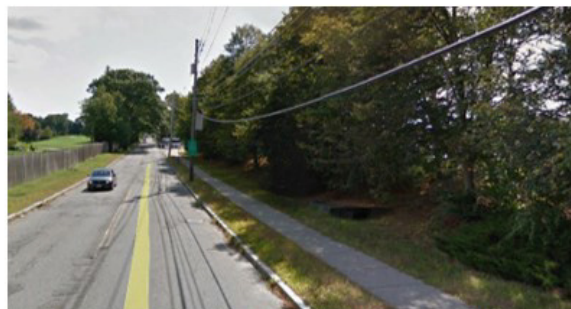


Express neighborhood character in public open space

Site Design



Create a defined and active streetwall, render facades with texture and depth

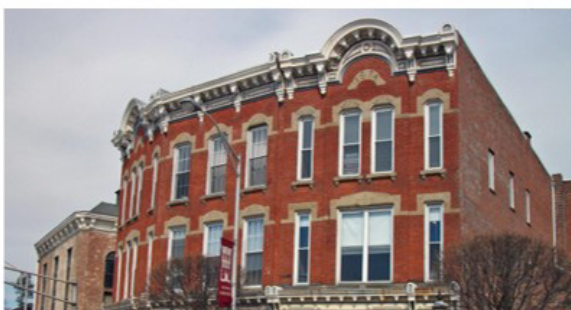


Recognize and enhance unique conditions, historic and natural features

Built Form



Modulate buildings vertically and horizontally



Shape the roofs of buildings

Source: City of Newton



D4: Highlight the Riverside MBTA Station

Special care should be taken to pay tribute to the Riverside MBTA station and contribute to a distinct identity through architectural cues, wayfinding, and overall site design. As the terminus of the “D” branch of the MBTA Green Line, Riverside station represents a long history of transit and access to Boston that should be highlighted and enhanced by any potential development, ensuring that residents and visitors are easily able to navigate to and from the station from within the site and surrounding area.

Key Considerations

- ▶ Maximize station visibility through site design and wayfinding
- ▶ Provide easy access to the MBTA station from Grove Street
- ▶ Create a unique station identity that works with overall site design



Government Station, located in downtown Boston, strikes the balance of being highly identifiable without overwhelming the aesthetic of the surrounding context.
Source: Wikipedia



Plans for Rohnert Park Station elevate the importance of the station to this transit-oriented development in Sonoma County, CA. The station sign, large clock, and low arch all call attention to the entrance at the end of a central park and plaza that extends several blocks and is framed by buildings.
Source: Laulima Development.

ADDITIONAL INFORMATION:

Riverside Station is the gateway to the “D” branch of the MBTA’s Green Line and, on a typical weekday, has 2,241 passenger boardings.³ The station is what makes Riverside a prime opportunity for TOD by offering regular access to other areas of Newton, Brookline, and Boston. As a result, the station itself should be celebrated through architectural design, landscaping, and street layout, and serve as an identifiable focal point within the site. Ensuring that the station remains highly visible will be important for wayfinding purposes and to ensure any development here enhances accessibility to transit on site.



Structural details contribute to Riverside's identity.

The current MBTA station does feature a number of structural details that serve both as identifiers and aesthetic cues that contribute to its identity. Green detailing on signage and structural components of the open-air station, such as the embossed “Riverside” in concrete, are just a few examples.

A mixed-use development on site presents an opportunity to revive the Riverside “T” Station and utilize architectural details to add prominence and offer amenities. Locally, there are many examples of transit stations that are easily recognizable and provide design clues as to their use. For example, Government Station, Back Bay Station, and South Station all accomplish this while still using very different architectural styles. Riverside is certainly a smaller station than these examples and, though it should not be designed at the same scale, it should nonetheless be highlighted in context of the site.



Newton Centre Station on the “D” branch of the Green Line is one of H.H. Richardson’s railroad stations that still exists today and currently houses a diner.

Source: Wikimedia Commons

H.H. Richardson’s Railroad Station Buildings

The Boston & Albany Railroad commissioned renowned architect Henry Hobson Richardson to design many of the original stations along the railroad lines in Newton. Best known for Trinity Church in Boston, Richardson designed these stations to be less intricate than his larger works, which include churches, libraries, municipal buildings, and commercial stores. The stations at Newton Centre, now a functioning diner, and at Auburndale, demolished in 1960s, were just two of the many buildings he designed for the B&A. Following his death in 1886, the firm Shepley, Rutan and Coolidge continued in Richardson’s style and tradition – termed “Richardsonian Romanesque” – and designed many additional stations along the Highland Branch – today’s Green Line “D” branch.

³ MBTA Green Line Ridership, 2014.

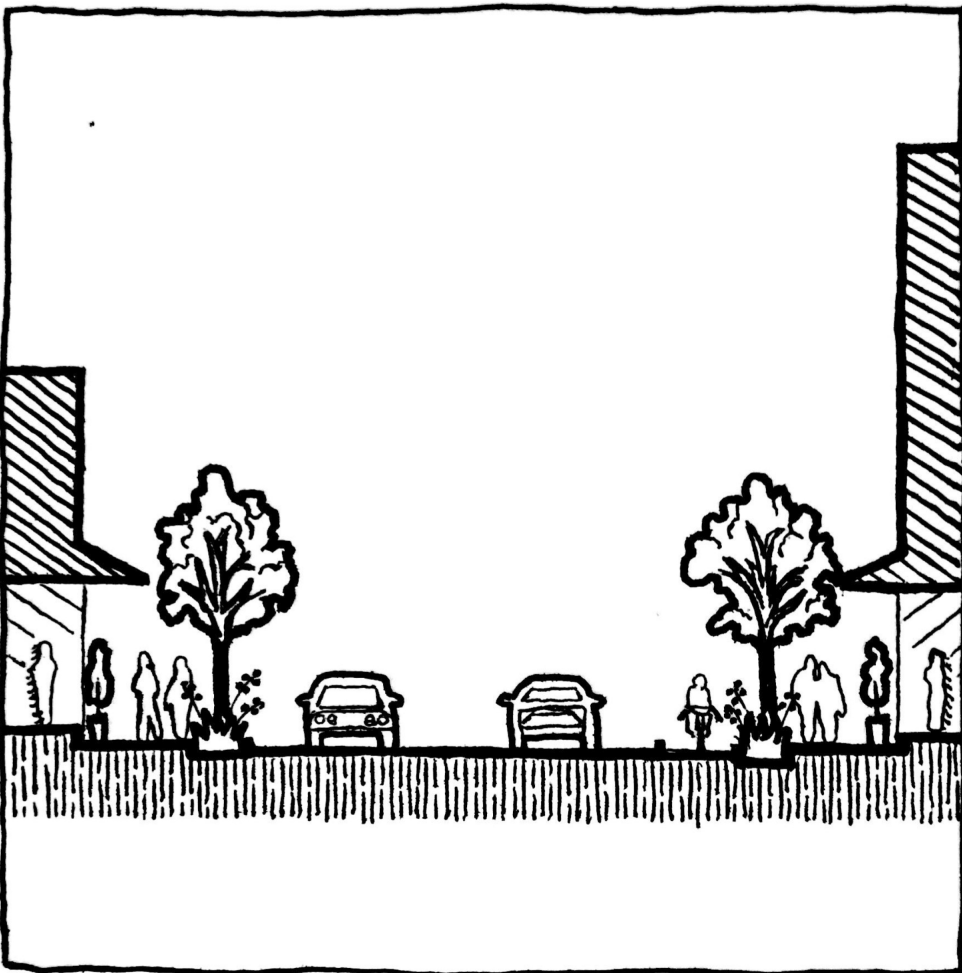


D5: Embody the Garden City through street-side landscape design within the site and along Grove Street

Newton is properly characterized as the "Garden City" due to its prevalence of landscaped vegetation and tree-lined streets. As such, the Riverside site should embody these characteristics by preserving existing trees and vegetation and incorporating new landscaping throughout the site and along Grove Street, a designated Scenic Road, to improve visual appeal and provide visual buffers where necessary. A key goal for Grove Street is to create a safe pedestrian environment.

Key Considerations

- ▶ Provide landscaping along Grove Street and throughout site
- ▶ When adding sidewalks along Grove Street, retain or add new landscaping/trees if set-backs exist
- ▶ Provide safe pedestrian access during construction



Within the site, street side landscaping can support a comfortable and human-scale public realm.

ADDITIONAL INFORMATION:**D5**

Creating a safe pedestrian environment and pleasant walking experience is a high priority for Grove Street. Because the street is also a Scenic Road under the provisions of Massachusetts General Law Chapter 40 Section 15C,⁴ care should be taken to minimize the removal of trees along the roadway and new trees should be planted when possible to compensate for the removal of existing trees in order to provide sidewalks. A streetscape plan showing new sidewalks, trees which must be removed, and new trees and landscaping must be approved by the Planning Board in advance of construction work.⁵

In addition, enhancing the landscaping on Grove and throughout the entire site can also provide important stormwater filtration and retention capacities noted in Sustainability Principle 3 (S3). Beautification during construction should also be considered as any work on the Riverside site will likely be phased over time. Temporary elements such as landscaping, public art, and fencing, should all enhance the experience along Grove Street during construction, as much as possible. During the visioning process, many residents noted

that Riverside Center, just north of the Riverside site, is well landscaped and has a pleasing frontage along Grove Street. In addition to a setback of 60+ feet, the development has some mature trees, a plaza, and well-maintained landscaping that limit the visual impact of the structures from the street. While a similar setback of buildings along Grove Street are not recommended in this Vision Plan in order to promote pedestrian activity and safety, the quality of landscaping at Riverside Center can be a guideline when landscaping the Riverside site.

⁴ <http://www.newtonma.gov/gov/planning/bc/board/default.asp>

⁵ Article IX Scenic Roads; Sec. 20-71 Regulation of Scenic Roads;
<http://www.newtonma.gov/civicax/filebank/documents/75150>



Landscaping in front of Riverside Center at 275 Grove Street.
Source: CRJA-IBI Group



D6: Celebrate the Charles River and recreation opportunities

Similar to how the Riverside Station should be highlighted and celebrated through architectural cues, wayfinding, and site design, similar respect should be paid to the Charles River. As the namesake of the Riverside site and a key natural resource locally and throughout the region, the Charles River can be celebrated through enhancements to visibility, wayfinding and signage, and highlighted through thoughtfully sourced public art.

Key Considerations

- › Enhance visibility to/from the Charles River
- › Provide natural areas wayfinding and signage
- › Provide locations and funding for public art



The beauty of the Charles River is inaccessible from the site and other locations nearby. Development at Riverside can invite people to the Charles River open space network and serve as a connector to natural areas.

Source: Newton Conservators

ADDITIONAL INFORMATION:**D6**

The MBTA station and site are termed “Riverside” for good reason. The Charles River lies less than 100 feet from the western edge of the railyard. The river and its surrounding riparian habitat, much of which is conserved as parks and recreation lands should be celebrated in the architectural design, landscaping, and wayfinding on site. The design should pay homage to the Charles River and its local history in addition to connecting to this resource via the trail network as mentioned in Principle S3.

Rooftop access or viewing platforms might be included to allow people to overlook this section of the Charles River. Conversely, any taller buildings on-site will likely be visible from the river and can serve as landmarks for canoers or kayakers traveling the Charles for recreation. For example, further downstream, such buildings as the Watch Factory in Waltham inform paddlers of their location. On-site wayfinding, signage, and even public art should also make clear that the Charles River is just next door.



The Pony-Truss Trail, located nearby the site.



D7: Evaluate development at human-level to understand human-scale experiences

At the end of this Vision Plan, a list of recommended drawings and studies is provided, many of which are already part of the Special Permit application process. These recommendations include experiential drawings that show the proposal, not at bird's eye view, but at human level, within the development and from vantage points in adjacent villages, to understand how the design, scale, and height meet requirements for human scale comfortable spaces, desired by the City and community groups. It is traditional that civic design and urban design reviews are often only made at street level with the understanding that people experience things at that level and are most effected by the materials, building treatment, and heights and scales of the first few stories of any building and the building's relationship to the street and open space.

Key Considerations

- ▶ Evaluate building heights and visual impacts from human-level perspective from adjacent neighborhoods and from Grove Street
- ▶ Require materials boards during design review of ground level building design to evaluate the built environment on site



It is important to evaluate building height and massing as it is experienced from the human-scale in adjacent neighborhoods. The pictures to the left are examples of perspectives that are reflective of these human-scale experiences from neighboring villages.



As previously mentioned, when viewed from the mostly single-family home neighborhood adjacent to the development, some taller buildings may be obscured or invisible because of neighborhood trees, while other locations may have clear views of Riverside.

ADDITIONAL INFORMATION:**D7**

Consideration of adjacent community landscaping and tree canopy could be a part of the permitting process – with focus not only on Riverside site landscaping, but also that of the residential areas immediately adjacent to the site to see what landscape elements may be added to transform views.



Special attention should be paid to adjacent community landscaping and topography. The aerial above depicts topographic changes between the Riverside site and Newton Lower Falls, revealing a mature tree canopy and grade change that provides visual coverage between the neighborhood and site. The site section at the bottom of the graphic is taken along the yellow line in the photograph.

Source: Google Earth with CivicMoxie annotations.



Robust Newton Economy (E)

Vision: *The Riverside site should contain a viable mix of commercial uses that brings positive tax revenue and jobs to the city. Local retail and services should be complementary to existing commercial in the nearby village centers.*

Overview

For over ten years, the City has considered the potential for Riverside to be a mixed-use development site that would include commercial development to help bring tax revenue to the City. The site is highlighted in the *Newton Comprehensive Plan* and the *Newton Economic Development Action Plan* because it remains one of the few large underdeveloped parcels available in Newton, as well as because of its accessibility to public transit and two major interstate highways. Although many stakeholders disagreed during the vision planning process over the best size of development, there was general agreement that some commercial uses on site in the form of office space and retail would provide positive benefits for the City and Newton residents.

The Riverside site represents a prime opportunity for Class A office space, particularly for uses such as medical offices and lab space that are in high demand throughout the region. The *Newton Comprehensive Plan* references this site as a “regional business area” – those areas containing, or intended in the future to contain, one million or more square feet of commercial floor area.¹ In addition to its regional and city-wide significance, commercial uses at Riverside should also meet needs at the neighborhood and site level. Co-working space for local start-ups and small retail opportunities for independent businesses should be made available and vibrant, ground floor retail can be positioned to serve workers and residents on the site as well as to provide complementary service and dining options to those that exist in nearby Auburndale and Lower Falls. The site’s connections to the Charles River and regional open space network can also provide opportunities to draw in recreation enthusiasts,

Guiding Principles

E1

Pursue best fit of local retail and services

E2

Provide an array of commercial space types

E3

Support new and existing locally-owned businesses

E4

Ensure development supplies fiscal benefit to the City

providing another market for retail and dining on site. Taken all together, these various commercial spaces should seek to improve overall livability in Newton, as mentioned in the *Comprehensive Plan*:

“A community’s livability is enhanced by convenient access to shopping, restaurants, work places, entertainment, and cultural activities. Successful businesses serving the local community in the village centers and the growth of more broadly-based organizations contributing tax revenues and jobs in commercial corridors and transportation hubs are equally important targets for assuring Newton’s future prosperity.”²

¹ *Newton Comprehensive Plan*, p. 53

² *Newton Comprehensive Plan*, p.6-1

What we heard...

"Must be strongly net revenue positive considering full cost impact on city services. Not many opportunities left to add significant commercial space."

"Many small businesses."

"Make sure that businesses are not overly expensive. They should be places everyone can afford to go to. Remember students and teachers live here."

"Views from Auburndale/Lower Falls matter more than view from highway."

"Think about how to ensure that not all restaurants and retail are so highly priced that they become only for the wealthy."

"Riverside should take advantage of its location for commercial development, specifically office, medical and research facilities."

"Ground floor retail including restaurants and community serving services."

"What kind of retail or office/lab space would serve Riverside and the abutting neighborhood best? Can we plan for commercial that reduces traffic by car?"

"No need for retail (coffee shop is good) or office space. Low income housing -100%"

Quotes were selected to show a range of comments received.

Key Takeaways:

- › Differing opinions about scale of commercial development that would be beneficial at the site.
- › Strong desire to see local, small businesses represented on site.
- › Desire to see mix of uses that serve surrounding communities without negatively affecting existing village centers.
- › Interest in generating tax revenue for the City through commercial development.
- › Preference for a range of retail and dining options, and not only high-end.



E1: Pursue best fit of local retail and services

Riverside can serve as a vibrant, mixed-use site that draws office workers, commuters, and residents from Newton and the surrounding towns by providing the best fit of overall land uses that support ground floor local retail and services. Market data and regional development trends indicate that retail and dining on this site will be supportive of the on-site commercial, residential, and hotel uses and will most likely not create a major city or region-wide destination for shopping and dining. Dining, service, and retail options should be complementary to, rather than competitive with, businesses in nearby villages and fill service gaps identified in the *Economic Development Action Plan* where possible. Active programming of public space and strong connections to the regional trail and recreational network can support local retail and dining at the site to ensure ground floor uses are active and have healthy demand from a range of on-site users, nearby residents, and visitors at all times of the day and week.

Key Considerations

- Consider local needs
- Provide increased opportunities for local and independent businesses
- Offer complementary, not competing, businesses
- Provide space programming and strong open space connections to support business health



Ensuring a complementary mix of uses will reduce turnover and promote longevity. Local needs take the form of a mixture of smaller-scale restaurants and retail options.

Location: Station Landing - Medford, MA

ADDITIONAL INFORMATION:

E1

To protect existing businesses in Auburndale and Lower Falls, Riverside should provide a retail mix that is complementary to those nearby while filling a gap in supply in the city's overall retail mix. The recent *Real Estate Market Analysis* completed as part of the *Economic Development Action Plan* identifies supportable retail for new businesses in Newton, highlighted in the chart below. Several of these correspond with what was heard from stakeholders during the visioning process, such as a the desire for a small grocery store and eating places.

While the overall demand for restaurants and retail businesses in Newton is strong, due in large part to the high average incomes and consumer spending power of its residents,³ it is important to note that this site is not expected to be a regional retail/dining destination which means retail, dining, and service uses will, for the most part, be supportive or ancillary to the major office, residential, and hotel uses on the site. To ensure the longevity of any new businesses on the Riverside site, special site programming and placemaking, valet parking for restaurants, and other promotional and marketing strategies will be needed to attract a wider market area, as most retail and restaurants in mixed-use developments are unable to survive exclusively off of tenants on site.⁴

³ *Economic Development Action Plan*, p. 109.

⁴ *Economic Development Action Plan*.

Supportable Retail, City of Newton							
A	B	C	D	E	F	G	H
NAICS	Retail Category	Retail Gap	10% Leakage Recapture	Average Sales per Business	Supportable Businesses (D / E)	Average Sales per SF	Supportable SF (D / G)
7225	Restaurants/Other Eating Places	\$ 83,449,535	\$ 8,344,954	\$ 746,006	11	\$ 350	23,843
4451	Grocery Stores	\$ 161,505,222	\$ 16,150,522	\$ 4,707,055	3	\$ 500	32,301
4441	Bldg Material & Supplies Dealers	\$ 93,157,657	\$ 9,315,766	\$ 3,092,156	3	\$ 350	26,616
4539	Other Miscellaneous Store Retailers	\$ 31,093,473	\$ 3,109,347	\$ 845,926	3	\$ 300	10,364
4461	Health & Personal Care Stores	\$ 63,062,722	\$ 6,306,272	\$ 2,991,827	2	\$ 400	15,766
4529	Other General Merchandise Stores	\$ 78,144,980	\$ 7,814,498	\$ 3,628,365	2	\$ 500	15,629
4511	Sporting Goods & Hobby Stores	\$ 29,405,729	\$ 2,940,573	\$ 1,418,317	2	\$ 250	11,762
4413	Auto Parts, Accessories & Tire Stores	\$ 29,597,557	\$ 2,959,756	\$ 1,003,741	2	\$ 300	9,866
4532	Office Supplies, Stationery & Gift Stores	\$ 21,554,300	\$ 2,155,430	\$ 1,024,969	2	\$ 300	7,185
4521	Department Stores	\$ 161,061,631	\$ 16,106,163	\$ 15,157,405	1	\$ 250	64,425
4431	Electronics & Appliance Stores	\$ 42,772,212	\$ 4,277,221	\$ 2,147,270	1	\$ 500	8,554
4482	Shoe Stores	\$ 18,297,880	\$ 1,829,788	\$ 1,376,101	1	\$ 300	6,099
7224	Drinking Places - Alcoholic Beverages	\$ 14,855,317	\$ 1,485,532	\$ 891,610	1	\$ 250	5,942
4442	Lawn & Garden Equip & Supply Stores	\$ 11,912,228	\$ 1,191,223	\$ 730,531	1	\$ 250	4,765
4452	Specialty Food Stores	\$ 11,675,260	\$ 1,167,526	\$ 823,975	1	\$ 350	3,336
4531	Florists	\$ 5,989,460	\$ 598,946	\$ 316,614	1	\$ 200	2,995
4533	Used Merchandise Stores	\$ 5,428,955	\$ 542,896	\$ 297,355	1	\$ 200	2,714
	Total				38		252,163

Source: Esri, Camoin Associates

The *Real Estate Market Analysis* shown here indicates market demand that has not been met for dining, grocery, health/ personal care and general merchandise stores.

Source: *Economic Development Action Plan*, Appendix: *Real Estate Market Analysis*

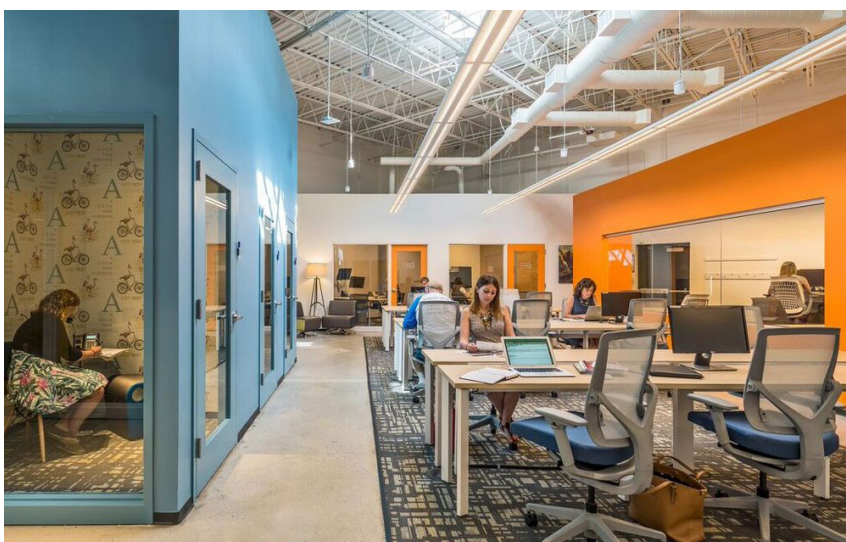


E2: Provide an array of commercial space types

The Riverside site offers a significant opportunity to provide highly desired commercial space in an accessible location. Commercial development at Riverside should strongly consider Class A office, lab, medical office, flex, and other commercial space types that are in high demand throughout the region. Diversification of commercial space types can also provide protection against changes in the market and economy in the future.

Key Considerations

- Provide commercial spaces of varied sizes to serve diverse markets
- Accommodate regional demand where appropriate



Coworking spaces can provide flexible options to those who work remotely or from home.

Source: Workbar Brighton



Harvard Lab Space.

Source: Glassdoor

ADDITIONAL INFORMATION:

The site's location at the Riverside MBTA station, the intersection of I-95/Rte. 128, and its close proximity to other job centers (as shown in the map on the following page) make it a unique development opportunity for the city.

The *Economic Development Action Plan* for the City of Newton notes that Riverside offers market opportunities for a variety of uses, with the highest potential for Class A office space and lab space (as shown in chart below). Development at Riverside should capitalize on this potential, offering a viable mix of commercial spaces to connect Newton to the growing regional trend of tech and life science industries. In addition, the plan encourages incorporating uses such as co-working space and diverse housing types on the Riverside site to complement these primary commercial uses.⁵

⁵ *Economic Development Action Plan*, p. 12

Economic Development Action Plan – 2019

E2

"There is strong demand for large Class-A office space within the region but tenants require direct highway or public transit access, and ideally both. Newton simply does not have many sizeable sites that offer this level of access." (p. 9) "In particular, the Riverside T station site was identified as a key opportunity property for Class A office development given its accessibility via both automobile and public transit." (p. 104)

Newton Comprehensive Plan – 2007 (updated 2011)

"A discussion of Route 95 is primarily a discussion about Riverside. It is clear that Riverside represents a significant development opportunity which the City can ill afford to ignore. Riverside has the capacity, access to highways, public transportation and location to attract several million square feet of high-quality mixed-use development. In fact, it is important to develop a dense enough project on this site to help pay to solve the access issues. The notion that a major parcel of land at the intersection of the Massachusetts Turnpike and Route 95 should remain undeveloped (and untaxed) is fiscally irresponsible and physically illogical." (p. 59)

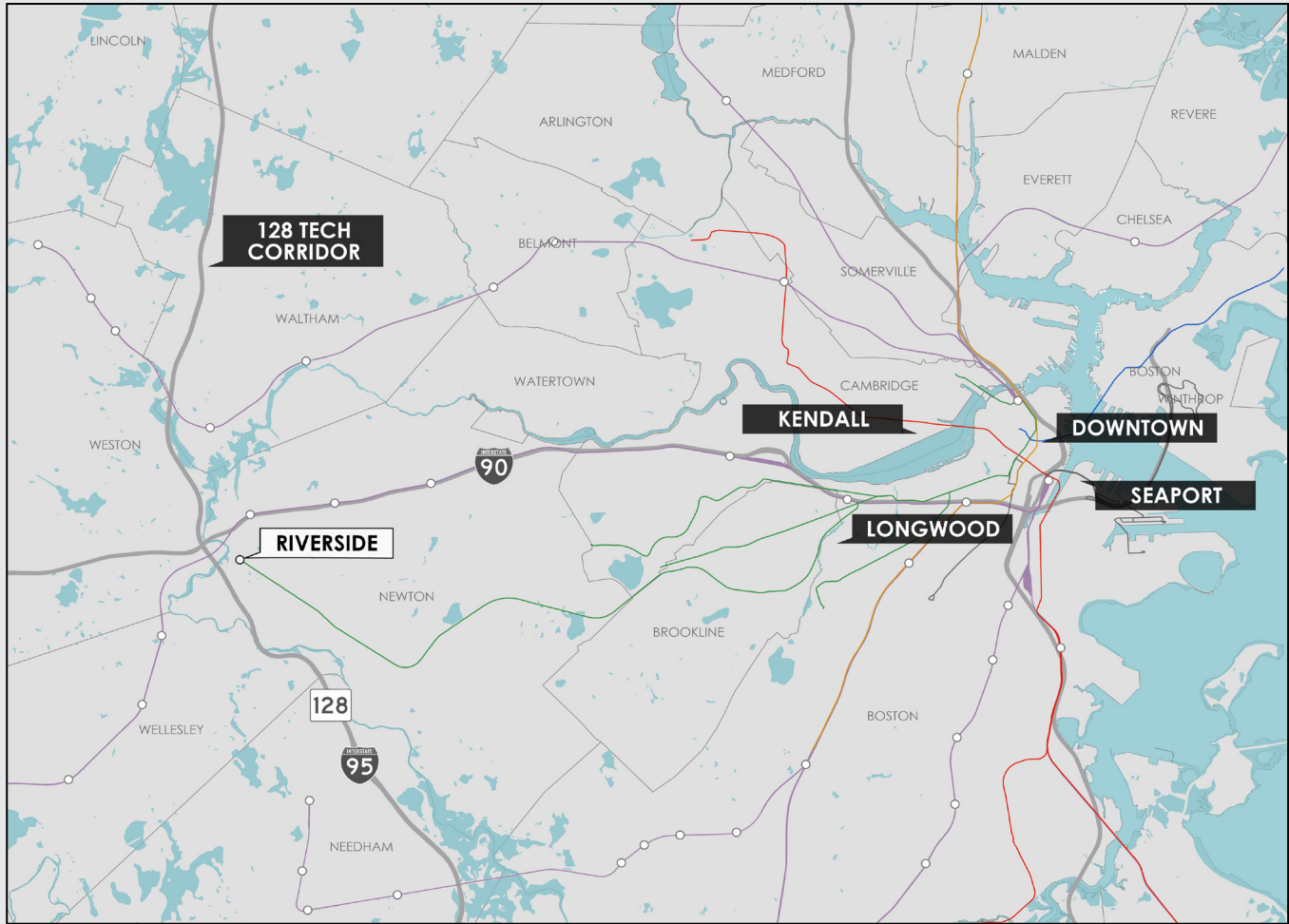
City of Newton Uses & Locations Opportunity Matrix							
Use Type	Market Potential	Target Locations (applicable districts in <i>italics</i> , 13 villages in bold)					
		Needham Street Corridor	Washington Street Corridor	Charles River Mill District	Major Office Centers	Major Retail Centers	Village Centers
		<i>N-Squared Innovation District</i>	<i>West Newton, Newtonville, Newton Corner</i>	<i>Nonantum</i>	<i>Wells Ave, Riverside</i>	<i>Chestnut Hill, Route 9, Newton Centre</i>	<i>Auburndale, Highlands, Upper Falls, Lower Falls, Waban, Oak Hill, Thompsonville</i>
Office	High vacancy level and a lack of Class A space limit potential for new development, but opportunities exist to reposition and amenitize current inventory.	●	●	●	●	●	○
Lab	Robust growth and soaring rents in Cambridge/Boston life sciences sector presents an opportunity to create a lab space node in Newton.	●	●	●	●	○	○
Medical Office	An aging population and shifting trends in health care delivery means strong demand for medical office space into the future.	●	●	●	●	●	●
Industrial	Land availability constraints and high land costs limit potential for comparatively low-value industrial development.	●	○	●	●	○	○
Retail	High incomes and significant spending leakage are an opportunity for new retail development in the city, but rising rents are squeezing out existing mom-and-pop shops.	●	●	●	●	●	●
Hotel	Sluggish commercial development in Newton and increased room supply in nearby suburbs limits potential, but differentiated boutique hotels are viable.	●	●	○	●	●	○
Multifamily Residential	Urgent need for smaller, affordable workforce units to house the talent required to attract commercial development. To be affordable, affordable units are more likely to be multifamily rather than single-family	●	●	●	●	●	●

Source: Camoin Associates

Key

High Potential ● Some Potential ● Limited Potential ○

City of Newton
Uses & Location
Opportunity Matrix.
Source: Economic
Development Action
Plan, p. 3



The Riverside site's location contributes to its status as a unique development opportunity, informed by its proximity to the Riverside MBTA Station, the intersection of I-95/Rte. 128, and a number of regional employment centers.

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E3: Support new and existing locally-owned businesses

Newton is committed to supporting new and existing locally-owned and independent businesses and available retail space at Riverside should give priority to Newton-based businesses. In addition, the site's proximity and connections to existing and future recreational trails and to the Charles River offer opportunities for seasonal or temporary space that might be offered on a rotating or pop-up basis to new entrepreneurs or to existing businesses wishing to expand their market area. There is also an opportunity to provide space for smaller businesses and to accommodate remote workers by including co-working space that includes small offices and shared workspaces on the site.

Key Considerations

- › Provide smaller, more affordable spaces for local and independent businesses
- › Offer pop-up and temporary/seasonal spaces for retail and dining
- › Consider co-working uses on site



Many of Newton's neighborhoods play host to a number of smaller, locally-owned businesses.

ADDITIONAL INFORMATION:

E3

Newton prides itself on its community character and village life, which includes locally-owned and locally-oriented businesses in village centers and along commercial corridors. These businesses include everything from small cafes to dry cleaners to barber shops, some of which are family-owned and have existed in Newton for over 50 years. Newton's *Economic Development Action Plan* explicitly states that the City should "create a business environment that provides more support for small and local businesses" and "implement policies to support small retailers and improve their ability to remain viable." Some recommendations include a financial assistance program for small businesses as well as improved resources and marketing for local businesses provided by the City and the Chamber. Support for emerging business, local businesses, and micro businesses to find space in Newton can be provided on site through pop-up, rotating spaces and kiosks. These smaller, temporary, and/or more affordable spaces can provide a launching point for local businesses unable to afford current commercial rents in Newton.

"Small, locally-owned businesses play an important role in any city, but especially in the villages of Newton. Small businesses have a great impact on the local economy and add flavor, uniqueness, and character to downtowns and village centers."

Economic Development Action Plan, p. 6

In addition, office space on site should be provided to meet the needs of emerging entrepreneurs and established businesses. For example, office space at Riverside might include co-working facilities that are a viable option for a one person startup as well as small companies looking for shared space. In the Boston MSA between 2006 and 2016, small firms (those with 2-9 employees) represented the largest growth in number of jobs. The number of self-employed workers also surged during this period.⁷ Co-working space, and possibly a satellite office for the Newton Innovation Center, could be included at Riverside to provide alternatives for home-based workers and small companies looking for affordable options.

⁷ *Youreconomy.org via Economic Development Action Plan, Appendix: Demographic & Economic Base Analysis, p. 16*



The Newton Innovation Center at 124 Vernon Street in Newton Corner provides collaborative workspace for start-ups thanks to the Cambridge Innovation Center, the City of Newton, and the Newton-Needham Regional Chamber. Newton's Economic Development Action Plan recommends expanding the capacity of the Center and possibly searching for a new location.

Source: Newton Innovation Center



E4: Ensure development supplies fiscal benefit to the City

A mixed-use development at Riverside should provide significant fiscal benefit to the City of Newton by growing the commercial tax base. Currently, commercial properties only make up 8.7% of the total real property value in Newton, which is less than all but seven of Newton's neighboring communities. Although one development is unlikely to significantly reduce the residential tax burden, it should still provide a positive impact to the overall City budget.⁸

Key Considerations

- ▶ Understand and consider current residential property tax burden
- ▶ Review projected impacts of development

⁸ Economic Development Action Plan, p. 1



Riverside Center, a commercial office space that contributes to Newton's commercial tax base, is situated directly north of the Riverside site.

ADDITIONAL INFORMATION:

E4

By locating new commercial development at Riverside, the City of Newton can help reduce the property tax burden on residential properties, which currently constitutes over 85% of the City's assessed value.⁹ During the visioning process, stakeholders were largely in favor of locating commercial office space at Riverside, with many residents specifically citing the need to diversify the tax base and provide more job opportunities for local residents. As with most municipalities, the City of Newton taxes commercial properties at a higher rate per \$1000 of assessed value (\$19.94) than residential properties (\$10.45).¹⁰ The commercial tax rate in Newton is generally lower than many surrounding municipalities, including Boston, Waltham, and Needham, meaning that this could make Newton (and Riverside) an attractive option for some businesses seeking commercial space.

⁹ Economic Development Action Plan, p. 12.

¹⁰ Based on City of Newton FY19 Tax Rate.

While the *Economic Development Action Plan* notes that Newton is unlikely to substantially shift the citywide ratio of residential to non-residential assessed value in the near future, any development at Riverside should still supply substantial fiscal benefit to the City. For example, the 2013 Riverside Special Permit application included a *Fiscal Impact Report* prepared by RKG Associates, Inc. that estimated new annual revenues to the City of approximately \$778,300, accounting for municipal services and education costs.¹¹ It is critical that the City carefully assess any future fiscal impact report with the help of peer review to ensure that redevelopment at Riverside is a net fiscal positive for the City, in addition to offering neighborhood retail, job opportunities, and other benefits to Newtonians.

¹¹ The report noted that the annual revenues to the City would be \$797,560 if the Community Preservation Act surcharge were to be included. The figures are based on an estimated \$1.9 million in annual revenues, with \$816,500 in municipal services costs and \$624,800 in education costs (Petition #258-12, page 22).

FY19 Tax Rates in Selected Metro Boston Municipalities

The below graph shows how Newton's FY19 tax rates compare to that of its neighbors and other select municipalities in Metro Boston. A lower commercial tax rate in Newton as compared to some of its neighbors could be a draw for businesses seeking commercial space in the area.

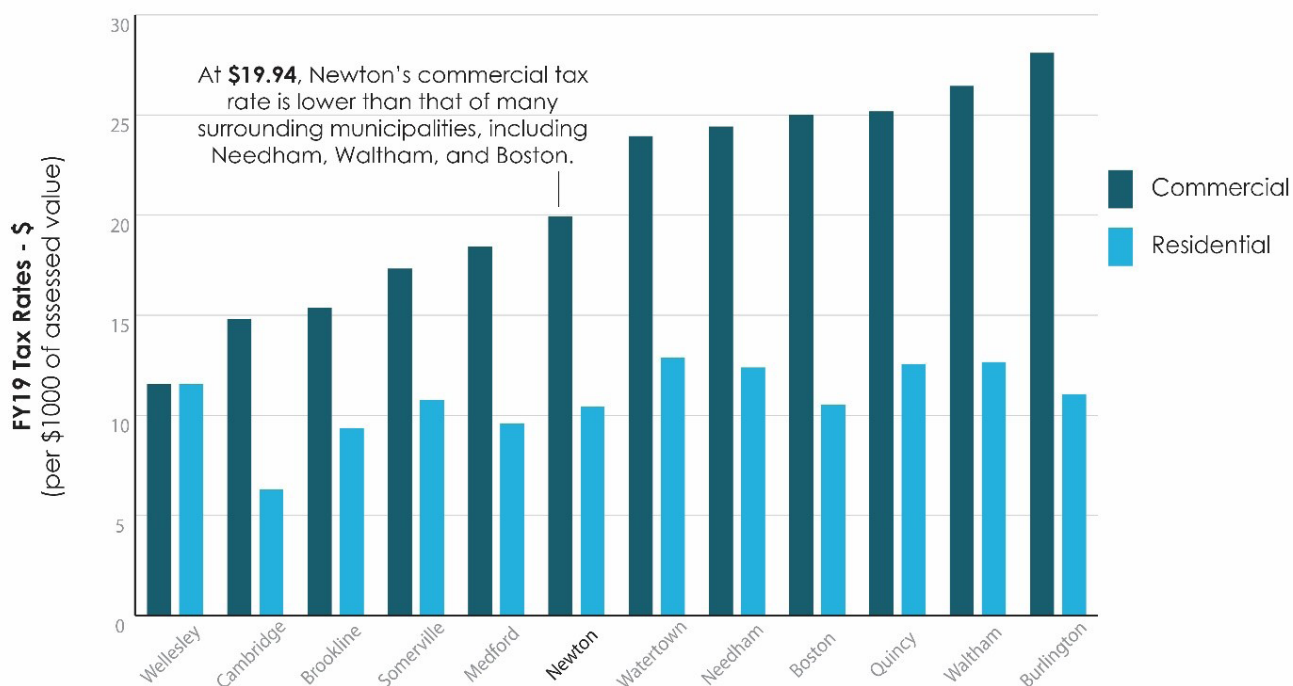


Chart: CivicMoxie, LLC - Source: Relevant municipal websites, as of April 5, 2019.



Transportation Hub (T)

Vision: *The Riverside site is an innovative, multimodal transit center that adapts to future transportation trends to improve local and regional mobility for Newton residents and all those who utilize the multimodal options.*

Overview

Ever since the Boston & Albany Railroad introduced streetcar service on “the Circuit” in 1886, Riverside has been an important transit depot bringing commuters to downtown Boston through Newton Highlands and Brookline. Riverside station still functions as a major transit hub for commuters with 2,241 daily boardings on average, the most of any MBTA Rapid Transit or Commuter Rail station within Newton, in addition to local and regional bus service.¹ The highway access and nearly 1,000 parking spaces on site mean that many commuters from Newton and surrounding communities, in addition to others heading towards downtown Boston, utilize the site as a park-and-ride facility. Although the site is currently functional, it has the potential to become an innovative, multimodal transit center that would improve both local and regional transportation access.

Riverside is an ideal site for transit-oriented development because of the Riverside MBTA Station and the site's adjacency to I-90 and I-95/Rte. 128. Improvements to both the station and Green Line service will be critical to ensuring that the site can meet increased demand resulting from new development. In addition, the City of Newton should coordinate with the MBTA to explore the potential of Commuter Rail expansion to the site via the inactive rail spur that is currently only used for emergency or maintenance activities, however it links to the Auburndale station and the Framingham/Worcester Line. Bus service is also another important component of transit at the site and can serve the commuting patterns of many workers.

Beyond public transit, Riverside will also need to better accommodate pedestrians, cyclists, and other alternative modes. In doing so, the experience along Grove Street and within the site can be much

Guiding Principles

T1

Advocate for improvements to the Green Line and Riverside MBTA Station to support increased ridership

T2

Support potential expansion or connection of the commuter rail to Riverside

T3

Enhance neighbor experience and safety along Grove Street

T4

Link to and expand the regional trail network

T5

Improve and manage traffic flow to and from Riverside

T6

Maximize efficiency of on-site parking and minimize neighborhood parking overflow

T7

Prepare for future transportation trends and technology

improved and allow for safer transportation options. As previously addressed in *Model for Sustainability (S)*, links to the nearby trail networks can provide connections to local amenities, and allow for pedestrians and cyclists to take alternative routes. This Vision Plan also recommends principles around traffic flow and parking, including traffic demand management (TDM) strategies to mitigate local neighborhood impacts and utilize best practices. Automobiles are intended to have more ready access to the site as a result, though not at the expense of other modes.

¹ *Newton in Motion*, p. 3-34. Source: MBTA data

What we heard...

"Require a free shuttle to Auburndale commuter rail station for workers and residents."

"Make accessible options possible to adjacent parks/trails."

"Let's not make the mistake of inducing traffic by providing too much parking. Would love to see the land maximized for housing and commercial, not wasted on excess parking!"

"Completion of off-street bike and pedestrian access to Riverside Station from Concord Street in Newton Lower Falls along the old rail trail that begins on Washington Street in Wellesley Lower Falls."

"Entrances to Riverside are currently inadequate and increase backup of traffic on Grove St. Ways to handle traffic volume and speed of cars are needed to maintain neighborhood safety."

"Very careful traffic/transportation planning. A traffic glut will kill surrounding neighborhood livability."

"Add more bus service to riverside - access to Natick, etc. (advocate for all)."

"Grove Street is a 2-way road. It gets over 15k cars daily. The pavement is taking a beating - fix it."

"Direct site access to nearby highways."

"It is critical to improve pedestrian safety in the Grove Street / Riverside corridor. Reducing traffic, improving speed mitigation and adding pedestrian-controlled traffic lights at designated crosswalks would be essential. If we are to truly embrace the importance of the public transportation hub at Riverside, we need to make sure that safety of neighborhood pedestrians trying to reach the hub is not further compromised, but rather enhanced."

Quotes were selected to show a range of comments received.

Key Takeaways:

- Concern about impact of development on traffic, particularly along Grove Street.
- Questions and concerns about current MBTA service and potential future expansion of services and facilities.
- Preference for direct highway access to/from site.
- Desire for site to be a true multimodal destination with pedestrian and bike access, improved traffic flow, trail connections, and transit (bus and rail).
- Range of opinions on how much parking is needed.
- Sentiment that Grove Street is currently insufficient when it comes to traffic management and pedestrian/cyclist safety.



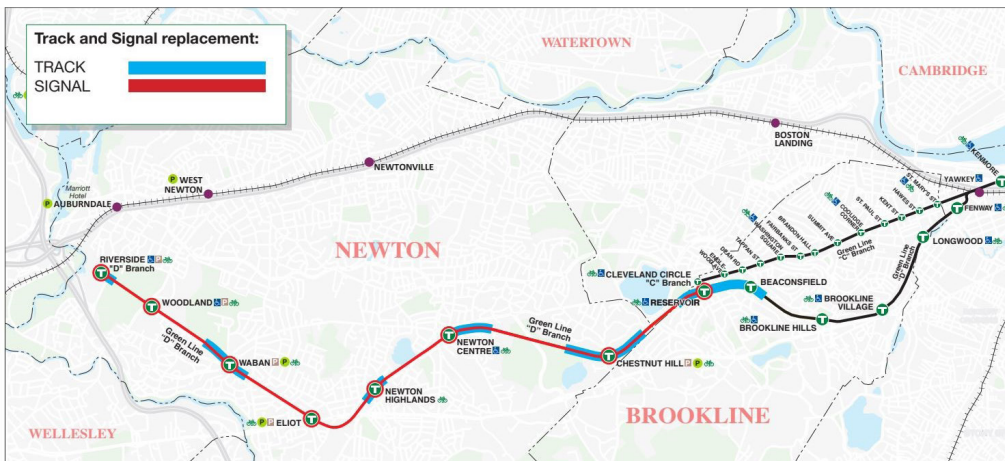
T1: Advocate for improvements to the Green Line and Riverside MBTA Station

Throughout the planning process, there have been concerns surrounding the ability of the Riverside Station to handle an increased ridership that could result from development on the site. While a number of improvements to the Green Line (in addition to some specific to the “D” Branch) are slated to be completed in the coming years, continuing to advocate for improvements will be helpful to provide the best-fit of service to the Riverside Station’s ridership. Doing so will increase the efficacy of the Riverside site as a multimodal transit center. While the City of Newton has no control over MBTA policy, the City Council should be proactive in understanding the pipeline of MBTA planned improvements and funding to ensure

Key Considerations:

- › New Green Line Vehicles (2018-2019) = more capacity
- › Green Line Track and Signal Replacement (2018-2020) = more reliability
- › Green Line Extension (GLX) (2014-2021) = second Green Line maintenance yard

assumptions about transit capacity are correct as any development is reviewed for permitting.



Track and signal replacements along the Green Line “D” Branch are expected to result in fewer delays because of reduced signal failures and removed speed restrictions.

Source: MBTA



The first T-9 Green Line vehicle went into regular service in December 2018. The vehicle is the first of 24 T-9 vehicles to go into service by fall 2019 and has 10% greater capacity than the old vehicles in addition to offering improved access for people with disabilities, more space, and updated braking systems.

Source: MBTA

ADDITIONAL INFORMATION:

T1

The “D” branch of the Green Line extends to Riverside and provides light-rail service to the greater Boston Metropolitan Region. The age of the system and its popularity has caused the MBTA to initiate a series of upgrades and improvements to the Green Line over the course of the next few years to improve service and capacity. In [Focus40](#), the MBTA outlines changes necessary in the coming decade to make the regional transit system more reliable, robust, and resilient. The overarching goal for the Green Line by 2040 is to “increase capacity by at least 50% on the nation’s busiest light rail line with redesigned, larger vehicles and modernized infrastructure.”² Near-term commitments by the MBTA in the next five or so years include:

- **New Green Line vehicles** – By fall 2019, the MBTA is planning to introduce 24 new Type-9 trolleys to the Green Line, which will add 10% greater capacity, improved access for people with disabilities, and improved service. A uniform fleet of Type-10, higher capacity, low-floor vehicles is planned for the mid-2020s.
- **Green Line D Track and Signal Replacement** – The modernization of signals and track replacement along sections of the Green Line “D” Branch in 2018-2019 is expected to reduce delays and lessen speed restrictions for overall better service on this line.
- **Green Line Extension (GLX)** – The Green Line extension is focused on the northern end of the system and will add 7 new stations between Lechmere in Cambridge into Somerville and Medford. The project will also add a new light-rail vehicle storage and maintenance facility at Lechmere, which is intended to relieve capacity concerns at the Riverside Station and create a more efficient storage model with centrally located facilities.

Despite these planned improvements, many stakeholders expressed concerns during the community engagement process regarding current Green Line service and the MBTA’s ability to cope with increased ridership resulting from development at Riverside and other locations along the “D” Branch corridor in Newton. In addition, both residents and the *Focus40* plan mentioned the need to allow for additional storage capacity associated with longer Type-10 trains that will eventually be phased in to the Green Line system. As much as possible, the City of Newton and the developer of the Riverside site should be adamant about the necessity for enhancements and improved service capacity on the “D” Branch and remain active partners with the MBTA.

For more information...

Please visit the following links for more information on Green Line Improvements:

- <https://www.mbta.com/projects/new-green-line-vehicles>
- <https://cdn.mbta.com/sites/default/files/projects/green-line-d-track-signal/2018-08-16-green-line-d-track-signal-replacements-revised-map.pdf>
- <https://www.mbta.com/news/2018-12-21/new-mbta-green-line-car-goes-passenger-service>
- <https://www.mbta.com/projects/green-line-extension-glx>

² MBTA, *Focus40*, p 23.

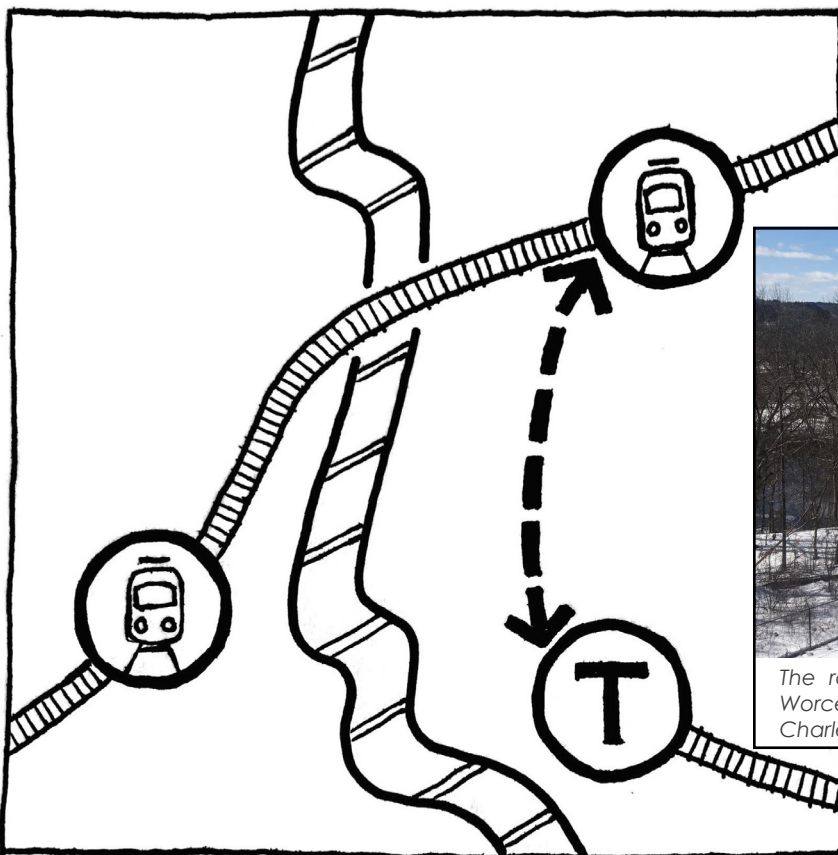


T2: Support potential expansion or connection of the Commuter Rail to Riverside

During the outreach process, many respondents indicated their desire to see Riverside Station linked to the nearby Commuter Rail station in Auburndale allowing for alternative and faster service into Boston as well as connections to northern Newton neighborhoods. Currently, the two rail lines are connected by an inactive rail spur, which is only used for emergency or maintenance activities. The MBTA is currently undergoing its Rail Vision planning process, which identifies potential strategies to expand commuter rail services both locally and throughout the region. Ensuring that future development does not disrupt potential expansion or connection of the commuter rail to the Riverside site will be critical to this station meeting its potential as a multimodal transit center in the future.

Key Considerations:

- ▶ Riverside Is highlighted as “Key Station” along Urban Rail in MBTA Rail Vision alternatives
- ▶ Protect potential for future active Commuter Rail connection along inactive rail spur
- ▶ Provide access to Commuter Rail station for workers and visitors at the Riverside Site.



The rail spur as it exists today between the Framingham/Worcester Commuter Rail line and Riverside Station, with the Charles River in the background.

Connections to the Commuter Rail line from Riverside could make use of the otherwise inactive rail spur.

ADDITIONAL INFORMATION:

T2

The MBTA is currently undergoing Rail Vision, a visioning process focused on its Commuter Rail system to identify cost-effective strategies that would transform Greater Boston's regional rail and improve mobility and economic competitiveness in the region. In early 2019, the Rail Vision team released seven alternatives for how the Commuter Rail could operate in the future – exploring everything from optimizing the current system to a full transformation involving a completely electric, high frequency network that includes a North-South Rail Link and South Coast Rail extension. In three of the alternatives (3, 4, and 6), Riverside was highlighted as a “Key Station” along Urban Rail, with service provided every 15-minutes as part of an urban rail system.³

The connection of the Commuter Rail to Riverside is facilitated by an old rail spur that deviates from the Framingham/Worcester Commuter Rail line west of Auburndale station and travels along the Charles River into the Riverside site. The 1.25 mile stretch of old rail and right-of-way dates back to the Newton Lower Falls Branch of the Boston and Albany Railroad, which opened in 1847 and served the mill area of Lower

Falls. The tracks that remain between Auburndale and Riverside are used infrequently to move trains, but have largely sat idle despite interest to revive this route and reconnect Riverside to the Commuter Rail.

Reviving this section of rail would provide a connection between the Green Line and Commuter Rail at Riverside as well as offer an alternative, faster route to downtown Boston and improved local mobility within Newton.⁴ During this planning process, Lower Falls and Auburndale residents insisted that any redevelopment at the Riverside site should not preclude the potential for future commuter rail expansion. Consideration of the impact that any proposed development has on current and anticipated transit planning efforts should be key in development proposal review, which will require collaboration and close communication with the MBTA. Making sure that development on the Riverside site does not prevent or hinder future improvements to local, urban, and regional transit services will be critical to ensuring that the benefits of any such expansion or improvement to transit services and infrastructure are provided to current and future residents of Newton.

³ Riverside was identified as an “Key Station” station in *Rail Vision* alternatives 3,4, and 6. Some alternatives suggest improvements to the Urban Rail system, which is identified as “A service schedule that provides frequent, all-day service to, from, and within the central area of Greater Boston, also referred to as the Inner Core. <https://www.mbta.com/projects/rail-vision#alternatives>

⁴ While Riverside is highlighted in three of the seven Rail Vision alternatives, it should be noted that it is not identified as a priority project in the MBTA's *Focus40* plan with commuter rail connections unlikely to move forward in the near-term.



Alternative #6 of the MBTA's Rail Vision investigates what a full system transformation would mean for the Commuter Rail. Riverside is identified as a Key Station in the Inner Core with high-frequency service to downtown Boston. Source: MBTA Rail Vision.



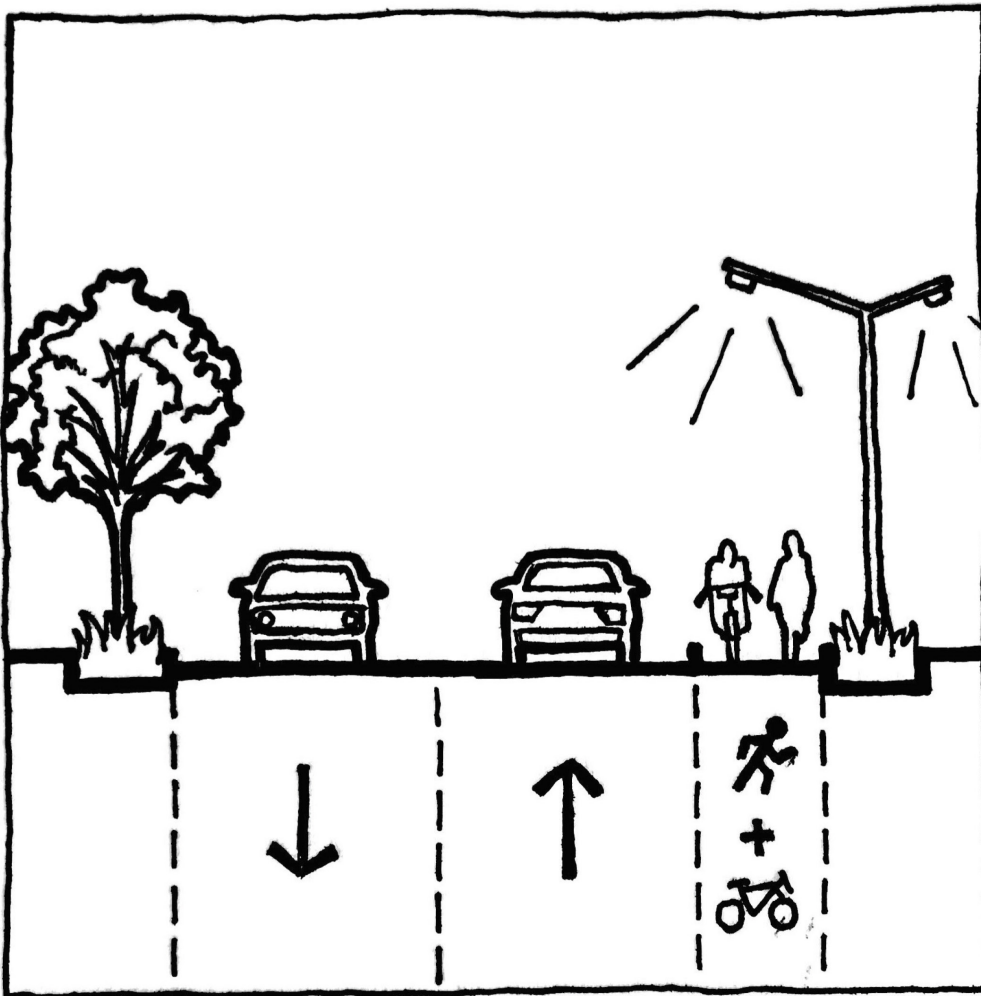
T3: Enhance neighbor experience and safety along Grove Street

Grove Street is a major connector between Newton Lower Falls and the rest of Newton and local residents have great concerns over the impact of Riverside development on traffic congestion and the character of the street. With approximately 15,000 cars traveling this stretch of road daily, Grove Street along the edge of the Riverside site could be greatly improved for all modes by constructing a shared use path and installing additional infrastructure.

Residents wish for a better experience while traveling along Grove Street and wish to protect the character of the street in the area of the Riverside site, which is a Newton Scenic Road. This designation sets guidelines for fence design and construction and other factors in order to preserve the character of the road.

Key Considerations:

- Provide bike and pedestrian improvements on Grove Street
- Provide adequate view lines from side streets and driveways
- Provide lighting along Grove Street



One option is the addition of protected bike/pedestrian lanes, adequate view lines, and lighting along Grove Street that can serve to promote safety and make a more pleasant pedestrian experience along Grove Street. The sketch to the left illustrates the general layout of a number of these improvements.

ADDITIONAL INFORMATION:

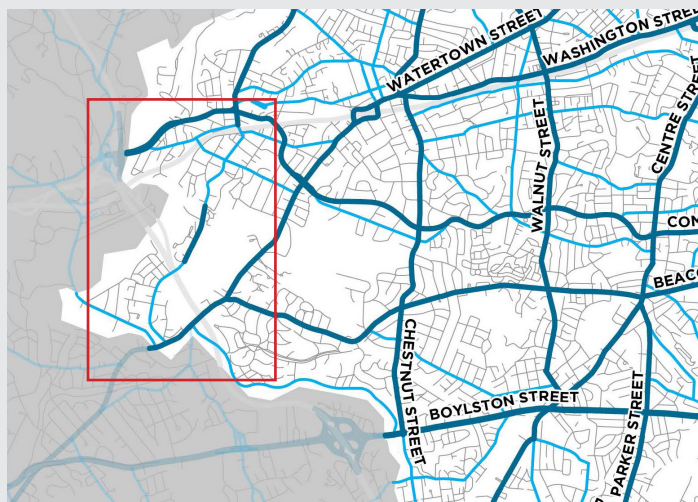
T3

The current layout of Grove Street does little to entice people to walk or bike to the adjacent Riverside T Station. The street is narrow, has outdated infrastructure, and is in close proximity to the highway. As seen in the corresponding image, the road lacks safety features that would support those navigating the route by bike. Without a designated bike lane, cyclists are forced to share the road or utilize the sidewalk during periods of peak traffic. The sidewalk, however, is generally narrow, uneven, offers little protection from vehicular traffic, and is connected by crosswalks that force pedestrians to cross at non-signalized highway ramps.

Using a combination of infrastructure and programmatic improvements, Grove Street could be reconfigured to be friendlier for pedestrians and cyclists, which would allow more residents of Lower Falls, Auburndale, and elsewhere to travel the corridor without their cars. For commuters taking the Green Line or bus into Boston, walking to Riverside Station means less parking and congestion on nearby streets. In addition, such a change would help provide a Safe Route to Schools for students from Lower Falls who attend the Williams Elementary School and for students from Auburndale who attend programming and classes at the Lower Falls Community Center. Possible infrastructure improvements could take the form of a widened sidewalk, bike lane (protected or otherwise) as proposed by MAPC's Metro Greenway Network, or the establishment of some form of shared-use pathway along a single side of the road. As Grove Street experiences higher volumes of traffic during rush hour periods (see Principle T5 for exact counts), a protected bike and pedestrian path would be most effective at promoting safety and accessibility for pedestrians and cyclists in addition to reducing vehicular speeds.



As currently configured, Grove Street does little to promote cyclist safety, and despite the presence of a sidewalk does little to contribute to the pedestrian experience despite being a designated Scenic Road within the City of Newton. Source: Google Earth



The Newton Street Design Guide includes this map identifying Newton Streets by Functional Classification. The red box highlights where Grove Street is classified as an arterial street adjacent to the Riverside site whereas it serves as a collector street through Lower Falls and Auburndale. Source: Newton Street Design Guide (2018), p. 8



T4: Link to and expand the regional trail network

Currently, the Riverside site is disconnected from the nearby trail network, limiting pedestrian and cyclist mobility and access to surrounding amenities. The Riverside Greenway Working Group has been working to resolve this and has developed a strategy to connect the trail system within this so-called “Riverside gap.” These investments would serve to revitalize a section of the Charles River that was a regional recreation destination 100 years ago. Linking to this trail network, in addition to providing supportive facilities and infrastructure, such as public restrooms and covered, protected bike parking areas, could help to expand mobility and access from, to, and through the Riverside site for locals and visitors alike.

Key Considerations:

- › Enhance and provide local connections that support the trail network
- › Contribute to proposed regional connections
- › Provide wayfinding to increase visibility of the network and provide educational information
- › Provide support facilities such as public restrooms at Riverside site



A number of trails adjacent to the Riverside site could be enhanced with direct connections to the site, and serve as an opportunity to increase local and regional mobility while simultaneously providing educational opportunities.

ADDITIONAL INFORMATION:

T4

Riverside is currently disconnected from the regional trail network, despite its importance as a transportation hub and its adjacency to the Charles River and natural lands. The Riverside Greenway Working Group is a local coalition of trail advocates from Bike Newton, the Newton Conservators, the Lawrence and Lillian Solomon Foundation, and the neighborhoods of Lower Falls and Auburndale.⁵ The group has identified this substantial gap in the regional trail network at and around the Riverside MBTA station and is working in conjunction with local and state officials to improve the trails and greenways connections in this area. Old railroad infrastructure and rights-of-way are critical to this vision, and the group is committed to obtaining funds for upgrades to the two former railroad bridges over I-95/Rte. 128, the Depot pedestrian tunnel under the Commuter Rail right-of-way, the Boathouse Bridge over the Charles River connecting Newton and Weston, and the new or renovated paths that would link them all together.

Multi-use trails connecting Riverside with Lower Falls, Auburndale, and the greater region would promote pedestrian and cyclist mobility and offer an alternative to Grove Street for commuters, students, and other users. In addition, such links would facilitate access to the Charles River and nearby park lands, helping to restore this area as a recreational destination drawing people from all over Newton and throughout the region. These links are supported by funding in the 2020-2024 *Statewide Transportation Improvement Plan*, which will be used to reconstruct a pedestrian bridge and connection between Recreation Road and the Upper Charles River Greenway.⁶ In addition to the trails themselves, recreational facilities on and near the Riverside site are needed to support active transportation and extended outings. Specifically, public restrooms, showers, bicycle storage, and covered bicycle parking are a few of the desirable amenities noted by residents and trails advocates during community engagement.

⁵ <https://riversidegreenwayma.wildapricot.org/>

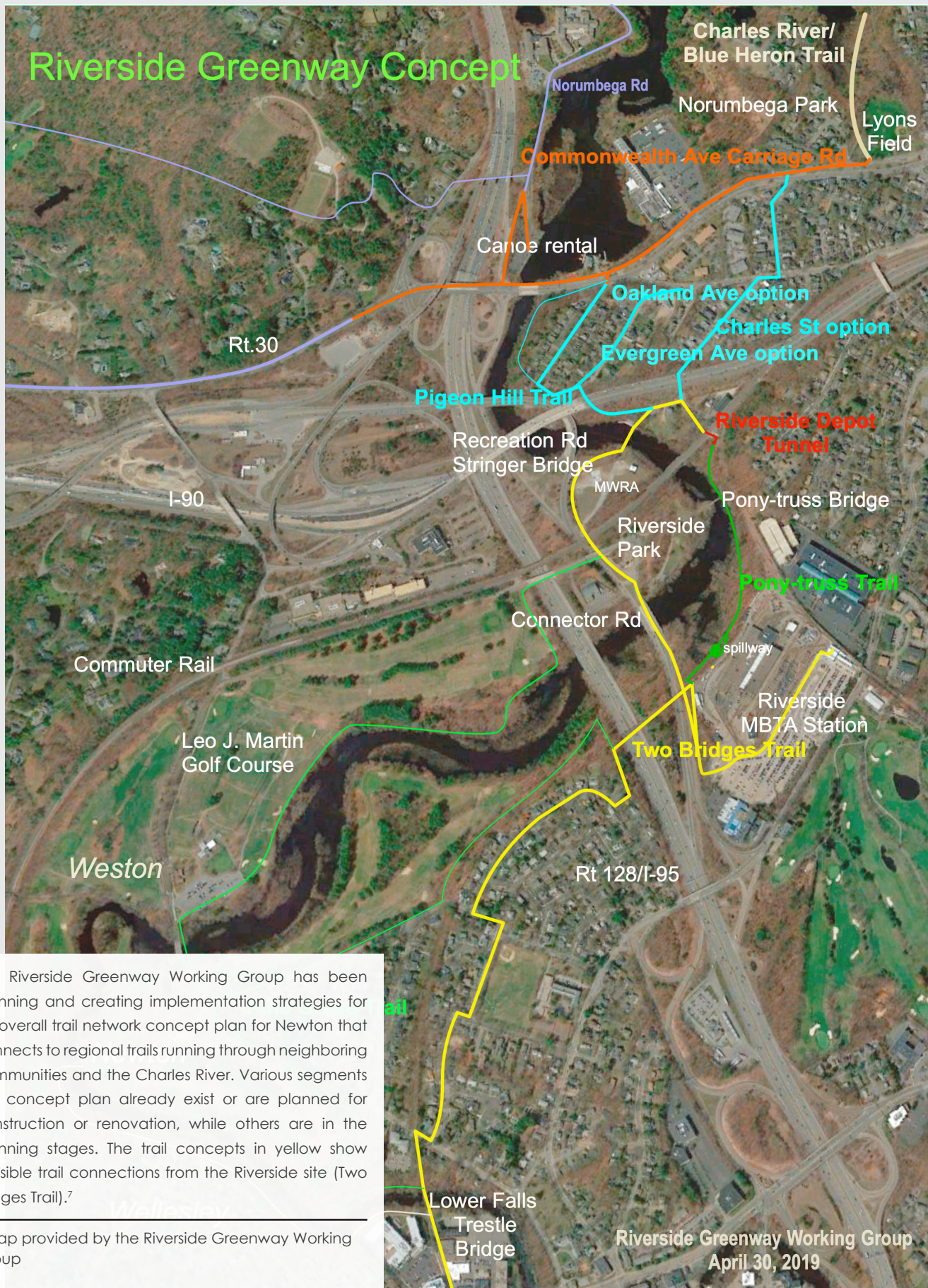
⁶ Announced at 3/21 MPO meeting



This photo shows one of two former railway bridges connecting the Riverside site to the Lower Falls neighborhood. The Riverside Greenway Working Group and MAPC have identified this route, which formerly carried the Newton Lower Falls Branch of the Boston & Albany RR, as a critical link in the regional greenway network.



Simplifying access along scenic, natural trailways to and from the Riverside site, and integrating the site with bike and multi-use pathways can help to provide safer and more enjoyable access routes to and from the site on foot and by bike.



The Riverside Greenway Working Group has been planning and creating implementation strategies for an overall trail network concept plan for Newton that connects to regional trails running through neighboring communities and the Charles River. Various segments the concept plan already exist or are planned for construction or renovation, while others are in the planning stages. The trail concepts in yellow show possible trail connections from the Riverside site (Two Bridges Trail).⁷

⁷ Map provided by the Riverside Greenway Working Group

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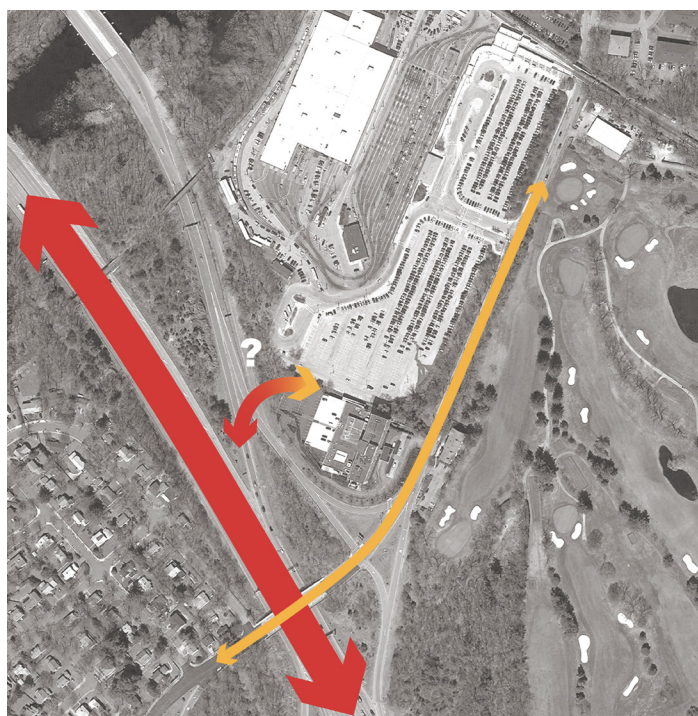
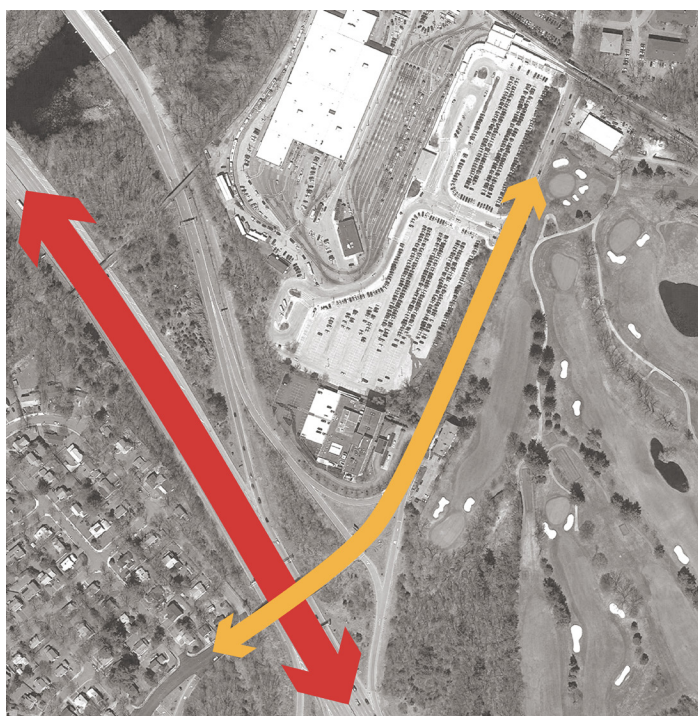


T5: Improve and manage traffic flow to and from Riverside

A major concern identified throughout the visioning process was the impact of any proposed development on traffic to, from, and in the areas adjacent to the Riverside site. There is also concern about how traffic impacts will effect the wide street network around the site including Commonwealth Avenue. Determining the appropriate street designs and access points will be important to ensure that traffic impacts of any development to the surrounding areas are mitigated. Of particular interest would be the ability of any development to provide direct access to and from I-95/Rte. 128, which could result in reduced traffic impacts on Grove St. and adjacent neighborhoods, in addition to improved regional flow to and from the site.

Key Considerations:

- › Provide direct highway connection(s) to the Riverside site
- › Understand the role of development impacts on Grove Street and citywide traffic
- › Require Transportation Demand Management (TDM) strategies



Improving traffic flow to and from the Riverside site will be largely dependent upon access to/from I-95/Rt. 128, as well as management of development-related impacts on Grove Street.

ADDITIONAL INFORMATION:

T5

The Riverside site's location at the junction of I-95/Rte. 128 and I-90 presents a mixture of opportunities and complications for vehicular access. While the two interstates provide transit alternatives for regional commuters, the ability of the site and surrounding areas to absorb additional traffic generated by new development has been an ongoing concern throughout the visioning process. Many Newton residents feel that the traffic along Grove Street is already disruptive – especially during commuting times and Red Sox games – and worry that any new development on site will only make matters worse.⁸ During the Special Permit process, the developer will need to present potential street redesigns and associated traffic studies to demonstrate changes in traffic flow in and around the site, while also proposing increased safety measures and design enhancements.

Direct access to the Riverside site through the

construction of a northbound I-95/Rte. 128 exit interchange would redirect traffic from Grove Street and offer a potential solution to mitigate increased traffic impacts from site development. By enabling access to the site directly from I-95/Rte. 128, regional traffic would primarily be concentrated at the interchange, while Grove Street could mainly serve local, through traffic. Additional traffic signals and street redesigns would complement altered highway access in order to improve safety and multimodal conditions along Grove Street and accentuate its designation as a scenic road. In addition, stakeholders requested that other connections to the site be studied as well, including I-95/Rte. 128 access.

⁸ In Fall 2018, the City of Newton's Department of Public Works recorded traffic counts over the course of two days in order to understand the difference between traffic volumes on a "typical" day versus one with higher demand.

Grove Street Traffic Counts - Combined Totals

The data was collected by Newton DPW in 2018 and shows traffic volume in both directions on Grove Street south of the Riverside driveway. Note that the first day of the data, October 31, 2018, was the day of the Red Sox parade in Boston, in addition to being Halloween. The next day, November 1, 2018, was a "typical" day. Data was collected on both days for the sake of comparison.

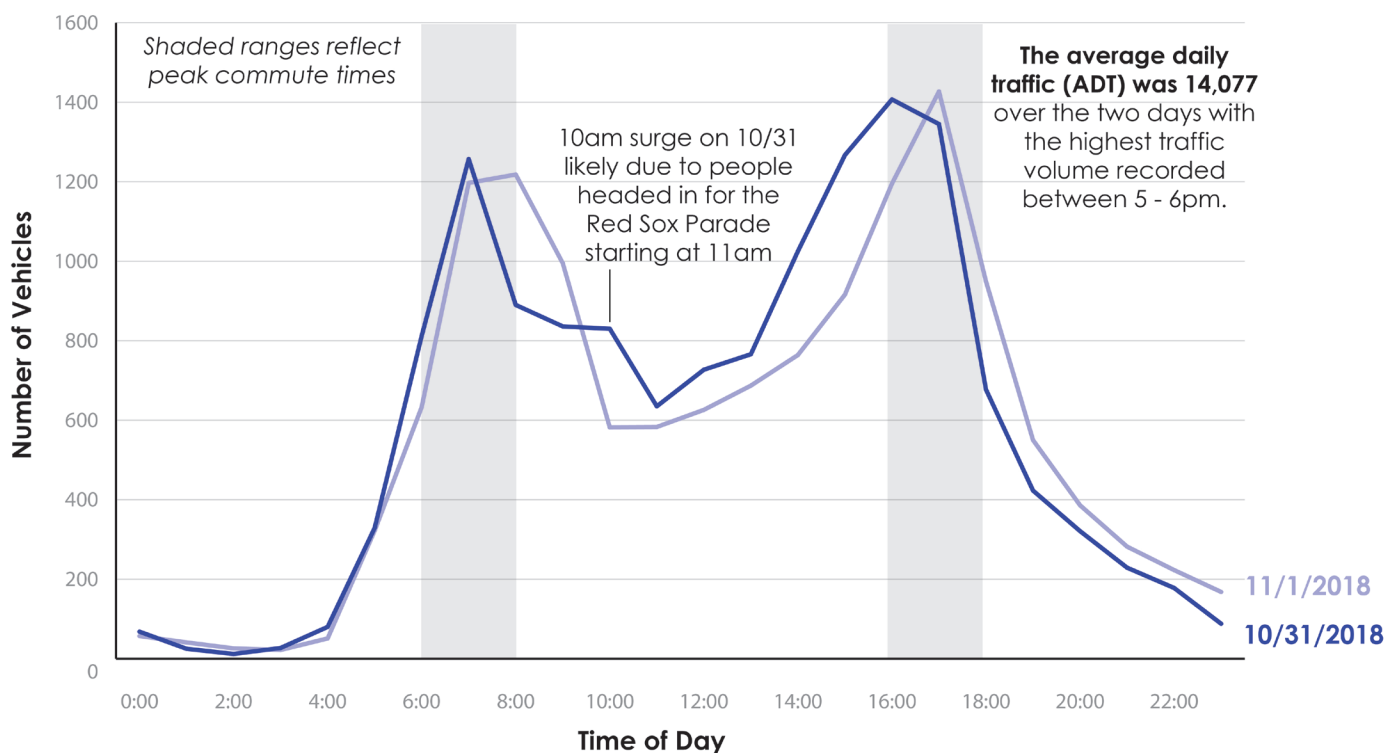


Chart: CivicMoxie, LLC - Source: City of Newton, Department of Public Works

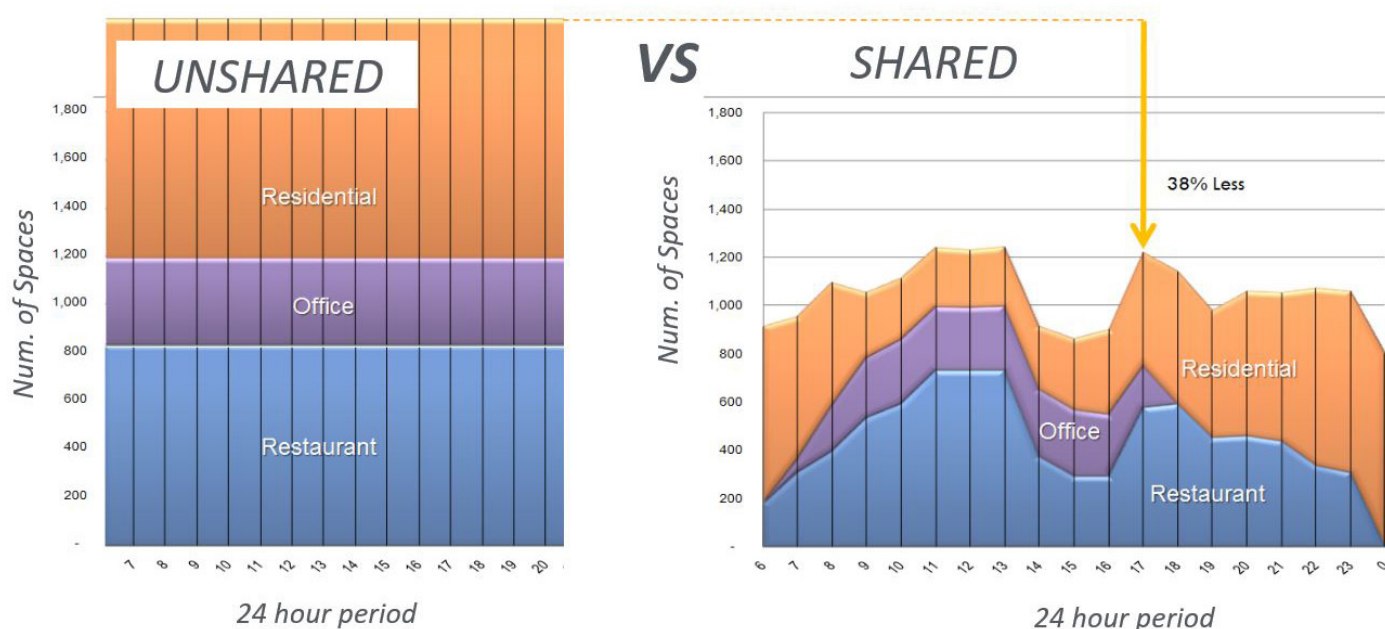


T6: Maximize efficiency of on-site parking and minimize neighborhood parking overflow

A major benefit of TOD projects is the shared parking potential derived from a mix of uses that generate varied peak parking demand times/days. This variation in parking demand allows for a reduction in overall parking spaces based on an estimate of shared use and overlapping times of demand. For instance, commuters use parking during the weekday and residents or visitors to the site for dining or shopping tend to need parking in the evenings. Weekend commuter parking demand is very low which leaves parking for recreational activities. Overall parking supply can be reduced to acknowledge these varied demand times.

Key Considerations:

- Provide an overall shared parking strategy and management plan for the site that maximizes the efficient use of parking spaces
- Advocate for shared MBTA commuter parking to maximize TOD benefits
- Advocate for MBTA to institute hourly commuter parking
- Create rules for parking and provide corresponding City parking signage and enforcement for adjacent neighborhoods to discourage neighborhood parking overflow



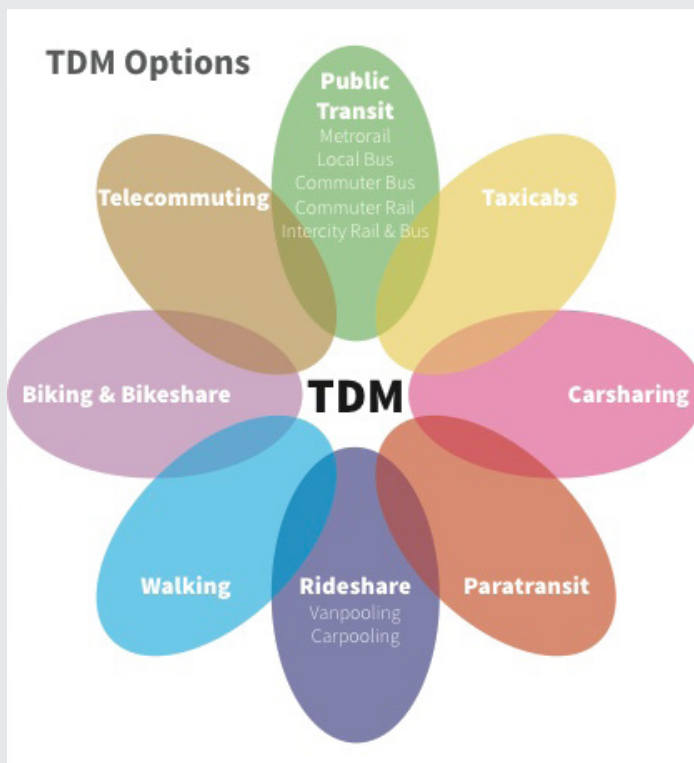
Varied parking demand for different uses in a downtown illustrates the efficiencies that result when various parking needs are mapped to calculate reduced demand. TOD creates similar efficiencies.

Source: City of Santa Cruz

ADDITIONAL INFORMATION:

T6

As with any potential mixed-use development site, and particularly one with transit, one of the objectives should be to maximize the efficiency of any new parking using time-based sharing that considers the different peak times and days that various users are on site. Creating a shared parking strategy can reduce the overall number of needed parking spaces while still accommodating the demand generated by different users of the site. The management and enforcement of shared parking should be detailed as part of an overall site-wide parking strategy and management plan.



Transportation demand management (TDM) is focused on understanding how people make their transportation decisions and helping people to use the infrastructure in place as an alternative to driving.

Source: Mobility Lab

Currently, the MBTA does not allow its commuter parking spaces to be included in shared parking computations, leaving the possibility for these spaces to be vacant on most weekends and evenings. This can result in an oversupply of parking and misses a major opportunity to reduce the amount of space devoted to asphalt or structured parking and increase the amount available for public green space. A different concern was voiced by residents living nearby the Riverside site, who worry that any development will increase the pressure of parking on their residential streets, particularly on Red Sox game days or for special events. Overall, an integrated parking strategy that recognizes all concerns and creates a collaborative solution will serve commuters, site residents/workers/visitors, and neighborhood residents best. This solution should include parking management and regulation of surrounding neighborhood streets and enforcement of parking rules during large event days.



On a typical weekday, there is often ample parking available at the Riverside Station lot, which has over 950 spaces.



T7: Prepare for future transportation trends and technology

Any potential development at the Riverside site should account for future transportation trends and technologies by supporting, enabling, and promoting emerging innovation. Taking advantage of technological trends around electric cars, carshare services, parking technology, ride share capabilities, regional bus and shuttle services, and the emerging micromobility movement can help to ensure that any development on the Riverside site not only abides by current best practices, but also is equipped to prepare for and embrace future methods of transportation.

Key Considerations:

- Provide EV charging, ample carshare spaces, smart/shared parking, and opportunities for micromobility
- Offer ride share and shuttle pickup/drop-off
- Add weatherproof bike parking
- Provide real time information on parking space availability



Attempting to account for current and anticipated transportation trends can help the Riverside site remain on the cutting-edge of transportation technology and best-practice.

Sources: Providence Place (top left); PluginCars.com (bottom left); TCSshuttle.com (right)

ADDITIONAL INFORMATION:

T7

We are living in an age in which transportation is evolving at a rapid pace, with new technologies and innovative thinking impacting our day-to-day mobility choices. These new technologies and trends have emerged in response to the transportation challenges we currently face and the need to develop sustainable options that limit our environmental impacts. Any development at Riverside should account for these current trends with an eye towards the future.

The Riverside site can embrace emerging trends by providing:

- EV charging stations
- Bus and shuttle terminal
- Ride-share pick-up/drop-off facilities
- Designated carshare spaces
- "Smart parking" with live tracking
- Shared parking strategies
- Bike/scooter share and designated parking
- The latest in TDM innovations
- Real time transit and parking information

The transportation sector currently contributes to roughly 28% of total annual U.S. Green House Gas emissions; as previously detailed, the majority of Newton residents rely on automobiles as their primary mode of transportation. While it is important to account for current usage of personal vehicles, considering sustainable transportation options can help to prepare the Riverside site and the surrounding area for current and upcoming transportation trends. The reduction of transportation-based emissions by supporting sustainable transportation trends and best practices should be considered in any potential development review for the site.



Car sharing services can provide round-trip and one-way vehicle access for residents who want to be part-time car users without full-time ownership.

Image Source: AP News



The current GoBuses terminal at the Riverside site. Stakeholders have stressed that for this site to be fully TOD, regional bus service is a critical component of transit here since many commuting patterns eschew the traditional suburb/Boston hub connection and are diffuse throughout the region.

5

Putting the Vision Plan to Use

In this section:

- A Guide for Riverside
- Next Steps

A Guide for Riverside

The Vision Plan is intended to serve as a guide for the City on how to plan for the future of the Riverside site and how best to review current and future development proposals. This document integrates community input, reflects Citywide policy objectives, and incorporates best planning practices in order to deliver a series of principles and considerations to serve as a lens through which the site should be viewed. The plan itself does not represent adopted policy, but rather a recommended vision for the future from which policy will be developed. The Special Permit application will require additional discussion; in the near term, the Plan will be used by the Land Use Committee and Zoning and Planning Committee of the City Council as a resource when evaluating any Special Permit application or changes in zoning.

For Newton residents and other stakeholders, this plan can also serve as a resource in which to find synthesized information about the Riverside site and a clear understanding of City objectives for the future. Hopefully, many of these principles will resonate with residents given the extensive input of many people – from Auburndale, Lower Falls, and beyond – and various stakeholder groups engaged throughout the process. In addition to serving as a unified document, the formatting of the Vision Plan is also purposefully modular so that the principles can be detached in part and more widely utilized according to the discussions at hand.

Next Steps

This plan represents the City's effort to create a vision for the Riverside site ahead of a development proposal for the site. Before the completion of the Vision Plan, a developer submitted an application on March 29, 2019 to begin the Special Permit review process. Various specifications and studies were submitted as part of the Special Permit application, including transportation and fiscal impact reports, which will be reviewed by City staff as well as independent, peer reviewers, in order to impartially evaluate the submitted findings. In evaluating the application, the Land Use Committee of the City Council can also request additional information, studies, and commitments, some of which are recommended in this section below. The public hearing process in response to the Special Permit application is expected to take several months with the Land Use and Zoning & Planning Committees reviewing all relevant information before an official vote by City Council will take place to determine the outcome of the application.

Residents and stakeholders are encouraged to stay involved during this process as this Vision Plan marks the beginning of the public input process, not the end. The Riverside site is significant to the surrounding villages and citywide, as well as a regional opportunity, and the goal is that it better serves its extended community at all levels in the future.

Recommended Special Permit Requirements

The following materials should be provided as part of the Special Permit process, in addition to current permitting requirements, so that the City of Newton has appropriate information by which to evaluate any development proposals:

- Ground-level perspectives of the project from Grove Street (experience of a pedestrian or driver)
- Ground-level perspectives from Newton Lower Falls (across the interstate) and Auburndale (across the train tracks and I-90 and from the north on Grove Street within the residential area)
- Ground level perspective from the site, near the Riverside T Station and active ground floor uses
- A list of proposed methods and activities for programming exterior and interior public spaces (events and placemaking)
- Thorough traffic study including pedestrian and bicyclist counts
- Details of a multi-modal Transportation Demand Management plan, including bike access to and from the site and analysis of potential cycling and transit propensities
- Full list of sustainable features, including design and landscape elements, construction methods, building materials, infrastructure, sustainable energy sourcing, systems, and programs

***Mediating an Unknown Future:
Developing Measurable Performance Outcomes***

As with any new development or change in the cityscape, the process of reviewing proposals and agreeing on changes to an existing environment is filled with questions of the impact of change. Our cities are fluid and changing by their very nature and subsequent to the vision process, development review processes for Riverside will include review of drawings, calculations and impact studies, which are used to understand a range of outcomes of development, some of which will be realized, and others imagined or anticipated but never realized, and still others that are never even anticipated.

In the case of the Riverside Site, measurable performance outcomes can be developed in a number of areas and funds reserved to mitigate for outcomes that affect surrounding neighborhoods or that simply do not meet the intentions for on-site quality-of-life or activity. For instance, measurable performance outcomes can be developed, through the Special Permit process, in the areas of:

- Traffic/TDM
- Site programming/community space use and management
- Creation and maintenance of open space

A periodic review of outcomes during the early life of the project will allow the City to understand unintended consequences (and also acknowledge intended consequences and benefits) and to ensure there are reserved funds available for changes to mitigate traffic, for additional landscaping, for increased emphasis on site programming, and efforts to ensure strong connections and attention to open space and the Charles River.

Because this Vision Plan has been developed at a singular point in time, it is necessary that the performance outcomes themselves are adapted and updated over time to reflect current best practices and contexts.

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RIVERSIDE

Vision Plan - Appendix A

May 2019

Development Feasibility Analysis

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DEVELOPMENT FEASIBILITY ANALYSIS

PART I – NEWTON RIVERSIDE MBTA SITE

Introduction

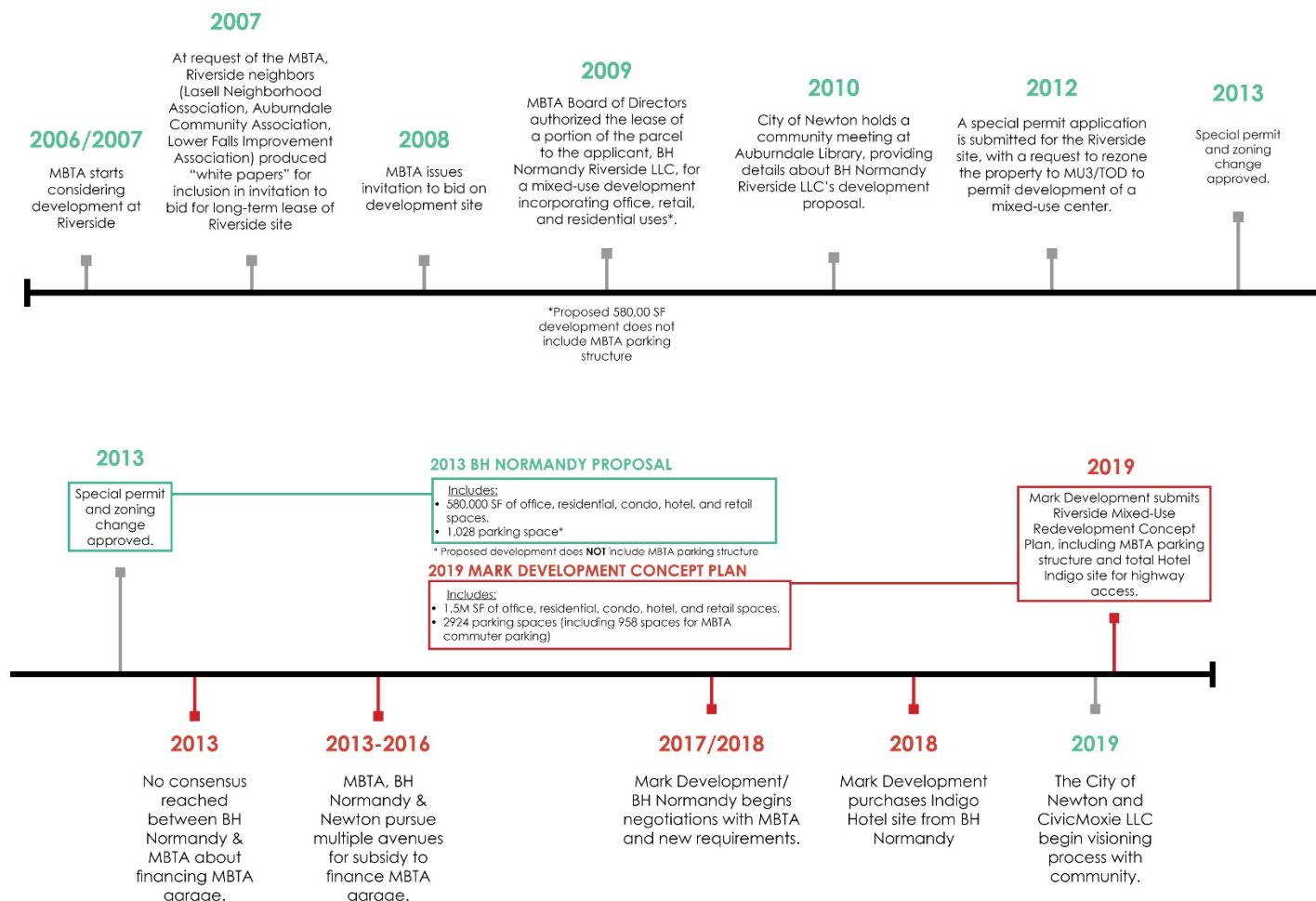
The Development Feasibility Analysis is intended to assist City Officials and the community in general to understand what is feasible and implementable for development at the Riverside site as it reviews development proposals through the Special Permit process. This analysis takes into account what a developer would require in order to make a development project successful as well as attractive enough to gain financial investment in the project.

The first part of this analysis documents the timeline for how the site disposition has proceeded since MBTA first issued its Invitation to Bid (ITB) for developers over ten years ago.

The second section analyzes the site and considers development feasibility in general terms; it answers what is attractive and valuable about this site, as well as what is realistic, and what considerations any developer would need to make for a project on this site to work.

As part of this analysis, Urban Focus spoke with industry professionals in the real estate field to understand how the site is viewed and valued within the greater Boston market. Many of these same professionals also provided insight into the development expectations for land valuation, density and revenue for a transit-based site such as the Riverside Station site.

Riverside Development Timeline



The MBTA site is 22.6 acres and includes the Riverside Station, the Green Line operations facility, a maintenance facility, and 958 parking spaces dedicated to commuter parking. The MBTA initially issued an Invitation to Bid in February 2008 with bids due in May. In February 2009, the MBTA Board of Directors approved an 85-year ground lease agreement for "a portion of the Green Line Riverside Station Complex in Newton" to BH Normandy LLC. BH Normandy began making annual ground lease payments and gained site control in order to proceed with development planning.

Over the course of the next three years, BH Normandy met with community groups and continued to design their proposed project. The scale of the project, initially 874,000 square feet was reduced through project meetings and discussions to 591,000 square feet. In June 2012, the developer submitted their project to the Newton City Council for a Special Permit. In October 2013 the Special Permit was approved for a project that included 225,000 square feet of office, 335,000 square feet of residential (290 units with 15% affordable), 20,000 square feet of retail, and an 11,000 square foot community space. The project also included 1,028 parking spaces but did not include the structured parking garage for the 958 parking spaces to be

provided to the MBTA. The project did include access to I-95/Rte 128 to/from the site on a portion of the Indigo Hotel site. The Indigo Hotel was proposed to remain.

During the same period, the MBTA and BH Normandy were in discussions of how to finance the commuter parking structure. Over the next three years, following the Special Permit approval, the MBTA, the City of Newton and the developer pursued multiple public funding sources for this purpose without success. At this point, the project stalled, and the developer halted ground lease payments to the MBTA.

In 2016/17, Mark Development began discussions with BH Normandy to partner on the redevelopment of the Riverside site and Mark Development began to investigate the site access to/ from the highway. Ultimately the two developers agreed to terms to develop the site that includes BH Normandy's continued participation in the development. In 2017/18, the BH Normandy/ Mark Development Partnership commenced negotiations with the MBTA. The terms remain similar to those proposed in the initial agreement with BH Normandy, however, some circumstances have changed or been clarified:

- 1) The developer must fund the operations and management of the MBTA commuter parking garage with all revenue going to the MBTA;
- 2) The length of the MBTA tracks has increased to accommodate future MBTA train storage, which has altered the site boundary and the amount of developable land;
- 3) The purchase of the Indigo Hotel site has revised the overall boundaries of the project;
- 4) The developer must pay the ground lease payments in arrears; and
- 5) The development must provide 10,000 square feet of office space to the MBTA.

In addition, though not a term of the MBTA lease, the City of Newton and the community have expressed interest that any future development project should provide direct highway access to/from the site.

In 2018, Mark Development purchased the Indigo Hotel Site from BH Normandy. In January of 2019, the BH Normandy/ Mark Development team (the developer) submitted their zoning application for the newly proposed project. The new proposed project includes 1.5M square feet of development (611,437 square feet of office, 702,273 square feet of residential (675 residential units including 15% affordable housing), 64,655 square feet of retail and a 194-room hotel (105,284 square feet). This proposed project includes 2,924 parking spaces including 958 parking spaces for MBTA commuter parking. The proposed development of the site includes the redevelopment of the Indigo Hotel site.

In January 2019, the City of Newton hired CivicMoxie, an urban planning firm that included Urban Focus as a sub-consultant. CivicMoxie was tasked with developing a Vision Plan for the MBTA Riverside Station site. Urban Focus was also asked to provide feedback on the development feasibility of the site.

Overview of the Market

In general, this site is seen as an extraordinary opportunity site for Newton and for the region. Based on its location on the Green Line, I-95/Rte 128, and the Mass Pike, this location is seen as a transit-oriented-development (TOD) site. Mass transit can bring residents, employees, and hotel guests to/from downtown Boston, Cambridge and the Longwood Medical Area in approximately 45 -60 minutes, making the location appealing. The site is also seen as an opportunity to bring more residential development to the city and region with direct access to the core of Boston. Finally, this site is viewed as an economic driver along the I-95/Rte 128 corridor.

Typically, the mix of uses in a TOD project is designed to support each other and diversify the risk for both the jurisdiction and for the developer. Creating single-use development projects at this scale is considered a higher risk than bringing multiple uses to a site that can work together and support each other. The industry sees this site as a strong mixed-use opportunity with each use supporting and benefitting from the overall mix. This viewpoint reinforces current best-practices in planning that seek to support the qualities of place that are found where a mix of uses creates places that attract people and activities.

The following evaluation assumes the MBTA Riverside Station site is to be redeveloped as a mixed-use property and is assessing the potential mix of uses onsite to be considered as part of a new TOD project here. Large transit-based sites do not follow the typical market trends of the surrounding uses and require a specialized analysis as the development ultimately relies on the mix of uses. All uses are codependent and don't compare to traditional stand-alone commercial uses in the area that don't



TOD in Portland, Oregon's Pearl District
Image www.smartgrowthamerica.org

have the same access to the MBTA or complementary uses available onsite. In addition, this site is somewhat isolated from other commercial uses in the area by the highway and the MBTA rail station meaning the uses on site must be, for the most part, supported by the MBTA traffic, neighboring residents, and the other uses onsite that draw people.

From the perspective of the local economy, as a TOD site, and based on the physical size of the development site, this is reasonably an opportunity to provide uses at scale and support the Newton economy like no other site in Newton. As traffic throughout the region continues to be a challenge, direct T access is valuable for residents and businesses.

Office

The office market is strong along the Mass Pike and the I-95/Rte 128 Corridor. As an MBTA TOD site, adjacent to the highway, this site is considered an excellent location for office space. Operators and brokers are seeing office tenants, who previously would not look outside of Boston, seriously considering the corridor for their corporate offices. With strong and dramatic architecture, industry professionals see this area as having great potential to be a market leader in the quality of tenants and rents commanded.



Clark Headquarters, Waltham, MA
Image Source: businesswire.com

One measure of a strong office market, other than the rent and absorption rate, is vacancy rate. The actual vacancy rate of a building demonstrates the demand for space at this quality level, in this market. A typically strong market has a vacancy rate of 5%. The projected rate could go as high as 10% in a more marginal market.

The Cambridge and Boston markets are presently very tight with vacancy rates hovering at 1%. Essentially, there is no space available in the downtown market –1% represents the minimal amount of turnover between tenants to make quick repairs and transition between users. Vacancy rates here are also expected to be low as companies seek accessible locations that are amenity-rich while offering lower (than downtown Boston) rents. The office market sees Newton and Needham as competitive with the Waltham market. As Needham and Newton continue to market themselves as competitive office markets to Waltham, this value will be reinforced. A 5% vacancy rate is an appropriate assumption on this site with its direct access to the T and the highway.



Riverside Center, Newton MA

A nearby case study

The Riverside Center at 275 Grove Street offers a nearby comparable for the market at the Riverside Station site. This property includes 509,000 square feet of office space. This property is a renovated building and is not considered a Class A suburban trophy office building so a premium is expected for newly constructed office space directly on the highway and the T. This property provides 150 free surface spaces and 1,500 free covered spaces to its tenants which equates to a ratio of 3 spaces/1,000 square feet. Its leases range from 3-12 year terms. As of

2017, office rents at this property averaged about \$45 per square foot (per year) with a 10% vacancy rate and taxes and operating expenses of approximately \$10 per square foot.

Summary

Office rents in the region are ranging from \$50-54 per square foot (per year) inclusive of taxes, insurance and utilities with an expected escalation of \$.50-\$1 per square foot (per year). Lab office rents are also strong at \$50 per square foot. Operating and property tax costs range from \$15-18 per square foot in a mixed-use development such as this.

Tenant Improvements required for a new build (the build-out of office space that is required as part of the overall package offered to attract office tenants) range from \$60-80 per square foot. This is an upfront capital cost to the project that would be offered to a potential tenant in order to secure a longer term lease (ten years or more). On shorter leases this equates to \$5-6 per square foot per year of lease. A longer-term tenant of this caliber will expect high quality state-of-the-art space.

There is strong demand for Class A suburban high design/ high quality office along the 128 Corridor. It will be important at the Riverside MBTA site for office development to be high design and high quality to attract stellar tenants. Locating the office uses closer to the highway access will allow for their greater visibility along the I-95/Rte 128 corridor, which is highly valued for many office tenants.

Residential Rental Market

As the cost of living in Boston increases and people continue to seek livable areas with access to the core of the Boston market, the residential market in TOD projects continues to be strong. The value of living on the T is very attractive and is expected to help mitigate traffic issues and support the reduction of parking requirements for this use. In addition, the office market's appeal to this area is expected to bring new residents to the area as well – both those who want to live near their work along the I-95/Rte 128 corridor and those who are being priced out of the Boston market and want an easy commute to their jobs downtown. And finally, Newton is seen as an exceptional market for new residents because of its stellar public schools.



Safari Drive Condominiums, Scottsdale, AZ
Image Source: www.millerhull.com

A nearby case study

The nearby Woodlands Station Apartments is the best residential comparable for the Riverside MBTA site because it is both in Newton and also an MBTA adjacent development. The differences include: 1) the property was developed between 2006 and 2009 so it is considered an older development, 2) the project included a 40B requirement therefore there was a larger number of affordable units than is typical and 3) this development is not a mixed-use site.

Woodlands Station was developed by National Development. The project has a total of 180 residential units and includes 83 one-bedroom units, 85 two-bedroom units and 12 three-bedroom units. Woodlands Station includes 36 affordable units (20%). The development also includes 550 commuter parking spaces for the MBTA and an additional 220 parking spaces for the development. National Development leases about 40 spaces to the adjacent hospital which leaves one space per unit available to residents.



Woodlands Station Apartments, Newton, MA

Source: apartmentlist.com

Currently market rate rents at Woodland Station apartments average from \$3.75 – \$4.25 per square foot (per month) with unit sizes at 1,074 square feet on average. Because of its adjacency to the T, the property rents are topping the market even as some newer residential units with more substantial amenities are coming online. The occupancy rate at Woodlands fluctuates between 90% and 97% as is season-driven – Spring brings strong interest - the operator is currently leasing units as they become available. Residents rent the parking spaces separately from the units. The current monthly rent for parking spaces on site is \$180 per spot, and the availability correlates with the occupancy rate. The operator does see that the residential parking is approximately 30-50% empty during the day indicating that at least a portion of the residents are using the T to travel to their jobs. This is a strong indication that shared parking (in a mixed-use project) would work well.

Summary

Residential demand is high and will be reinforced by the mix of uses on the site as employees choose to both live near their jobs, potentially onsite or nearby, and seek an easy commute into Boston via the T. In addition, shared parking as a strategy to reduce costs at the T site is reinforced by the experience at Woodlands Station.

Residential For Sale

The residential condominium market is considered a strong market in the Boston region. However, because it is a for-sale product where a long term financial commitment is required, the location, size of units, surrounding services offered, and the overall viability of the project are critical. First, given the location, the market for the site, as for residential rental, is the young professional who will use the T and wants direct access to Boston. This type of buyer is looking for a more modest purchase and a smaller unit size. In order to achieve the highest sale prices for these units, location on the site will be important as will the timing for sales. In downtown Boston, the sale of 60-100 residential condominium units in a project can take a year or more. The Newton development should expect the absorption period to be up to two years for the same number of condominium units. In addition, condominium purchasers will want to see an established and stabilized site before they are willing to purchase units, meaning

that the condominiums should ideally be offered for sale once the rest of the other uses are up and running.

Additionally, on this particular site, the most viable locations for for-sale residential is along Grove Street, scaled to the neighborhood. It was suggested that these units might include direct access from Grove Street but be embedded in a larger multifamily building so that these homeowners feel more connected to the surrounding community.



Belclare Luxury Condominiums, Wellesley

Source: www.realtor.com

The demand expectations for the site – modest, smaller units – also support the sales pricing expectations at the site. Lower-scale development costs support the more modest sales price expectations of this market of \$600-\$800 per square foot. High rise condominium development in the Newton/Needham/Wellesley market is relatively untested. High-rise construction cost can exceed \$1,000 per square foot meaning that the units must achieve sales of \$1,100 per square foot to be successful. High-rise development is also challenging due to the timing of condominium sales in a large mixed-use development. As stated above, to achieve target sale pricing, condominium units are best sold after the project is stabilized. When built as part of a high-rise development that includes other uses, the sales timing may need to be earlier as part of the overall delivery of the building. This is not optimal and will impact the overall returns that the units can deliver to support the entire project.

Summary

The market for luxury condominiums in the Newton market is challenging. The cost of construction for high-rise development exceeds the projected sale price for luxury units. The more likely buyer for for-sale residential in this market will be younger professionals and those seeking more moderately priced condominiums. The location and timing of the development of the condominium units will be important and the pricing will be directly tied to the overall redevelopment being stabilized and vibrant with attractive amenities and retail on offer. In general, the number of for-sale residential units on site that can be supported is limited.

Retail

In retail terminology, the Riverside site is classified as Suburban/ Urban which means that although it is not an urban site, the site will function more like an urban site– i.e. structured parking, more compact development and more urban like living (in mid-rise buildings) – but in a more suburban setting – i.e. not near other destination retail. Retailers will primarily draw from the MBTA users, office tenants and residents for their market which means that the retail is here primarily to provide amenities for the other uses on site. The expectation is that the likely uses here will be service-related uses (dry cleaners, hair salons, a possible fitness center, day care, pet store and possibly banks) and restaurant uses.

Retail uses here have several challenges to overcome. First, the site is somewhat isolated for retail and is not particularly visible. Any retail here will not be seen from the highway, and also there is no other significant retail in the area.

Secondly, any retail located here is competing with retail provided in other areas of Newton including Needham Street, Newton Centre, and the adjacent villages, as well as along Route 9 where other

destination shopping is present. Also, the parking access on this site is likely to be primarily in a parking structure with some minimal parking on the street. This is not appealing to retailers or their customers who want convenience and easy access. Brokers do not see the retail at this development site as a strong draw beyond the uses on site and nearby neighbors.

Brokers see it as important for Newton and the developer to be seeking complementary uses that support the overall development, and the consensus is that 30-40,000 square feet maximum is supportable. Considerations, like valet parking for restaurants, can compensate for the structured parking that will be a deterrent for customers coming to the site.

The expectation is that rents will be between \$40-60 per square foot. By comparison, the retail in commercial areas of Newton rents for \$40-100 per square foot, Newton Centre garners \$50-70 per square foot and Needham Street retail rents for \$45-70 per square foot. In addition, the common area maintenance fees are typically high in mixed-use developments - upwards of \$15 per square foot where \$8-10 per square foot is more typical of traditional strip center retail, which makes the return margin smaller. And tenant improvements are projected to be approximately \$75 per square foot depending on the use and length of lease. The developer cannot expect significant return for retail development but needs to provide service and restaurant uses to support the success of the rest of the development.

Summary

Retail is a support use for the overall mixed-use development; on its own, it is not a destination that will draw substantial customers to the site. The developer will need to carefully consider the appropriate tenants for the site to make the overall development attractive to the other active uses. They will also need to support these retail tenants to make sure they succeed by helping them improve accessibility through solutions like accessible parking, signage, and valet parking for restaurants. Active programming and placemaking of the site (events, programs, and community activities) can also help support retail success.



A New Eco-Village and Creative Center, St Louis Park, MN
Image Source: www.metroplains.com

Hotel Market

As the office market strengthens, the hotel market will become more attractive as companies will be interested in the growing amenities and access available for employees, consultants and clients.

From Needham to Newton, hotel uses make sense when adjacent to other nearby uses that allow walkability as well as transit access into Boston. More and more, the value of being on the T is being seen as an asset, but this value is difficult to quantify. Good design and quality amenities are also important to make this an attractive opportunity.

It is important to note that the sale of the Indigo Hotel garnered much interest from buyers in 2018. The value of a smaller branded development site was attractive to hotel buyers because it didn't include requirements and additional franchise terms typically required from the larger hotel flags. Mark Development was able to purchase the site and secure its position in the development project because this site is critical to providing highway access as part of the proposed Riverside MBTA redevelopment.



Existing Hotel Indigo, Newton MA
Source: <http://www.newtonboutiquehotel.com/>

Market Analysis Conclusion

Mass transit can bring residents, employees, and hotel guests to/from downtown Boston in 45 minutes, making the MBTA Riverside site's location appealing. Located on the I-95/Rte 128 Corridor and the T Station, this site is considered a regional opportunity within the larger market for office, residential and hotel. As a transit-oriented development site (TOD), a successful program relies on a mix of uses— for the developer and the local economy. And as traffic throughout the region continues to be a challenge, direct T access is valuable for residents and businesses.

As a TOD site, and based on the physical size of the development site, there is reasonably an opportunity to provide uses at scale and support the Newton economy like no other site in Newton as well as an opportunity to bring more housing and amenities to Newton.

As the site programming is contemplated, locating office and hotel with direct access to the highway is appropriate because the site topography at this end of the property can support more massing, the direct access will keep help these uses off of the surface streets and the location will allow the office and hotel users an opportunity for visibility along the I-95/Rte 128 Corridor. Residential uses, both for-sale and rental uses, are more appropriately located closer to the T station entrance and the smaller residential scale of Grove Street – for access as well as for sale and rental revenue expectations to be achieved.

Overall Development Feasibility Assessment

As part of this evaluation, Urban Focus evaluated the financial feasibility of a series of development scenarios to determine how much square footage would be required to redevelop the site based on a series of factors and conditions that are associated with the site.

Assumptions

This analysis includes the primary uses of office, residential and ancillary retail as these are the uses that show the highest demand in the market and are appropriate for a successful TOD site in this location. The factors and conditions (givens) used to complete this analysis include:

- Land Cost –The current land cost has been established based on several components:
 - The negotiations with the MBTA to require the construction of the MBTA garage;
 - The value of the ground lease as established in the original Ground Lease agreement and the payments outstanding in arrears to the MBTA;
 - The acquisition cost of the Indigo Hotel site; and
 - The estimated cost of the infrastructure to build the I-95/Rte 128 highway access.

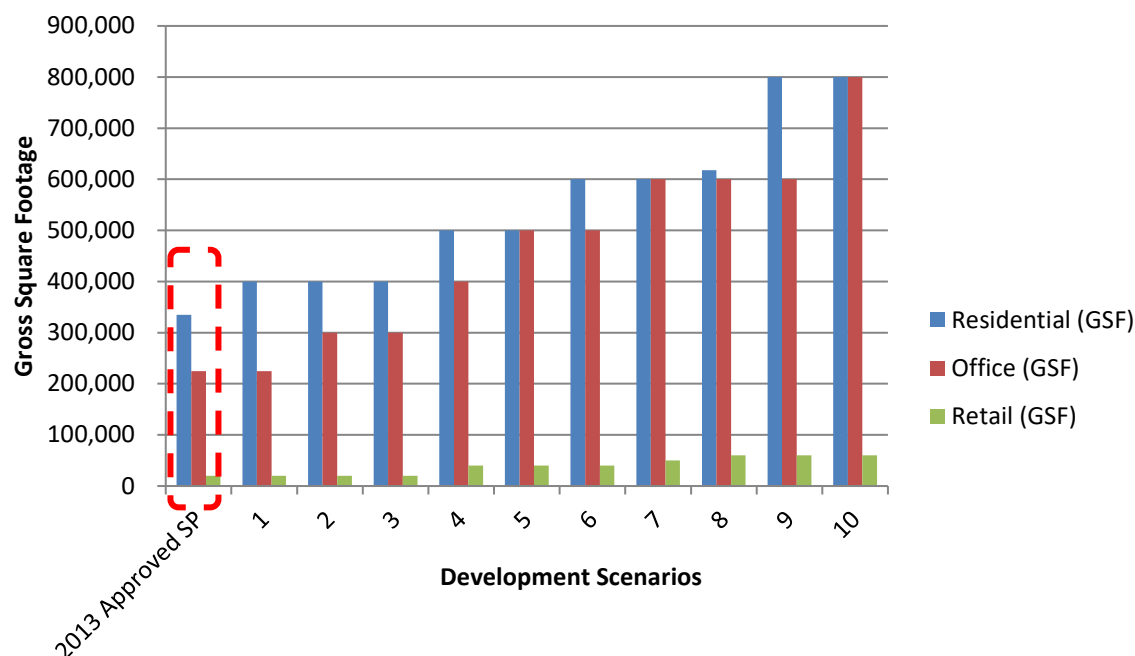
These costs are outlined in detail in Part II of this analysis.

- The typical Newton zoning requirements for parking require 2 parking spaces per residential unit and 1.25 spaces per affordable residential unit in addition to 1 space per 333 square feet of office and 1 space per 300 square feet of retail. This analysis has assumed that through the Special Permit review there will be an adjustment to these requirements. Parking requirements used here will include: 1 space for residential unit; 1 space per 333 sf of office; and 1 space per 300 sf of retail. No shared parking is assumed. All parking is assumed to be in structured garages above grade. While a development may have some on-street parking, it will be a minimal proportion of the overall.
- An affordable housing requirement of 15% is assumed for the residential component of the project which is the current affordable housing requirement in Newton.
- Return on Cost expectations are in the market range of 7-9%. We have used a 7% targeted return on cost based on discussions with industry professionals and developers at other similar sites in the region.
- Additional assumptions related to cost of construction, financing, and soft costs are all based on market assumptions based on our research.

It is important to note that the development assumptions are based on interviews with brokers and developers, and publicly available market data and do not directly reflect Mark Developments' financials or return expectations.

This analysis does not directly evaluate the development program proposed by the current developer team. We do identify the scenario that most closely correlates with the square footage proposed but these scenarios do not include hotel or condominium uses, a minimal proportion of the overall development.

The Development Scenarios



We reviewed a series of eleven scenarios ranging from the original program approved in 2013 to approximately 1.7M square feet of development. All scenarios are based on a program that consists predominately of residential and office with support retail. Other than scenario 1, all scenarios include the full count of required parking as listed above.

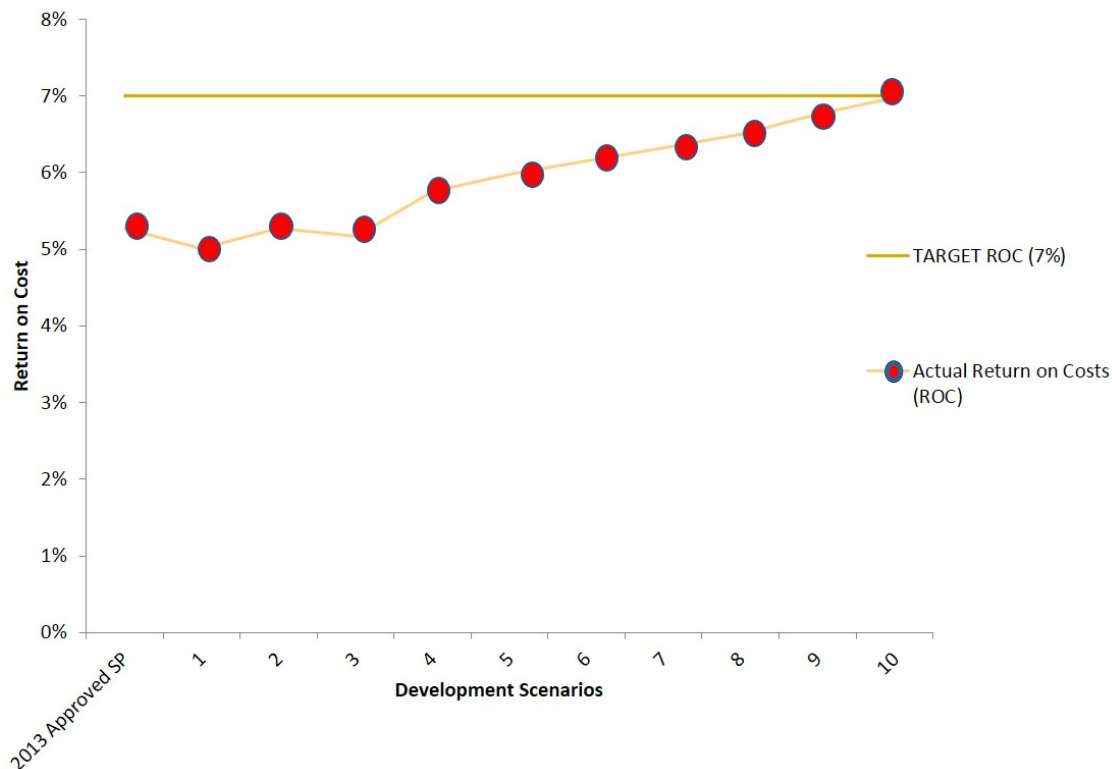
The Analysis

DEVELOPMENT SCENARIOS FOR SENSITIVITY ANALYSIS	Residential SF	Market Rate units	Affordable Units	Office SF	Retail SF	Total Parking required
2013 Approved Special Permit (res. unit size 1090 sf)	335,000	247	44	225,000	20,000	1028
Scenario 1 (400,000 sf residential - res. unit size 850 sf)	400,000	340	60	225,000	20,000	1090
Scenario 2 res. unit size 850 sf (300,000 sf office)	400,000	340	60	300,000	20,000	1309
Scenario 3 (res. unit size 750 sf.)	400,000	385	68	300,000	20,000	1358
Scenario 4 (500,000 sf of residential - res. unit size 750 sf, 400,000 sf office and 40,000 sf retail)	500,000	482	85	400,000	40,000	1819
Scenario 5 (add 500,000 sf of office - res. unit size 750 sf)	500,000	482	85	500,000	40,000	2110
Scenario 6 (increase residential to 600,000 sf - res. unit size 750 sf)	600,000	578	102	500,000	40,000	2125
Scenario 7 (increase office to 600,000 - res. unit size 750 sf, increase retail)	600,000	578	102	600,000	50,000	2538
Scenario 8 (increase unit size to 850 sf, increase retail to 60,000)	618,000	525	93	600,000	60,000	2513
Scenario 9 (increase residential to 800,000 - res. unit size 850 sf)	800,000	680	120	600,000	60,000	2682
Scenario 10 (office increased to 800,000 - res. unit size 850 sf)	800,000	680	120	800,000	60,000	3264

Based on this order-of-magnitude analysis, a developer seeking a return on cost of between 7-9% would find most of these scenarios infeasible.

Scenario 1 is a reflection of the BH Normandy program that was approved in 2013. In this scenario the cost of the Indigo Hotel site has been reduced as the original development proposal was designed to use only a portion of the site for highway access. All other scenarios include the full cost of the Indigo Hotel site as outlined in Part II of this analysis.

Based on the land costs, hard costs and revenue likely in today's market, the originally approved program can only achieve 5.3% return on costs which is well below the margins required to make the project feasible.



Scenario 8 is the closest to the current scenario proposed by the developer, however, as noted above, this analysis is high level and it does not include the condominium or hotel as part of the development. This scenario includes 618,000 square feet of residential (618 units), 600,000 square feet of office space and 60,000 square feet of retail. This scenario also includes 2,513 parking spaces. The returns of scenario 8 do not achieve the market return expectations of 7%.

By looking through the various scenarios, the project only begins to approach the expected return requirements when the program includes 800,000 square feet of residential and 800,000 square feet of office space with 60,000 square feet of retail. Scenario 10 includes 3,264 parking spaces to support the development program. The return on cost projected for this scenario is just approaching the expected market return of 7%.

Conclusion

Based on this analysis and assuming a basic program and with conservative concessions to the requirements (we have assumed that through the Special Permit review there will be an adjustment to the parking requirements to 1:1 for residential), the Riverside MBTA site requires upwards of 1.6M square feet of development to achieve market return expectations. This is based on a simple program that includes the two most needed/in demand uses – residential and office with support retail.

In the market review portion of this analysis, Urban Focus has reviewed the demand for condominium and hotels. Based on the industry expectations, a hotel can reasonably be expected to improve the project returns and for-sale residential with the provided caveat that it should be low scale and closer to the remaining residential should provide a positive net return, but this was not contemplated as part of the Feasibility Assessment.

In general, this analysis provides an indication of the range of development that would be appropriate on the site based on existing market conditions and expectations. The analysis and conclusions do not factor in individual developer capabilities or expectations that may impact the program revenue or costs, or any concessions offered to the developer to improve the costs on the site.

The cost of the Indigo Hotel site impacts the development cost. Removing the Indigo Hotel (and the land around it) from the analysis and keeping only what is needed for access to the highway, would reduce the cost of the project but will also push all of the density to the rest of the site. This is counterintuitive as the portion of the property closest to the highway and the Indigo Hotel site has the potential to hold more density based on site topography.

Because the gross square footage required to develop a feasible project on this site is substantial, it is recommended that the City identify concessions that can maintain/support the development returns without impacting the overall development quality.

The most direct concession would be to consider shared parking. Significant shared parking should be considered and will improve the needed development scale as well as the financial feasibility of the development project. The built area and related cost required for structured parking is significant in each of these development scenarios. Each structured parking space adds approximately 550 square feet to the site (accounting for the actual space as well as drive aisle); therefore, every 1,000 parking spaces requires 550,000 square feet of structure.

In addition, the cost to build each structured (garage) parking space is approximately \$30,000 - 40,000 per space. On a \$600M total project cost, the cost of structured parking is at least \$60M to provide the required parking. Without some sort of shared parking, the scale of the development project as well as the overall development costs make the project substantially expensive to build.

Finally, while considerations are made for shared parking across all uses, the MBTA commuter parking should also be considered as an opportunity for savings. If the MBTA is concerned about the availability of parking at surge times such as game days, the developer should organize a mechanism to ensure parking availability as needed and allow for overflow into the other site parking for special events in downtown Boston.

PART II - ANALYSIS OF DEVELOPER ASSUMPTIONS

As part of this analysis, we looked at the assumptions made by the developer to determine the feasibility of their overall proposal.

The developer provided access to their development plans and financial analyses for the proposed project with the understanding that this information and their intellectual property would only be used to evaluate their proposed project in relation to the larger marketplace and would not be shared publicly.

Below are some of the more significant assumptions that are typical for any pro forma and how the developer's analysis correlates.

Land Price

The developer provided the following information regarding the cost of the land. Several components are assumptions based on their cost estimates. These costs should be tracked and confirmed. These costs are considered the overall land investment costs necessary to build the project as required by the MBTA and the City of Newton.

Land Price (present day)

Land Price to MBTA

MBTA Land Price Pre-paid ground Lease*)	\$23,960,000
MBTA Past Rent (accrued through March 2020)	\$5,500,000
Incremental Density to MBTA	\$5,453,000
Hotel Indigo (purchased in 2018)	\$34,500,000
Additional Infrastructure**	
Newton I-95/Rte 128 Ramp/ Infrastructure (estimate)	\$19,625,000
MBTA Garage	\$30,000,000
	\$119,038,000

*paid at the project's financial closing

** estimated costs based on developer estimates to be confirmed by City peer review

The purchase price to the MBTA remains as defined in the agreement from 2009 between MBTA and BH Normandy. There are increases based on the delay in time – the negotiations with Mark Development have restarted the ground lease to 85 years as of an anticipated closing in March of 2020 but they are required to pay all ground lease payments in arrears. The incremental density calculation is also based on the requirements of the original ground lease and are calculated based on the proposed development submitted by the developer in January 2019 for the Zoning Review Application. The developer has negotiated the value of this Incremental Density payment with the MBTA based on the maximum density proposed. While there is a component of the overall land payment tied to the added density proposed on the site, through negotiation, the developer has reduced this value by the capitalized value of capital costs and operating costs necessary to maintain the parking structure – which has been identified as their responsibility. The remaining incremental density payment of \$5.4 M is a small portion of the overall embedded land cost and will only be reduced (not increased) by any reductions in the overall site massing identified through the Special Permit process.

The land price for the Indigo Hotel has been established by the sale of the property to Mark Development in 2018. This property was on the open market and Mark Development purchased the parcel, securing their position as partner in the Riverside redevelopment. It is a vital parcel for access to the highway.

The additional infrastructure costs include the cost of the highway access as well as the internal site road development. As highway access is seen as crucial by the City of Newton to the redevelopment of the site, this cost is justifiably part of the overall land development cost. The cost of the highway access should be verified as an expense separate from the internal road development. In general, for this analysis, the infrastructure costs are assumed to be reasonable and appropriate. Urban Focus recommends that the cost of the highway infrastructure be verified by MassDOT and a third party reviewer to confirm that it is specific to the offsite work required for the highway access.

In addition, the City of Newton should be very clear about what the options for highway access are as defined by MassDOT. This negotiation appears to be between MBTA and MassDOT with the developer's participation. The City of Newton should be made aware of the options for this access.

Finally, the estimated cost of the construction of the MBTA commuter parking structure is also a requirement of the land development and a justifiable expense as the MBTA has clearly outlined this as a stipulation of developing the site. These costs are currently defined as \$30M but could vary as plans are developed. In general, for this analysis, the infrastructure costs are assumed to be reasonable and appropriate.

Project Use Assumptions

As part of this analysis, Urban Focus reviewed the assumptions the developer is using in preparing their financial projections for the project.

Revenue Projections	Market Terms	Developer Assumptions
Office Rents	\$50-54 psf with escalations of \$1 psf per year; Tenant Improvements \$60-80 psf NNN	In line with market
Residential Rents	\$3.75-\$4.25 psf with 1:1 parking	In line with market
For sale Residential	\$600-800 psf	Appropriate for the market- however high rise construction cost exceeds demand
Retail	\$40-60 psf; Tenant Improvements \$75.00 NNN	In line with market
Vacancy Rate (residential of office)	5%	In line with market

Office Rents and Cost Expectations

The office development should be of high marquis quality design to attract both corporate headquarters and local and regional I-95/ Rte 128 corridor office tenants. Office rents in the region are ranging from \$50-54 per square foot (per year) with an expected escalation of \$.50-\$1 per square foot (per year). Lab office rents are also strong at \$50 per square foot. Operating and property tax costs range from \$15-18 per square foot in a mixed use development such as this.

The developer-proposed project terms are in line with the market rent and expense assumptions in the market.

Residential Rental Rents and Cost Expectations

This site will attract younger professionals who work in the suburban market as well as those who are attracted to the direct access to the Boston core. Residential demand is high and will be reinforced by the mix of uses on the site as employees choose to both live near their jobs, potentially onsite or nearby, and seek an easy commute into Boston via the T. Residential rents are currently pushing \$4 per square foot and expected to continue to rise.

The developer's rent and operating expectations are in line with the market at comparable TOD sites.

For Sale Residential

The developer is proposing 57 residential for-sale condominiums above the hotel building. The construction cost to build high-rise condominiums exceeds the sales prices that the market believes are viable for this location. High rise construction costs for condominiums can cost upwards of \$1,000 per square foot. In addition, because the condominium development is tied to the hotel redevelopment, the marketing of the condominiums will be tied to the activity and roll out of the hotel use. This is not optimum unless the condominiums are operated by one user which may be the consideration. Finally, in the current program, the condominiums are located on the fee simple portion of the site (the Indigo Hotel site) by necessity. This location is not ideal for achieving premium unit sales and high rise condominium sales on site will be challenging and should be carefully planned for as they are detached from the neighborhood scale along Grove Street. Locating the for-sale units nearer to the rest of the residential may not be possible due to the ground lease structure with the MBTA (as fee simple for sale residential is prohibitive on a ground leased site). Sales prices should be about \$6-800 per square foot, and it is critical to that construction costs not exceed this. Low scale or mid-rise construction meets this requirement at \$500 per square foot.

The developer should consider, if possible considering the ground lease structure, relocating the for-sale units to the more residential scale of Grove Street. The cost of construction for lower scale development will be more in line with the expected sales pricing and the timing of delivery of units to the market.

Hotel Use

The developer intends to develop a 194-room hotel in an 18-story building that also includes 9 stories of residential rental at the site. This is seen in the market as a completely feasible building size for hotel. The hotel valuation is appropriate for this early stage analysis. The program proposes high rise construction which requires a higher per square foot cost.

The developer's projections for return on overall cost of construction are reasonable in relation to the hotels size and value in the market.

Retail

The developer is proposing retail as a support use here at 60,000 square feet which exceeds the amount of retail that industry recommends. The rents projected are in line with market expectations of \$40 per square foot however, both the developer and the City of Newton will want to consider the level of retail needed on the site and assist as possible with supporting best practices for retail at this location to ensure its success.

Vacancy Rate

In general, across the major asset classes of office, rental residential and retail, the appropriate vacancy rate is determined to be low – referred to as a structural vacancy rate. A structural vacancy rate accounts for when a unit must be offline for repairs and turnover. A 5% vacancy rate is appropriate.

The developer is assuming a 5% vacancy rate.

Other Assumptions Reviewed

Other Assumptions	Market Terms	Developer Assumptions
Construction Costs	\$280 per square foot (higher for high rise development - \$1000 psf)	In line with market – except for high-rise condominium
Construction Cost (structured parking)	\$30-40,000 per space	In line with market
Market Capitalization Rates	Office – 5.62% Residential – 4.88% Retail – 5.86%	In line with market
Developer Fee	3-5%	Below market expectations
Return Expectations	7-9% return on cost	Below market expectations

Construction Costs

Construction costs for a mixed-use project with a variety of uses can vary wildly. On average the cost of construction in the market is about \$280 per square foot blended (meaning across uses). In residential rental, the overall cost per square foot can be mitigated some by economies of scale as the materials are replicated throughout the units and more funds are directed to public areas. Hotel and Condominium uses typically have higher cost per square foot construction costs than residential rental and office where the build out is typically less extensive. In the proposed project, both hotel and for-sale residential are currently in high-rise construction which can cost upwards of \$1,000 per square foot. In office and retail, the cost of the shell is in the overall hard costs and additional tenant improvement allowances are set aside to build to suit the tenant. In office, the most expensive spaces include the lobby and other public areas.

The costs per square foot projected in the developer analysis are generally right in line with the blended construction cost determined in the market however the hard cost per square foot allocated for office is lower than what would be expected for a high-end/ high design office building. The tenant improvements for both office and retail are reasonable and right in line with market expectations.

Market Capitalization Rates

To determine the stabilized value of the completed asset, the industry uses a capitalization rate that correlates with similar product (building) types in the region. The market capitalization rate for each use is determined by looking at similar assets in the market and dividing the Net Operating Income by the Property Value. Developers use market capitalization rates to evaluate their asset in relation to other assets in the region and determine the future projected stabilized value of the asset.

In reviewing the capitalization rates used by the developer, all were directly in line with the market capitalization rates that are used within the market.

Developer Fee

The developer/project manager is permitted to include a fee in the total development budget to support their work developing the project. This fee is in addition to any value created through the ownership of the development. The fee can range from 3% of the development costs on a very large development project to 12-15% for smaller development projects. Subsidized projects, public-private partnerships, or more complex phased projects have yet another layer of complexity and typically allow for higher development fees to the developer.

In the case of the Riverside MBTA Development, the project is very large and will also be underway for multiple years. This project should warrant a developer fee between 3-5% based on market comparisons.

The developer's projected fee is just below this range suggested in the market for this scale of development.

Return Expectations

Developers have different metrics by which they determine whether a project is financially feasible. A simple measure of return is the Return on Cost (ROC) or Cash on Cost Return which is determined by dividing the net operating income by the total development cost. This return measure does not factor in the time it takes to complete the project. It is a snapshot in time and tells the developer, if based on all of the assumptions, the project is worth pursuing. These yields vary by use because different asset classes are considered more risky than others. A second return measure is the Internal Rate of Return (IRR) which determines the return on equity over a period of time. Both of these measures should be in line for the project to be considered feasible.

The developer's Return on Cost requirements are slightly below the market expectations for yield for a project of this scale and complexity. The company does not use IRR in their analysis.

Conclusion

Based on the review of the developer's assumptions, we have determined that overall the development assumptions are reasonable. The return expectations and developer fee terms are both conservatively below the markets expectations for a site of this scale. For the primary uses of office and rental residential, the developer has reasonable rent expectations for the market.

For the for-sale condominiums component of the program, there is concern about the location and expected construction cost as high rise construction costs exceed the expected market for for-sale residential in this market. Consideration of a lower scale for-sale residential component closer to the residential Grove Street and residential end of the site is more appropriate. It is noted that it may be prohibitive to relocate the condominiums to the ground leased MBTA parcel as fee simple sales. Hotel use, also a smaller components of the overall project, is an attractive use for the site but is dependent on the success of the overall mixed use character.

It is important to stress that while this analysis and these return expectations are based on the market expectations for return on a project of this size rather than this specific developer's expectations, the redevelopment of this parcel is currently attached to a development partnership. As outlined in Part II of this assessment, the developer has a slightly lower than market return expectation. All developers have return criteria that vary. Given that the generic development proposed in Scenario 8 (most closely resembling the developers program) achieves a return acceptable to the developer yet below the market, it would ultimately be the developer's yield requirements that prevail.