WEST NEWTON VILLAGE AREA PLAN | 2011

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MIT | Department of Urban Studies and Planning

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WEST NEWTON VILLAGE AREA PLAN

Final Report
2011 Community Growth and Land Use Planning Practicum

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West Newton Village Area Plan was developed by graduate students in the Community Growth and Land Use Planning Practicum at MIT. It presents a vision for the Village shared by its residents, business owners, visitors, and the City of Newton as a whole.

However, this vision would not have been possible without the city officials, the Planning and Development Department staff and the community members who generously volunteered their time, knowledge and ideas in every stage of this process.

We learnt a lot from engaging with you and are grateful to all those who shared their experiences and expertise with us, which informed the course of this plan. We hope that our efforts will be useful to the City of Newton in making decisions that will inform the future development of West Newton Village and spur conversations among community members about creating a West Newton Village that reflects their vision.

We would especially like to thank the members of the West Newton community and the City of Newton:

Members of the West Newton Community

Josephine McNeil, Executive Director, Citizens for Affordable Housing in Newton Development Organization (CAN-DO)

John O'Hara, Owner, Paddy's Pub

Karl O'Hara, Owner, Paddy's Pub

Ted Tye, Managing Partner, National Development

Miles Smith, Neighborhood Resident

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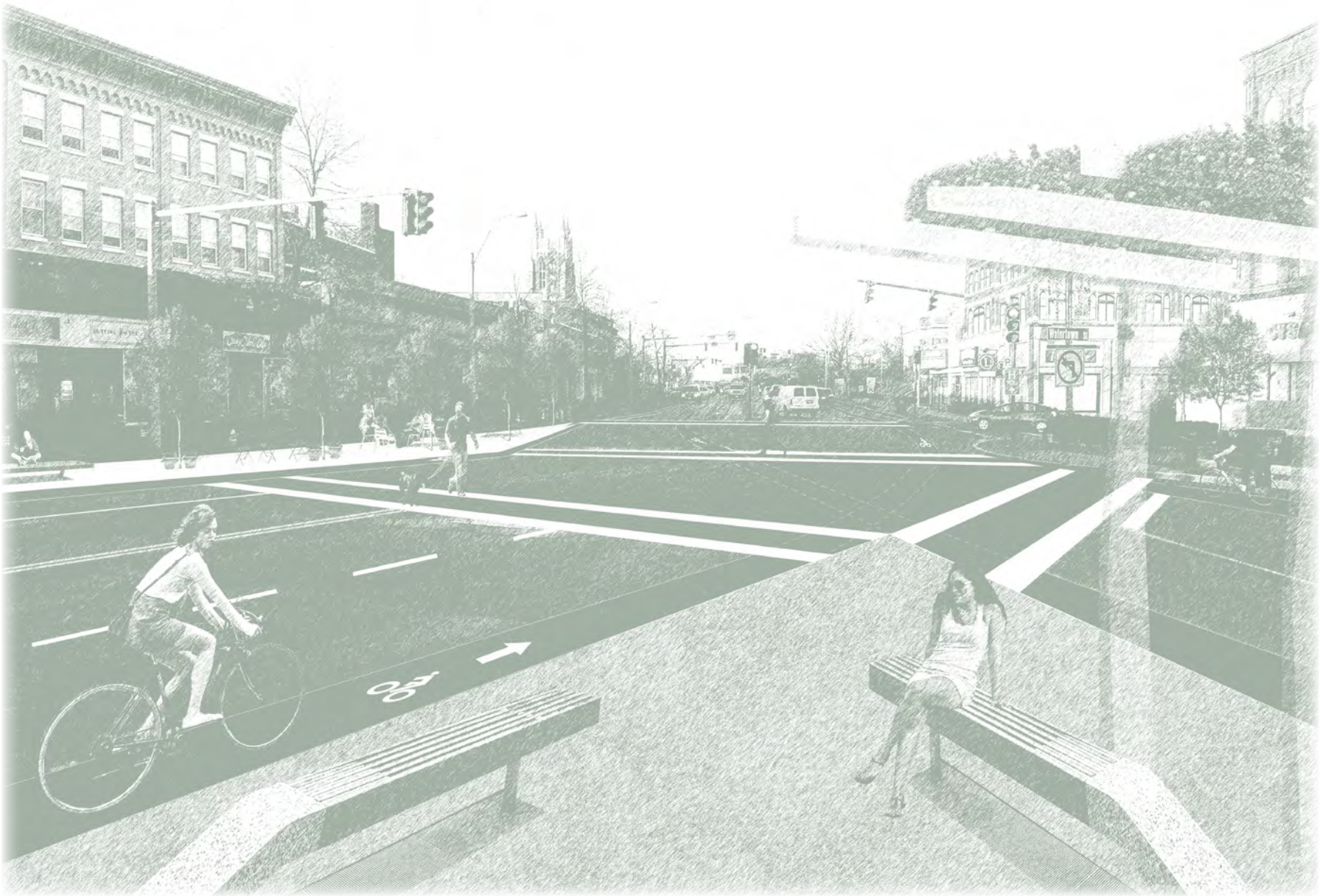
Lastly, we would like to thank Professor Terry Szold and Instructor Annis Whitlow Sengupta for guiding us at every stage of developing this plan and reviewing our efforts that helped us improve upon our work and present a comprehensive vision for West Newton in the form of this report.



EXECUTIVE SUMMARY

Building on West Newton's historic character, its bucolic charm, the vision of area residents, business owners, and city officials and the goals outlined in the Newton Comprehensive Plan (2007), we created a vision where West Newton Village is the social heart of the surrounding community. The vision is outlined and described in detail in this plan.

Our plan fosters a vibrant environment where local businesses and institutions thrive in the Village Core, providing the places where neighbors and visitors gather, shop, work and play. It supports housing affordability to preserve the diverse range of households that already exist in the Village. It entails more intensive development nearer the Village Center, transitioning to smaller buildings and less active storefronts as streets approach existing residential zones. We detail interventions to improve walking and cycling conditions, and create the volume of residences and businesses needed to support improved transit options.

Our report is organized according to five themes:

- Land Use – the uses and form of buildings and properties;

- Circulation – the way streets are organized to accommodate multiple modes of transportation, including pedestrians, bicycles, transit and automobiles;

- Parking – where residents, visitors and employees would park their vehicles;

- Community and Economic Development – guidelines to encourage economic vitality in the Village, as well as housing opportunities for a diverse range of residents; and

- Open Space and Environment – the use and creation of green spaces and natural areas.

This report first reviews existing conditions pertaining to each of these five themes in West Newton, analyzing both the strengths of the community and the opportunities for improvement. Synthesizing our analysis, we present a vision of what West Newton can become. This vision is followed by detailed interventions to realize this vision, including implementation strategies. Finally, we note four "catalyst sites," which include redevelopment concepts for specific parcels, as well as parking and circulation strategies that could be implemented in the nearer term to begin realizing the vision for West Newton.

West Newton has a strong sense of community amongst its residents and local businesses, and its built form presents many assets. This plan aims to make it an even more delightful, vibrant place. The vision now belongs to you.

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SHOES
THE BARN
BARN

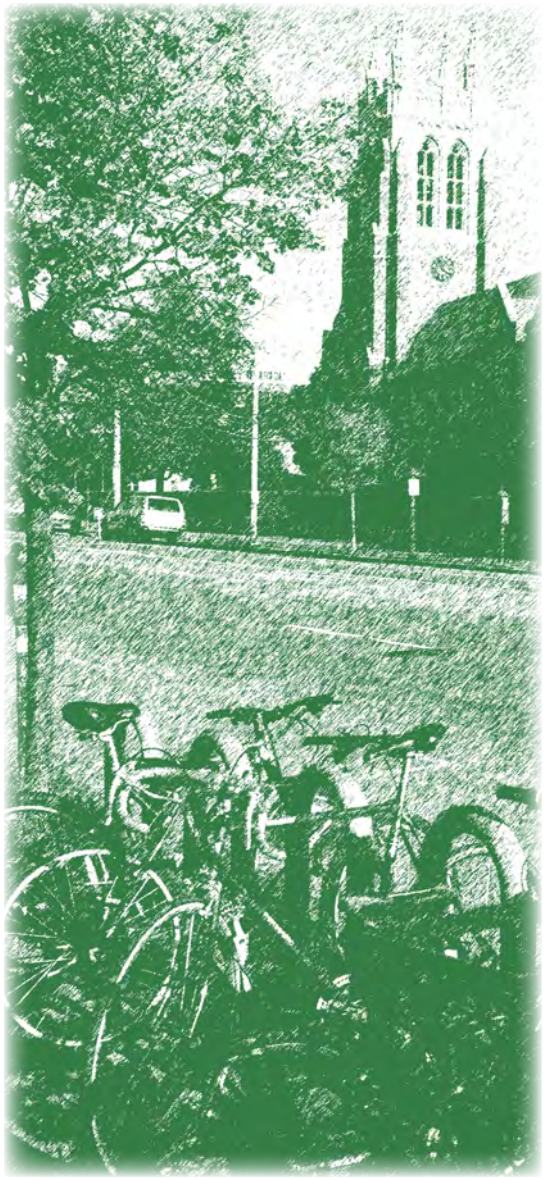
PART ONE: *ANALYSIS*

The West Newton Village Area Plan is divided into two parts- Analysis and Synthesis.

Part One analyzes the neighborhood context of West Newton Village (also referred to as "the Village" in this document) and is an effort to the understand the scope within which this plan would evolve.

This section then identifies some of the Village's major opportunities and challenges based on the students' analysis of the existing conditions along the Washington Street Corridor and the surrounding area in West Newton, which is the study area for this report.

The findings of this analysis serve as the basis for the recommendations and implementation strategies further described in Part Two of this report.



CHAPTER ONE
ANALYSIS: INTRODUCTION

A team of graduate students in the Community Growth and Land Use Planning Practicum, taught by Professor Terry Szold and Annis Whitlow Sengupta, produced this report as part of a semester-long course in the Department of Urban Studies and Planning (DUSP) at the Massachusetts Institute of Technology (MIT). The Newton Planning and Development Department engaged the class to create a plan and recommend implementation strategies for West Newton, one of Newton's 13 historic villages, which would allow the Village to grow as a strong community center in the short and long-term.

West Newton is already a vibrant village center. Home to a strong mix of local businesses and with transit connections to Boston, the Village offers attractions and services for residents and visitors alike. The West Newton Cinema, the post office, restaurants like Lumière and Blue Ribbon BBQ, and local civic and religious organizations offer West Newton Village all the qualities of a true community center. The Newton Comprehensive Plan (2007) recognized the importance of maintaining and expanding such centers, particularly because doing so will accommodate future growth while preserving the community character. Historically, West Newton accommodated denser buildings in the center of the Village. This historic precedent and West Newton's numerous, existing assets serve as the foundation for generating sensible amounts of future development in the Village.

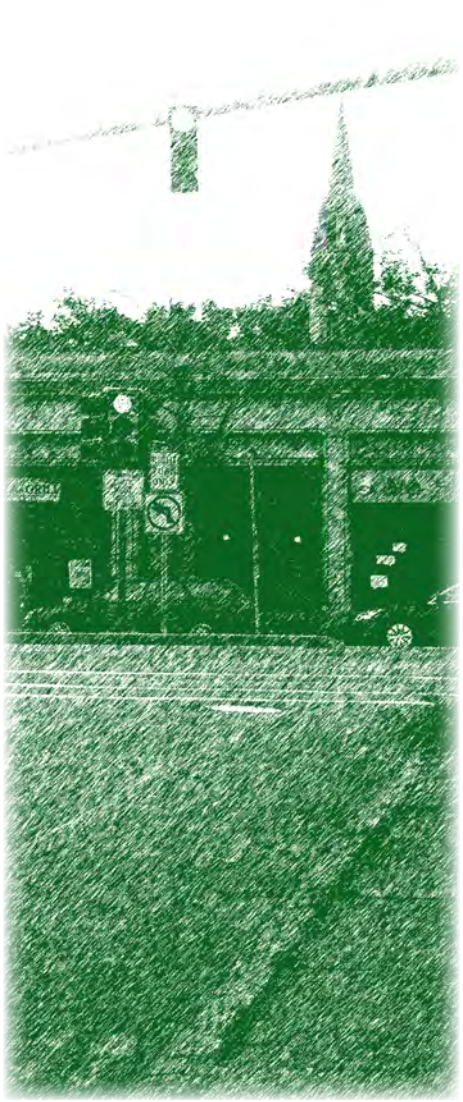
Yet for all of its strengths, West Newton faces considerable challenges. The Village is heavily oriented towards automobiles—wide lanes and high speeds erode the area's village feel and make it difficult to get around by walking or cycling. Crosswalks are few and far between, sidewalks lack street trees, and local streets have no accommodations for cyclists. These conditions, combined with few transit options beyond commuter service to Boston leave minimal alternatives to automobile use in the Village. This lack of automobile alternatives, in turn, exacerbates the area's parking problems, at times making it difficult for customers to visit local businesses. The area's natural amenities—including Cheesecake Brook and area parks—are pushed to the fringes of the community and largely neglected. All told, these challenges affect both the cohesiveness and the identity of West Newton.

Our team conducted extensive research and community outreach in order to devise interventions to address these challenges presented by West Newton. The Newton Comprehensive Plan (2007) served as the basis and inspiration for much of this work; its goals and recommendations heavily influenced our final vision. We also took many of our cues from the 2001 Initial Plan for West Newton, a plan developed by students in this same practicum at MIT a decade earlier. Our text-based research was supplemented with numerous visits to the Village and myriad conversations with city staff, residents, visitors, and business owners.

With this information, we began crafting preliminary recommendations for the Village and on October 21st presented these initial ideas at a public meeting at Newton City Hall. The feedback we received that evening was invaluable and conversations both during and after that meeting helped our team to further refine our ideas. In some cases, this meant eliminating or limiting our recommendations; in others, it meant going further and proposing ideas that pushed the bounds of the West Newton that people knew into the West Newton that people had merely imagined. After several weeks of refinement, we presented our final recommendations at another public meeting at Newton City Hall on December 1, 2011.

This report includes those final recommendations. In the first section, it lays out West Newton's geographic, historical, and community context, as well as relevant planning efforts. In the second section, it discusses the existing conditions in West Newton—information about the land uses, traffic patterns, parking situation, business community, housing options, and open space network as they exist now. In the third section, we lay out our broad vision for how West Newton can build on its strengths and tackle its challenges. This section includes both a broad vision and specific interventions and implementation strategies within a number of topical areas. The fourth and final section seeks to illustrate how the vision and strategies discussed previously will evolve in different areas of the Village. Breaking the Village into four areas, it shows more specifically how circulation patterns change, where visitors park, and where new development may occur.

Our intention with this report is to provide recommendations that will inform and spur conversations about the future of West Newton, both in City Hall and in the community.



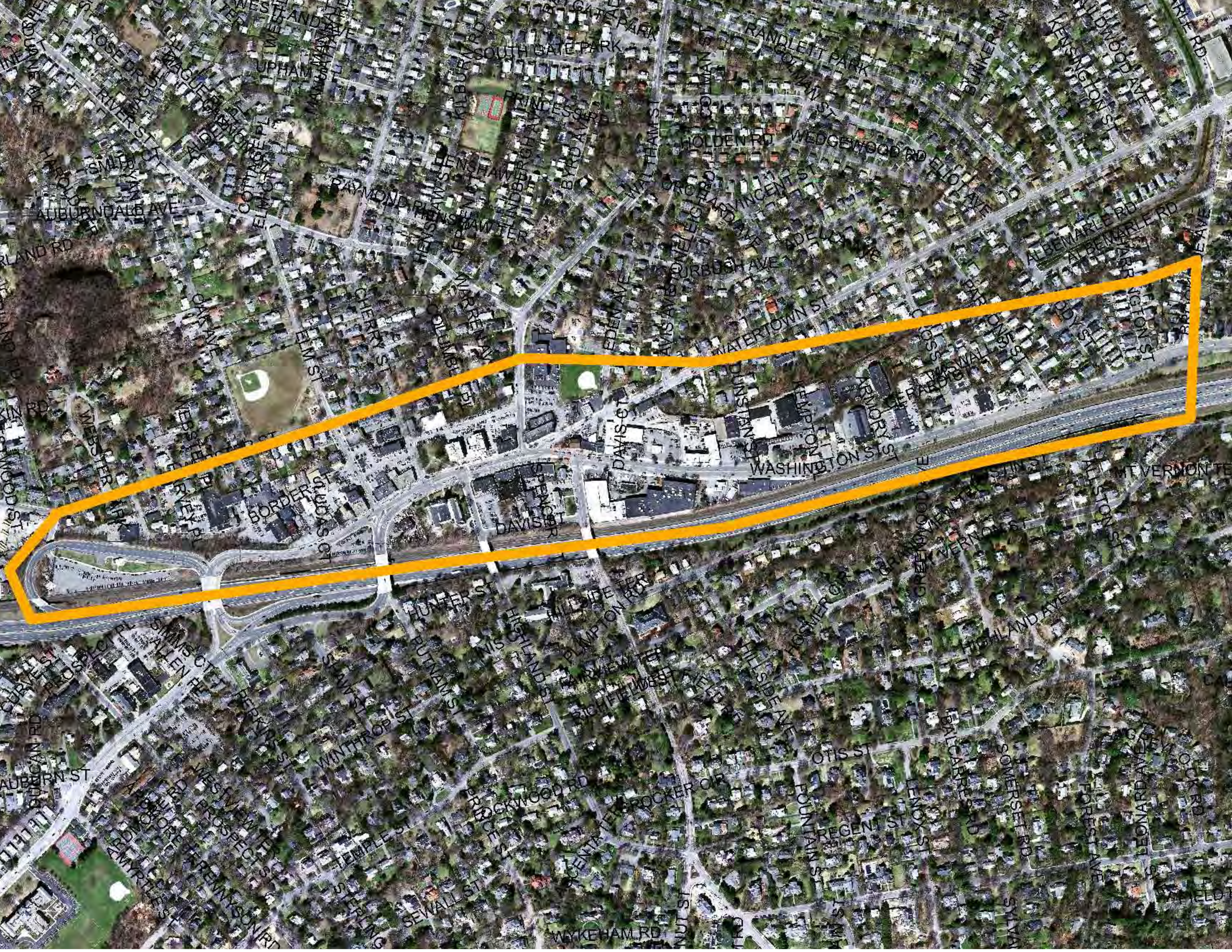
CHAPTER TWO
CONTEXT

2.1 GEOGRAPHIC CONTEXT

West Newton is one of Newton's thirteen historic villages. Located in the north-central part of the City, the Village developed around both the Boston & Worcester Railroad and Washington Street—a main thoroughfare from Boston into the western suburbs.

The Village is located just off of Exit 16 on the Massachusetts Turnpike / U.S. Interstate 90 (I-90) and is a 10-minute drive due south of downtown Waltham. The Massachusetts Turnpike (Mass Pike) provides convenient access to Boston. Route 16 (Washington Street) carries traffic southwest to Wellesley and northeast to Watertown. The Massachusetts Bay Transport Authority (MBTA) Commuter Rail line and MBTA bus lines offer commuter access to downtown Boston.

This report focuses on West Newton Village, an area bounded by I-90 to the south, the limit of the Exit 16 off-ramp to the west, Brookside Avenue to the east, and residential areas to the north. The area includes the Village Center, as well as peripheral areas along the eastern section of Washington Street, along Watertown Street, and in the light industrial area on Border Street.


SOUTH GATE PARK
RANDLETT PARK
UPHAM
HOLDEN RD
WEDGEWOOD RD
AUBURNDALE AVE
RAYMOND
ALBEMARLE RD
WATERTOWN ST
WASHINGTON ST
ELM ST
BORDER ST
DAVIS ST
HUNTER ST
HIGHLAND AVE
WINTHROP ST
LOCKWOOD RD
OTIS ST
REGENT ST
AUBURN ST
WYKEHAM RD

2.2 DEMOGRAPHIC CONTEXT

Data from the American Community Survey (2006-2009) undertaken by the US Census Bureau provides a snapshot of the current demographics of West Newton. The Village population remains predominantly white, but there is also a growing population of Asian-American residents. West Newton also tends to favor families, as reflected by the significantly lower amount of area residents between the ages of 17-34 as well as residents over 70. It should not be overlooked that while the median household income for the three Census Tracts sampled for this study hover just below $100,000 per year, there are slightly over a quarter of households earning less than $50,000 per year.

As shown in Table 2-4, home values in West Newton are outstripping increases in household income. For current homeowners, high home values are good, but as housing ownership turns over, wage earners in traditional occupations that may once have been able to afford to live in West Newton are being pushed out. The Village has a moderate number of renters and rental units with few vacancies and could probably accommodate an increased rental supply. There are two large-scale affordable

Demographics for West Newton Village Area[1]

Race	White	Asian	American Indian	African American	Other	Total
Population	11,016	1,454	6	297	241	13,014

Table 2-1 Count of West Newton Residents by Race

Age	0-17 years	17-34 years	35-49 years	50-69 years	>70 years
Population	2,975 (23%)	2,366 (18 %)	3,366 (26%)	2,911 (22%)	1,396 (11%)

Table 2-2 Count of West Newton Residents by Age

Median Income	<$50K	$50K to $100K	$100K to $200K	$150K to $200K	>$200K
Percentage of Households	27%	25%	21%	13%	14%

Table 2-3 Count of West Newton Households by Median Household Income

Total Number of Housing Units	5,279
Median Value Owner Occupied House	$580,900
Median Household Income	$97,136
Percentage of Rented Housing Units (Versus Owner Occupied)	31%
Housing Units in City of Newton Managed as Affordable	1500
Affordable Housing Units in West Newton	<180

Table 2-4 Housing Statistics for West Newton Village Area

1 American Community Survey 2006-2009 data set; the data is taken from Census Tracts 3745-47

housing developments of 50 or more units and a number of scattered designated affordable housing units in West Newton. Overall, the City is still well below the 10 percent affordable housing requirements recommended by Massachusetts General Law 40B, but there is little available open space for new development. Tackling affordability therefore requires a great deal of creativity and collaboration between public agencies and private groups.

2.3 COMMUNITY CONTEXT

Residents of Newton identify closely with their villages, and members of the West Newton community are no exception. Input from the area's residents was a key component in generating the vision developed in this plan, and conversations with the people who live, work, and shop in West Newton were invaluable in helping to identify the area's key strengths and biggest challenges. The outreach organized by the students at Paddy's Shillelagh Shuffle on October 16th, 2011, and the interviews conducted over the last four months, were critical in this regard. Given the importance of residents in shaping the future of the Village, this report fully supports current efforts to create a local Neighborhood Area Council for West Newton.

This plan also recognizes the importance of civic, religious, and cultural institutions—from the Post Office to the Unitarian Church to the Greater Boston Chinese Cultural Association—in the Village. These institutions are gathering places in the community and a source of true social capital for West Newton; they should be closely involved with attempts to implement and promote recommendations included in subsequent sections of this report. Educational institutions in the area of West Newton covered by this study are made up of three elementary schools, one middle school, one high school, and one private school.

In addition to residents and institutions, West Newton's large business community is one of the Village's greatest assets and one of the most important constituencies for the recommendations proposed in this plan. The sections on community and economic development reflect many of the goals, visions, and desires of the community. To craft recommendations that best support West Newton's businesses, the students organized a business community visioning session on October 13th, 2011 that gave a sense of the issues most important to local business owners. Through a mapping exercise and subsequent topical conversations,

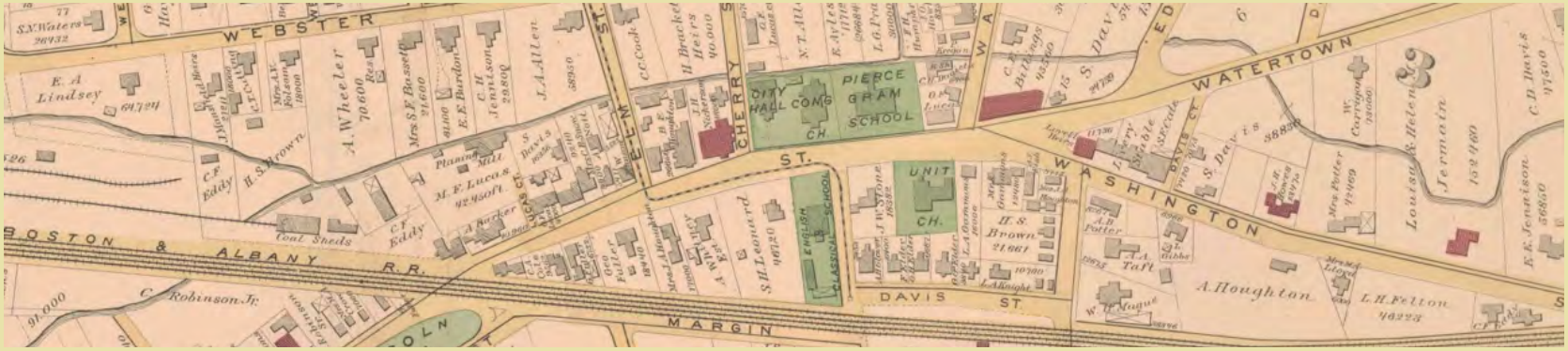
Fig. 2-1

Members of the class attended the 2011 Paddy's Shillelagh Shuffle to survey and talk to neighborhood residents.

Fig. 2-2

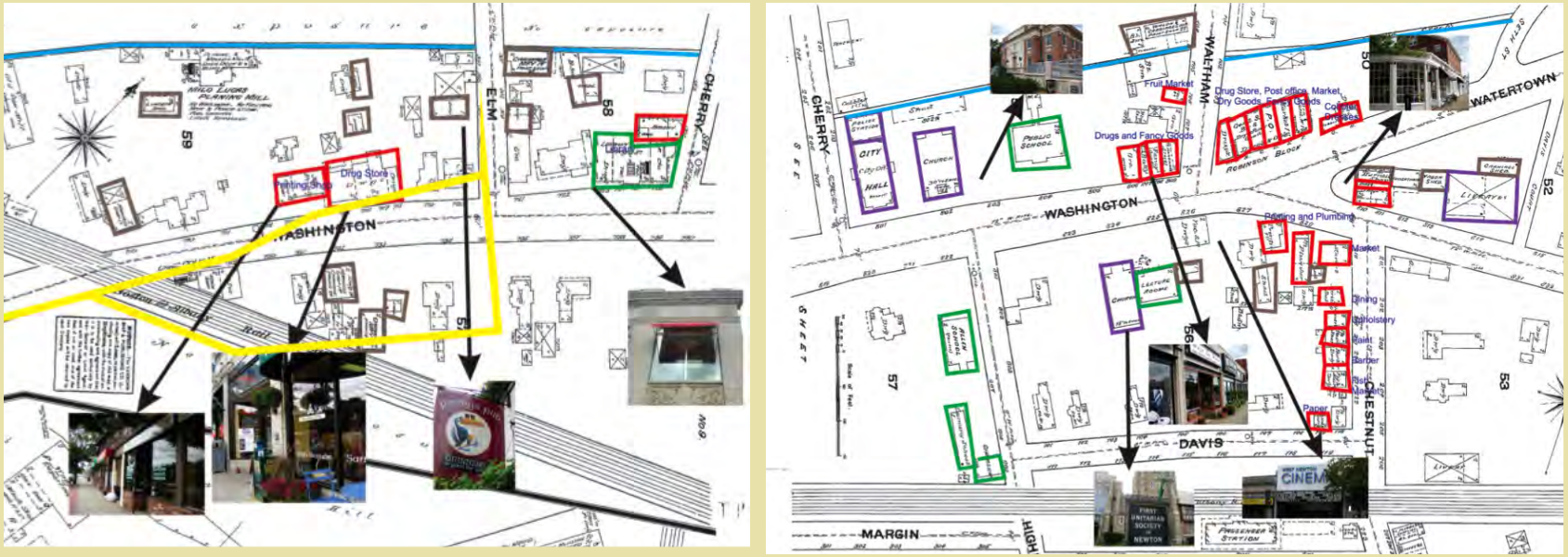
West Newton residents were extremely active throughout the process of creating this report.

Fig. 2-3 Historic Map of West Newton



West Newton Village along the Boston & Albany Railroad.
Source: City of Newton

Fig. 2-4 Sanborn Maps



West Newton Properties and their Use (in 1884 and now) on Elm Street to Cherry Street (Left) and Cherry Street to Watertown Street (Right)
Source: 2008 ProQuest, LLC

the students were able to get a better idea of West Newton's landmarks and primary assets, its challenges, and solutions feasible in this context.

2.4 HISTORIC CONTEXT

Although the City of Newton has its own rich history dating back to the mid-1600s, the history of West Newton that is most relevant to the current context begins with the history of the rail network established in Newton. Before the railways extended into West Newton, the Village comprised a cluster of buildings along Washington Street and a few outlying farms. By 1720, there were only three houses within a mile of West Newton Square, which was later demolished to make way for I-90.

The history of West Newton changed for good in the 1800s when a railway station was constructed in West Newton Village and the Village became a gateway to Newton for those coming from downtown Boston or other suburbs. In 1833, one of the earliest passenger train lines in the U.S., the Boston and Worcester Railroad was established. This railway corridor had a stop in West Newton, bringing connectivity, greater settlement and commerce to the Village.

In 1848, the Town Hall relocated from Newton Center to West Newton and it remained in the Village until the 1930s, attracting many wealthy Bostonians.

Never really a center for heavy industry, West Newton emerged as a small business center that catered to local services, shopping and regional traffic. Its proximity to Boston while maintaining a village-like, laid back feel made it a particularly attractive place to live.

In the mid-1850s to 1860s, West Newton's connectivity to other suburbs via the railroad extended further with the construction of the Waltham and Newton Street Railway. This was a glorious period for West Newton. Small wood-frame buildings were replaced with business blocks, reiterating its identity as a well-connected region that serves local as well as regional business needs. West Newton had everything necessary to be considered a livable community.

Figure 2-4 shows an overlay of some existing properties and their uses over the properties that existed in 1884. The area was not divided by the circuitous loop of I-90 (highlighted in yellow) back then. All of the brown boxes show properties that had sheds, carriage houses, or lumber storage, signifying the important role that West Newton played in the days of the horse-drawn streetcars. Today, some of these locations are occupied by light industrial uses along Border Street and residential properties. The Cheesecake Brook (highlighted in blue) running at surface level then provided a strategic location for these sheds. Proximity to rivers and their tributaries was important to the emergence of the mills in Boston and its suburbs at that time. The building highlighted in green in the left map of Figure 2-4 used to be a library.

Moving east along the Washington Street Corridor, the map on the right side of Figure 2-4 shows one of the busiest sections of West Newton. The leftmost property in purple along Cherry Street is the Town Hall and extension of the adjacent Second Church that ultimately laid the foundations of the City Hall in West Newton. This area was also an educational center, as demonstrated by properties with educational uses marked in green. The First Unitarian Society in Newton is marked in purple on the southern side of Washington Street. All of the properties in red are mixed commercial uses including drug stores, fancy goods stores, cobblers, a paint shop, a salon, markets, a fish market, a stationer, and dining and upholstery stores. Today, West Newton Cinema,

CVS and Sweet Tomatoes are all located in this corridor.

The route of the Boston & Albany Railroad serves as the right-of-way for the MBTA Commuter Rail corridor on the Worcester line. The station at West Newton remains and provides accessibility for Newtonians to Boston and the western suburbs in Massachusetts.

A lot has changed in West Newton since the 1800s. The Town Hall was relocated to the geographic center of Newton near Bullough's Pond in 1932 after a prolonged dispute between Newton Center and West Newton, leading to the consideration of separating West Newton from the rest of the City. Today, the location of the old Town Hall is Captain John Ryan Park. When walking through West Newton, one cannot help but notice glimpses of its history among its abundance of historic properties styled in Second Empire, Queen Anne, Victorian, Greek Revival, and Italianate architecture.

2.5 PLANNING CONTEXT

This report builds upon a long history of planning, both in Newton generally and in West Newton specifically. Many of the recommendations proposed in this plan were informed and inspired by the Newton Comprehensive Plan, adopted in 2007. This planning document calls for transit-oriented development, context-sensitive smart growth in historic village centers, and road development that supports multiple modes of mobility – from cars to bikes to public transit.

In addition to the Newton Comprehensive Plan (2007), we have incorporated guidance from other current and past planning efforts in Newton. The City's Zoning Reform Group gave a final presentation on zoning reform in November 2011 that also informed our proposals. Their recommendations include encouraging mixed-use redevelopment of village centers, promoting soft transitions between villages and surrounding neighborhoods, and creating more diverse housing opportunities. The Transportation Advisory Council's (TAC) 2011 Bicycle Master Plan identifies key bicycle corridors through West Newton and these routes have been incorporated in the proposed recommendations. Additionaly the TAC submitted a report to the mayor in December 2011 that suggested the implementation of many of the parking proposals included in this report. Lastly, the West Newton Advisory Council, which oversees Community Development Block Grant (CDBG) funding in the eastern portion of the study area, has identified pedestrian improvements to Washington Street as one priority, and this plan recommends exactly those improvements. Throughout this report, attempts have been made to translate Newton-wide goals into specific, actionable guidance tailored towards West Newton.

A 2001 study by a previous Community Growth and Land Use Planning team has helped in these efforts. While many of the issues that this analysis discovered were discussed to varying degrees in the previous plan, it appears that the Village's parking issues, auto-orientation, and poor pedestrian experience have changed little over the last decade. The proposed interventions in this plan are, in some cases, similar to the previous plan. However, there is a greater degree of specificity to the recommendations made in this plan and the attempt is to provide more concrete guidance and an overall implementation strategy in order to spur adoption.

CHAPTER THREE
EXISTING CONDITIONS

3.1 LAND USE

West Newton is a combination of areas with unique attributes and character. Located along the western end of Washington Street, the central artery running through the length of the study area, is the heart of West Newton: a vibrant, active village center. Surrounding the village center is a mix of low density commercial, manufacturing, retail, institutional, and residential uses that run along the eastern portion of Washington Street in addition to extending North into the side streets. This unique mix of distinct land uses is both a strength and weakness of West Newton. It creates a lively mix of activities, but also results in abrupt transitions as one moves between areas. Through land-use regulations, it is possible to build upon West Newton's strengths by extending them across the Village and uniting the site in a cohesive vision – a vision that recognizes the unique characteristics of areas within the site, but that also connects them through complementarity, rather than dissonance.

3.1.1 HISTORIC PRECEDENT AND PLANNING FRAMEWORK

West Newton has a long history of being a vibrant village center anchored by the Washington Street corridor. Although it is now predominantly comprised of one- and two-story buildings, the corridor historically contained a denser mix of three- and four-story buildings. A key goal of the recommendations is to encourage a form and density consistent with the village character and this historic precedent served as a backdrop for our analysis and vision for the future of West Newton.

In addition to the historic precedent, the Newton Comprehensive Plan (2007) provided the foundation for this planning effort.

Fig. 3-1 Washington Street circa 1920

The Comprehensive Plan seeks to:

"Implement zoning changes that encourage well-designed mixed use as an alternative to incrementally haphazard business sprawl, particularly for areas of the City having retail use, public transportation and good pedestrian access, strengthening both business and residential uses over time, and facilitating designs which assure compatibility between commercial and residential uses where such uses adjoin [3-26]."

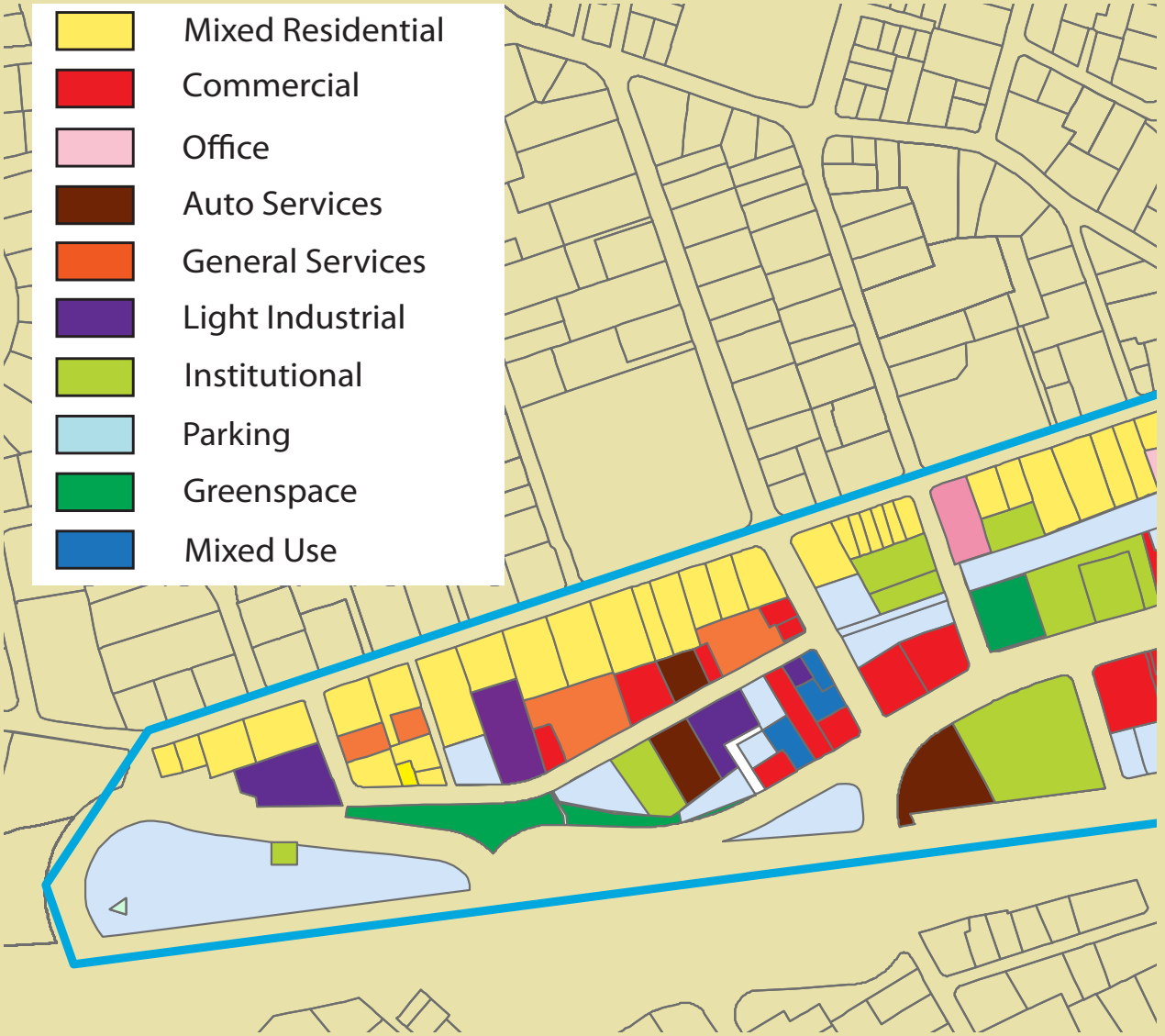
3.1.2 EXISTING LAND USES

The first step in the analysis was to examine existing land use conditions in West Newton and identify key strengths, weaknesses, and opportunities that would inform any zoning recommendations.

Existing Land Use Map

An existing land use map was developed through a detailed survey of each parcel within the study area (Fig. 3-2). The survey identified 10 different land uses that were consistent throughout the site, including commercial, parking, auto services, and residential. The results of the survey demonstrate that West Newton is currently more of a combination of distinct areas than a cohesive unit. These areas derive their character from the existing land uses rather than the designated zoning.

Fig. 3-2 Existing Land Use Map



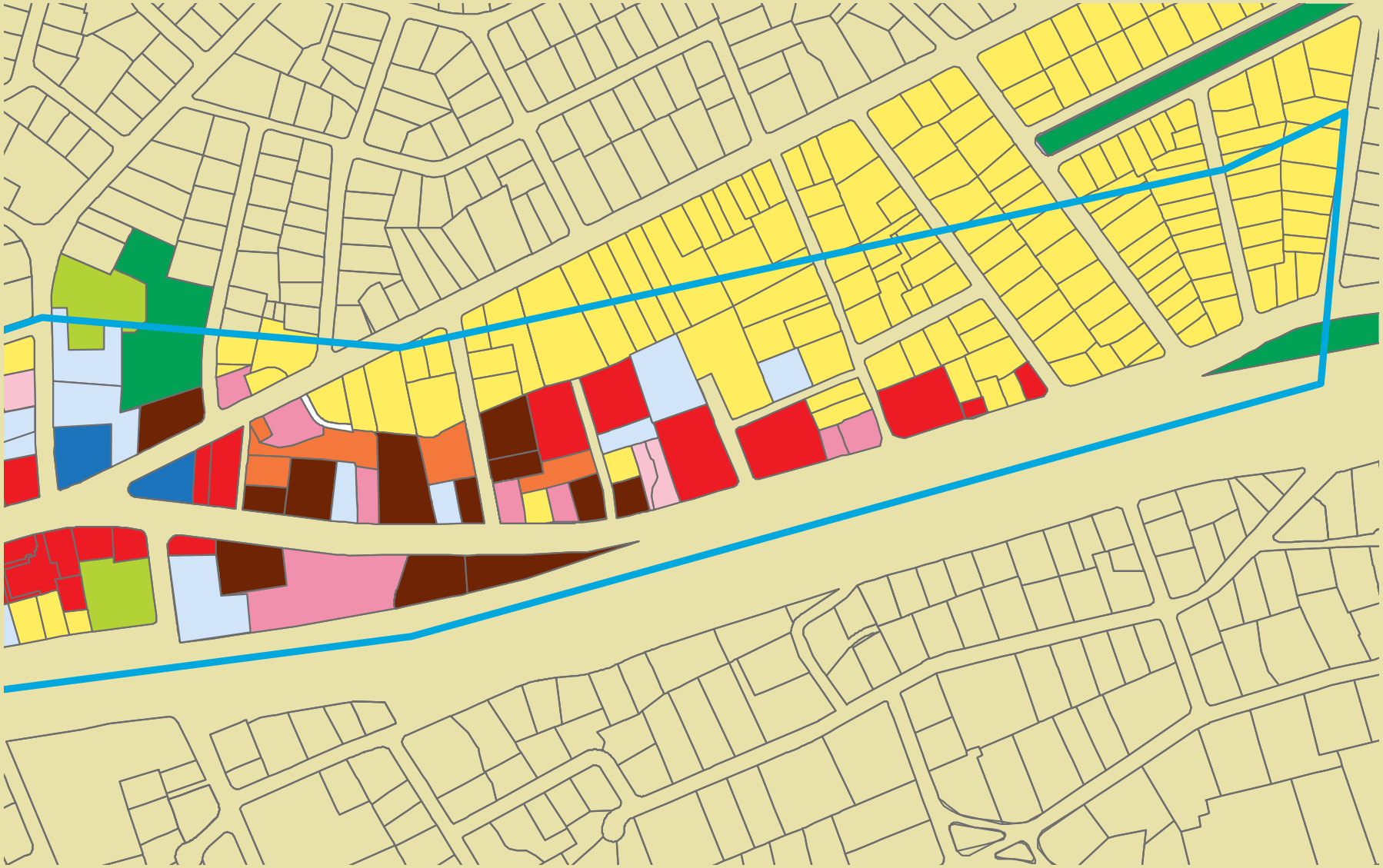


Fig. 3-3 Existing Uses

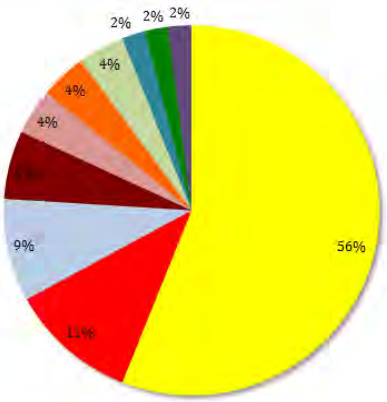


Fig. 3-4 Existing Non-Residential Uses

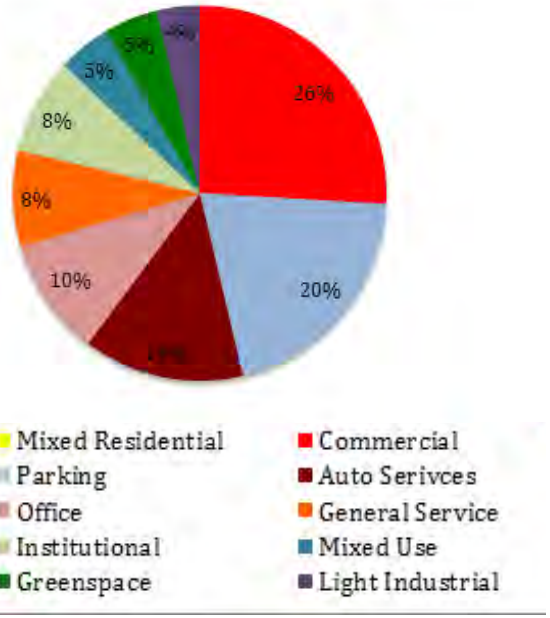


Table 3-1 Existing Land Uses

LAND USE (BY PARCEL)	PERCENT OF TOTAL PARCELS
Mixed Residential (single & multifamily)	56%
Commercial (e.g. retail, restaurants)	11%
Parking (includes public lots, major lots over 30 spaces, or parcels devoted entirely to parking)	9%
Auto Services (e.g. car rental, sales, repairs)	6%
Office (e.g. real estate or insurance)	4%
General Service (e.g. heating & cooling, warehouse)	4%
Institutional (e.g. public, non-profit)	4%
Mixed Use (ground floor commercial + office or residential)	2%
Green Space (e.g. parks, undeveloped parcels)	2%
Light Industrial (e.g. light manufacturing, research and development)	2%

	LOCATION IN WEST NEWTON
	Primarily located along northern boundary of site and eastern end of Washington Street
	Concentrated in village center, also found along East Washington Street and along Border Street
	Public parking concentrated in village center, major lots and individual parcels interspersed throughout site
	Concentrated along Washington Street, east of Davis Court, with a small number in village center and along Border Street
	Located on periphery of village center and along the eastern section of Washington Street
	Concentrated along Border Street and side streets off eastern portion of Washington Street
	Centrally located in village center
	Small clusters in eastern and western ends of village center
	Primary greenspaces clustered in village center (e.g. Captain John Ryan Park)
	Located along Border Street

Observations

After careful consideration and conversations with city zoning officials, it was decided that the current zoning designations neither accurately reflected the current characters of the areas within West Newton, nor encouraged development consistent with the proposed vision. This report includes a new classification criteria tailored to the site to better reflect the existing conditions.

An analysis of the conditions of these areas—Village Center, Manufacturing Zone, Side Streets and Transitions, and the eastern section of Washington Street—helped form the vision moving forward.

The observations of these areas are described in the following pages.

An analysis of the existing land use conditions led to the identification of key strengths, weaknesses, and opportunities within the site that are described below:

Strengths

- Vibrant village center with a strong mix of active uses and a compact, walkable core, enhanced by strong building form;
- Unique light industrial uses that complement and add to existing mix of uses; and
- Assets on eastern edge that could be linked to the rest of the site and generate activity.

Weaknesses

- Conflicting uses and abrupt transitions;
- Lack of form and dimensional consistency in certain areas; and
- Areas that lack identity and connection to village core.

Opportunities

- Historic precedence of successful development with taller, denser buildings; and
- Encouragement of future growth through zoning.

EXISTING LAND USES

Village Center

At the heart of West Newton is the Village Center, a low-rise mix of commercial and institutional uses located on the western portion of Washington Street. The Village Center is a vibrant area, with a strong mix of active uses and a compact, walkable core. Enhancing this experience is the building form, which commonly features large windows, colorful signage, and a consistent street wall. The architectural styles in the Village Center also give West Newton its unique, visible historic identity and create aesthetic cohesion throughout the community.

The diversity found within the Village Center is due in large part to the size of the commercial establishments. Smaller lot sizes and building footprints allow for multiple businesses on a single block and add to the sense of variety and activity, while outdoor seating areas and a public park provide opportunities for outdoor leisure. Institutional uses are integral to the fabric of the area, but divide the commercial section and provide a key challenge to cohesive development.

Manufacturing District

Nestled behind the western end of Washington Street along Border Street is a small zone containing a unique mix of commercial, residential, service, and light industrial uses. As the only light industrial area in West Newton, it provides employment opportunities for skilled laborers within the Village and from beyond its bounds, providing support for the local economy. This area is a unique asset for West Newton, as the low-impact nature of the light industrial uses complement the more traditional uses, adding another layer to the vibrant, mixed-use Village Center.

Fig. 3-5 Border Street

Commercial and industrial uses characterize Border Street.

Side Streets and Transitions

A wide mix of uses can create diverse, vibrant areas, but such developments must be crafted with great sensitivity to the transitions between uses. Moving from Washington Street northward into the residential neighborhood, one encounters a mix of commercial and service uses that abruptly end at the residential edge. These side streets also often contain open parking lots that service the buildings along Washington Street, resulting in an abrupt transition from the density and activity of the Village Center.

Fig. 3-6 Watertown Street

Commercial buildings directly abut residential areas at the edge of the village center.

Eastern Section of Washington Street

Beginning at Davis Court, the eastern portion of Washington Street is characterized by a predominance of auto-related uses, including car dealerships, gas stations, and car repair shops intermixed with offices, converted residences, and commercial establishments. This haphazard mix of uses continues until Parsons Street, where the area transitions to residential development. The nature of the uses along the street result in an area that is inactive, car-dominated, and pedestrian-unfriendly, exacerbated by the lack of consistent building form and larger lot sizes. Most importantly, however, is that this corridor lacks a cohesive identity and bears little resemblance to the nearby village center, despite being a key gateway into the site.

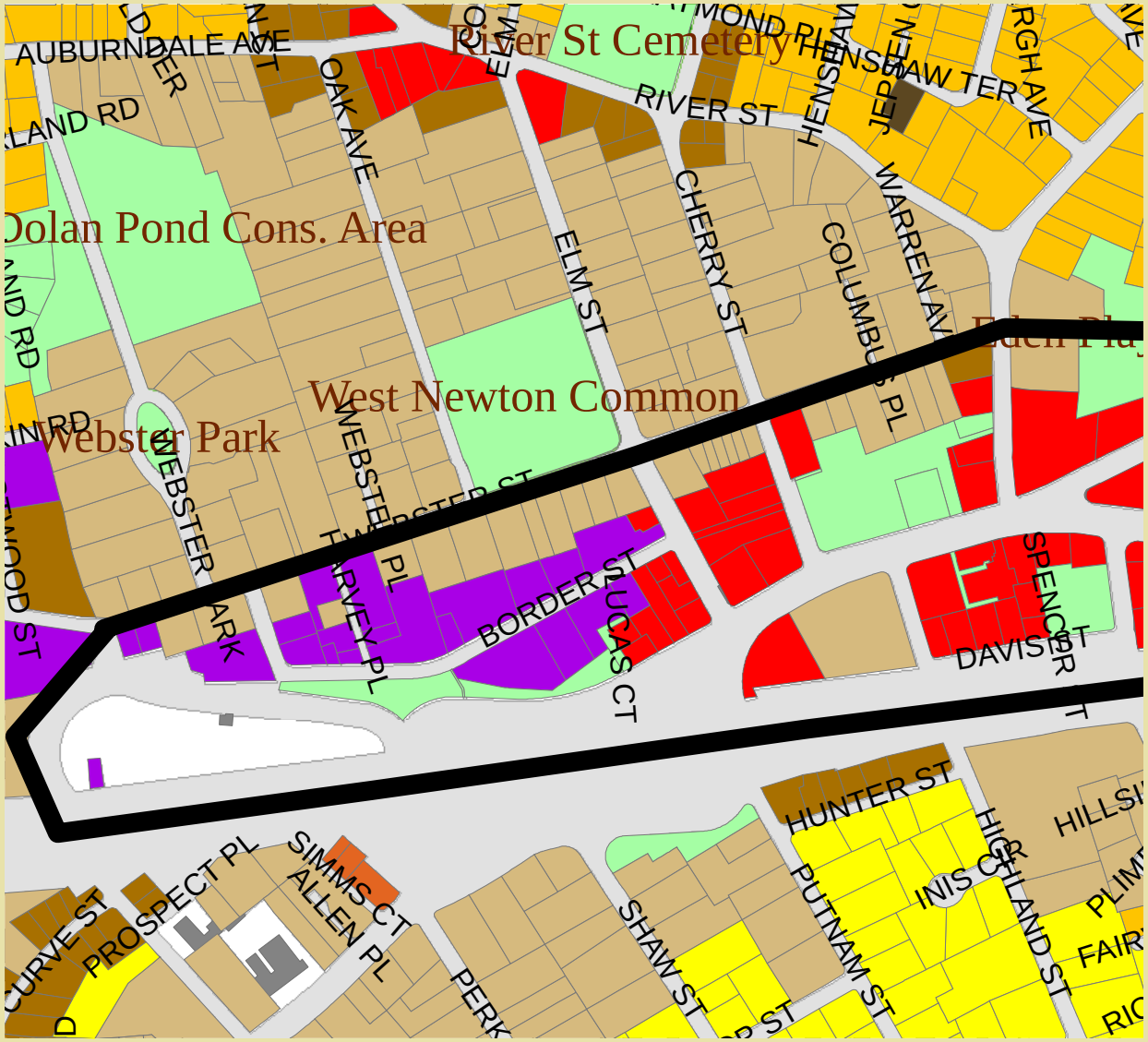
In spite of its challenges, this area boasts some key assets and amenities, including Trader Joe's, a strong residential section to the north and east, and the Cheesecake Brook.

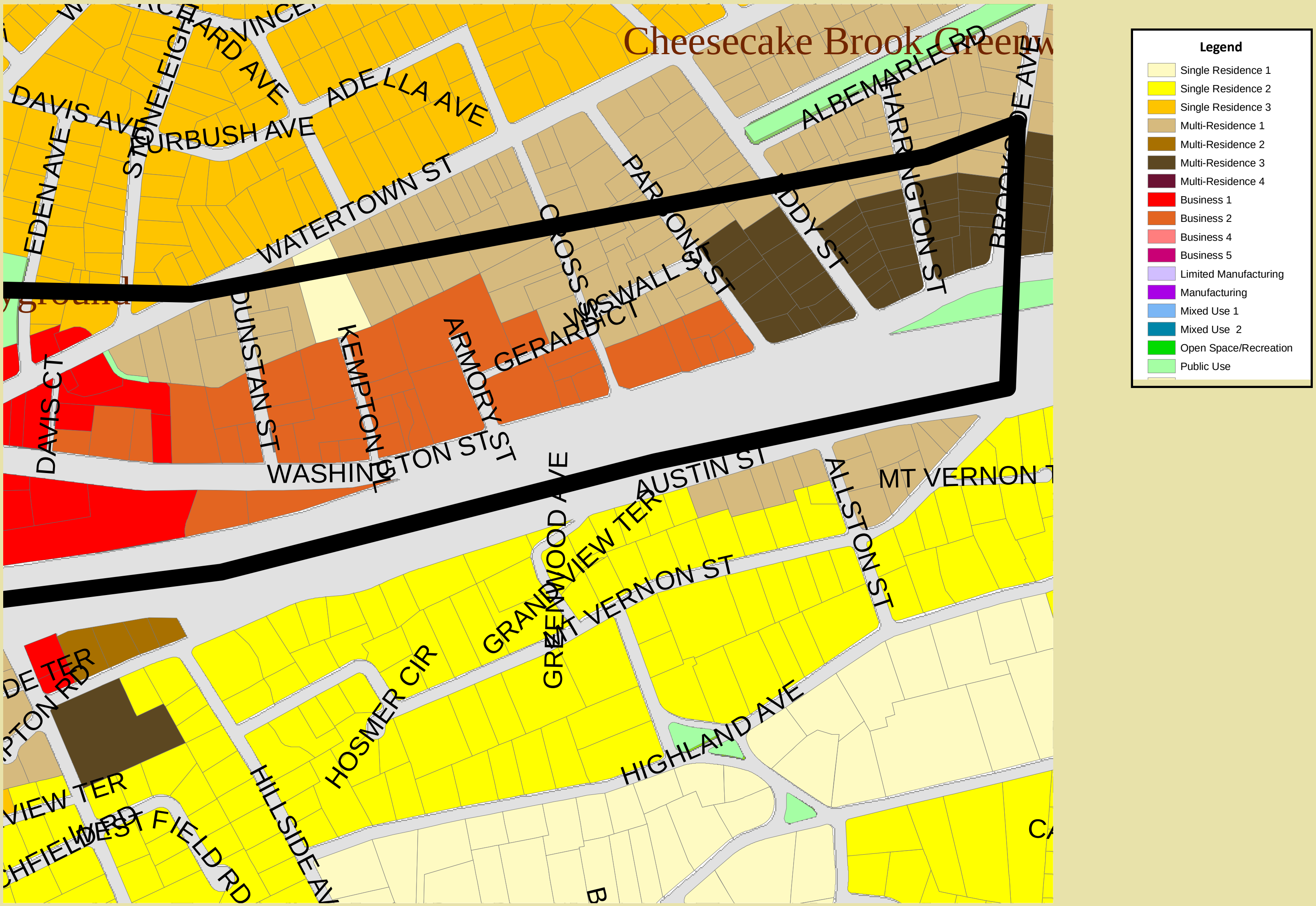
3.1.3 CURRENT ZONING

Since zoning provides the framework that directs land use, the Zoning Map and Zoning Ordinance of the City of Newton was used to identify key guidelines influencing the current land use patterns. The West Newton study area includes nine different zoning designations as outlined by the City of Newton's zoning map, which include two business categories, a manufacturing zone, public use, and five residential designations, ranging from single to multi-residence.

While these zones dovetail with the vision for development of a commercial corridor along Washington Street that transitions into residential uses, it is evident from the existing land uses survey that there is dissonance between the zoning designations and the actual land use. The source of this dissonance lies in the wide variety of uses permitted within each zone and the fact that uses are not limited to one section, but rather interspersed throughout the site.

Fig. 3-7 Current Zoning Map




Cheesecake Brook Greenw
DAVIS AVE
STONELEIGH
STURBUSH AVE
EDEN AVE
ADELLA AVE
WATERTOWN ST
ALBEMARLE RD
HARRINGTON ST
BROOKSIDE AVE
EDDY ST
CROSS ST
PARSONS ST
WISWALL ST
GERARD CT
DUNSTAN ST
KEMPTON PL
ARMORY ST
DAVIS CT
WASHINGTON ST
AUSTIN ST
ALLSTON ST
MT VERNON T
GREENWOOD AVE
GRANDVIEW TER
MT VERNON ST
HOSMER CIR
HIGHLAND AVE
HILLSIDE AV
VIEW TER
FIELD RD
Legend
Single Residence 1
Single Residence 2
Single Residence 3
Multi-Residence 1
Multi-Residence 2
Multi-Residence 3
Multi-Residence 4
Business 1
Business 2
Business 4
Business 5
Limited Manufacturing
Manufacturing
Mixed Use 1
Mixed Use 2
Open Space/Recreation
Public Use

CURRENT ZONING

A. Permitted Uses

Flexibility in the zoning code can result in complementary as well as conflicting land uses. While a number of uses are permitted in the Business 1 zone, these uses—including office, retail, and restaurants—are consistent with an active, vibrant commercial core and therefore complement each other. In comparison, while the Business 2 zone permits these same uses, it also allows for wholesale business, storage warehouses, and contractor's offices – uses that are much less active and often require high truck traffic. These uses can be found along the side streets in the eastern portion of Washington Street, typically abutting the residential area and resulting in a conflict of uses and abrupt transitions. Additionally, within these zones, uses that are now permitted by special permit only, such as auto uses, currently dominate the edges of the Village. These include fuel establishments, garage repair shops, and indoor motor vehicle sales. The predominance of these uses results in a zone with little activity, walkability, or village character.

B. Height and Density

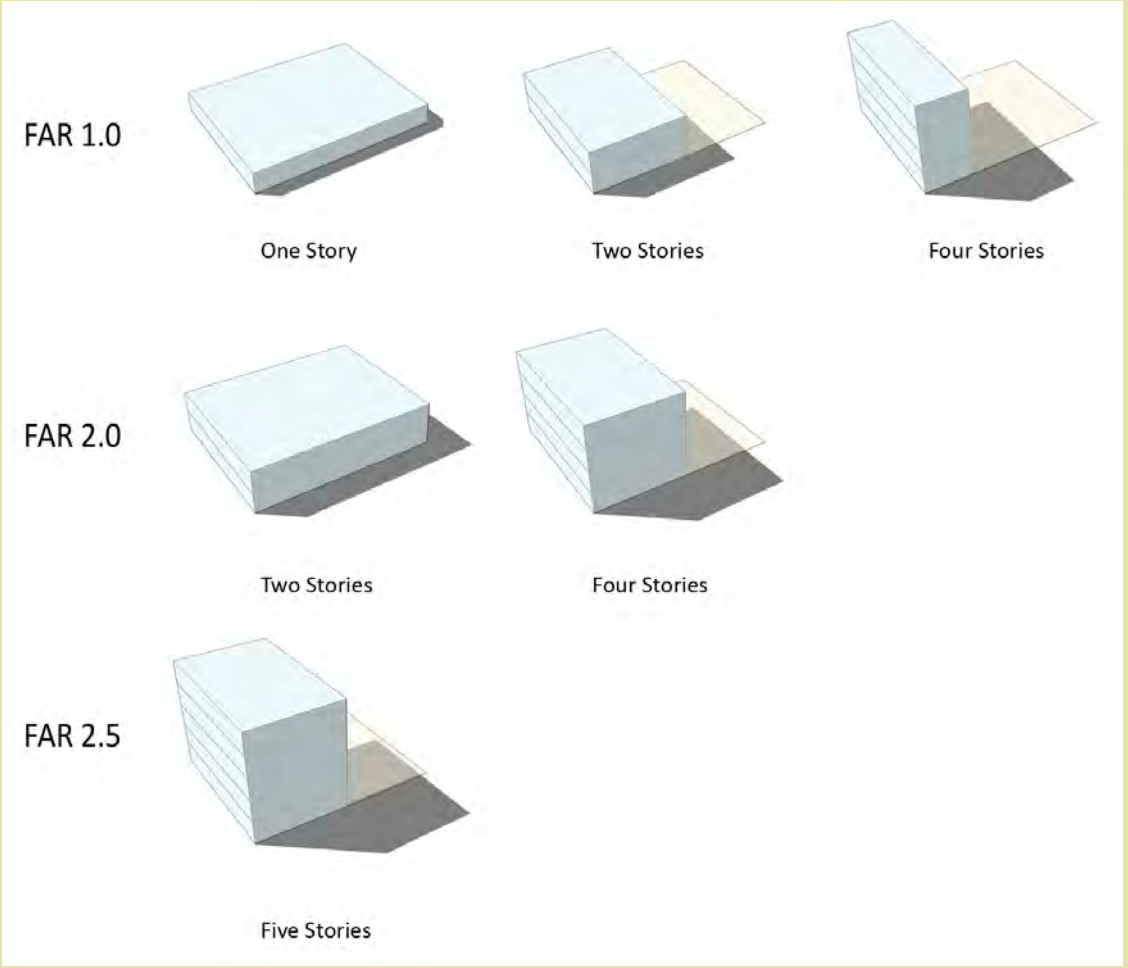
Height and density requirements can play an important role in determining an area's feel and character. One of the most consistent elements through the study area is a low-rise streetscape of primarily one- and two-story buildings. Along a wide thoroughfare such as Washington Street, these low building heights reduce the connection between opposite sides of the street and create a sense of distance. The zoning designations for these areas limit as-of-right development to two stories (24 feet) with an FAR of 1.0, but by special permit the Business 1 and Manufacturing Zones both allow up to three stories (36 feet) with a 1.5 FAR and the Business 2 district allows for as high as four stories (48 feet) with a 2.0 FAR, suggesting that areas of the site can support greater height and density (Figure 3-8). However, while this potential exists, the special permit process makes such development more difficult. It is important to note that within the Multi-Residence 1 zone, the primary residential area in the study site, the guidelines permit up to 36 feet of height,

demonstrating that increased height within the commercial section would be compatible with the surrounding residential area. Our recommendations consider the role that height, density, and the permitting process can play in shaping the built environment.

C. Dimensional Requirements

Dimensional requirements have a significant impact on the built form and character of an area. The Village Center, for instance, has a strong street wall with minimum setback, promoting a consistent, walkable streetscape–characteristics lacking on the eastern portion of Washington Street. Section 30-15 of the Zoning Ordinance states that the front setback for Business 1 and 2 should be the "average of the setbacks of the building nearest thereto on either side." While the average building in the core has a minimal setback, the average building along the eastern portion of Washington Street is setback at a large distance from the sidewalk. A possible solution would be to have a maximum setback in certain areas to limit the possibility of such variation.

Fig. 3-8 Floor-Area Ratio (FAR)



Within Business 1 and 2 there are no specifications for lot coverage. As a result, one encounters lots such as 1229 Washington Street (Enterprise Rent-A-Car), where the building only covers 10 percent of the total lot area and is substantially set back from the street. Such low lot coverage is conducive to auto-related business, but not particularly conducive to the vision for the area. It also allows for lots to be used entirely for parking, which can be detrimental to an active pedestrian environment, particularly when along major thoroughfares. It will therefore be worth considering lot coverage minimums to both encourage and discourage particular uses and built forms.

Lastly, specific guidelines about the length of a building's façade along the street in relation to total lot frontage, or building frontage, are woefully lacking in the Zoning Ordinance. Consideration of this element is essential since it can ensure a consistent street wall as seen in the Village Center, which features buildings that take up 100% of the lot frontage. As one moves east, however, this continuity ends, often resulting in large gaps between buildings filled with driveways and parking – a condition not conducive to walkability or a village feel. Potential guidelines for building frontage must be flexible based on location, needs, and future vision.

D. Parking

With regard to parking areas of over five spaces, the Zoning Ordinance notes that, "No parking stall shall be located within any required setback distances from a street and sidelines, and shall, in any case be set back a minimum of five feet from the street (30-19)." Looking at the on-site conditions, particularly in the eastern portion of Washington Street characterized by large parking and vehicle storage areas open to the street, it is evident that such guidelines are not sufficient in promoting our vision for West Newton. Stricter guidelines for off street parking placement and more explicit guidelines about setbacks and frontage could result in significant improvements for parking.

E. Design Guidelines

Section 30-23 of the Zoning Ordinance notes that an element of Site Plan Review includes "consideration of site design, including the location and configuration of structures and the relationship of the site's structures to nearby structures in terms of major design elements including scale, materials, color, roof and cornice lines." Beyond this nod to design, however, the Zoning Ordinance provides little specificity or guidance about the form and appearance of the built environment. Since West Newton's identity revolves around its role as a village, its design should be considered a key element with Newton's Design Review Commission playing a central role. Improved design guidelines benefit the Village and developers alike, provide a reference point for the developers to propose development harmonious with the village character, and give more control to the City over development.

3.1.4 POTENTIAL INTERVENTIONS

The analysis of the current zoning map and guidelines shows opportunities for interventions, including:

1. Rethinking the permitted uses within the study area and encouraging those that are more consistent with this plan's goals;
2. Analyzing the potential for greater height and density as-of-right;
3. Adding dimensional requirements and tightening current requirements to better guide future development while allowing flexibility;
4. Being more explicit about the location of parking and its role;
5. Encouraging greater, more specific design standards and review; and
6. Reconsidering the current zoning designations and their boundaries.

3.2 CIRCULATION

A multitude of users - drivers, bicyclists, walkers, wheelchair users, and transit riders - commute on the streets in West Newton. The short distances between neighborhood destinations, transit hubs, and residential areas enable people to get around West Newton. The area offers road connections to surrounding neighborhoods and transit connections to Boston, and the availability of sidewalks and bicycle parking allows people to make their trips by walking and biking. In spite of these assets, there are still many aspects of circulation in West Newton that need improvement. Traffic flows can be confusing for drivers, pedestrians face an uninviting walking environment, cyclists lack designated bicylcle lanes or facilities to enable safe cycling, and transit connections have significant room for improvement. The following section takes a close look at the existing circulation patterns in West Newton.

3.2.1 WALKABILITY

West Newton has many of the elements that contribute to walkability. Local businesses abound, from the theater to bakeries to restaurants. Indeed, the mix of businesses within walking distance earns West Newton a WalkScore® of 82. Many of these businesses line Washington and Elm Streets, with their storefronts built right up to the sidewalk, instead of being set back behind parking. Sidewalks are mostly in good condition, a few plazas offer places to sit outside and trees are interspersed along Washington Street. The Village has several crosswalks that have crossing signals and countdown timers to help with safe crossing. Additionally, the connections to nearby residential areas on Webster Street and around West Newton Playground consist of walkable, quieter streets, enabling residents to stroll into the Village.

Yet there are numerous aspects of the Village that detract from the pedestrian environment and make walking unattractive and unsafe. Much of the eastern section of Washington Street is comprised of four lanes of fast moving traffic and numerous surface parking lots, each requiring a curb cut through the sidewalk. The southern side of the street has on-street parking and bus stops, but no sidewalk of any kind and no crosswalks to be seen.

West Newton residents voiced major concern about the intersection of Washington and Watertown Streets being particularly unsafe to cross due to crossing distances that are long and crosswalks that are located ahead of a confusing traffic signal setup. The intersection of Washington Street, Elm Street, and the northbound bridge over the Turnpike is an even worse pedestrian environment. Fast-moving traffic through several wide lanes and the convoluted series of crossings necessary to traverse the bridge, require a total walking distance of 315 feet. Many pedestrians skip it altogether and cross where no crosswalk exists, making for an unsafe intersection (see Figure 3-10).

The connection from West Newton Village to its Commuter Rail stop is also difficult, with no signage for the station visible from Washington Street. The walk from

Fig. 3-9 Eastern section of Washington Street

Fig. 3-10 Washington / Elm Street Crosswalks

There is no direct crosswalk across Elm Street between the parking lot and the MBTA Commuter Rail station, forcing pedestrians to cross and re-cross Washington Street, crossing a total of nine lanes of traffic. Many pedestrians opt to jaywalk instead.

the Village Center to the stop also passes a long row of tall hedges and the tow lot, making for an unpleasant walk.

In general, throughout the Village, the presence of fast moving traffic, wide roads, and long crossing distances detracts from the pedestrian environment. Such issues make the Village a less attractive place to walk about, and subsequently people are more inclined to drive for a short trip or skip the visit to West Newton Village altogether. There is thus a clear need to improve the character of the streets, sidewalks, and crosswalks to make them inviting and pedestrian-friendly.

3.2.2 PUBLIC TRANSPORTATION

Currently, public transit options in West Newton are disproportionately oriented towards commuters working in Downtown Boston. While these connections allow many village residents to commute by transit, the lack of transit connections to nearby villages and surrounding cities means that most residents still have to rely on their cars for non-work trips.

A. Express Bus Service

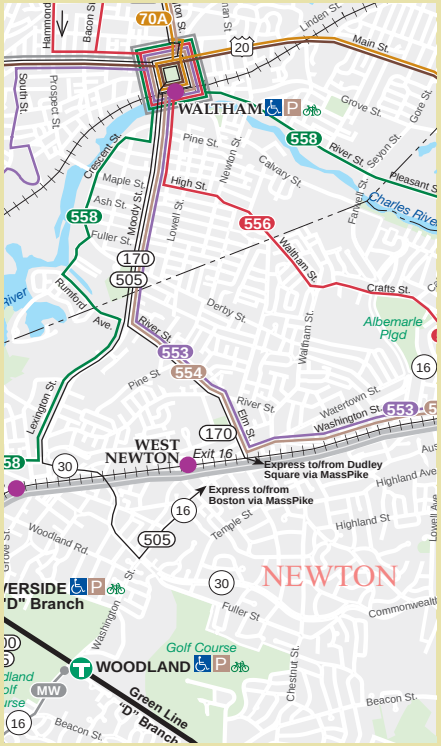
Massachusetts Bay Transportation Authority (MBTA) express bus lines provide transit connections to Downtown Boston, Waltham, and Dudley Square. The 553 and 554 lines serve Boston-bound commuters from Newton Corner via Washington Street, and to Newton Corner from Downtown Boston the lines operate as Express Service along I-90. The 170 bus line follows the same route, but terminates in Dudley Square instead of in Downtown Boston. All three lines continue north from West Newton to Waltham via Elm Street. The 553 and 554 lines operate Monday through Saturday from approximately 6:00 a.m. to 7:30 p.m., with 15-minute headways during peak hours and 30-minute headways during off-peak hours. The 170 line operates weekdays only in the reverse commute direction with service limited to a mere four trips per day.

B. Commuter Rail

West Newton is served by the MBTA Framingham/Worcester Line, which operates seven days per week. The total travel time to Back Bay Station is only 19 minutes, while the trip to South Station takes a total of 25 minutes. Boston-bound commuters are served in the morning by four trains between 6:00 a.m. and 9:15 a.m., and in the evening returning commuters have the choice among four trains between 4:00 p.m. and 6:30 p.m. Outbound travelers have fewer options. Because outbound trains do not serve West Newton before 11 a.m., the service is not a viable option for commuters traveling west for work.

The MBTA's West Newton Commuter Rail station is a single platform station located adjacent to I-90 that can be accessed by either the Elm Street or Washington Street

Fig. 3-11 MBTA Transit Services



West Newton has connections to Downtown Boston (via Newton Corner), and Waltham, but lacks transit connections to Watertown, Cambridge and the nearbyWoodland Green Line station.
Source: MBTA

Fig. 3-12 Commuter Rail Station

The West Newton Commuter Rail station features utilitarian shelters with minimal amenities.

bridges over the Turnpike on the west side of the Village. The current station is utilitarian. It provides only minimal shelter for passengers and restrooms. Ticket vending and transit information are not provided. The station's isolated location out of sight from the active areas of the Village may contribute to a perceived lack of safety and security among passengers waiting for the train (see Figure 3-12).

The way the platform is situated – low to the ground and well below street level – requires passengers to descend a flight of stairs to reach the platform and ascend several stairs again to board the train car. A lack of elevators and raised boarding platform renders the station and train cars inaccessible to passengers with disabilities and impedes access for seniors and passengers with luggage or strollers.

C. Missing Connections

While West Newton has transit connections to Downtown Boston, transit connections to neighboring villages and other job centers are missing. There are currently no transit connections to Newton's villages south of I-90, and transit connections to major employment centers including Cambridge, the Longwood Medical Center area, and the Route 128 corridor are limited.

3.2.3 BICYCLE CIRCULATION

Bicycles are a growing mode of transport in West Newton, from people using them for daily commutes to long weekend family rides to short rides into the Village Center. In previous generations, the bicycle was dismissed as a child's hobby, but today's West Newtonians recognize the benefits that cycling has for their health, their pocketbooks, and their busy schedules.

While the main streets of West Newton Village are currently auto-oriented and prioritize movement onto and off of I-90, the dense network of cross-streets provides ample neighborhood connectivity with slow traffic speeds.

Site analysis and interviews with community stakeholders indicate a consistent demand for dedicated bicycle lanes, route signage, bicycle racks and parking, and bicycle safety outreach and awareness in West Newton Village. As a critical mass of West Newton cyclists slowly assembles, the City of Newton has an opportunity to be ahead of the curve in the proactive creation of a truly bicycle-friendly community.

West Newton Village can be a potential focal point for developing a Newton bicycle network. The family-owned Harris Cyclery has been a West Newton Village tenant for 57 years and is a resource for the local community and bicycle enthusiasts in the surrounding communities. A strong bicycle service sector is necessary for any community that plans to increase bicycle ridership and the presence of this successful local business should therefore be recognized through the development of Newton's proposed bicycle network.

Not only does Newton have a strong community resource within the local business community, but it also has an advanced level of citizen engagement in the bicycle planning process through Bike Newton, the Newton Pedestrian / Bike Task Force and the Transportation Advisory Committee (TAC).

TAC is a group of concerned citizens, planning, engineering, and public works officials whose efforts have resulted in a solid framework for transportation improvements, including an official Newton Bicycle Master Plan. It is likely that

Fig. 3-13 Bicycle Stores

West Newton boasts several bicycle stores, which can support the expansion of cycling as a mode of transportation.

this master plan, which is currently in draft form, will include recommendations for appointing an official bicycle coordinator, allocating five percent of Chapter 90 funds from the City of Newton's budget to bicycle infrastructure, and developing at least 10 miles of bicycle lanes per year for the next five years. An impressive TAC recommendation report to Mayor Warren was recently released and it sets high expectations and provides detailed guidance for the City's future planning efforts. The Newton Comprehensive Plan (2007) is also specific about the role of bicyclists in the community and encourages development that integrates cycling into the transportation infrastructure and street design.

In West Newton, the implementation of these goals has not yet taken place. While individual bicycle racks have been installed at various Village locations, the coverage of the area is sparse. Through an interactive map on their website, Pedestrian / Bike Task Force has indicated that the Village has eight locations with approximately 200 parking spaces. However, an analysis of the site for this study points out that most of these locations are neither located in important areas, nor are they easily identified. This is especially true of the MBTA Commuter Rail station; bicycles were seen locked to fences and street furniture on multiple visits conducted by this class.

Currently, West Newton does not have any bicycle lanes, shared-width lanes with road markings and signage, or specifically delineated bicycle shoulders. During the process of the site study, many bicyclists in the area were observed riding on the sidewalks on the higher capacity portions of the streets such as those in the eastern section of Washington Street.

3.2.4 VEHICULAR CIRCULATION

As a gateway to and from I-90, the existing infrastructure clearly prioritizes movements through the Village Center rather than within it. High speed traffic, wide lanes and large overhead signage; characterize the Village Center. However, unclear signage, confusing signaling, and indirect movements further complicate vehicular movements.

Table 3-2 Traffic Counts*

Weekday traffic counts were performed at the intersections of:

1. Washington Street and Elm Street / I-90 WB Exit Ramp;
2. Putnam Street and Washington Street; and
3. Washington Street and Armory Street.

Washington Street / I-90 Off-Ramp

Across Overpass	Peak AM	Peak PM
From Westbound I-90	1004	798
From Washington St. and Village	1040	820

Putnam Street and Washington Street

	Peak AM	Peak PM
Eastbound on Washington Street	776	968
Northbound on Putnam Street	112	41
South on Putnam Street	92	79

Washington Street at Trader Joe's / Armory Street

	Peak AM	Peak PM
Westbound	525	632
Eastbound	667	370

*All counts are in vehicles/hour at peak AM and PM times.

Fig. 3-14 Traffic Flow AM Peak

Fig. 3-15 Traffic Flow PM Peak

3.2.5 CIRCULATION ISSUES

A. Through Traffic

Vehicular movements onto and off of I-90 bring with them higher speeds that are carried through the Village Center. The abrupt transition from 35 mph on Washington Street to 65 mph on I-90 (and vice versa) gives drivers little opportunity to adjust speeds before and after the ramps.

The traffic counts identify the Washington Street and Elm Street intersection as a particularly high-trafficked area, but to many, West Newton is no more than an intermediary step between their origin or destination and the Turnpike.

B. Wide Lane Widths

Each lane along Washington Street is 11 feet wide, which is just one foot less than the lane widths along I-90. In contrast, lanes along the major avenues of Manhattan in New York City are approximately 10 feet wide and have a speed limit of 30 mph. Furthermore, street right-of-ways vary between 59 feet along the eastern part of Washington Street to 66 feet in the Village Center; the street width on Sixth Avenue at the end of the Macy's Thanksgiving Day Parade route in New York City is approximately 55-60 feet.

Minimal pedestrian crossings and streetlights, particularly along the eastern portion of Washington Street, do not offer drivers many opportunities to stop or slow down. As a result, drivers are not accustomed to interacting with pedestrians and register less awareness of their surroundings.

C. Confusing, Restricted and Indirect Movements

Movements into, out of, and through West Newton are most often indirect and restricted.

With the exception of east-west movements along Washington Street, a combination of poor signage, signaling, and traffic engineering have led to circuitous routes and confusing movements for drivers.

D. Massachusetts Turnpike Access

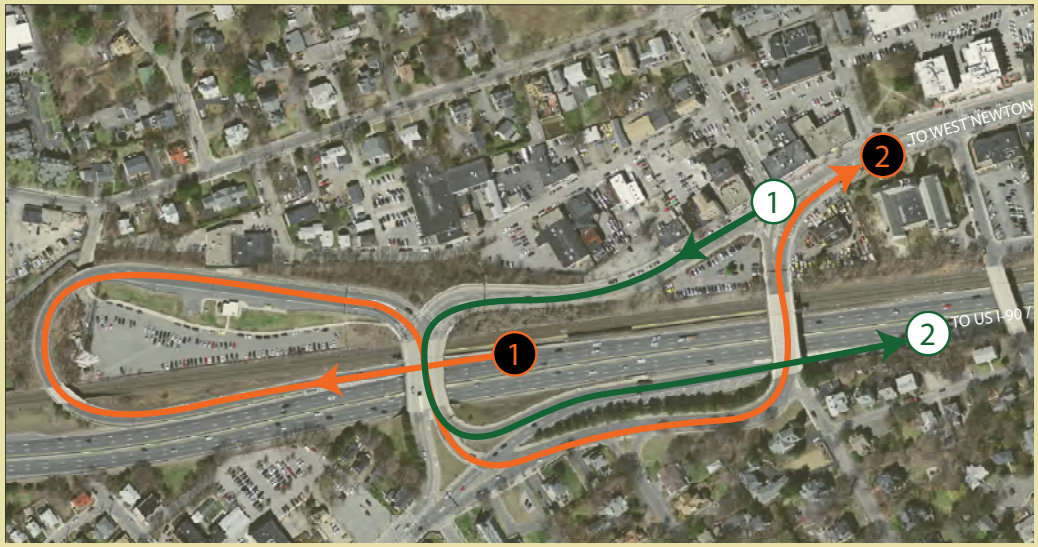
Although West Newton has direct access to the Massachusetts Turnpike, the actual movements to and from the Turnpike are indirect and unclear. The most circuitous movement is from the westbound-lane into the Village Center, which requires drivers to cross the Turnpike twice (see Figure 3-17).

The approach from the westbound lane on the Turnpike onto Washington Street is also unclear for drivers who are unfamiliar with the movements. Signage directing drivers to the Village Center from the off-ramp is unnoticeable until the top of the overpass bridge. Automobiles' high speeds coming off the Turnpike and the short reaction time between the sign's visibility and the fork in the road may result in drivers missing the turn. If drivers intending to enter West Newton take the "16 West - Wellesley" direction then they will have to re-enter the Turnpike eastbound and attempt to enter the Village from the next exit over two miles away. Another complicating element is that West Newton is not demarcated on the exit sign and is instead identified as "EAST - Watertown" as can be seen in Figure 3-16.

Fig. 3-16 Existing Signage

Existing signage does not identify West Newton and is out of scale with the rest of the Village.

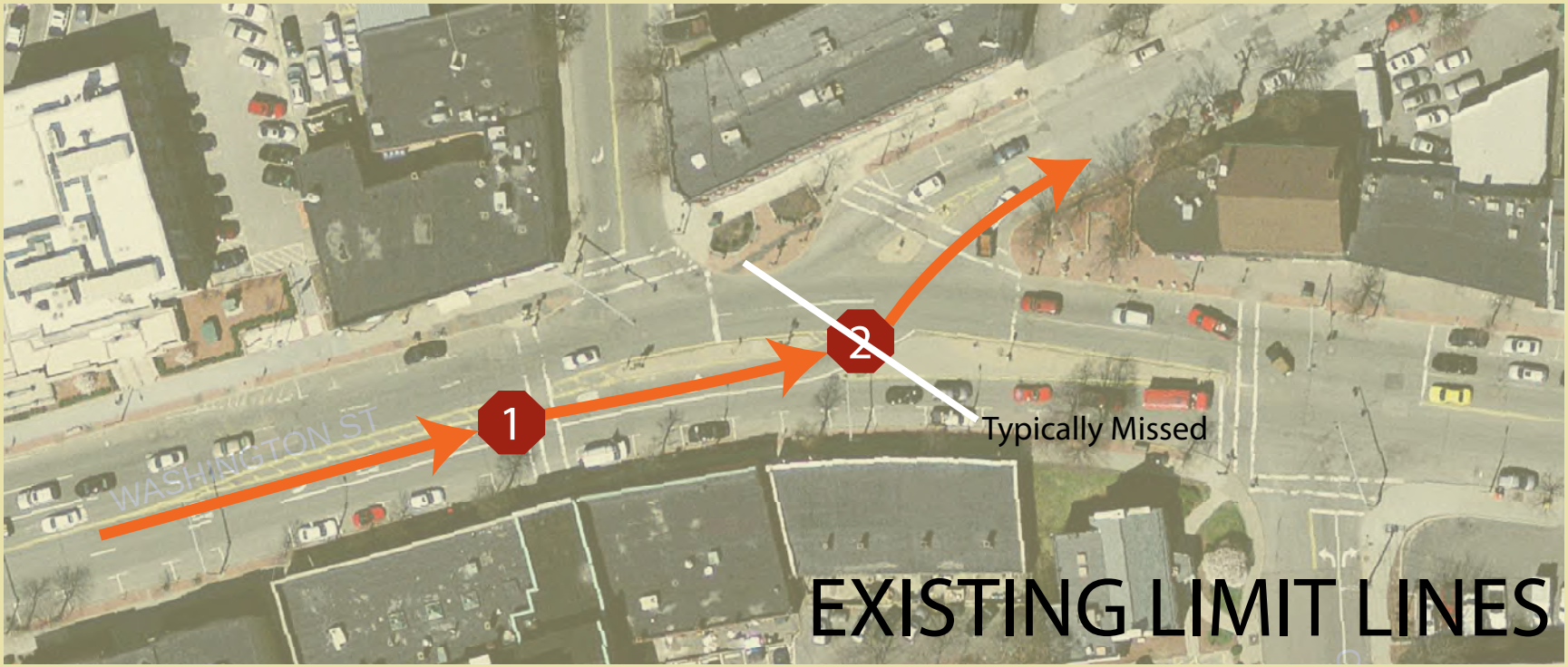
Fig. 3-17 Turnpike Access



Despite its proximity to the Village Center, automobile access to and from the Massachusetts Turnpike/ I-90 is confusing and indirect.

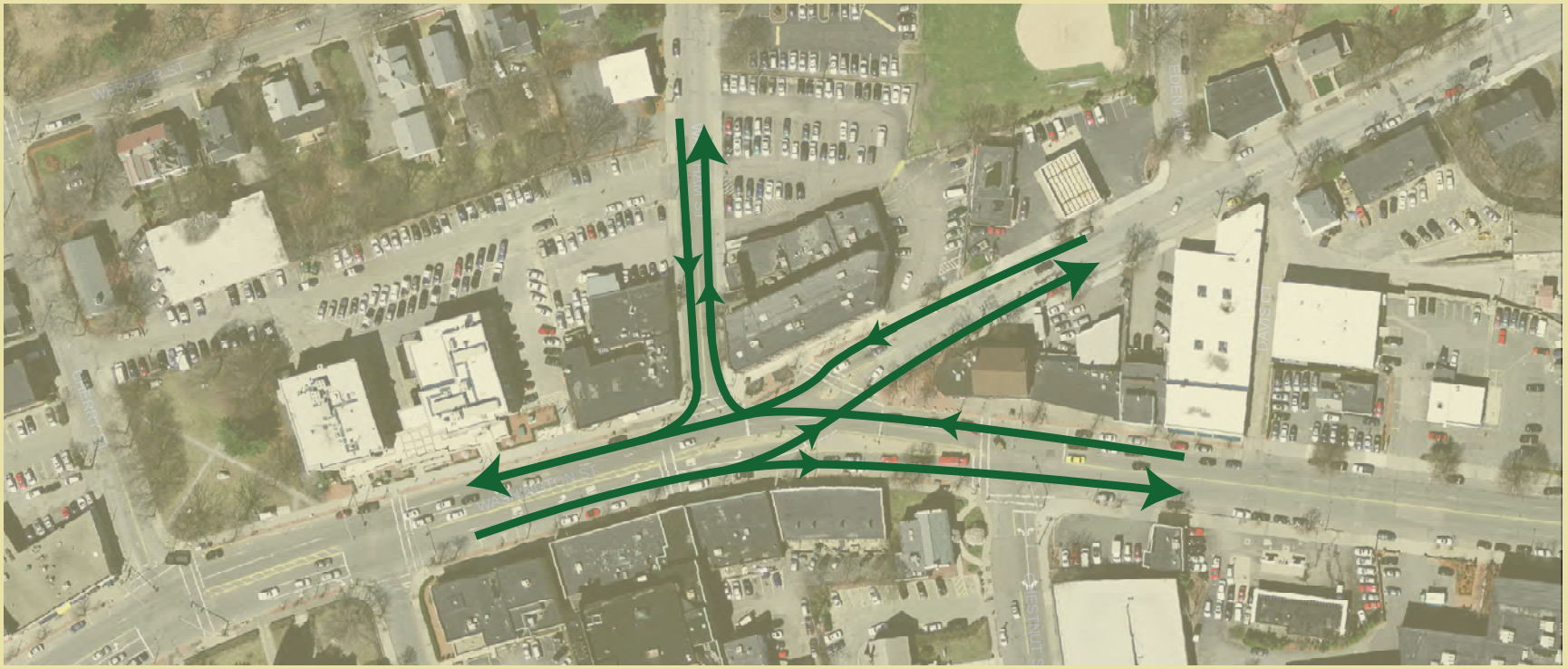
Village Center Washington / Watertown Intersection

Fig. 3-18 Traffic Signal Limit Lines



The restriction of movements and an excess of traffic signals make movements in and around the Washington Street/Waltham Street/Watertown Street intersection convoluted and indirect. When moving east from Washington Street to Watertown Street, poor visibility of the limit line and of the traffic signal, coupled with high speed automobiles, makes it common for drivers to miss the second signal, and increases the probability of drivers running a red light.

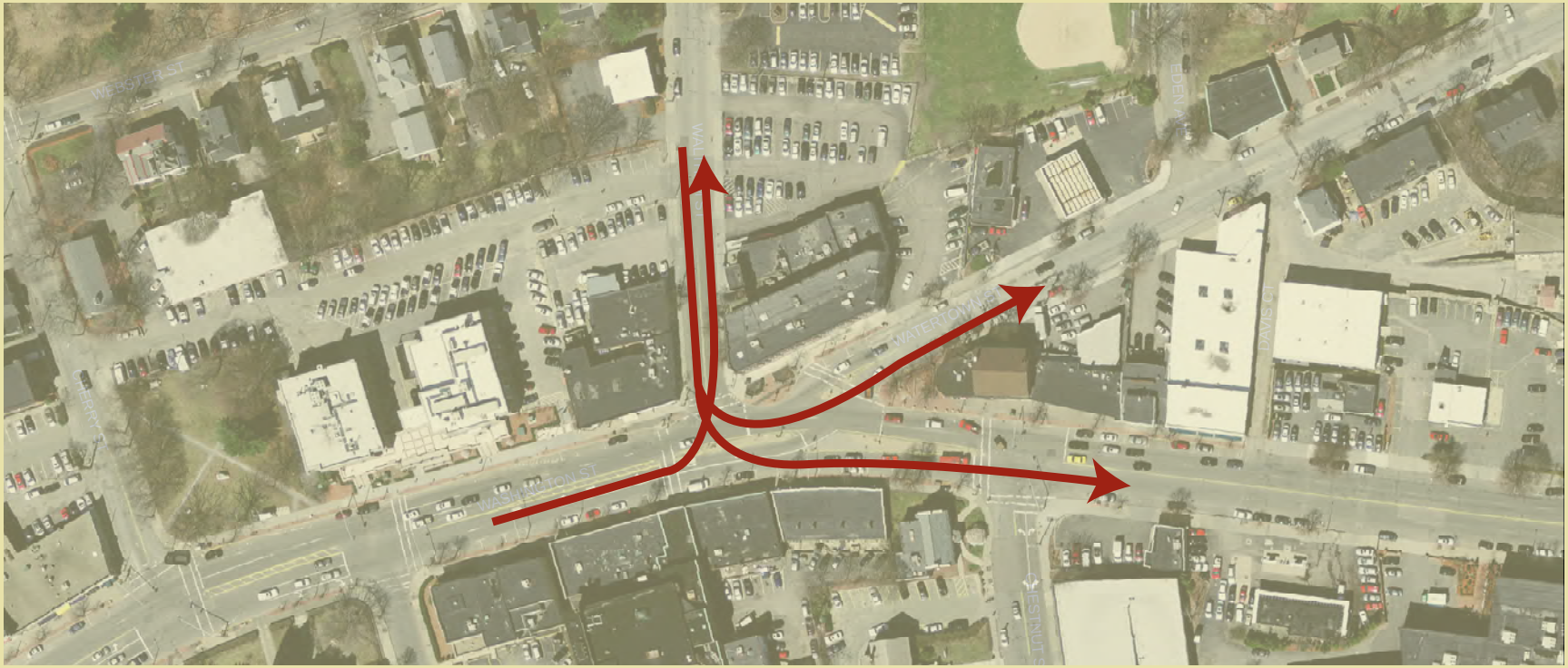
Fig. 3-19 Permitted Movements



Restricted movements onto Waltham Street from Washington Street and east from Waltham Street make desired movements circuitous. During the process of interviews and surveys, it became apparent that in order to achieve the shortest distance, it is often the case that drivers make illegal movements through this intersection when traffic movements and activity are low.

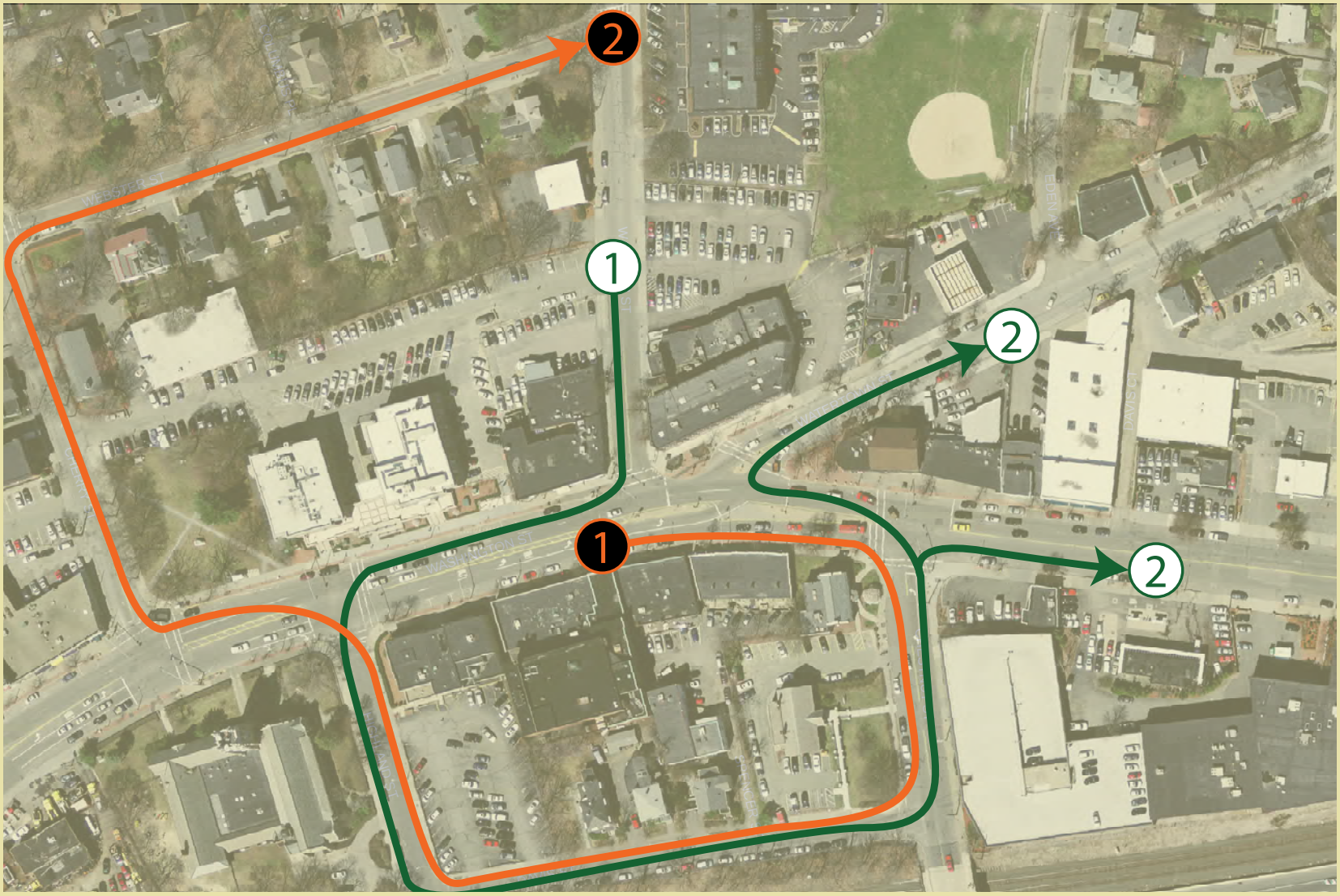
Village Center Washington / Watertown Intersection

Fig. 3-20 Restricted Movements



Left turns are neither permitted from eastbound Washington Street onto Waltham Street nor from Waltham Street onto Washington or Watertown streets.

Fig. 3-21 Circuitous Movements



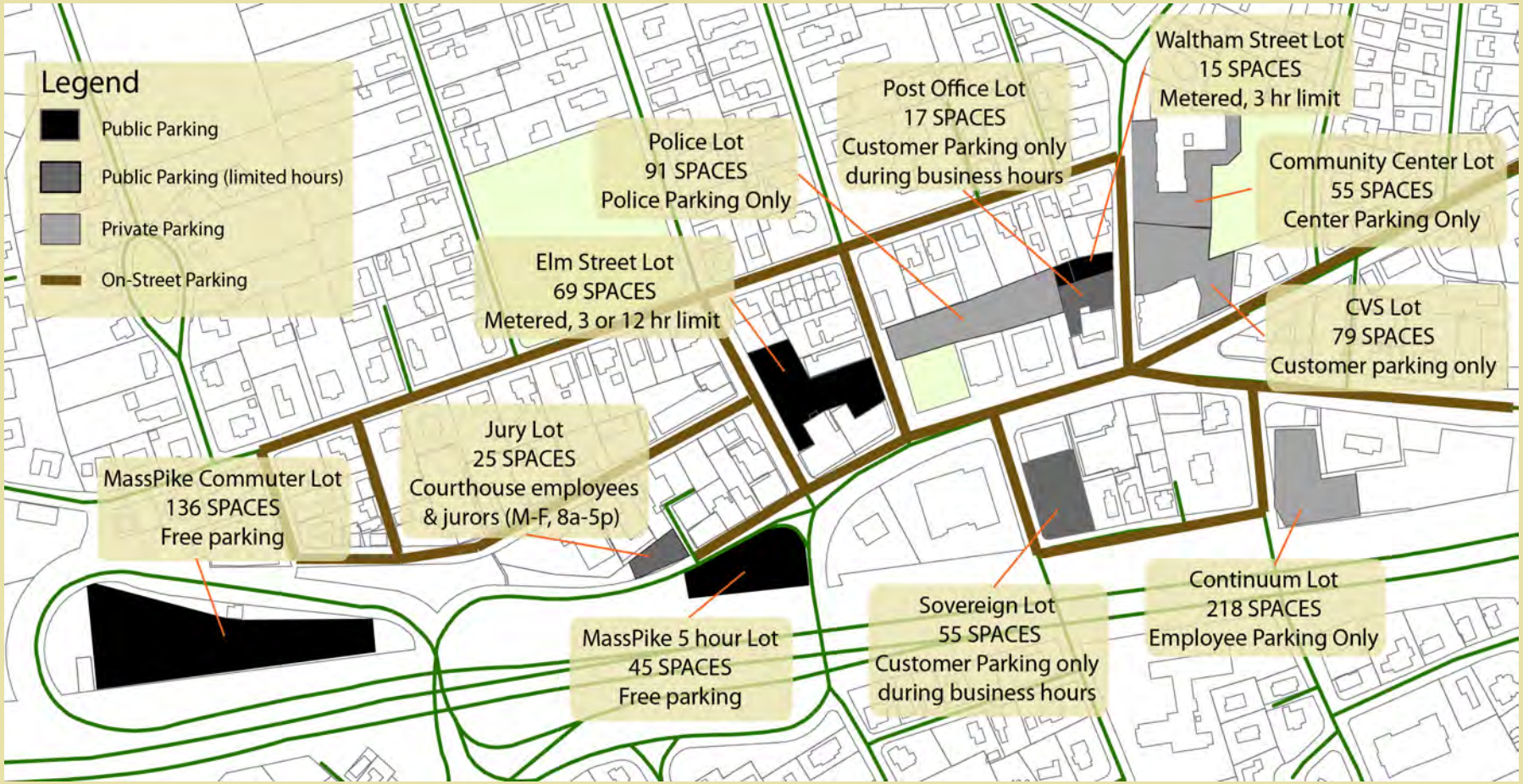
Due to the restricted movements drivers are forced to use circuitous routes, which increase travel times and lead to increased traffic congestion in the Village Center.

3.3 PARKING

One of the biggest challenges for business owners and visitors to West Newton is providing or finding parking that is conveniently located within the Village. Parking has already been addressed and documented in several reports concerning West Newton, but several years have elapsed since these studies. Consequently, a new parking analysis was conducted for this study to determine the availability and location of public and private parking options in West Newton. In addition to metered parking spaces on Washington Street, the following parking options exist and will be referred to in further discussion of the challenges to parking that currently exist, as well as short term and long term parking solutions:

- Commuter Lot
- Jury Lot
- Masspike 5-Hour Lot (or 5-Hour Lot)
- Police Lot
- Elm Street Lot
- Sovereign Bank Lot
- Post Office Lot
- Waltham Street Lot
- CVS Lot
- Continuum Lot

Fig. 3-22 Existing Parking Areas



3.3.1 METHODOLOGY

The methodology used to identify challenges and opportunities relating to parking consist of observations from several visits to the Village, informal interviews with residents and visitors, interviews with city officials, responses to a parking survey that was distributed at the class' booth at the 2011 Paddy's Shillelagh Shuffle, and feedback from a meeting conducted at Paddy's Pub with 30 business owners.

The conclusions drawn are also based on prior reports and, in the cases of cost estimates and best practices, other literature on topics such as parking management strategies, shared parking, and sustainable development practices have been referred to as well.

3.3.2 CHALLENGES

A. Imbalance of lot usage

Within close proximity to the Village Center, certain parking lots are over-utilized, such as the 5-Hour Lot, while others, such as the Commuter Lot, are underutilized. This imbalance greatly influences perceptions of the existence of a parking problem from business owners, visitors, and residents, and may be a deterrent to more people visiting West Newton. For current needs, parking capacity in West Newton is sufficient but the perception persists that there is inadequate parking because lots closer to restaurants, retail, and institutions are more crowded than parking lots that are further, but still a walkable distance away. The high demand for parking in the evening due to the cluster of restaurants and entertainment destinations like the Cinema also shapes this perception.

B. Parking lot time limits are not properly aligned with usage

Currently, the time limits of many of the lots do not match the times when visitors to the Village Center need access to parking. For example, the 5-Hour Lot across the intersection of Washington and Elm Streets has a five-hour time limit, yet most of the uses closest to the lot would require a time limit that is closer to two hours.

C. Parking lot time limits are inconsistently enforced

Although time limits within lots may exist, inconsistent enforcement allows people to engage in long-term parking in lots that are close to the center of activity along Washington Street. As a result, many spaces that could have greater rates of turnover and be free to a greater number of people coming to the Village are being occupied for longer periods of time than is allowed despite the availability of other long term parking options nearby.

D. Inefficient allocation of spaces within lots

The parking lines in the Commuter and Elm Street Lots are not drawn efficiently

to maximize the number of parking spots.

E. Limited on-street handicapped parking spaces

Handicapped parking is offered in many of the off-street parking lots, but only one on-street handicapped parking space exist. Handicapped people will have to endure longer journeys from the parking lots to their destinations within West Newton, which could be particularly unpleasant in the colder winter months.

F. Existing lots contribute to stormwater runoff

The current surface lots were not built following "green building" standards. The resulting storm-water runoff from the lots can have negative environmental consequences.

G. Parking ratios mandated by zoning are higher than needed

Due to the high parking ratios that are required within the Village, the number of parking spaces required exceeds the space available for these uses.

H. Visibility of surface lots detracts from pedestrian experience

Along Washington Street, off-street surface lots are not visually buffered, thus diminishing the pedestrian experience.

I. Limited and inconveniently located bicycle parking

Although bicycle parking exists within the Village, it is often placed at inconvenient locations causing cyclists to lock their bicycles to signs, fences, and street furniture, which may obstruct the sidewalk. Highly visible bicycle racks, such as the one in front of Boston Sports Club, are heavily utilized while other racks are underutilized and difficult to find.

Fig. 3-23 Pedestrian Experience

Landscaped buffers between the sidewalk and surface parking lots can mitigate the visual impact of parking and enhance the pedestrian environment as shown here.

Where no landscaped buffer exists, parking can encroach on the pedestrian realm, as seen in this parking lot along Watertown Street.

3.4 COMMUNITY AND ECONOMIC DEVELOPMENT

3.4.1 COMMERCIAL ACTIVITY

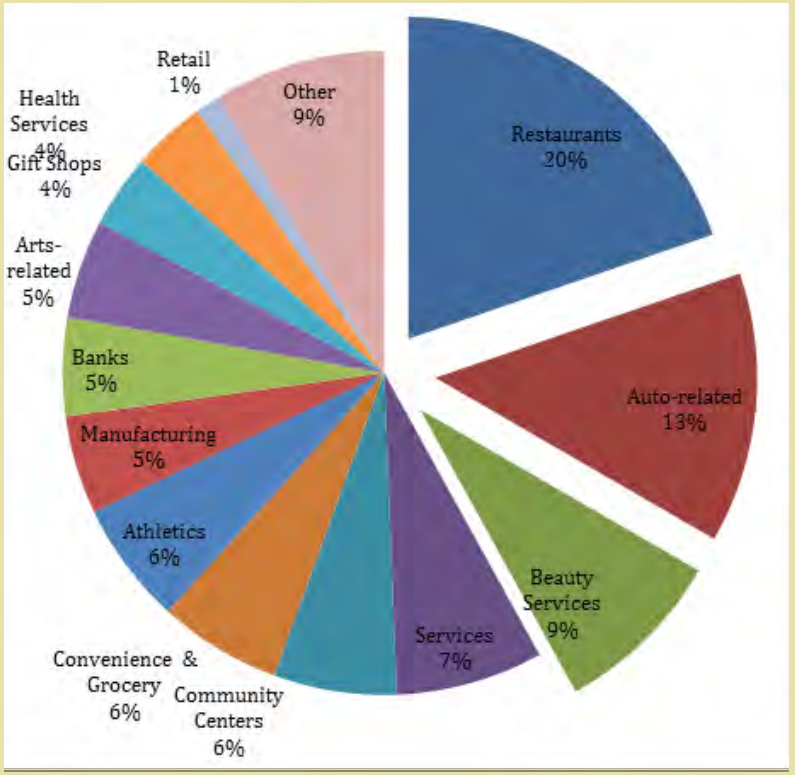
West Newton has a variety of businesses that contribute to its distinct charm. Coupled with a Commuter Rail connection and popular businesses such as West Newton Cinema and Blue Ribbon BBQ, the Village houses a multitude of opportunities for strengthening the business core economically, socially, and politically.

A. Existing Business Mix

The commercial areas currently do little to encourage a pedestrian environment, in turn limiting West Newton to destination shoppers. Low levels of foot traffic along streets, lack of signage, and inefficient parking patterns keep the area from realizing its full potential and commercial vitality.

Figure 3-24 displays the vast array of businesses in West Newton and indicates the dominating uses. Restaurants, auto-related businesses, and beauty services comprise 42 percent of the existing businesses in the area. Retail uses comprise merely 1 percent, clothing retail makes up 1 percent, arts-related businesses total 5 percent, and gift shops amount to 4 percent. For more information about existing businesses, see Appendix D.

Fig. 3-24 Business Uses, by Category



B. Business Issues

We met with many business owners in a round-table discussion on October 13, 2011 to hear about issues affecting the commercial sector in West Newton. Most business owners expressed concern about economic development in the area. Some of these concerns mirrored threats identified by community members, indicating that issues in the Village such as low pedestrian activity due to speeding vehicles, non-leisure visits, and confusing street layouts are echoed by the business community as well. Specific problems identified in this meeting and through the site visits and analysis include:

1. Absence of an organized business community or a group;
2. Unmaintained and inconsistent streetscape;
3. Lack of pedestrian activity; and
4. Stagnation in new business growth.

Fig. 3-25 House in East Washington Street area

3.4.2 HOUSING

Newton has a long history of being a leader in providing lower-income residents in Massachusetts with affordable housing. "Newton's inclusionary zoning, which mandates housing affordability in much development, was the first of its kind in the Commonwealth," (Newton Comprehensive Plan, 2007). Speaking with city officials and members of the community made it apparent that Newton's strength lies in the diversity of its constituency, which includes young families, elderly couples, numerous generations of Irish families and a more recently settled, vibrant community of Chinese-Americans.

A. Methodology

Through analysis of the four census tracts closest to the Village Center (based on data from the American Community Survey (2007-2009) came a better understanding of the household composition of West Newton. The Census tracts most useful to the West Newton study area are tracts 3746 and 3745 (see Figure 3-26). Housing information from these locations was then compared to that from the city as a whole (see Figure 3-27).

Although these are micro-datasets and thus not as comprehensive as what a more detailed study might provide, they illustrate that Newton has sufficient demand for an increased supply of rental units.

The two tracts outlined in red in Figure 3-27 that are most proximate to the Village Center have lower median income levels than the median income for the city. Especially of note is Census Tract 3745, which has the lowest median income level, yet has a relatively high median home value.

In terms of real estate, this high median home value is justified by the properties' close proximity to the Village Center. For lower-income households, however, high home values and corresponding high taxes make homeownership less feasible. These barriers also reflect a homeownership trend that is predominated by the transfer of properties that are inherited from generation to generation. This results in

the inability of West Newton to keep up with the higher home values and income levels in the rest of Newton. As a result, traditional middle class residents are being priced out of neighborhoods like West Newton where they were born and raised, further complicating the issue of housing affordability.

Massachusetts General Law 40B establishes the goal that all communities in the State should make 10 percent of their housing stock "affordable." 40B defines affordable housing as a housing unit that a household that earns up to 80 percent of the median income of an area could afford to rent or own. Such housing must be subject to affordable housing restrictions to preserve affordability for the long-term.

The City of Newton officially meets 7.6 percent of the 10 percent required minimum. Compared with its neighbors, Newton is doing well. However, according to the Newton Comprehensive Plan (2007), there are ambiguities in the calculation of this percentage, and about 900 of the 2,400 units included in the 7.6 percent figure are not exactly affordable. If those 900 units are not included, the percentage of Newton's housing that is affordable is actually closer to 5 percent.

It is becoming increasingly expensive to live in Newton for average income households, and it is simply not affordable for those who earn well below the median income. Figure 3-28 from the Newton Comprehensive Plan (2007) shows that homebuyers in

Fig. 3-26 West Newton Census Tracts

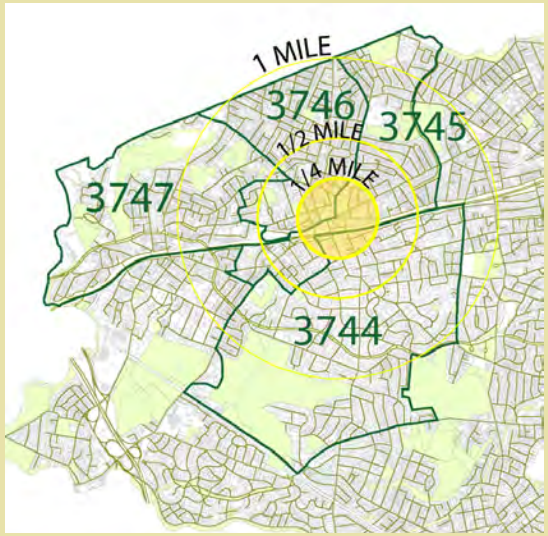


Fig. 3-27 Household Income and Housing Costs

Geography	Number of Households	Owner Occupied Housing Units	% of Renters	Vacant Housing Units	Median Household income	Median value of Owner Occupied Housing
Newton City	28,894	20,029	30.7%	1,342	$107,412	$610,000
Census Tract 3744	1,785	1,478	17.2%	85	$159,044	$979,200
Census Tract 3745	1,560	1,007	35.5%	0	$88,611	$620,400
Census Tract 3746	1,781	1,270	28.7%	29	$100,784	$492,900
Census Tract 3747	1,631	1,040	36.3%	75	$102,014	$629,500

Source: City of Newton 2007 Comprehensive Plan

Fig. 3-28 Income Levels of New and Existing Homeowners

Recent home-buyers tend to have higher incomes (as compared to the median income of the Boston Metropolitan Area) than existing homeowners, according to the 2000 City of Newton Assessor's records and Census data.

2000 tended to have a much higher income (over 120 percent of the area median income) than the households that have lived in Newton for decades. The reason that there was a noticeable change in this demographic is that many families sold their homes in Newton because they were unable to afford the standard of living. Thus, the families that have created the culture of Newton are being forced out, diminishing the character of the Village that residents have come to love.

The buildout analysis in the Newton Comprehensive Plan (2007) notes that under existing zoning regulations, the City has a capacity for 3,400 additional housing units. However, if guided by 40B's 10 percent affordable housing requirement, one-third of these newly built units would have to be affordable in order to bridge the gap between the existing affordable housing stock and this requirement.

As Figure 3-29 shows, the qualification for affordable housing means that a family of four must earn $64,200 or less. This is not dramatically low. Affordable housing is not meant to increase housing delinquencies or inconsistencies—it is meant to allow people who have lived in Newton to continue to do so affordably. A household income of $64,000 is a high income relative to the rest of the State, where the average median income for 2009 was $64,081 (American Community Survey).

Conversely, the average value of a house in Massachusetts is $338,500, compared with the average home value of $610,000 for Newton. This comparison indicates that average wage-earning families in West Newton are dealing with an intensely unequal playing field with regard to homeownership if they are not legacy owners.

Interviews also revealed that many of the core City employees of Newton live in surrounding neighborhoods because of the lower cost of living in those areas.

B. Existing Policies

Newton mandates all new developments to have 15 percent affordable housing units, enacted through an inclusionary zoning rule. However, because development costs run high, developers have the option to "pay-in-lieu" to the City instead of creating affordable units. This option is frequently exercised and contributes to the lack of affordable units.

The Community Preservation Act (CPA) of 2001, passed by the City of Newton, has been heavily used over the last 10 years for community development. The CPA funds are raised through a 1 percent tax on all real-estate transactions and historically have been matched by the State, although this practice seems to have discontinued. The Committee managing these funds has used over $30 million for historic preservation, public space improvements, and affordable housing. There was also a pilot program in 2008 to increase the supply of accessory apartments, typically through changing extra-bedrooms in large homes into separate apartments. The program made funding available from the CPA, which allowed residents to use up to $90,000 per unit for up to three units, as long as they were made affordable. The program, unfortunately, did not generate as much momentum as anticipated.

Newton also has partnerships with a number of organizations that advocate for supplying affordable housing ranging from local initiatives to statewide mandates; these include non-profit organizations such as the Newton Housing Authority, the Community for Affordable Housing in Newton Development Organization, Inc. (CAN-DO), and the Citizens Housing and Planning Association in Massachusetts (CHAPA). Through these advocates, the City has been able to allot below-market real estate and provide an option for the households in need of this opportunity.

Nevertheless, there remains a dearth of affordable housing options in the city. In West Newton, there is a clear demand for more affordable housing units that has informed the recommendations for the Village as well as the city.

Fig. 3-29
CDBG Service Eligibility Income Limits

Number in Family	30% of Area Median Income	50% of Area Median Income	80% of Median Income*
1	$20,250	$33,750	$44,950
2	$23,150	$38,550	$51,400
3	$26,050	$43,350	$57,800
4	$28,900	$48,150	$64,200
5	$31,250	$52,050	$69,350
6	$33,550	$55,900	$74,500
7	$35,850	$59,750	$79,650
8 or more	$38,150	$63,600	$84,750

*Newton's Median Income for a family of four is $96,000. However, 90% of Median Income is capped by the U.S. Family Median Income level. Data was taken from the 2009 American Community Survey.

3.5 OPEN SPACE AND ENVIRONMENTAL DESIGN

3.5.1 EXISTING OPEN SPACE

West Newton has a strong mixture of community open spaces. From small plazas to the large natural area encompassed by the Dolan Pond Conservation Area, these spaces provide opportunities for West Newton residents to engage in a variety of recreational activities.

A. Dolan Pond Conservation Area

Dolan Pond Conservation Area, a ten-minute walk from the Village Center, is the largest and most significant natural area in the vicinity.

Only eight acres in size, the area nonetheless provides a rich variety of habitats; according to Friends of Dolan Pond, the conservation area includes four ponds and a large area of red maple swamps. This diverse mix of habitat types supports over 130 species of birds and approximately 120 plant, animal, and insect varieties.

In 2003, CDBG funds were used to improve access and accessibility at the preserve, and CPA funds were used between 2004 and 2007 to acquire additional land. The Conservation Area's wheelchair-accessible boardwalks provide opportunities for both active and passive recreation.

B. West Newton Common, Eden Playground and Captain John Ryan Park

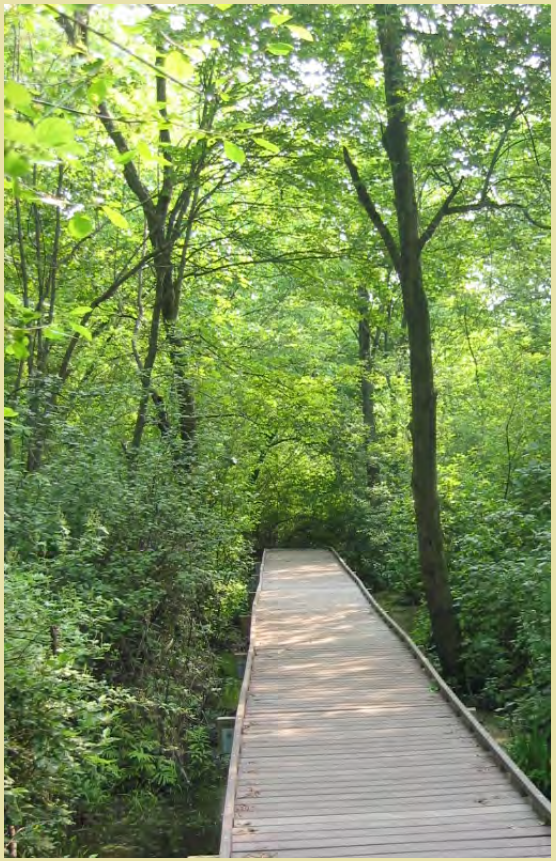
While Dolan Pond provides a natural respite from the Village, West Newton's other open spaces fulfill different roles.

The West Newton Common and Eden Playground provide several acres of open space within a short walk of the Village Center. These areas include playgrounds, ball fields, and a basketball court that allow residents to engage in active pursuits.

Captain John Ryan Park, located at the corner of Washington and Cherry Streets, serves as a passive recreation space; its benches and tables provide a perfect place to sit and socialize in the heart of West Newton.

Small plazas in front of the Courthouse, CVS, and Sweet Tomatoes provide additional places to sit, although these plazas might benefit from programming or other improvements to make them more attractive to passersby.

Fig. 3-30 Dolan Pond Conservation Area



Dolan Pond Conservation area provides both opportunities for recreation and ecological benefits.
Source: Newton Conservators

Fig. 3-31 Cheesecake Brook

By channelizing Cheesecake Brook through West Newton, native plants along its banks that would have helped filter water flowing into the creek have been eliminated.

3.5.2 WATER RESOURCES

West Newton is located within the much larger Charles River watershed and contributes to the river basin primarily through runoff and groundwater flow to Cheesecake Brook. The brook is one of Newton's largest tributaries to the Charles, flowing approximately 1.5 miles from headwaters generally west and south of the village.

While Cheesecake Brook was historically a visible part of the landscape, today, it is almost invisible, for its run through the Village occurs mainly in underground pipes. This alteration of the area's natural hydrology is exacerbated by the narrow, concrete channel that constrains the brook where it comes above ground just east of the intersection of Washington and Watertown Streets (see Figure 3-31). These alterations, combined with the level of development in the watershed, make Cheesecake Brook a major contributor of pathogens to the Charles River.[1]

3.5.3 URBAN FOREST

Newton as a whole has over 30,000 street trees, and this "urban forest" provides measurable benefits—from soaking up stormwater to absorbing air pollution. While trees thrive in many of the residential areas surrounding the Village Center, West Newton's commercial core lacks a robust tree canopy. This dearth of trees is due in part to the nature of the Village Center, whose parking lots, higher building density, and major streets leave less room for trees.

However, there are also a significant number of dead and diseased trees in the Village, particularly along stretches of Washington Street in the central business area (see Figure 3-33). A 2011 study conducted by Gas Safety, Inc. identified nine Grade 1 gas leaks in this corridor that may have contributed to the tree deaths.[2]

1 The 2007 Pathogen TMDL for the Charles River watershed identifies the brook as a high priority water body for remediation.
2 Natural gas leaks have been shown to both displace oxygen in the soil and dry out the roots of trees, leading to tree stress.

Fig. 3-32 Water Resources

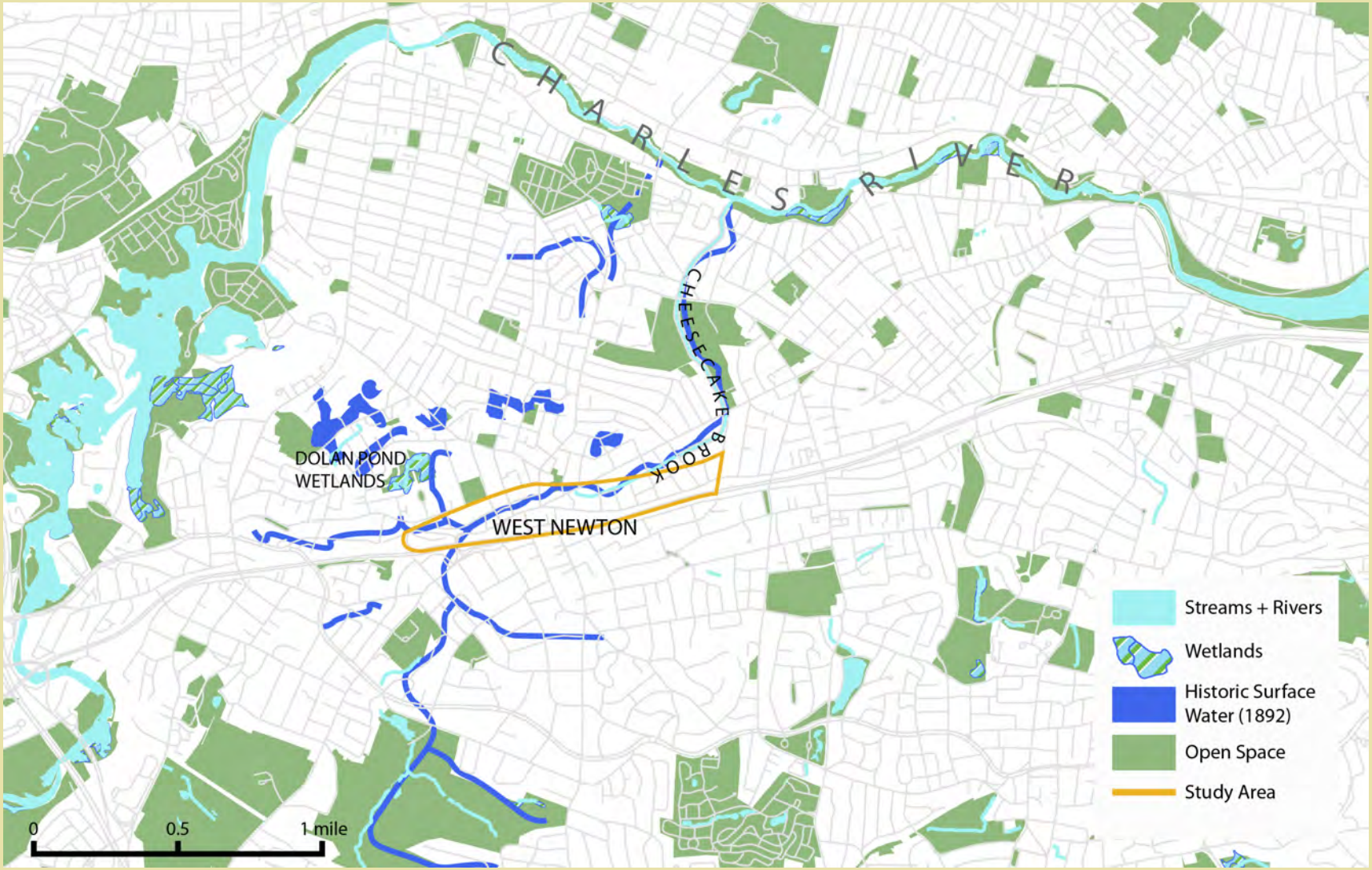


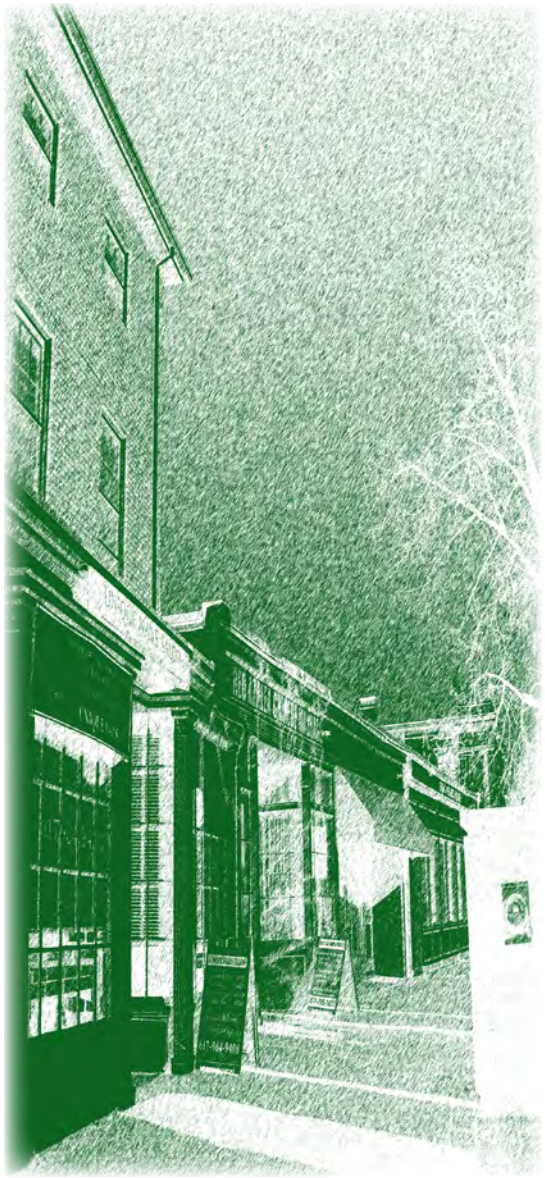
Fig. 3-33 Open Space and Tree Cover


EXIT

PART 2
SYNTHESIS

A vision for what West Newton could and should be in the coming decades depends on the present. However, it can truly be understood by studying the past. This section makes recommendations and highlights implementation strategies that are informed by careful consideration of West Newton's current assets and challenges as well as through understanding historic precedents, its longstanding character and the themes articulated in the Comprehensive Plan.

These strategies are further developed into plans for four specific catalyst sites in West Newton that reflect the vision of the West Newton of the future as envisioned by its residents, businesses and the visitors. It builds upon the Comprehensive Plan and inputs shared by the city officials.



CHAPTER FOUR
SYNTHESIS: INTRODUCTION

4.1 IMPLEMENTING THE VISION

In the following chapters, we intend to show just how this vision can become a reality. Recommendations have been divided into five categories—land use, circulation, parking, community and economic development, and open space and environmental design—with specific, actionable guidance that will be useful to both planners and community members. However, these recommendations do not exist in isolation. Each specific action item will contribute to broader goals for the study area. Specifically, these recommendations should help achieve the following ends:

1. Make West Newton a better place to walk, shop, and socialize

In conversations with residents, city staff, and business owners, we repeatedly heard that West Newton was not a particularly pleasant place to walk or window-shop. High traffic speeds, a confusing pedestrian crosswalk layout, and poorly-designed public spaces all contribute to this perception. In the following pages, we propose a number of strategies for overcoming these challenges that include:

a. Calming traffic throughout the area by reducing lane widths, adding bike lanes, and making roads feel more like village streets than highway thoroughfares. We propose removing lanes on the eastern portion of Washington Street, simplifying intersections throughout the area, and restoring two-way vehicular traffic along parts of Washington Street.

b. Improving bicycle and pedestrian amenities, specifically by adding bike lanes through the Village and simplifying confusing crosswalks. In many areas, visitors need to take roundabout routes to walk to their destinations and biking can feel downright dangerous. In Chapter 6, we identify ways that specific intersections and road segments could be improved to accommodate these visitors.

c. Providing more inviting public spaces, particularly in the Village's center. We suggest realigning the intersection of Washington and Watertown Streets; doing so would provide a larger downtown plaza in front of Sweet Tomatoes and would increase the sidewalk width on the south side of Washington Street. This additional sidewalk width could, in turn, be used for sidewalk café seating or other improvements that would provide a more pleasant pedestrian experience.

2. Make West Newton an easier place to visit and navigate

The Village is difficult to navigate, especially if one is driving, looking for a parking space, or taking transit. One-way streets, confusing parking arrangements, and poor transit connections are all contributing factors. Our recommendations for addressing these issues include:

a. Revising traffic patterns to make them more intuitive. Many of the intersections and circulation patterns in the Village are unique—they are designed in ways that most people are not used to navigating. In order to help residents and visitors alike, we propose restoring two-way traffic in several areas and normalizing intersections so that they are more intuitive. These improvements would also better accommodate bicyclists and pedestrians.

b. Creating a wayfinding system to help visitors reach both destinations and parking. A cohesive set of wayfinding signs throughout the Village would help visitors find parking and guide them to West Newton's key assets. These signs could also add to the Village's unique identity if they utilize an attractive and consistent design.

c. Promoting shared parking, especially between businesses with different peak hours. Parking is an ongoing challenge in West Newton, even though there are usually enough spaces to meet demand. In Chapter 7, we recommend that the City encourage businesses to share parking facilities. Doing so would help to free up parking spaces where and when they are needed.

d. Improving transit connections to and from the Village and providing enhanced access to the West Newton Commuter Rail Station. By making it easier to get to West Newton by public transit, we hope to encourage more visitors to leave their cars at home (which would help to alleviate the area's parking challenges). Additionally, improved connections to other parts of the Greater Boston region would make the Village a more attractive place to live, visit, or open a business.

3. Strengthen the West Newton business community

West Newton is already home to a thriving local business community, but there is little coordination or communication between business owners. Collaboration of this sort can only strengthen the business community, and our recommendations promote it explicitly. In particular, we propose:

a. Creating a local business network to coordinate efforts to brand, enliven and promote the Village. Such a network could help to fund or advocate for streetscape improvements, events, and village-specific marketing efforts that would build upon West Newton's existing assets.

b. Providing additional resources and mentoring to businesses could help improve the business community further; funding for façade improvements would help to create an attractive and cohesive Village identity.

4. Create a more cohesive Village

Despite its vibrant mix of local businesses, West Newton lacks a cohesive village feel. Because of the area's built form—wide roads, single-story commercial buildings, and automobile-oriented uses along Washington Street—it can feel like a place that is better to drive through than linger in. The following pages present a number of strategies to better define the Village. These include:

a. Changing the area's zoning to promote density and walkability. We propose adopting a form-based code that will create smart transitions from the Village Core to surrounding residential areas. These recommendations call for increasing the density in the center of the Village, thereby creating opportunities for multi-story, mixed-used commercial and residential buildings. New development will provide a larger customer base for local businesses and will create additional housing opportunities in the area.

b. Providing a greater diversity of housing options through new development. Additional development in the Village would open the door for housing options that meet the needs of all of West Newton's residents. By promoting affordable housing in the area, we hope that the Village can better accommodate a wide range of family types and income levels.

c. Funding streetscape improvements to make West Newton a pedestrian-friendly commercial corridor. We recommend improving the pedestrian experience by increasing the number of street trees, resurfacing sidewalks, and adding street furniture. Doing so will make the Village a more inviting place to spend time, and will help to cement the area's identity as a true community center.

d. Holding events to draw people into the Village year-round. In Chapter 8, we recommend that that the local business community hold events in order to bring visitors to the center of West Newton. Doing so will help reinforce its place as the social hub of the community.

5. Improve the Village's natural environment and promote environmental sustainability

West Newton has a wealth of environmental assets, from the Dolan Pond Conservation Area to abundant solar resources for power generation and passive solar design. However, these assets are currently underutilized. The recommendations outlined in Chapter 9 seek to address this and make environmental attributes a key strength of West Newton Village. Specifically, we propose:

a. Incorporating solar design guidelines into any zoning changes in the Village, using the area's east-west orientation to help reduce building energy consumption.

b. Promoting green infrastructure and other sustainable stormwater management strategies throughout the Village, particularly in areas adjacent to Cheesecake Brook. Pervious pavement, green roofs, and rain gardens will help to restore water quality in the Brook and can also help beautify streetscapes.

CHAPTER FIVE
LAND USE

5.1 VISION

The unique characteristics of the study area informed a vision for West Newton based around the concept of 'the Village': an area characterized by a core of active, walkable streets and a diverse mix of uses that gradually steps down into the surrounding residential neighborhood.

Through land use and urban design guidelines it will be possible to catalyze development and yet remain true to West Newton's village-like character.

5.2 METHODOLOGY

To develop this zoning plan, existing land uses in West Newton were analyzed to identify strengths, weaknesses, and opportunities in the study area. Current zoning guidelines were compared with existing land uses in order to determine their role in encouraging and discouraging certain land uses and built forms.

This section examines key guidelines, including permitted uses, building height and density, dimensional requirements, building form, and zoning district boundaries.

5.3 INTERVENTIONS

The following key recommendations are tailored to West Newton and aim to advance the vision for the Village:

1. Implement design guidelines to preserve a cohesive West Newton feel;

2. Soften the transitions between commercial and residential areas, creating a unified site rather than a fragmented one;

3. Create a form-based code specific to West Newton that is both predictable and flexible;

4. Adjust dimensional requirements to encourage new development consistent with the village scale;

5. Develop incentives that will bring diversity and additional amenities to West Newton; and

6. Use zoning to encourage extension of the commercial core east and west along Washington Street.

5.3.1 ZONING RECOMMENDATIONS

At first, existing zones were redesignated (see Figure 5-1) based on the classifications provided under the Newton Zoning Code to propose recommendations. However, the Code as it stands is not specific or nuanced enough to meet the challenge of re-zoning the Village. As a result, this approach was not pursued for developing the guidelines in this report.

More specifically, because the Code was originally designed as a tool to separate land uses, using it to foster a true mix of uses proved to be a difficult task. The Business 2 zone, for instance, which is the current designation for the West Newton Village Center, is defined by basic dimensional requirements and a litany of acceptable uses, many of which are obsolete. Business 2 is also the designation for the village centers in Newton Center, Newtonville, Auburndale, Waban, Newton Highlands, and others, despite the fact that these areas have widely varied assets, degrees of transit accessibility, and urban contexts. Simply extending the Business 2 district would not provide the degree of resolution that would be necessary.

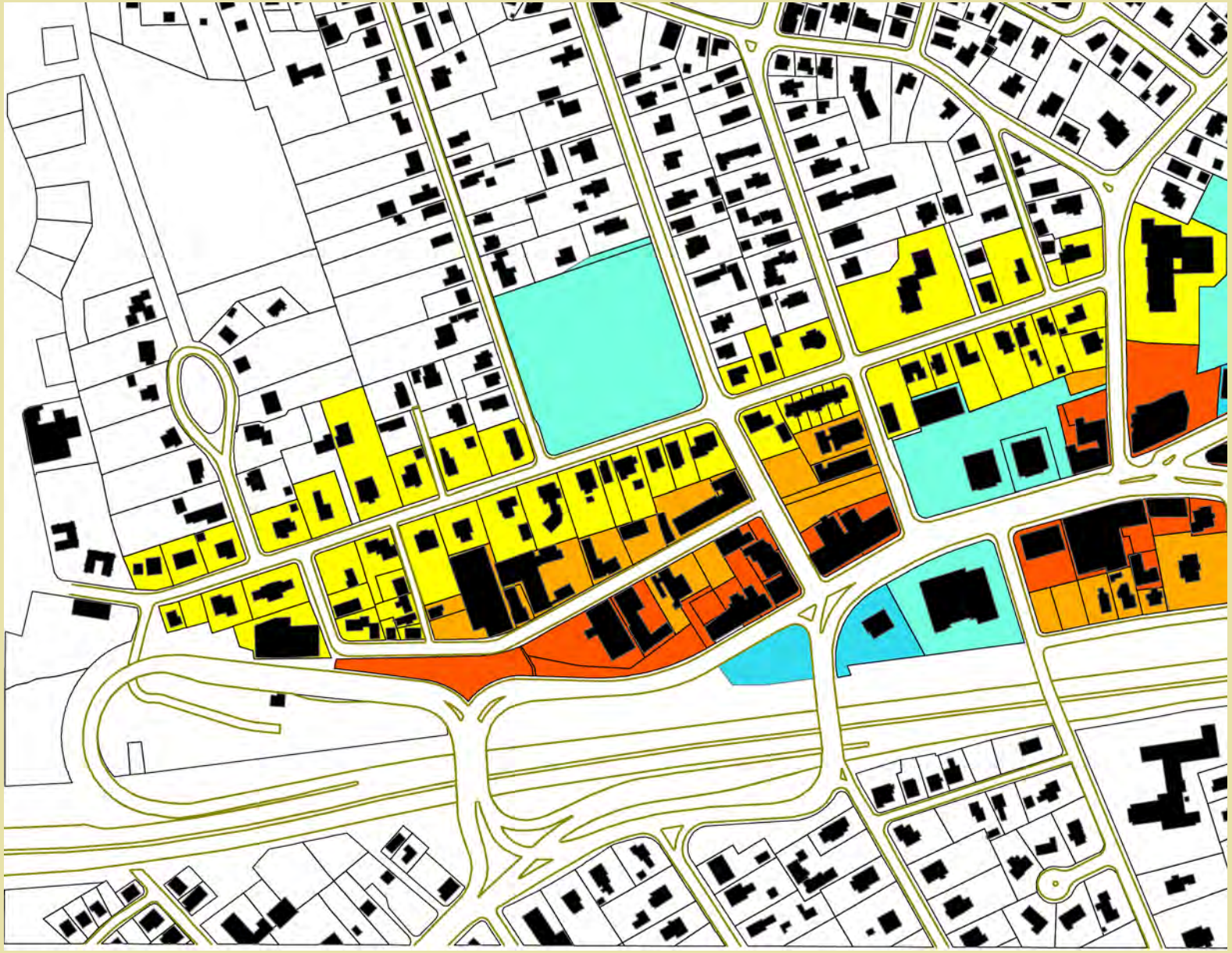
Looking solely at existing land uses, and not the imaginary lines of the current zoning designations, made it evident that the diverse characteristics of the entire study area could be distilled into three place-specific zones that were not reflected by the blanket zones of "Business," "Single or Multi-Residence," or even "Mixed Use." The following place-specific categories were created: the West Newton Village Core, the Outer Core, and – taking a cue from Newton's Zoning Reform Group – Transition Zones.

Having defined the boundaries of the three zones tailored to the specific context of West Newton, a set of guidelines for each was developed, focusing on five key elements aimed at promoting the vision for each area. These include:

1. Building Height and Density
2. Dimensional Requirements
3. Permitted Uses
4. Parking
5. Design Guidelines

Fig. 5-1 Proposed Zoning Designations

Fig. 5-2 Proposed Zoning Map



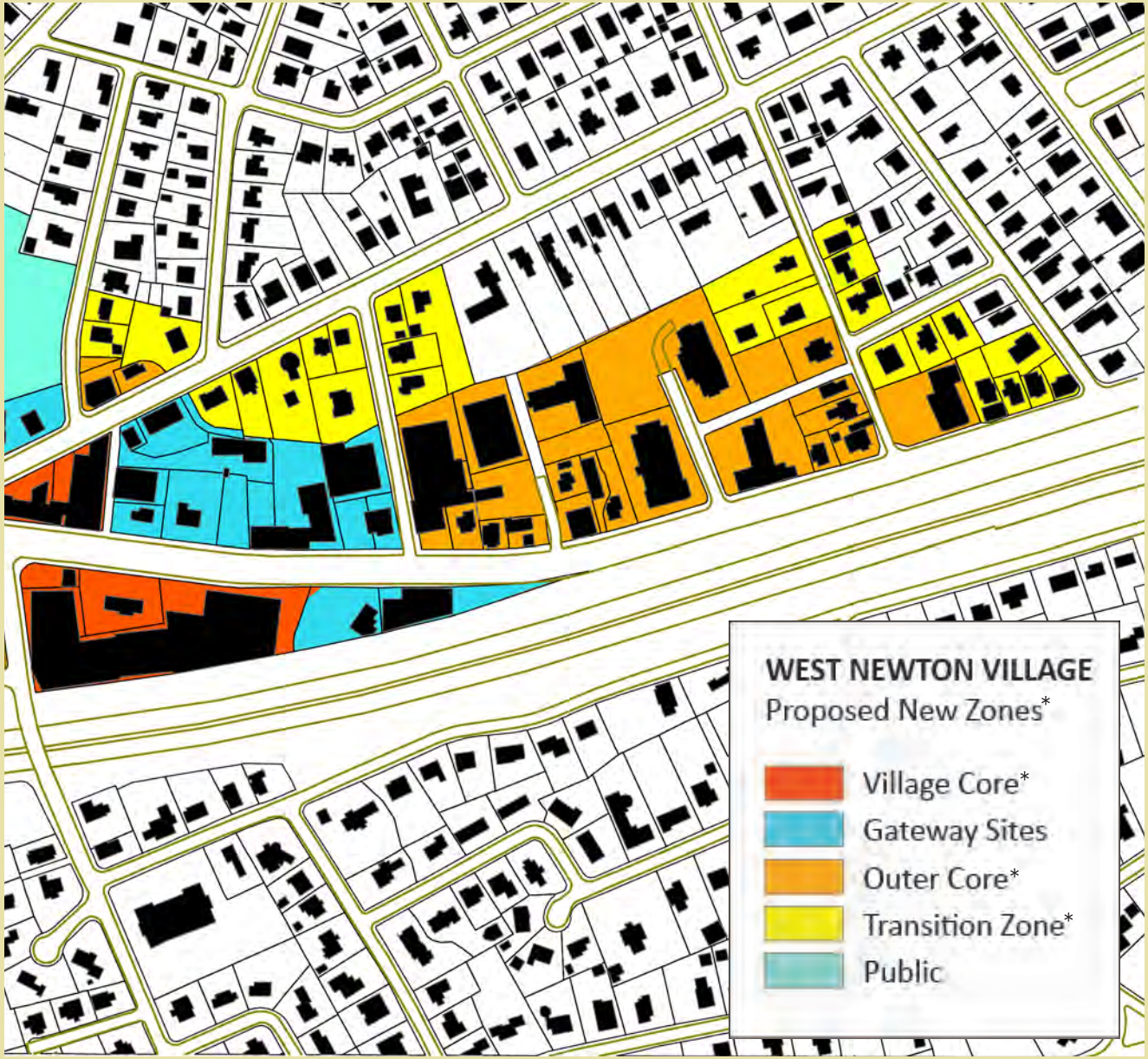

WEST NEWTON VILLAGE
Proposed New Zones*
Village Core*
Gateway Sites
Outer Core*
Transition Zone*
Public

Table 5-1 Proposed Zoning Guidelines Summary

Section	Vision	Building Height	Total FAR [1]	Building Frontage [2]	Front Setback (to sidewalk)	Side & Rear Setback (to lot line)	
Village Core	"Live, work, shop, play" Vibrant, walkable, active retail, window shopping	4 stories (48 feet) as-of-right 5 stories (60 feet) (Gateway Sites Only) by Special Permit	2.0 as-of-right 2.5 by Special Permit	100% Required 80% by Special Permit	None Up to 10 feet if used for public amenity	Minimum rear setback 25% of lot No side setback (except by Special Permit)	
Outer Core	Stepping down as move away from core Combination of active and passive uses	3 stories (36 feet) as-of-right 4 stories (48 feet) by Special Permit	1.5 as-of-right 2.0 by Special Permit	60% Minimum as-of-right 40% Minimum by Special Permit	10 feet Maximum	Minimum rear setback 25% of lot Maximum side setback of 20% lot frontage (30% by Special Permit)	
Transition	Maintain Residential character while allowing flexibility	2 stories (24 feet) as-of-right 3 stories (36 feet) by Special Permit	0.9 as-of-right	40% Minimum as-of-right 20% Minimum by Special Permit	10 feet Minimum	Minimum rear setback 25% of lot Minimum side setback of 20% lot frontage (10% by Special Permit)	

[1] Please refer to Additional Zoning Recommendations and Incentives section for FAR bonuses
[2] Building frontage = length of building façade / total lot frontage
[3] Please refer to Parking Recommendations chapter for further guidelines

	Lot Coverage (building footprint)	Uses	Parking [3]	Design Guidelines
	75% Maximum	Active Commercial (required along ground floor) Mixed-Use Public Space	No curb cuts along Washington Street All off-street parking in rear of building	• 60% glazing on ground floor • No more than 40 feet of ground floor street frontage devoted to single business • Maximum 30 feet between entrances • 40% Minimum ground floor window and door coverage • Consistent 3 feet knee-wall • Signage at consistent heights • Unique facade treatment on first story • Contextual material and window design
	33% Minimum	Mixed Commercial Mixed Use Multi Residence Office Light Industrial Public Space	All off-street parking in rear of lot	• 40% Minimum ground floor window and door coverage • Landscaping in front setback • Unique ground floor façade treatment for buildings over 3 stories
	40% Minimum green space	Single Residence Multi Residence Office / Home Office Accessory Apartments Public Space (by Special Permit)	Parking in rear of lot or side driveway only	• Design consistent with current residential character

ZONING RECOMMENDATIONS

A. Village Core

The Village Core stretches along Washington Street from beyond the current western edge of West Newton's commercial center to the intersection of Washington and Dunstan Streets (see Figure 5-3). This decision was made based on current conditions and a conviction that the fine-grained character of the center can expand over the next several years. Though perhaps difficult to imagine the Village extending east past Chestnut Street, the opportunity exists to develop both sides of Washington Street with multi-story, mixed-use buildings in the years ahead.

Given this area's historic density, community input about a desired height increase, and the perceived potential for increased commercial and residential diversity, an increase in allowable height limits to four stories throughout the Village Core is recommended. Select "Gateway" sites at the edges of the Core have been identified on which five-story buildings would announce to visitors that they have entered the heart of West Newton (see Figure 5-4). Increased density along Washington Street in the Village Core would bring added vitality to the Village, creating a dynamic, mixed-use zone. It would also give the corridor a more intimate feel, providing a sense of enclosure currently precluded by the greater than 60 feet width of Washington Street and the small scale of the buildings on either side.

The historic character of the small retail storefronts in the Village Core, an increasingly rare asset, suggests the importance of stringent ground floor design guidelines to enhance an already walkable, dynamic shopping strip. Along with scale of development and design, the plan for the Village Core includes general guidelines with respect to specific uses. While the upper stories can support residential, office, and service uses, the ground floor must be limited to active retail, as defined in the land use chart (see Table 5-1).

It is important to designate acceptable uses loosely according to this active-passive mix rather than enumerating every possible use to provide additional flexibility. It would be desirable to encourage as much local, mom-and-pop retail as possible, however, larger chains such as CVS would be considered an active use and should be accomodated. The aforementioned design guidelines would ensure that any larger footprint retailer would tailor their store design to appear as contextually appropriate as possible.

The vision for the Village Core is for it to be a vibrant, walkable, active retail area—a place to "live, work, shop, and play."

1. Building Height & Density

Due to historic precedent and the 2007 Comprehensive Plan's mandate to promote more active, mixed-use development, it is recommended that the as-of-right building height be increased to four stories and five by special permit. Precedent for such height exists within the Zoning Ordinance, which currently allows for four stories by special permit in Business 2 districts that also exist in West Newton. Special permits for five-story

Fig. 5-3 Zoning Map: Village Core District

Fig. 5-4 Gateway Sites

buildings should be reserved solely for gateway sites, as the extra height can serve as a distinct marker at key entrance points to the neighborhood. The added height would create a more intimate feel along the street, and can be supported due to the substantial width of Washington Street.

A 2.0 FAR as-of-right and a 2.5 FAR by special permit are recommended to support an increase in density in the Core. A precedent of 2.0 FAR already exists by special permit in Business 2. Increased height and density is intended to incentivize additional development within the Core. Increased development would not only expand the active uses within the neighborhood, but also bring new residents and workers to West Newton to support existing and new businesses, making the area more vibrant.

The presence of existing amenities, access to the rail network and I-90, and the overall desirability of living in West Newton generates an untapped potential for development within the Village Core.

2. Dimensional Requirements

Building form that is consistent with an active retail corridor is encouraged. Building form includes the concepts of building frontage, front setback, and lot coverage. To encourage a consistent street wall and cohesive streetscape, it is recommended that buildings in the Core be required to have a 100 percent building frontage along Washington Street. Recognizing the need for flexibility, particularly with regard to public open space and active outdoor uses, this requirement could be reduced to 80 percent by special permit. Limiting the front and side setbacks could also help maintain a consistent streetscape, though it is important to maintain flexibility by allowing a small setback for active uses that are consistent with the village character.

Within the Core, a maximum lot coverage is recommended to encourage developers to build upwards versus outwards. However, in other portions of the study area, a minimum lot coverage should be established in order to discourage uses inconsistent with walkability. The guidelines for the potential of lots being used for public open space or parking should be flexible.

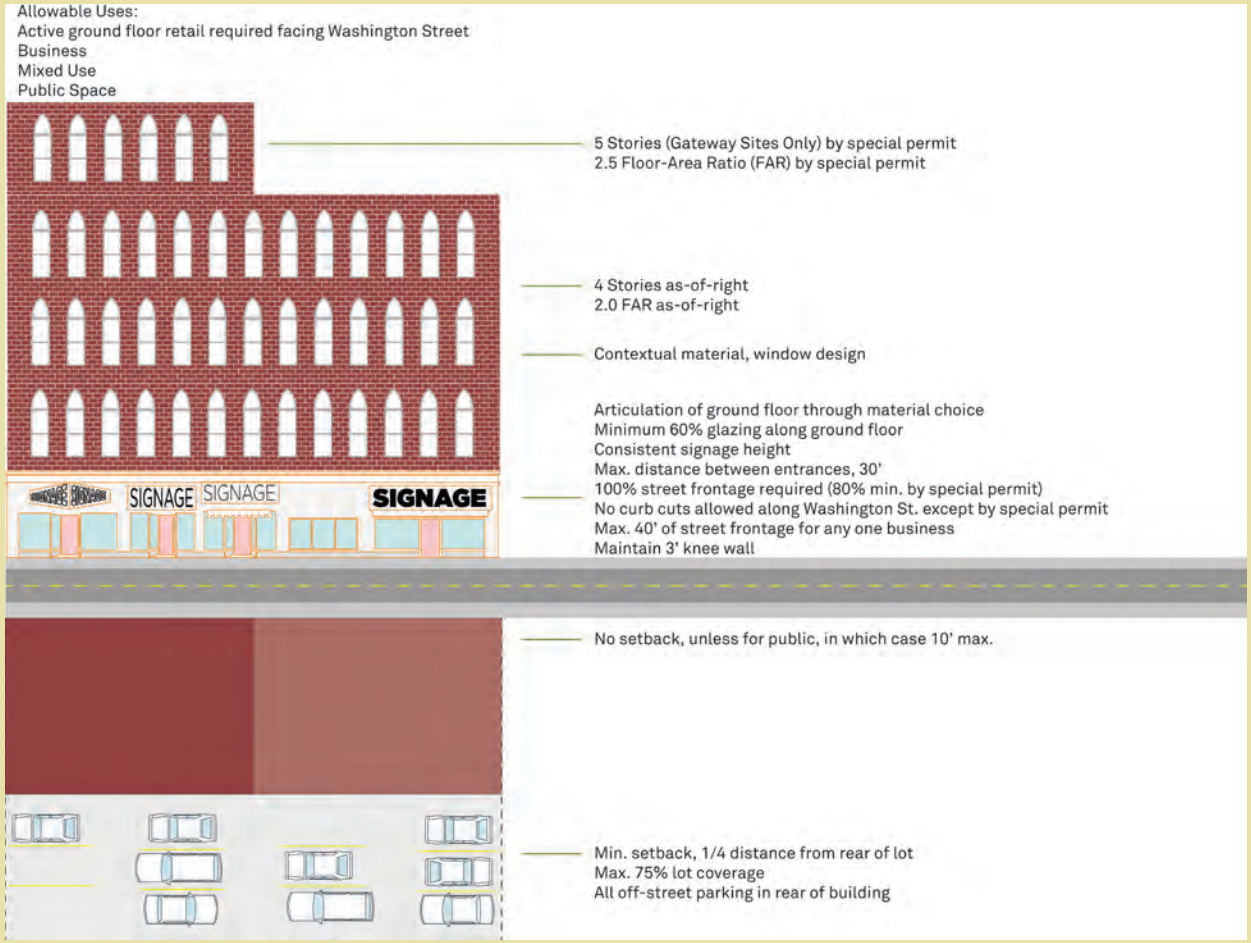
3. Permitted Uses

The vision for this area is that of an overall mixed-use zone with active commercial uses required along the ground floor. Active use in this case refers to high-turnover uses such as retail and restaurants, with the addition of public space uses by-right. While the upper floors can be either office or residential, it is critical that the Village retain its active character. Passive uses such as banks, or offices, forbidden in this section, should be relegated to the Outer Core.

4. Parking

To maintain an active street and eliminate the conflict between automobiles and pedestrians, the proposed zoning does not allow for curb-cuts. It also requires that all off-street parking be located in the rear of buildings.

Fig. 5-5 West Newton Village Core Zoning Requirements



5. Design Guidelines

Building character is central to the success and vibrancy of the Village Core. Therefore, detailed design guidelines are necessary to ensure that this character is maintained.

The proposed design guidelines include:

- Minimum of 60 percent door and window coverage on the ground floor to encourage active commercial uses and a vibrant walking experience (e.g. window shopping);
- Maximum of 40 feet of ground floor street frontage devoted to a single business, which encourages the variation in businesses that currently characterizes the Core;
- Maximum of 30 feet between entrances to enhance access to businesses for pedestrians and window shoppers;
- Consistent 3 foot knee-wall to encourage large windows and enhance visual access to buildings;
- Signage at consistent height to encourage a consistent visual experience;
- Unique façade treatment for first-story to enliven ground floor and break up building façade; and
- Contextually relevant materials and window design.

B. Outer Core

At the periphery of the Village Core are commercial clusters of a different scale and orientation. Gone are the restaurants and independent retailers and in their place are a preponderance of auto uses, light manufacturing, and chain retailers. These types of uses are, for the most part, an asset to West Newton. But these areas are also opportunities for additional development and higher densities. Zoning the Outer Core for three-story buildings as-of-right (four stories by special permit) would provide a 'stepping down' zone, transitioning from the high density Village Core to what lies beyond.

The Outer Core clusters share the Village Core's commercial character, but serve different needs. Trader Joe's for instance, is one of West Newton's most frequented destinations, and relies on ample parking and a more generous footprint than the Village Core can accommodate. Big-box and chain stores like Trader Joe's and Dunkin' Donuts are uses that are more suitable to the Outer Core. In both cases urban design considerations could have created a more pedestrian-friendly streetscape[1].

1 The blank Washington Street façade of Trader Joe's, for instance, detracts from the pedestrian experience, though it does a good job of shielding the parking from view (as opposed to the Whole Foods further east). The Dunkin' Donuts, on the other hand, provides several off-street parking spaces in front, a gesture more appropriate along a highway strip than a historic commercial corridor.

Urban design guidelines for the Outer Core are meant to be flexible and would be able to accommodate uses that are incompatible with the uses permitted in the Village Core.

While sharing some traits of the Village Core, the Outer Core is a zone that begins to step down in height and density as it moves away from the Village Center and serves as a transition from active to passive uses.

1. Building Height & Density

Since the Outer Core serves as a bridge between the Village Core and Transition Zone, a reduction in both the height and density permitted in the Village Core is recommended. Therefore, a height of three stories as-of-right and four stories by special permit with a 1.5 FAR as-of-right and 2.0 FAR by special permit should be adopted by the City. The aim of these guidelines is to encourage development of active uses similar to those within the Village Core, and to maintain passive uses that support the local economy. As the Transition Zone primarily contains two- and three-story residential structures, the height permitted within the Outer Core would not conflict with the bordering areas.

2. Dimensional Requirements

Recognizing that the uses of the area should be an active-passive mix, the dimensional requirements should allow for both pedestrian and automobile access. The guidelines continue to encourage a strong street wall, allowing a minimum of 60 percent building frontage as-of-right. This requirement allows for parking access to individual buildings and minimal side setbacks that allow for stand-alone buildings that are consistent with office or residential uses. As these areas will be more destination-oriented than the Village Core, the guidelines permit up to a 10 foot setback to allow for landscaping and entranceways. However, to maintain density and consistent building form, the recommendations propose a 33 percent lot coverage minimum to discourage service uses that attract significant automobile traffic or require storage of vehicles. Since many of the rear lot lines within this zone abut residential structures, a 25 foot rear setback is required to avoid negatively impacting nearby residences.

3. Permitted Uses

This zone permits greater flexibility while maintaining uses that are complementary to the Village Core and the surrounding Transition Zone. This area can support both active and passive uses, and therefore would accomodate a mix of big box retail, offices, and banks. Residential uses would also be permitted on the ground floor in the Outer Core. The flexible designation can be conducive to the light industrial uses at the western edge of the site.

4. Parking

The guidelines permit curb-cuts and access to parking facilities for buildings that face the street. However, they require that all parking be subordinated to the rear of the lot behind the structure.

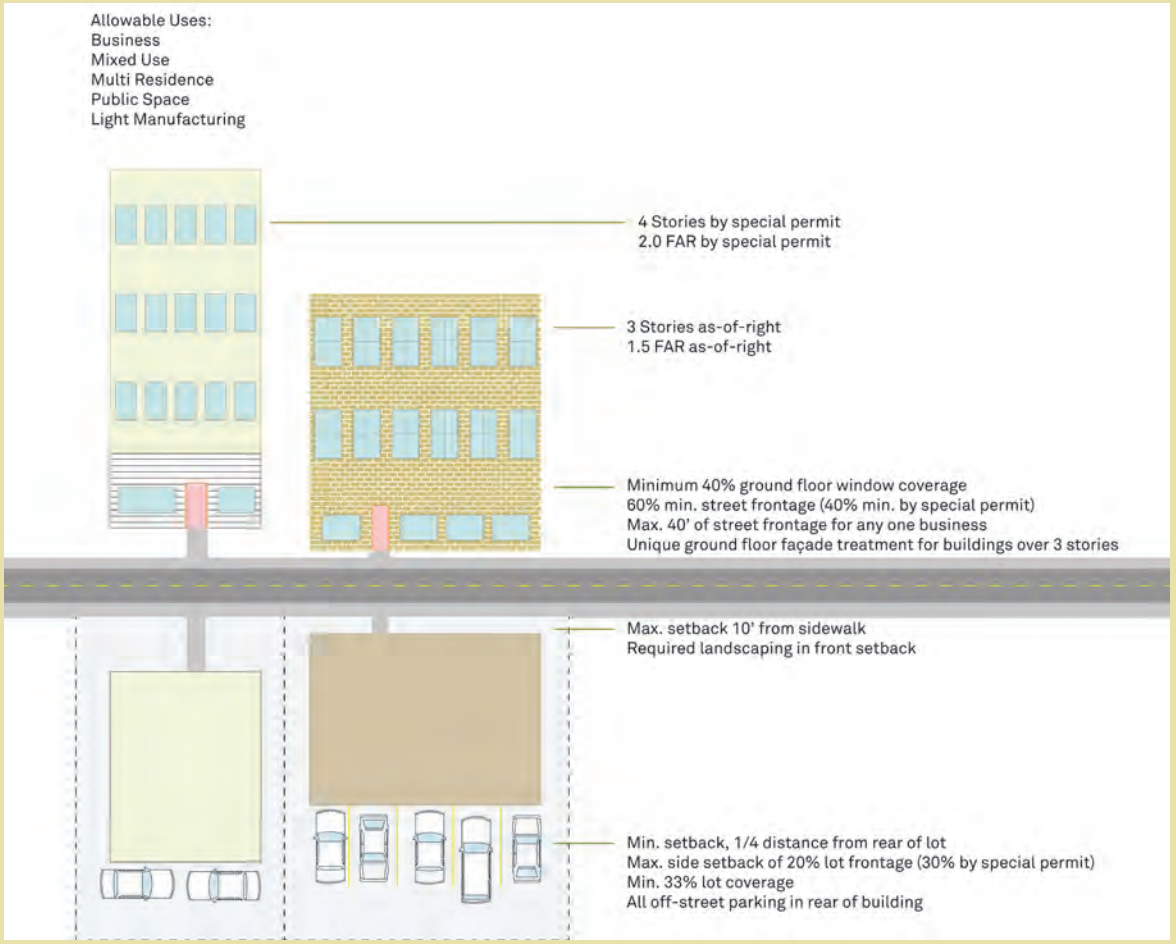
Fig. 5-6 Zoning Map: Outer Core District

5. Design Guidelines

The design guidelines aim to promote an attractive building form and streetscape.

A minimum of 40 percent door and window coverage on the first floor, landscaping within the front setback, and a unique façade treatment on buildings over three stories tall should be required. The same guidelines proposed for ground floor retail in the Village Core should apply to the buildings that have retail on the first-story in the Outer Core.

Fig. 5-7 West Newton Outer Core Zoning Requirements



ZONING RECOMMENDATIONS

C. Transition Zone

The southern edge of West Newton Village is cut off from West Newton Hill by I-90, creating a physical and psychological barrier between the commercial and residential uses. In contrast, the northern boundary separating the Village Core and Outer Core from the residential neighborhood beyond is a permeable boundary, and requires careful examination. As noted by the Zoning Reform Group's recent report, "village centers have blended most successfully with surrounding neighborhoods where the commercial core has transitioned gradually to the residential neighborhoods that surround it." This notion of a "soft transition" is a stated priority of the Village and is an integral component of this rezoning plan.

A combined look at form and use is critical because the Transition Zone is both hard to define and nearly impossible to map under the current zoning classifications. Students walked the edges of the Village Core and Outer Core, subjectively identifying where exactly the Transition Zone appeared to start and stop. What was at first a purely intuitive process developed into a consistent methodology that defined the Transition Zone by the pedestrian experience. This largely conforms to the existing streetscape. In reality, Transition Zone parcels share a border with the Village Core and/or the Outer Core, completing an otherwise commercial block. These parcels are directly across the street from other Transition Zone properties.

The Transition Zone designation presupposes the retention of the Village's existing, historic residential scale. In contrast, the Village Core and Outer Core incorporate design principles that ensure walkability that is necessary for the development of the Village Center's distinct identity in the future. This designation also asserts that there are certain uses and density levels appropriate in this transitional space that would not fit in either of the Cores or in the purely residential neighborhoods beyond. Residential zoning restrictions in the Transition Zone should be less stringent to accommodate passive ground floor uses such as professional offices with housing above.

The Transition Zone maintains the residential character of the area, while allowing for accessory units and converted residences, as are commonly found in West Newton.

Fig. 5-8 Zoning Map: Transition Zone

1. Building Height & Density

The height requirement of two stories as-of-right and three stories by special permit is consistent with the current residential design and character of this zone. Serving as a transition, the 0.9 FAR proposed for this zone is lower than that of the Outer Core (1.5 FAR), but higher than the FAR that exists in Multi-Residence 1 and Single Residence 3 districts (0.5 FAR). The slightly higher FAR recognizes that office uses may require greater space and allows for increased square footage for accessory units.

2. Dimensional Requirements

The dimensional requirements are consistent with a predominantly residential neighborhood by allowing larger front and side setbacks. Rather than impose a minimum or maximum lot coverage, the recommendations require at least 40 percent green space to maintain a more open, natural feel.

3. Permitted Uses

Consistent with the vision for the area, the primary uses permitted are single family residence, multi-family residence, office/ home office, and accessory apartments. These uses maintain the residential feel of the area and can benefit from the slightly higher permitted density than a typical residential-only area.

In certain cases, converting homes into offices should be permitted to allow local residents to work at home and maintain office jobs within West Newton. Accessory apartments allow current residents to augment their income and attract new residents to the area. Allowing public uses by special permit recognizes the potential of public parks within this zone.

4. Parking

Parking is permitted along the side and rear of structures to allow for traditional driveways, as this zone is a primarily residential area with buildings used both as houses and converted offices. The recommendations discourage parking directly in front of the structures in order to maintain green space and entranceways typical of a residential area.

5. Design Guidelines

Design must be consistent with the current residential character of the area.

Fig. 5-9 West Newton Transition Zone Zoning Requirements

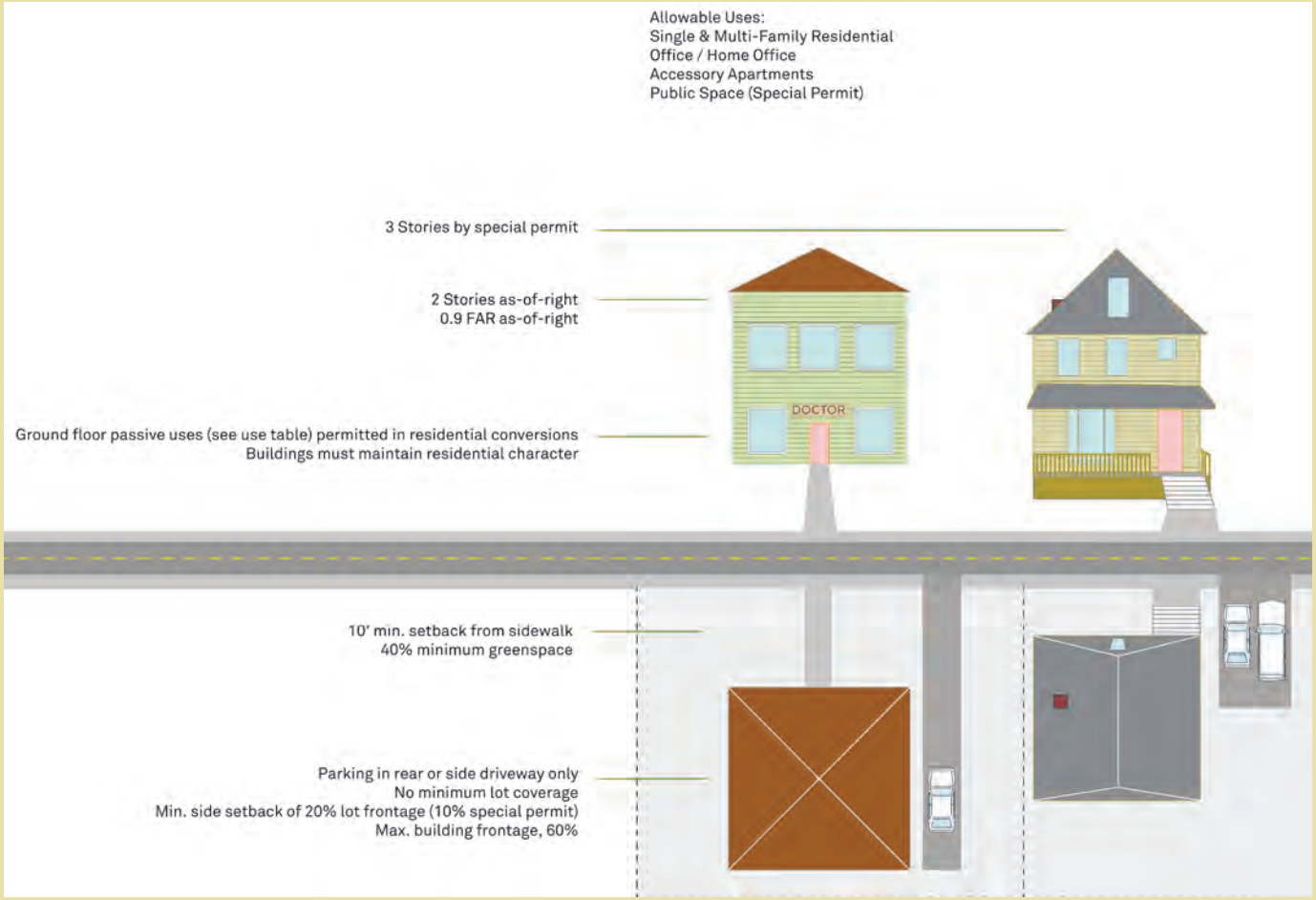
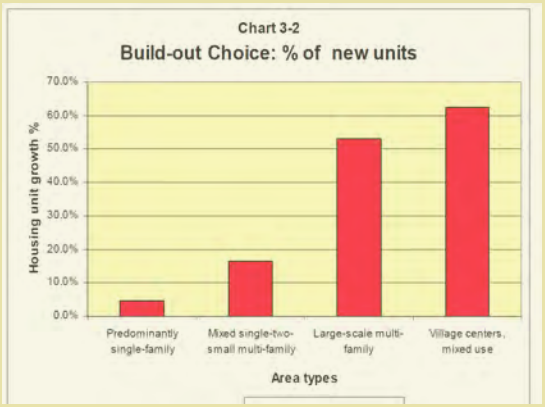


Fig. 5-10 Build-Out Choice as a Percentage of New Units



Village centers are targeted for the majority of new growth.
Source: City of Newton, Comprehensive Plan (2007)

5.3.2 NEW ZONING IMPLEMENTATION

The Zoning Reform Group (ZRG) was created in 2010-11 to initiate a comprehensive reconsideration of the existing zoning in Newton. Efforts of the ZRG, undertaken with the support of Mayor Setti Warren and the Board of Aldermen, present an opportunity to think boldly and creatively about the future of Newton's villages. While this report has proposed a new approach to zoning in West Newton, many of the basic precepts—recreating historic densities, adjusting parking requirements, treating commercial-residential transitions deliberately—are more broadly applicable.

Implementing a new zoning strategy for West Newton is more complicated than simply 'redrawing the lines.' There are a number of steps that the City would need to undertake. First, the City on behalf of West Newton should converse with potential developers to gauge interest in development under the new guidelines and to determine whether any modifications to incentives are necessary.

Second, the City must continue to reach out to property owners, business owners, and residents in West Newton to ensure that the spirit and intent of the recommendations are well-communicated and understood. Though the proposed changes within the Transition Zone are less drastic than the proposed changes for the other zones, a large proportion of stakeholders occupy this area and hence, should be consulted.

Third, the City should commission a study on the environmental and traffic impacts of the proposed new development.

The City should also consider the option of phasing in the implementation of the new zoning scheme. After a sufficient period for community input, the changes to the Transition Zone should be put in place immediately. Additionally, changes to the Village Core and Outer Core could also be phased, beginning with those areas best suited to new development.

5.3.3 BUILD-OUT ANALYSIS

The Newton Comprehensive Plan (2007) acknowledges West Newton's key role as a major village center and notes that thoughtful growth and development can help achieve the City's vision of having vibrant mixed-use villages and a strengthened tax base. It notes the importance of "encourag[ing] business (including retail) growth that furthers other goals in the Plan, provides essential services, and contributes to the vibrancy of the community" (3-28). In addition, it mentions that "development of housing in mixed-use areas can lead to maintaining strong vibrant village centers and mixed-use corridors that further the vision of the Plan" (3-19). The Comprehensive Plan identifies West Newton as a potential area for commercial growth and places a high priority on residential growth in village centers, serving as a backdrop for this analysis.

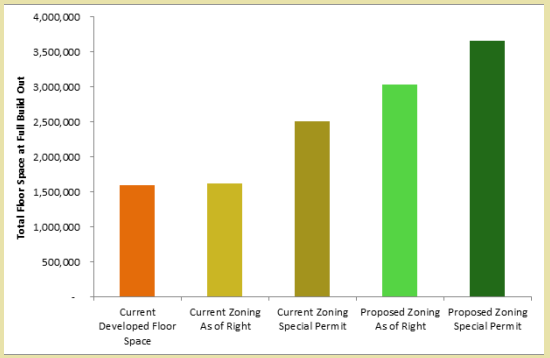
To test the impact of the proposed development, a build-out model was developed to determine the as-of-right square footage that would be allowed under the new guidelines. It is important to note that this is a maximum projection for a potential scenario that would develop incrementally over an extended period of time (e.g. 25+ years).

Geographic Information Systems (GIS) was used to calculate the current lot square footage in each area, which was then multiplied by the corresponding FAR. A total amount of 1.2 million square feet in the Village Core was approximated, with 945,000 square feet in the Outer Core and 830,000 square feet in the Transition Zone. These numbers include the existing floor area within the entire site, which currently totals 1.6 million square feet (of which approximately 1 million square feet of area is commercial and 330,000 square feet of area is residential).

The build-out analysis yielded an additional 1.4 millon square feet of developable area within the study area. Based on historic precedent and the physical characteristics of the site, the build-out could be absorbed over the long term to better fit the goals of the Plan.

Priorities and incentives that might help further promote the vision for West Newton were also considered.

Fig. 5-11 Build-Out Analysis



	Core	Periphery	Transition
Total Square Ft.	627,988	630,463	922,295
FAR	2.00	1.50	0.90
Total Build-out	1,255,976	945,694	830,066

*Table includes current building floor area of 1.6 million square feet for entire site

5.3.4 ADDITIONAL RECOMMENDATIONS AND REQUIREMENTS

1. Affordable Housing

To encourage a diverse mix of residents within West Newton incentives could be used to promote inclusionary housing within the Village Core and Outer Core. The diversity in the residential population would support an active community including young families and professionals who typically do not live in West Newton.

To achieve this goal, the City should consider offering a 0.25 FAR bonus for the on-site development of 15 percent inclusionary units instead of payment-in-lieu, with an additional 0.25 FAR bonus for up to 30 percent inclusionary units.

2. Open Space

Spaces where people can congregate and interact are central to a vibrant mixed-use area. In order to encourage these spaces, developments abutting the Cheesecake Brook should be required to maintain a minimum 15 foot buffer along the brook that is landscaped and publicly accessible.

To further enhance this strong potential asset, a 0.5 FAR bonus for developments that go beyond the minimum requirement and create a significant public amenity around the Cheesecake Brook (by special permit) should be offered.

The City should also consider FAR bonuses for buildings in the Village Core that devote a minimum percentage of their floor area to active public spaces. A waiver for certain dimensional requirements should be granted (by special permit). Alternatively, the City could require developments that are over a certain dimensional threshold to provide active public space.

3. Design Review and Special Permits

Due to the increased importance of design within the new recommendations, the Design Review Committee should review all proposals to ensure that development is consistent with the village character and the vision for West Newton.

The Comprehensive Plan (2007) notes that "most developments larger than a single family house (and some of those) require Aldermanic approval of one or more special permits…"(2-6). Due to the proposed increase in development that this plan is envisioning, increasing the special permit threshold above the current 20,000 square feet should be considered.

Finally, a number of sites within the study area have the potential for substantial development. A maximum building footprint guideline should be established to avoid the potential of a single development dominating the Village.

4. Solar Design

Sustainability is a key element for the long-term health and strength of West Newton. A set of detailed solar guidelines to help inform building design and make West Newton a leader in energy-efficiency is included at the end of this report (see Appendix A).

CHAPTER SIX
CIRCULATION

6.1 VISION

Improving circulation in West Newton can help visitors and residents get to their destinations in the Village more conveniently and safely, while promoting healthy and sustainable travel options.

Numerous shops and residences are closely situated within the Village, and not far from other neighborhoods in Newton. Nearby towns offer many other destinations popular with West Newton residents and improved circulation can make it easier and more convenient to get to these locations for everyone – walkers, drivers, bicyclists, and transit riders.

6.2 INTERVENTIONS

In its discussion on road design classifications, the City of Newton notes that the eleven village centers "are intended to be strongly pedestrian-oriented areas, so that roadway and other infrastructure improvements are to be designed to maintain and improve the pedestrian experience."

The following recommended interventions are intended to improve the pedestrian experience and to increase transportation options in West Newton. Improvements in signage, road design and public transit access will improve the experience and accessibility for pedestrians, bicyclists, transit riders and drivers alike.

6.2.1 Pedestrians and Cyclists

A. Walkability

There is a distinct need to improve the pedestrian environment of West Newton Village. While the Village has many destinations within walking distance of each other, improvements to the street infrastructure can create a more inviting pedestrian experience.

1. Intersection Design

Intersections need to provide safe, attractive crossings for pedestrians. Corners should have bulb-outs to increase visibility and shorten the crossing distance for pedestrians. Crosswalks should have walk signals with countdown timers, calibrated to provide adequate crossing time. These measures would allow for safe crossing and minimize jaywalking. Curb-cuts should be provided at each of these crosswalks for handicapped access that complies with American with Disabilities Act (ADA) regulations.

2. Crosswalk Design

Crosswalks should be made highly visible by using distinctive paving materials, providing a visual extension of the sidewalk and a reminder to drivers (see Figure 6-1). There is also the potential to use lighting, either in bollards or embedded in the pavement.

3. Traffic Calming

Traffic flow throughout the Village should be calmed such that the character of the street is more akin to a village and less similar to a thoroughfare. These traffic calming measures are primarily a concern for the eastern and western sections of Washington Street where traffic flow is faster and prioritizes automobiles rather than being pedestrian-oriented.

Fig. 6-1 Enhanced Crosswalk

Using a different color or material to designate crosswalks enhances their visibility to drivers and improves pedestrian safety.

4. Sidewalk Design

The sidewalk should be distinctive and inviting. Sidewalks in the Village Center should be made of wire-cut brick and edged with granite curbs, providing a

consistent, New England village look. Trees should be planted along the street and sidewalk to provide shading. Benches, trash cans, and recycling bins need to have a consistent look, perhaps with West Newton branding. Flower-beds can add significantly to the sidewalk experience.

5. Open Space

The Village's plazas—the two at the intersection of Watertown Street and Washington Street and any space that opens up after redesigning the intersection—need to provide attractive seating for pedestrians. A cluster of benches with planters or similar aesthetics could create inviting, well-used pedestrian space (see Figure 6-2).

Implementation

The City can implement these changes through a number of mechanisms.

First, the City should develop a plan for West Newton to guide future sidewalk and crosswalk construction, ideally as part of a larger complete streets policy. This policy could mandate bulb-outs at intersections and identify the types of crosswalk treatments that could be used based on the street conditions. The Massachusetts Department of Transportation (MassDOT) Complete Streets guidelines provide a good model.

Funding for walkability improvement could come from a number of sources. The Newton Capital Improvement Plan provides an opportunity to construct pedestrian infrastructure in conjunction with other infrastructure projects. Around the Boston region, MassDOT and the regional Metropolitan Planning Organization (MPO) coordinate funding for transportation improvement projects through the Congestion Mitigation and Air Quality Improvement Program and the Transportation Enhancements Program. This funding, however, is heavily sought-after and allocated for projects several years out. It is thus important to recognize that pedestrian improvements in West Newton could easily be implemented incrementally as funds become available. The reconstruction of the intersection at Washington Street and Elm Street would be the top priority, being a gateway for visitors and MBTA commuters.

B. Bicycle Infrastructure and Programming

Government agencies and public health organizations are increasingly recognizing cycling as a way of improving individual health and reducing air pollution, carbon emissions, congestion, noise, traffic dangers, and other harmful impacts of car use[1]. However, it is difficult to change longstanding and complex patterns of personal mobility and transportation and urban planning policies.

With the goal of promoting cycling in mind, the City of Newton has recently gone to great lengths to publicly think about and plan for current and future bicycle users. So far, these public conversations and plans have resulted in very few concrete changes for Newton's cyclists. This section presents a specific set of policy recommendations

1-2 Pucher, John, Dill, Jennifer, Handy, Susan (2010). Infrastructure, programs, and policies to increase bicycling: An international review Preventive Medicine 50 (2010) S106–S125. http://policy.rutgers.edu/faculty/pucher/Pucher_Dill_Handy10.pdf. Accessed on December 10, 2011.

that are within the capacity of the City to implement, and that could support changing public behavior vis-à-vis increased bicycle usage.

1. Approve and Enact Bicycle Master Plan

The first step of the implementation strategy should be to finish and approve the Bicycle Master Plan. This will ensure that a funding stream is in place to install the recommended interventions, maintain installations, and expand facilities to meet increased demand. When the Plan is approved it would have positive implications for West Newton through the following interventions:

- Dedicated lane bicycle routes along the entire stretch of Washington Street; and
- Share-the-road bicycle routes on Watertown, Waltham and Cherry Streets.

Dedicated lane bicycle routes refer to the installation of dedicated two-way bicycle lanes on a majority of the route with clear markings that are compliant with national and state standards. Share-the-road bicycle routes refer to the use of compliant signage and pavement markings that encourage bicycles to share traffic with automobile traffic.

All routes should include facilities for bicycles in the Village Center and near transit stops.

2. Comprehensive Network and Evaluation Framework

It is important that the City of Newton ensures that bicycle lanes and pathways form an integrated network. As the City establishes the network, it should develop criteria and identify streets to augment the initial map. A systematic review of multi-lane streets should be conducted to identify excess capacity and potential travel lane removals to accommodate bicycle lanes.
The performance of the network should also be consistently re-evaluated. It is recommended that the City expand and formalize a data collection program and continuously ameliorate the bicycle program through monitoring and evaluating programs, projects, and procedures. Program funding and other resources should be prioritized based on the monitoring and evaluation findings.

Fig. 6-2 Pedestrian Plaza

The pedestrian plazas at Washington Street and Watertown Street could be expanded and enhanced if medians were removed from the roadways.

3. Integration with Public Transit

As the bicycle program is a part of the larger transportation framework, planners should look to emphasize connections between the modes wherever possible. A particular opportunity is to focus on facilitating bicycle trips between residential areas and the MBTA Commuter Rail station. Bicycle parking is especially helpful for integrating cycling with public transport[2].

It is useful to provide cyclists with secure and sheltered parking at stations, especially in the

form of bike lockers. Bicycles on buses via racks and bicycles on trains are also important forms of integration with public transport that the City may wish to promote.

4. Safety / Education Outreach

West Newton must be committed to developing designs for bicycle facilities that will appeal to the potential riders who are curious about cycling, but concerned about their safety. To ensure a successful program, it is important that the Village provide services related to cycling beyond the simple provision of infrastructure.

The Planning Department of the CIty of Newton could partner with the Health and Human Services Department to educate children and families about the risks associated with bicycle riding. An outreach program with schools and afterschool programs should be established to deliver bicycle safety presentations to groups of children and to provide safety incentives such as low-cost or free helmets and bicycle lights.

It is also recommended that an interdepartmental program be developed with the Police Department to emphasize good bicycle behavior and compliance with vehicle codes related to bicycle operations. In particular, the Police Department may be consulted regarding efforts to reduce traffic violations by cyclists if this problem is anticipated. To raise awareness about this issue and reduce collisions involving cyclists who have violated vehicle codes, the City may wish to publicly set goals and track data related to these types of incidents.

Finally, a proactive approach to educating cyclists on their responsibilities while riding in the Village may prove fruitful in reducing violations and accidents. It is strongly recommended that the City provide funding to local bicycle advocacy non-profits to offer basic street skills classes to adult cyclists on a semi-regular basis.

5. Programming

Programmatic interventions aim to increase cycling through promotional activities, media campaigns, educational events, and other means. In conjunction with the National Bike to Work Day program, the City should explore using promotional campaigns to increase the profile of cycling as an alternative mode of transportation. The local farmer's market would be an appropriate place to start creating awareness and to build a supportive constituency for these programs.

To better promote the use of West Newton's bicycle network, members of the Village should be encouraged to participate in National Bike to Work Day. Participation in Bike to Work Day events have proven to be an especially effective technique in attracting new bicycle commuters[3].

The City's efforts to promote cycling should begin at home with its employees. Particularly, the Planning and Public Works Departments are recommended to conduct bicycle safety classes for city employees and increase their own involvement in Bike to Work Day.

3,5 Pucher, John, Dill, Jennifer, Handy, Susan (2010). Infrastructure, programs, and policies to increase bicycling: An international review Preventive Medicine 50 (2010) S106–S125. http://policy.rutgers.edu/faculty/pucher/Pucher_Dill_Handy10.pdf. Accessed on December 10, 2011.

Fig. 6-3 Bikesharing

Hubway bike share station on Commonwealth Ave. in Boston.
Source: BU Today

6. *Bicycle Sharing*

Bicycle sharing programs are a new way to make bicycle transportation easily available in cities. Boston's Hubway program was launched in July 2011 and has proven to be popular with residents and tourists (see Figure 6-3). Recently the Town of Brookline approved a contract and financial plan to bring four bike sharing stations with the capacity of 15 bikes at each station. As the local bicycle capacity expands, West Newton may wish to explore the potential of bringing the Hubway system into its borders.

Bicycle facility designs should be utilized to create conditions that make cycling more attractive than driving for short trips[4]. Specifically, physical separation from large volumes of high-speed traffic is an essential technique that is employed by many bicycle-friendly cities.

7. *Land Use / Public Policy*

It is important to note that land use may significantly negate or enhance the effects of cycling interventions. Uncoordinated regional planning efforts and low-density, car-oriented sprawl make cycling more difficult. At the same time, promoting compact, mixed-use development policies generates shorter, bicycle-friendly trip distances[5].

Policies favorable to car use also impact cycling. The lack of restrictive policies that reduce the convenience and attractiveness of car use make bicycle programs and policy interventions more challenging to implement.

Implementation

The City of Newton has many opportunities and options available to create a truly exceptional bicycle program. The City should adopt a comprehensive approach to bicycling conditions and awareness. When the Village begins to implement these recommendations, sensitivity to potential concerns from motorists is imperative.

With an increased presence of bicycles, automobile drivers will have less room and more traffic components to monitor. At the same time, increasing the numbers of bicycles may impact traffic congestion levels by reducing the number of automobiles on the road. The City must be wary not to position cyclists and automobile drivers in competition, and should instead promote efforts to make streets available for all users. Bicycle program interventions should be paired with pedestrian and public transit improvements within the context of complete streets where the resource

4 City of Portland Bureau of Transportation. (2010). "BIKEWAY FACILITY DESIGN: SURVEY OF BEST PRACTICES"PORTLAND BICYCLE PLAN FOR 2030 http://www.portlandonline.com/transportation/index.cfm?c=44597&a=334689. Accessed on December 9, 2011.

of public space is shared equally by all modes.

C. Signage

Although West Newton covers a small area, it is oftentimes confusing to navigate. Whether trying to enter the Village from the I-90 off-ramp or trying to access the Commuter Rail station, there is a need to clarify where destinations are located and how they can be accessed. Wayfinding systems also serve as another mechanism to "brand" West Newton, for the signs can be used to promote a unique and cohesive identity for the Village. This report recommends several components of a wayfinding system for West Newton:

1. Welcome Signage

West Newton should consider placing attractive welcome signage at major entrances. These signs will alert visitors to their entry into West Newton and will help designate the Village as a unique destination.

2. Directional Signage

Directional signs at a scale appropriate for both pedestrians and automobiles are needed to guide visitors to key destinations. These signs should direct automobiles to parking facilities in the Village Center, and should direct pedestrians and automobiles to local destinations like the West Newton Cinema, the Commuter Rail station, and area restaurants.

Directional signage would be particularly important in clearing up confusion about where individuals can park in the Village.

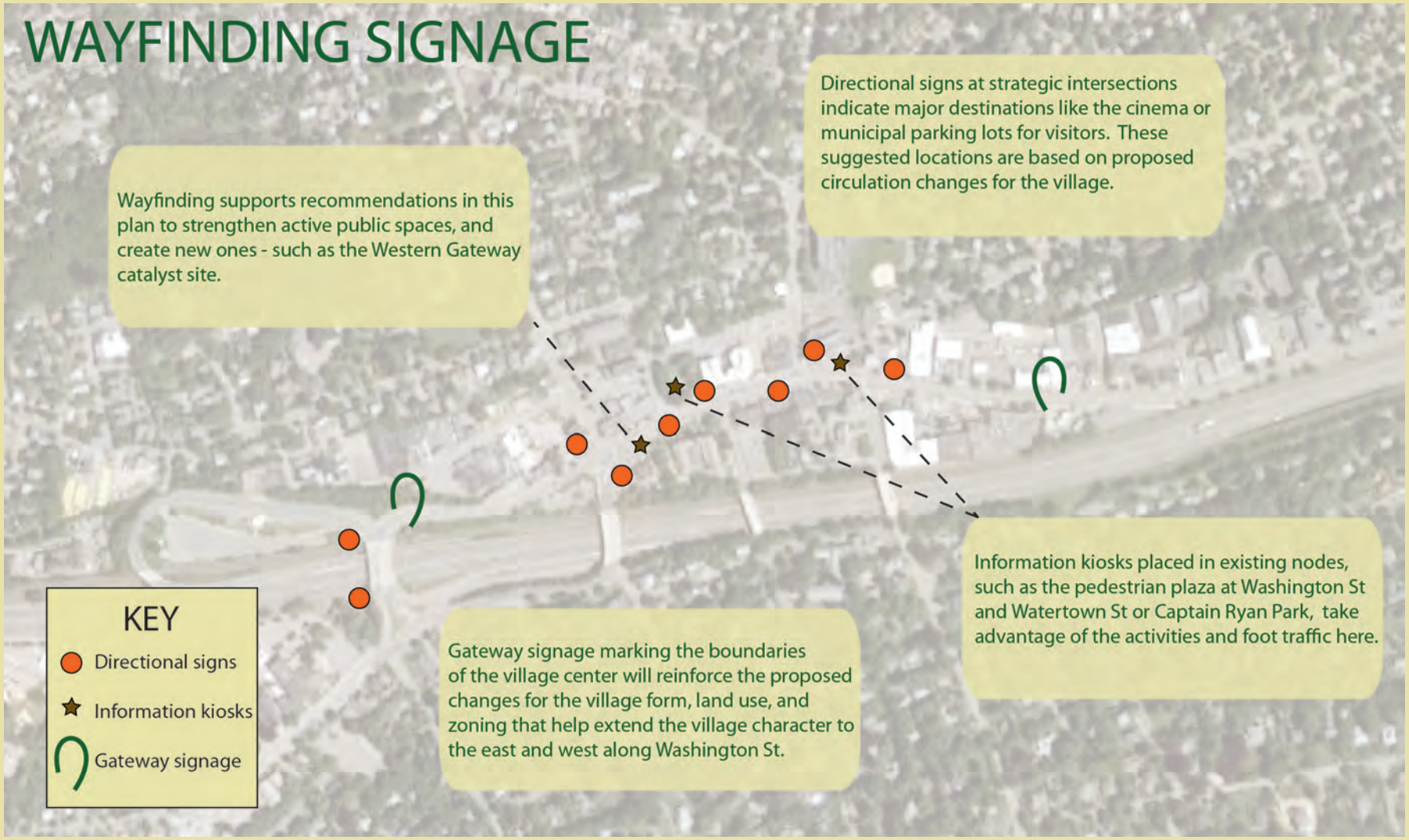
3. Orientation Signage

Several orientation signs should be placed at key intersections and plazas in the Village. These signs should be oriented to pedestrians and should provide a map of local area attractions so that individuals can determine how best to get to their destinations.

Implementation

Costs for wayfinding signage vary widely depending on a number of factors, including design, materials, and location. Prices range from several hundred dollars for a simple directional sign to tens of thousands of dollars for a complex welcome sign. This network of signage could be designed and financed by a local business association or could be a collaboration between businesses and the city government. Most similar programs—whether municipal or business-association led—typically contract outside consultants for the design and construction. Consultants often begin with a community outreach effort to identify key destinations and determine preferences for sign designs and locations.

Fig. 6-4


WAYFINDING SIGNAGE
Wayfinding supports recommendations in this plan to strengthen active public spaces, and create new ones - such as the Western Gateway catalyst site.
Directional signs at strategic intersections indicate major destinations like the cinema or municipal parking lots for visitors. These suggested locations are based on proposed circulation changes for the village.
Information kiosks placed in existing nodes, such as the pedestrian plaza at Washington St and Watertown St or Captain Ryan Park, take advantage of the activities and foot traffic here.
Gateway signage marking the boundaries of the village center will reinforce the proposed changes for the village form, land use, and zoning that help extend the village character to the east and west along Washington St.
KEY
Directional signs
Information kiosks
Gateway signage

6.2.2 TRANSIT CONNECTIONS

Gone are the days when the majority of people headed downtown for work each day. While Downtown Boston is still a major employment center, many people now commute to jobs in other suburbs, including Cambridge and the cities along Route 128; however, public transportation from West Newton is still focused on downtown commuters. With the following changes the MBTA can serve West Newton commuters going to Watertown, Cambridge and other parts of Newton, and can enhance service for Boston commuters.

A. Bus Service to Watertown Square and Cambridge

Initiating bus service to Watertown Square and Cambridge will significantly enhance travel options for West Newton residents. With two universities and growing pharmaceutical and technology sectors, Cambridge is an important employment center, but there is currently no transit option between West Newton and Cambridge. Creating a third branch of the 70 bus line to connect West Newton and Watertown Square via Watertown Street would offer village residents a direct, no-transfer ride to Central Square in Cambridge and an easy, one-transfer ride to Harvard or Kendall Square via the 71 line or Red Line.

B. Bus Connection to Green Line

Creating a transit link to the Green Line will connect West Newton to the central villages of Waban, Newton Highlands, Newton Centre, and Chestnut Hill. With this link, the existing bus network, and the proposed 70B line, seven of Newton's 13 villages will be directly accessible by transit from West Newton. There are several options for linking West Newton to the existing Green Line:

1. Re-route line 553 or line 554 south to Woodland Station via Washington Street

Currently both of these lines travel north to Waltham and east to Downtown Boston. Re-routing one of these lines to Woodland would preserve transit access to Downtown Boston, and the subsequent reduction in service between West Newton and Waltham could be offset by the increased frequency of service along the other line to Waltham.

2. Split the existing route 558

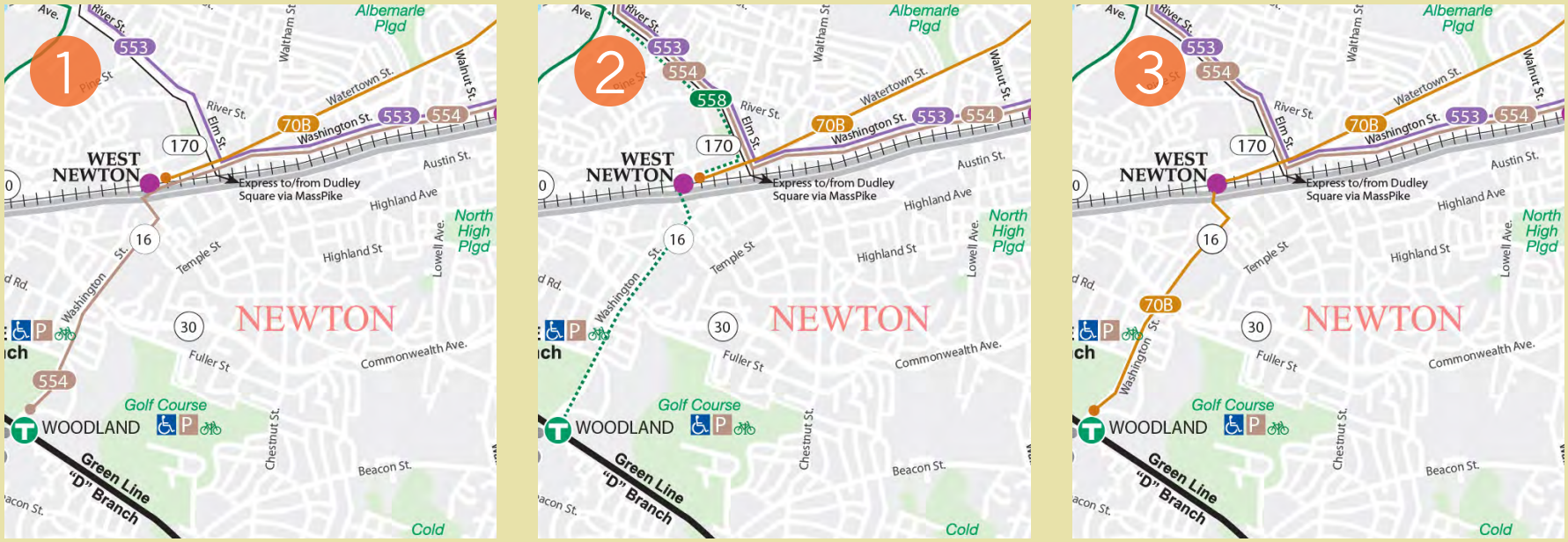
Route 558 currently bypasses West Newton via Lexington Street. Creating a branch of this line through West Newton to Woodland would increase transit access for West Newton residents while preserving existing service.

3. Extend the 70B line to Woodland station that is proposed to serve Watertown and Cambridge via Watertown Street

This option would be the most expensive, as the creation of a new route would require additional vehicles and drivers. This option would, however, enhance transit access, ideally with no reduction in service elsewhere.

To pursue this option, the MBTA would be required to conduct a detailed study to ascertain its feasibility.

Fig. 6-5 Proposed Transit Route Changes



C. Improve Commuter Rail Station Accessibility

West Newton's Commuter Rail station is not currently living up to its potential as a multi-modal transit hub. The station fails to meet ADA access requirements and does little to facilitate the use of transit or encourage Commuter Rail ridership over automobile use.

In the short term, new wayfinding signage and highly visible transit information can increase awareness of the station and available connections, while locating bus stops at station entrances can make inter-modal connections easier.

In the long term, the station should be reconstructed to facilitate access for all transit users. Upgrading the station to allow wheelchair access will require rebuilding platforms to allow level boarding and installing elevators alongside existing stairs (see Figure 6-6, next page). Alternatively, a new platform could be constructed on the north side of the tracks, accessible by ramps and stairs.

Implementation

Since station improvements will likely cost several million dollars, the City of Newton and the MBTA should consider ways to finance station improvements with development on the existing parking lot adjacent to the station.

6.2.3 VEHICULAR TRAFFIC TRAFFIC CIRCULATION

In addition to the interventions described in this chapter, designs of roadway modifications to calm and simplify traffic through West Newton are included in this report. The recommendations aim to:

- Simplify and standardize complicated intersections along Washington Street;
- Improve access to and from the Massachusetts Turnpike; and
- Design streets that are appropriate to a village, not an expressway.

Specific changes to the vehicular circulation pattern in the Village are described in detail in Chapter 10.

Fig. 6-6 Proposed Enhanced Transit Station

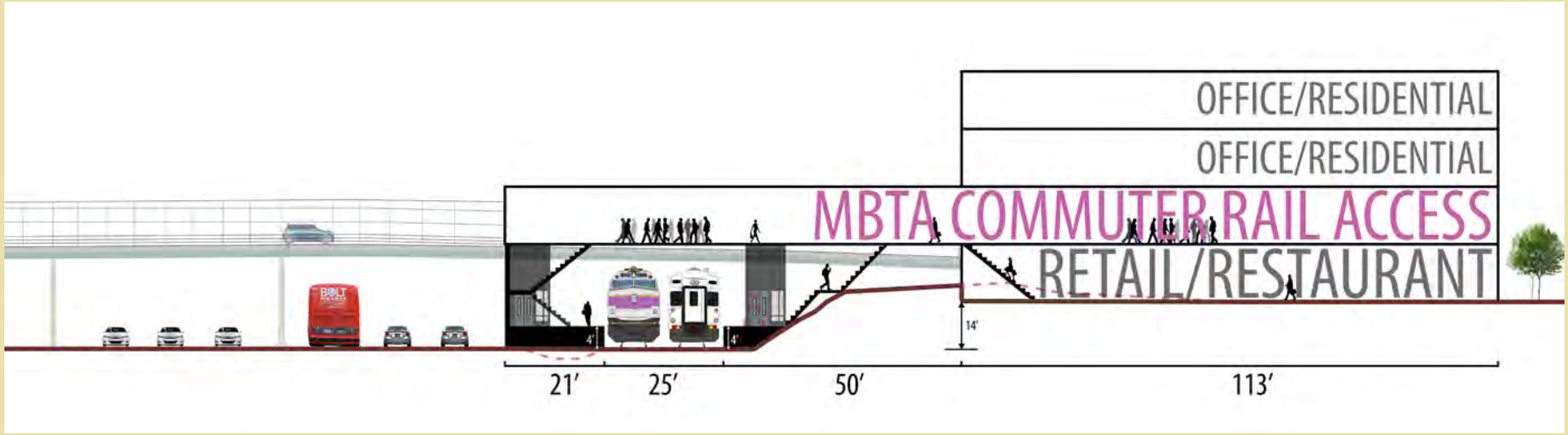
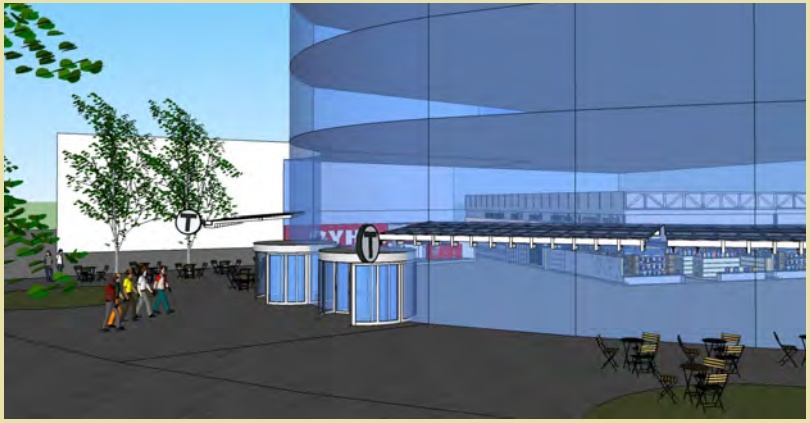


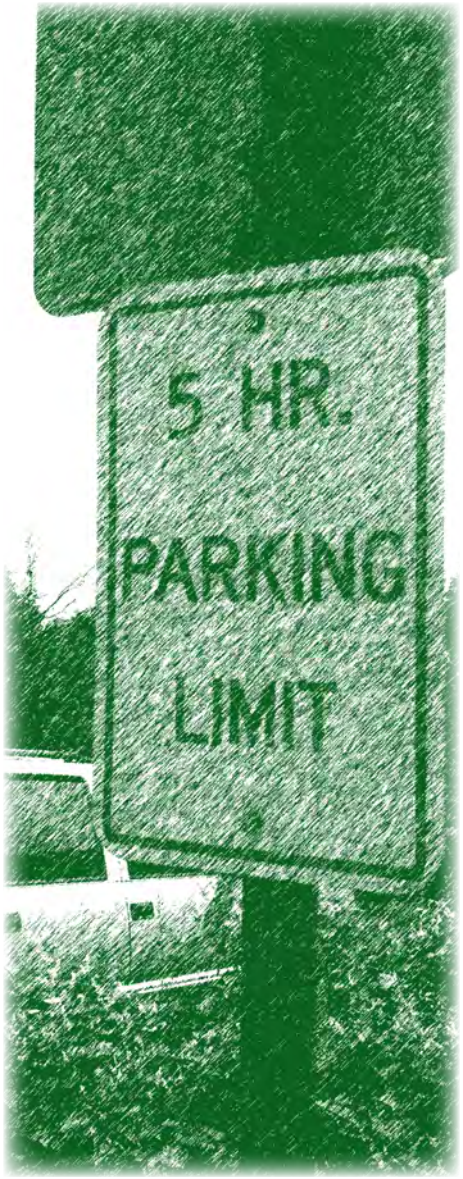
Fig. 6-7 View of Station Entrance Plaza



An inviting, landscaped plaza and transparent facade, make the station inviting and accessible from Washington Street.

Fig. 6-8 View from Platforms

High platforms allow for level boarding, while escalators and elevators make the station accessible to all users.



CHAPTER SEVEN
PARKING

7.1 VISION

Parking in West Newton is a necessity for the vitality of businesses and institutions and an amenity required by both residents and visitors. The village atmosphere prioritizes the pedestrian environment in order to increase foot traffic and maintain the Village's desirable aesthetic.

The objectives of providing parking and providing a pedestrian-friendly village must be treated as complementary, rather than mutually exclusive, in order for West Newton to be a destination accessible by all.

7.2 INTERVENTIONS

This vision can be achieved through more efficient utilization of existing surface lots and on-street spaces through improved parking management, shared parking agreements, and additional bicycle parking.

In the long term, structured parking, flexible-parking requirements, and improved connections to the region through transit will enable reduced parking ratios for new development.

7.2.1 Short Term Solutions

In the short term, there are two major components that can allow West Newton to maximize the usage of the existing parking capacity: parking management strategies and shared parking agreements.

Through these two components, existing municipal spaces can be managed by the City to provide adequate turnover and capacity for surrounding needs. Also, private lots could be used for other businesses and institutions during off-peak hours.

Parking Management

Parking management is a package of strategies that, when used together, increases the efficiency of parking space usage by locating short-term parking near the Village Center and longer-term parking on the periphery. This parking management strategy includes five major components:

- Adjusting meter limits based on surrounding uses,
- Enforcing meter and lot time limits,
- Improving wayfinding and signage to aid visitors in finding parking nearest to their destinations,
- Relocating longer-term parking farther from the Village Center, and
- Upgrading parking infrastructure.

Adjusting the timing of on-street parking meters to be aligned with surrounding uses would allow for more efficient turnover of spots near the visitors' destinations[1]. Currently, meters are not coordinated with nearby uses, creating unnecessary traffic when drivers search for parking spots far from their destinations and circle for spaces. Additionally, enforcement of the time limits of the meters and lots should be improved to encourage healthy turnover of the parking spaces.

By making improvements to the wayfinding and signage for parking, the City can direct residents and visitors to parking lots that are not directly visible from the street. This change would improve the likelihood of people finding spaces closer to their destinations and also address the perceived problem of constrained parking.

Table 7-1 Land Uses by Time of Peak Parking Demand[1]

Weekday	Evening	Weekend
Banks and public services Offices and other employment centers Park & Ride facilities Schools, daycare centers and colleges Factories and distribution centers Medical clinics Professional services	Auditoriums Bars and dance halls Meeting halls Restaurants Theaters Hotels	Religious institutions Parks Shops and malls

Peak parking demand for different land use types. Parking can be shared efficiently by land uses with different peaks.

1 For example, meters near CVS and the Post office would be 30 to 60 minutes while meters near Paddy's Pub would be 2 to 3 hours. Meter times would be aligned with uses nearby, with an emphasis on short-term use. Patrons wishing to shop in West Newton longer will utilize the lots instead

2 Litman, Todd. Parking Management: Strategies, Evaluation, and Planning, Victoria Transport Policy Institute, February 2011; p. 12.

Fig. 7-1 Parking Kiosk

West Newton can upgrade to Pay-and-Display meters.
Source: Metric Group

Relocating long-term parking to the Commuter Lot at the far western end of Washington Street just beyond its intersection with I-90 will open up some spaces in the 5-Hour Lot across from Blue Ribbon BBQ. This lot is currently used by some drivers as commuter parking because of its proximity to the eastern Commuter Rail station entrance. This relocation can be accomplished through better enforcement of time limits, metering and ticketing, and improved signage to direct riders to the entrance of the large lot.

The quality and organization of the municipal spaces can be improved through re-striping of the existing lots to maximize the number of cars that can be accommodated. Re-striping is particularly important for the two Massachusetts Turnpike lots closest to the Commuter Rail and will greatly improve their capacity[3]. Upgrading meters to allow for alternative payment methods and variable meter limits across the Village will increase convenience for drivers. Meters should be able to accept credit/debit cards and cash in addition to change.

Shared Parking

While shared parking is traditionally utilized as a method for reducing required parking spaces at the time of development for projects with more than one use, it is possible to capture the utility of private spaces for the public through shared parking agreements.

Shared parking agreements are legal contracts that allow businesses with different peak operating hours to lease spaces from a lot with excess capacity, as demonstrated in the informal shared parking agreement between Sovereign Bank and the First Unitarian Church. These leases do not need to be monetarily based; the parties involved agree on acceptable terms[4]. A template for a shared parking agreement is included in Appendix C.

West Newton currently possesses a few potential shared parking lots. Sovereign Bank currently shares its lot, but the agreement could be formalized. The court could allow the Jury Lot next to The Local to be a shared parking facility during evenings and weekends. CVS could also

3 The current lot has had most of its striping worn away by usage and time and cars do not park close enough together to reach the maximum capacity, which is about 163 spaces.

share some of its spaces during evenings and weekends, depending on store traffic, or even lease some spaces full-time to the City. Additionally, there are opportunities for the City to lease parking spaces in the Continuum garage for potential police or court uses. Due to the nature of structured parking, it is unlikely that the owner of the Continuum garage would be open to allowing public use of its spaces at this time.

Other Components

An additional tool available to West Newton is the creation of diagonal parking on one side of some of the side streets perpendicular to Washington Street. The east side of Elm Street between Washington and Webster Streets and the portion of Davis Street that runs parallel to I-90 are two areas where diagonal parking could be introduced without decreasing the capacity of the street. Snow plowing should be factored into the decision to create diagonal parking, for snow piles could force cars to park partially in the narrowed travel lanes, obstructing traffic.

The addition of bicycle parking facilities to the Village is ideal for reducing parking needs for short trips. With the inclusion of bicycle lanes and awareness signage in the area (see Chapter 6: Circulation), it is important to provide places for cyclists to safely park their bikes. Proper bicycle racks keep bicycles out of the way of pedestrians and allow cyclists to secure their bikes. Potential locations for bicycle parking include places near the Commuter Rail, at bus stops, and outside common destinations, including the Police Station and Courthouse.

7.2.2 Long Term Solutions

The short-term solutions suggested are designed to help West Newton to cope with current parking needs. However, with the potential for new, denser development in the Village Core, larger steps to accommodate the parking needs of residents and visitors are necessary. It is important to accommodate enough parking for growth, but the new parking should follow "smart growth" principles adopted by Massachusetts Area Planning Council (MAPC) for the entire Boston Metropolitan region. Because of the emphasis on "greener" modes of travel for the region, parking requirements and policies should be adjusted to reflect this change in regional parking mentality. Improved transit connections to the surrounding towns, villages, and downtown Boston can reduce the need for parking, while lowered parking ratios, shared parking agreements, and flexible parking standards could be implemented in ways that reduce the amount of excessive parking spaces required by the City of Newton and its zoning code. Green infrastructure should be used where possible to help mitigate the environmental costs of building more parking.

The addition of a parking structure will likely become necessary in order to accommodate the parking needs of the Village in the long term. Estimates for structured parking approximate the cost per space to be $20,000 for above ground and $75,000 for underground parking. The costs of constructing this type of garage could be financed through a combination of bonds and in-lieu parking fees paid by developers to

4 The Cities of Marlborough and Waltham and the Town of Stoneham allow shared parking through either their zoning bylaws or their city ordinances. Examples of these are included in Appendix C. The principle of shared parking is encouraged by the Metropolitan Area Planning Council (MAPC), which provides a sustainable transportation parking toolkit on their website. The Urban Land Institute (ULI) also produced a report entitled "Shared Parking", which provides examples of shared parking agreements as well as calculations and factors to consider while determining the appropriate number of total spaces.

Fig. 7-2 Permeable Pavement

The use of permeable pavement for surface parking lots contributes to stormwater management.
Source: Sculpture Process Log

Fig. 7-3 Bicycle Parking

Bicycle parking should be provided at more convenient locations closer to transit.
Source: Cityphile

fund public creation of spaces that would otherwise be required as part of private development. High parking requirements could either limit the size of the new developments or require the construction of underground parking, which is often prohibitively expensive. In-lieu fees may encourage developers to start projects in the Village Core without the constraint of creating sufficient parking on their parcels.

Shared parking principles, both with single-developer and multi-developer mixed-use projects, should apply to all new development within West Newton. Maximizing the use of all potential parking spaces will reduce the generation of more impervious services, improve the pedestrian environment, and encourage visitors to make multiple stops per visit. A sample calculation for shared parking spaces for new development can be found in Appendix C.

The use of flexible parking standards is similar to the concept of shared parking and has been implemented in one place in the City of Newton already. Flexible parking standards are allowances in the zoning code for reduced parking ratios when the development is of a certain use or located near certain amenities that imply a lower automobile share (see Table 7-2). Currently, Newton has lower minimum parking requirements for subsidized low-income or elderly housing. A similar principle is being implemented in the City of Somerville near the Red Line, and can be applied to West Newton due to its similar proximity to transit.

According to the Transit-Oriented Development Overlay District Model Bylaw for Massachusetts, a maximum of one parking space is permitted per multi-family unit plus one guest space per 15 units. Parking for non-residential uses should be provided at no more than three spaces per 1,000 square feet. The potential build-out described in the chapter on land use (see Chapter 5) would require a maximum of 3,353 retail and commercial parking spaces under current parking requirements. This could be reduced to 2,936 commercial and retail parking spaces using shared parking standards for mixed-use developments with the current ratios. These can be further reduced to 2,100 spaces with lower parking ratios of three spaces per 1000 square feet of office and commercial space and two spaces per 1000 square feet of retail.

All new parking lots and structures should be designed with "green building" principles in mind. Having designs that manage stormwater are important for environmental consideration in order to recharge the aquifers, instead of having the water run down the streets or onto I-90. In order to retain the visual appeal and experience of West Newton, surface parking lots should have a minimum requirement for area that shall be landscaped. In the model bylaw for a TOD overlay district in Massachusetts, the requirement is that a minimum of 15 percent of all surface lots should be landscaped. Additionally, no row of parking can be more than 10 stalls wide without being interrupted by a landscaped area. Each landscaped area must have at least one tree. These plants must be low-maintenance, salt tolerant, and capable of withstanding extreme weather conditions[5].

In order to accommodate automobiles stopping to pick up food from businesses along Washington Street, it is recommended that 15-minute free parking spaces be created outside of businesses that have heavy "carry-out" traffic. Creation of such spaces is recommended because with reduced lane widths in the Village Center, any double-parking would hinder traffic flow or even cause it to stop. A very short-term space being available can solve this problem and would be self-policed.

Lastly, hiring a parking program manager to oversee the process of implementing a citywide parking management system would greatly benefit West Newton. This more comprehensive view of the parking needs of the City and its villages will aid in the implementation and review of shared parking agreements and creation of new flexible parking measures.

7.3 CONCLUSIONS

The need for parking in West Newton is both immediate and long-term. The new short-term parking management strategies and updated equipment should be paired with long-term zoning and other changes that allow for flexible parking standards, a streamlined shared parking agreements process and the construction of a parking structure if required. Newton's Transportation Advisory Council (TAC) has discussed many of the strategies presented in this section and their report was presented to Mayor Warren on December 2, 2011[6]. Continued action on these items is encouraged in order to develop parking strategies across Newton that are effective in the present, but also evolve to address future constraints.

5 http://www.mass.gov/envir/smart_growth_toolkit/bylaws/TOD-Bylaw.pdf
6 http://www.newtonma.gov/Planning/TAC/docs/Final%20TAC%20Report%2012.02.11-2.pdf

Table 7-2 Parking Requirement Adjustment Factors[7]

Factor	Description
Land Use Mix	Vehicle ownership and use rates in an area
Transit Accessibility	Number of residents or housing units per acre/hectare
Carsharing	Number of employees per acre.
Walkability	Range of land uses located within convenient walking distance
Demographics	Nearby transit service frequency and quality
Income	Whether a carsharing service is located nearby
Housing Tenure	Whether housing is owned or rented
Pricing	Parking that is priced, unbundled or cashed out
Unbundling Parking	Parking sold or rented separately from building space
Parking & Mobility Management	Parking and mobility management programs are implemented at a site
Design Hour	Number of allowable annual hours a parking facility may fill
Contingency-Based Planning	Use lower-bound requirements, and implement additional strategies if needed

Example from the Victoria Transport Policy Institute, which explains typical flexible parking adjustments that can be made and summarizes various factors that affect parking demand and optimal parking supply.

7 Litman, Todd. Parking Management: Strategies, Evaluation, and Planning, Victoria Transport Policy Institute, February 2011; p. 14.

	Typical Adjustments
	Adjust parking requirements to reflect variations identified in census and travel survey data.
	Reduce requirements 1% for each resident per acre: reduce requirements 15% where there are 15 residents per acre, and 30% if there are 30 residents per acre.
	Reduce requirements 10-15% in areas with 50 or more employees per gross acre.
	Reduce requirements 5-10% in mixed-use developments. Additional reductions with shared parking.
	Reduce requirements 10% for housing and employment within 1/4 mile of frequent bus service, and 20% for housing and employment within 1/4 mile of a rail transit station.
	Reduce residential requirements 5-10% if a carsharing service is located nearby, or reduce 4-8 parking spaces for each carshare vehicle in a residential building.
	Reduce requirements 20-40% for rental versus owner occupied housing.
	Reduce requirements 10-30% for cost-recovery pricing (i.e. parking priced to pay the full cost of parking facilities).
	Unbundling parking typically reduces vehicle ownership and parking demand 10-20%.
	Reduce requirements 10-40% at worksites with effective parking and mobility management programs.
	Reduce requirements 10-20% if a 10th annual design hour is replaced by a 30th annual peak hour. Requires overflow plan.
	Reduce requirements 10-30%, and more if a comprehensive parking management program is implemented.

CHAPTER EIGHT
COMMUNITY AND ECONOMIC DEVELOPMENT

8.1 VISION

The vitality of communities is intimately tied to their ability to continue diversifying the bases of their economic activity. The vision for West Newton brings together this perspective of economic development as a process driven by differentiation and community engagement coupled with flexible zoning changes that allow a wider range of reconstruction options in the Village Core. The proposals for zoning upgrades are tied to recommendations that ensure that the Village continues to meet and overcome some of the housing equity challenges that currently face the City and could be exacerbated by specific village re-design plans.

The Newton Comprehensive Plan (2007) clearly draws attention to the need to combine economic development with concerns about community diversity, "As plans are made for neighborhoods, village centers and other sub-areas of the City, each of those plans should include accommodating a responsible share of the City's overall housing growth expectation." Along with the City's efforts, this report calls for a volunteer-driven and participatory vision of village development. This vision is anchored around the creation of a new business association of local area businesses that has semi-formal authority to convene and make collective decisions about the aesthetics, uses and improvements to the Washington Street Corridor without always needing to wait for the approval of the

Board of Aldermen.

Attention to these two aspects of economic and community development – increasing means for localized decision-making and business engagement, along with measures to protect and enhance diversity – create a solid foundation for a more vibrant and attractive West Newton.

8.2 BUSINESSES

8.2.1 Vision

The vision for West Newton is that of a charming village where residents and visitors shop, dine, and play. The vision specific to West Newton's businesses encompass the following:

- Attractions for pedestrians, bicyclists, and automobile drivers;
- Convenient access to daily needs;
- Opportunities to shop, dine, and play;
- Encouragement of multi-destination trips;
- Strength in cohesive identity; and
- Preservation and promotion of historic character of the Village.

The goal is not merely to strengthen any one type of business, but to cohesively link all businesses within West Newton to better support multi-destination and leisure visits and enable existing businesses to be in constant conversation with each other.

8.2.2 Interventions

By establishing and fortifying connections between business owners, West Newton Village would be able to become a destination that understands the needs of the community.

Local Business Network

A simple business network similar to ones implemented in Greater New England, Downtown Wrentham, and Downtown Milford, that are at a comparable scale and character to West Newton, would address some of the existing threats and opportunities and promote collaboration within the business community. The network would also play a major role in strengthening and maintaining the character of West Newton through promoting its cultural, historical, and social makeup.

In the class' October 13th meeting with West Newton business owners, it came as a surprise that many of them had not previously met, despite their close proximity to one another and often, shared clientele. A business network would provide guidance and shared services, while also serving as a resource for emerging businesses. It would also attract pedestrian activity, foster economic and social vitality along Washington Street, and generate community interest and involvement in the more active commercial area.

There are various other benefits in implementing a business network. Since the network would function on a neighborhood scale and be member-run, all participants would be major stakeholders within the community and face many of the same issues. The network would also play an advisory role to the City, ensuring that business interests receive attention and are clearly represented. At the same time, the network would be able to easily collaborate with and learn from Merchant's Associations of surrounding neighborhoods.

Furthermore, physical improvements become easier to address with the

Fig. 8-1

Banner with district logo on streetlight pole.
Source: Midtown Business Association

Fig. 8-2

Outdoor seating in front of cafes.
Source: San Francisco's Streetscape Improvement Plan

Fig. 8-3

General streetscape improvements.
Source: Jersey City's Capital Improvement Projects

establishment of a business network. Well-designed, well-maintained, and aesthetically consistent streetscapes and sidewalks increase foot traffic in front of businesses, and improving the pedestrian experience becomes easier when driven by a formal organization. Finally, creative marketing techniques become streamlined and joint promotions, such as coupons distributed at an auto-repair shop to be used at a new restaurant while you wait, are made easy.

Following the establishment of a business network, the following six programs should be implemented in order to achieve the stated vision for West Newton. Having the programs member-run and on a neighborhood scale gives greater weight to their success and sustainability, but they can also be implemented by individual businesses if desired.

Streetscape Improvements

Purpose: To increase foot traffic through the creation of a pleasant pedestrian experience for visitors and customers.

Tasks:
Hang banners throughout the Village with a unique logo and area name, such as the "West Newton Village," to strengthen the village identity and identify its bounds.

Provide outdoor seating to attract clientele and encourage them to spend more time at the business, be it a restaurant or a bookstore.

Sweep streets regularly and invest in small landscaping measures, such as potted plants and hanging flowers, to improve the village aesthetic with minor costs to businesses.

Design Guidelines and Facade Upgrade Program

Purpose: To create a cohesive aesthetic for the village commercial area while promoting individual business identity.

Tasks:
Create a set of design guidelines to which businesses must adhere. Guidelines should enhance the village character with minimally intrusive structural changes, such as requiring automotive businesses to park their vehicles in the back of their business.

Establish a Facade Improvement Grant

Program to disburse funds to businesses for storefront upgrades. Figures 8-1, 8-2, 8-3 and 8-4 show the major difference storefront upgrades can make.

Public Events

Purpose: To draw residents and visitors to the Village, fostering community interaction and involvement while boosting business activity.

Tasks:
Expand current public events through collaboration with surrounding businesses, neighborhoods, and community centers.

Identify different annual and seasonal cultural events that could highlight West Newton's diversity, such as a Chinese New Year neighborhood parade, an arts and crafts fair, art gallery showings, and outdoor screenings during the warmer months (Figure 8-5).

Business Development Training and Networking

Purpose: To provide business owners and employees the knowledge and training needed to maintain economic vitality in a village atmosphere.

Tasks:
Set up networking events for business owners to meet and socialize. Such events aid in the formation of relationships between various businesses and catalyze the aforementioned creative marketing strategies.

Provide workshops where businesses can teach each other, learn and gain valuable skills. A wealth of knowledge exists within the West Newton community and utilizing it would be beneficial to all parties.

Historic Plaques

Purpose: To create awareness of the historic locations in West Newton and build upon its identity.

Tasks:
Identify historic properties and landmarks and place plaques that provide the name of the landmark and its historic significance.

Formalize other historic program opportunities, such as educational field trips and regular walking tours to the area. These tours could be designed to pass through the commercial center,

Fig. 8-4

Facade improvement of an auto business.
Source: City of D'Iberville, Mississippi

Fig. 8-5

Annual Arts and Crafts Festival in Chatham, Massachusetts.
Source: Cape Code Craft Shows

Fig. 8-6

Historic Plaque Program in Pittsburgh.
Source: Pittsburgh History & Landmarks Foundation

Fig. 8-7

Walking trails emphasize historic significance and generate pedestrian activity.
Source: City of Atlanta

Fig. 8-8

Plaques in the sidewalk guide people through historical walking tours.
Source: BootsnAll

Fig. 8-9 Historical Properties in the Site Area

bringing more pedestrian foot traffic to local businesses.

Historic Interventions

West Newton's history—from its regional connectivity to its identity as an education and business center—is integral to envisioning its future. The following interventions use the history of the Village to further its growth. Other recommendations include adaptive reuse of historic properties. Please refer to Appendix E for more information on adaptive re-use of historic properties.

Historic District: Four villages within Newton—Newtonville, Newton Upper Falls, Chestnut Hill and Auburndale—are identified as historic districts. West Newton boasts its own historic properties identified in Figure 8-9. Some of these properties are on both State and National Registers, some others are considered City Landmarks, and some properties are recorded under the Historic Resource Study. West Newton's residents could also send an application to the City for the establishment of the Village as a historic district. This could both preserve the historic character of the Village and also inform future development in West Newton. Historic district designation does not preclude having a mix of uses or densities. But it increases neighborhood control over how the streetscape and buildings evolve.

Historic Walking Trail: A subtler intervention is the creation of a walking trail. This trail could be based on the "Discover Historic West Newton" walking tour brochure that the City of Newton has published. The tour weaves in and around Washington Street, and as a trail, it would both bind together different sections of West Newton Village and guide people through the commercial center.

The walking trail can be created by embedding printed blocks or tiles in the sidewalk, and the options for its design are limitless. The Freedom Trail in Boston is the most proximate example, but many other places in the world have created similar successful trails.

8.3 HOUSING

In conjunction with the new land use proposal, this report encourages the build out of affordable units in accordance with the current 15 percent inclusionary zoning requirement in exchange for height increases, specifically within the Village Core. Presently, it is quite common for developers to pay-in-lieu for new developments, which is detrimental to the supply of affordable housing in the Village. Land owners in the Village Core would receive generous up-zoning from incentives proposed under the new zoning guidelines. Therefore, they should be required to provide public goods in return for these incentives.

The City should revisit the current inclusionary/density package to ultimately raise the "pay-in-lieu" expense from the current "over two units; under six" and let developers building up to 20 units opt for "pay-in-lieu" expenses if they choose not to opt for the density bonuses and inclusionary build out. There are few housing projects of this size in Newton, but the City should incentivize developers willing to increase housing stock by paying into a community development fund, rather than triggering the inclusionary rule. The community development fund would be managed by the City and targeted for increasing the stock of affordable housing through partnerships with existing housing non-profits. Tax incentives on real estate that promote affordable housing, as opposed to density incentives, can be used as an alternative bonus. The City could also look into creating a low-interest loan program for development of affordable housing.

Additionally, through the tools of compact development, housing in-fill could be encouraged along Border Street. This housing could be linked with some of the financing recommendations made in this section. The new mixed-use development at the corner of Elm and Border Street can serve as a catalyst to revitalize this area and serve as a location for more affordable units (considering that it will be at a higher density).

Lastly, simplifying the language of the accessory apartments program in the zoning code and creating a training service run through the Village and/or a non-profit affordable housing group to explain how owners of large housing units could benefit from the program would be met with greater success. There is a clear need for increased rental units both for low-to-moderate-income renters and for large homeowners who are struggling to maintain their properties in West Newton. This proposal could specifically target the transitional zone between the Village Center and the surrounding residential neighborhoods.

CHAPTER NINE
OPEN SPACE AND ENVIRONMENTAL DESIGN

9.1 VISION

West Newton's natural assets and community open spaces set it apart from many of Newton's other villages. This vision seeks to build upon these assets by using natural systems and smart investments to reduce pollution of Cheesecake Brook, improve the pedestrian experience, and enhance existing public spaces.

9.2 INTERVENTIONS

Increasing the number of street trees and promoting both low impact development strategies and solar design throughout the Village would help achieve this vision.

Street Trees

Urban trees provide a host of benefits: they absorb air pollutants, filter stormwater, improve the pedestrian experience, and even increase property values. Tree-lined streets slow down the traffic and shade visitors, and when placed appropriately, trees could also reduce the heating and cooling costs of nearby buildings. There are few areas in the study area of the Village where healthy street trees still exist. Surrounding neighborhoods have verdant canopies, but many trees along Washington and Watertown Streets have been cut down,

killed, or weakened. Re-planting street trees along the main Washington Street corridor will help tie the Village together and make the section between Waltham and Elm Streets, in particular, much more pleasant for pedestrians.

In looking to restore street trees in these and other areas, the City should involve natural gas providers in joint ventures or programs for replacing trees that have likely been killed by natural gas leaks; doing so could help restore trees along a significant stretch of Washington Street.

The City should also consider consulting experts to identify trees that are more resistant to such leaks. According to the GIS report cited in the Existing Conditions section of this report, certain trees may be able to withstand natural gas exposure at higher exposure levels and for longer periods of time. The City could also provide larger tree pits for street trees[1]. Square tree pits along Washington Street may not allow trees to receive adequate moisture, especially where gas leaks contribute to root drying. If possible, tree pits could also be combined with stormwater filtration facilities. "Enhanced tree pits" have been shown to be able to treat 1 inch of rain from a 1,530 square foot area at minimal cost.

Given constrained financial resources, West Newton should seek to leverage partnerships with businesses, individuals, and non-profit organizations to restore West Newton's urban forest. Currently, the Newton Tree Conservancy conducts Community Tree Plantings in neighborhoods throughout the city, and a similar effort in the Village could completely transform the area's streetscape. Business sponsorship should be pursued as one funding mechanism for such an effort, since the effects of planting trees on property values and pedestrian experience are well worth the investment from local businesses.

Stormwater Management and Treatment

Development in West Newton has had significant impacts on the area's hydrology. Cheesecake Brook, in particular, appears to have been severely impacted by the piping, channelization, and stormwater runoff that have resulted from village growth. Low impact development (LID) techniques have been shown to reduce many of these impacts and improve the

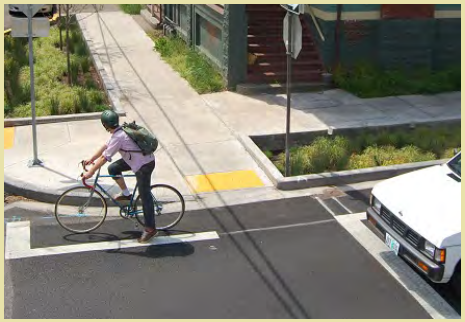
Fig. 9-1

Sidewalk stormwater infiltration facility in Portland.
Source: Green Infrastructure Digest

Fig. 9-2

Enhanced tree pit in east New York.
Source: City of New York

Fig. 9-3



Stormwater management in curb extensions.
Source: Sustainable City Network

1 Many cities require approximately 4' x 10' tree pits; many of the tree pits on Washington Street are only 3-4' square.

Fig. 9-4 Parking Lot Stormwater Management

Stormwater management used in a parking lot as a part of the Willamette Stormwater Control Pilot Program.
Source: Green Works

Fig. 9-5 Green Street

Green streets manage stormwater and increase bicycle and pedestrian safety.
Source: Portland Green Streets

quality of nearby water bodies by treating and filtrating stormwater, replenishing groundwater, and slowing the rate of runoff, often incurring lower costs than traditional treatment systems. LID techniques also have the added benefit of "greening" the village environment—providing habitats for insects and birds, absorbing air pollutants, and helping reduce the effects of nearby pavement on summer temperatures.

LID systems take a variety of forms, from pervious paving to tree planters, from rain gardens to vegetated swales. We recommend promoting LID to the greatest extent feasible throughout the Village. Any investment in streetscape improvements should investigate how "green infrastructure" can be included; for example, expanded sidewalks could include filtration basins, sidewalks and parking lots could utilize pervious pavement, and curb bulb-outs could include rain gardens. In addition to treating stormwater, these investments will further beautify the Village and could even lead to improved property values.

Other municipalities that have pursued green infrastructure initiatives have found that adopting a citywide approach

to green infrastructure is preferable to uncoordinated actions. The most successful efforts utilize a combination of incentives and regulations to promote LID. These programs often include revised stormwater management regulations that require LID techniques, FAR bonuses, design assistance, and small grants. Given Newton's proximity to the Charles River and its existing water quality challenges, a green infrastructure approach may provide multiple benefits to the city.

The City should consider using the West Newton area as a pilot area for testing green infrastructure approaches in Newton. Zoning changes in the area should consider incentivizing stormwater filtration facilities as part of open space and landscaping requirements; a small FAR bonus could be included for those projects that include green roofs, vegetated filtration facilities, pervious pavement, or rainwater capture. The City should also consider partially waiving its stormwater fee for commercial properties that capture and treat the first inch of precipitation on-site.

Solar Design

West Newton has many opportunities for solar design and should adopt solar design guidelines to encourage development that makes optimal use of solar resources. Solar design strategies can often be achieved with no additional upfront costs, while reducing energy spending and pollution for the lifetime of the building. These designs can also be used on any property. The following guidelines are suggested:

- **Orientation:** All developments on properties fronting streets running within 20 degrees of the east-west axis, no matter their use, should maximize the length of their southern face, working with other development constraints;

- **Window area percentages:** South-facing residential walls with solar access during winter should have about 50 percent window area, while east, west, and north residential walls should have a maximum 15 percent window area;

- **Thermal mass:** Interior areas of buildings collecting solar energy through south-facing windows should feature materials with high thermal mass, such as concrete, masonry, or stone, in walls or floors; and

- **Exterior shading**: South- and west-facing windows should feature exterior shading systems, including awnings, exterior venetian blinds, overhangs, rollers, and screens.

These strategies will greatly reduce building energy consumption and augment Newton's ambitious Stretch Energy Code. The Planning Department and Zoning Reform Group should consider incorporating these guidelines into any proposed zoning changes in the area[2].

9.3 CONCLUSIONS

West Newton already has a wealth of natural assets—from nearby parks and natural areas to its abundant solar resources. This report outlines ways to augment and capitalize on these strengths. Solar design strategies would reduce the energy consumption of buildings, low-impact development would break up the visual and environmental impact of impervious surfaces, and street trees would make the Village a more pleasant place to walk, shop, and socialize.

2 For additional details, see Appendix A.

CHAPTER TEN
FOCUS AREAS

10.1 VISION

Earlier chapters proposed a variety of interventions in West Newton. The following sections note how these interventions could specifically impact four specific areas in West Newton and within each area, a few specific parcels termed "catalyst sites." The recommendations for these catalyst sites better crystallize the vision for West Newton. Moreover, acting on the recommendations for these sites and the general areas will realize significant improvements to the Village, serving to stimulate West Newton's development. The four areas identified are:

- East Washington Street
- The East Gateway
- The Village Center
- West Washington Street

Fig. 10-1 The Four Focus Areas in the West Newton Village Area

Table 10-1 Boundaries of the Focus Areas

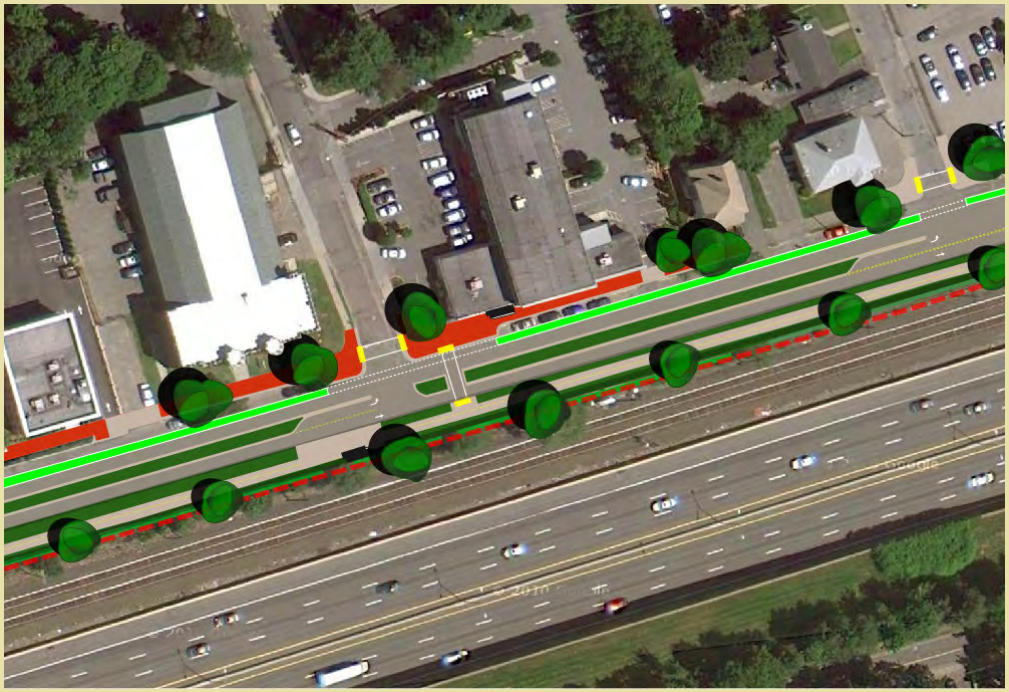
Focus Area	East Washington Street	East Gateway	Village Center	West Washington Street
Bordering Streets	Dunstan Street Brookside Avenue	Davis Court Dunstan Street	Elm Street Davis Street	MassPike Off-ramp Webster Street Elm Street

Table 10-2 Road Alignment Shift for Washington Street

Proposed Design	Width
Eastbound traffic lane	11 feet
Westbound traffic lane	11 feet
Eastbound turning lane	11 feet
Parking lane	8 feet
Bike lane	5 feet
Parkway buffer	10 feet
Bike/pedestrian path	8 feet
Washington Street	64 feet

The proposed shift prioritizes pedestrian and bike use by reallocating the public right-of-way.

Fig. 10-2 Proposed Changes



Proposed changes to the eastern section of Washington Street.

10.2 EAST WASHINGTON STREET

This site, which serves as an approach to the Village Center from the eastern section of the study area is envisioned as a green corridor. Greening Washington Street will activate this space by providing more opportunities for recreation and multiple modes of transportation. The result is increased connectivity with the surrounding area and greater accessibility for different kinds of users.

Fig. 10-3 Before and After Views of East Washington

10.2.1 Existing Conditions

Currently, the eastern section of Washington Street does not serve as an amenity for nearby residents of the Village. The street is clearly designed for cars, despite being located in the middle of a mixed-use neighborhood with office, residential, and retail uses. The lanes are at least 12 feet wide, which is the same standard used for interstate highways. Having I-90 visible also encourages speeding, and although not a significant disadvantage for drivers, the streetscape offers few points of visual interest, such as public art or landscaping. The lack of street frontage and inconsistent sidewalk conditions discourage recreational uses and multiple modes of transportation. Although the 553 and 554 bus routes traverse the street, the stops lack basic amenities. Similarly, there is no infrastructure for cyclists such as bicycle lanes or signs urging drivers to share the road.

10.2.2 Proposed Interventions

The vision is to transform the eastern portion of Washington Street into an active boulevard compatible with all modes of transportation—a true amenity for West Newton. Shifting the road alignment would allow for the creation of a complete street, without negatively impacting traffic flows. Remaking the eastern section of Washington Street is a critical step towards a more vibrant mixed-use Village Center.

The proposed changes are based on a road alignment shift. Washington Street would have one lane in each direction with a turning lane so as not to impede traffic. Street-parking would be retained on the north side of the street. A westbound on-street bike lane would be added, while eastbound cyclists would be accommodated by a widened sidewalk shared with pedestrians as part of a new parkway buffer. These changes enhance circulation by clarifying the movement of traffic along Washington Street and have the added benefits of increasing road safety, encouraging alternative transportation, and reducing vehicle speeds in this residential area.

Fig. 10-4 Bulb-outs

Large sidewalk bulbouts would calm traffic and allow better pedestrian safety and access.

Sidewalks should be upgraded to be consistent with standards in place in the Village Center. Although this improvement has the potential to be beneficial for all, the choice of design and materials is important when considering how to achieve greater accessibility for seniors and the disabled. Curb bulb-outs, crosswalks, and clearly defined lanes and parking are recommended to start with. Bus shelters can be improved and more strategically located. Standardizing sidewalk design along this section of Washington Street

Fig. 10-5 Properties Owned by One Family

Source: Assessors Parcel Data

would help signal the approach to the Village Center, facilitating pedestrian movements in the Village. Certain elements, such as signage, should be designed to bolster the identity of the Village as a cultural node in the greater area.

The amount of green space on Washington Street should be increased to achieve greater environmental sustainability. Doing so would create new opportunities for stormwater management such as rain gardens that promote natural processes of filtration instead of channeling runoff into the drainage system. This goal could be achieved through the addition of landscaped left-turn medians and a parkway buffer next to the highway.

Lastly, a visual and sound buffer from the highway to promote use of the street should be installed, potentially funded in part by the federal Community Development Block Grant program. Improvements to the fence should not only block the highway, but also enliven the street. The City of Newton could invite artists or community members to install temporary or permanent public art. Such site-specific works contribute to the Village's artistic character and imbue the eastern portion of Washington Street and reflect the vibrancy of the Village Center.

10.3 THE EAST GATEWAY

The East Gateway is a catalyst site that refers to a series of parcels that lie between Washington Street, Cheesecake Brook, Davis Court and Dunstan Street. They provide a rich opportunity for development of a vibrant mix of new housing, shops, services, and open space, providing a sweeping change from the drab auto-oriented uses that occupy the site today. The East Gateway is composed of 14 parcels, which are 163,000 square feet in aggregate. Many parcels on the site are owned by one family, which suggests strong potential for the site to undergo comprehensive, coordinated redevelopment.

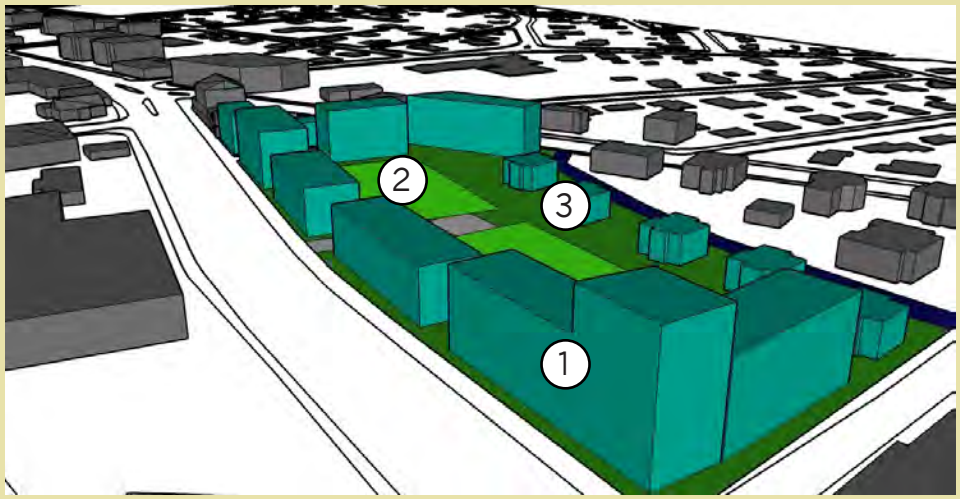
10.3.1 Existing Conditions

The East Gateway largely consists of auto-dominated commercial uses, which are mostly passive uses of the space .

Uses include car sales lots, a rental car agency, car parts shops, and an auto-body shop, . The concentration of auto-uses and the physical configuration of the site result in an uninviting streetscape. Most buildings are single story and set back from the street at a farther distance than buildings in the Village Center. There are large gaps between buildings, and the site features blank walls and expansive surface parking. Sidewalks are interrupted by frequent curb-cuts to accommodate the auto-related uses on the site. These factors combine to make the site an unattractive pedestrian corridor. As a result, the surrounding residential neighborhoods and commercial areas of Washington Street are estranged from the Village Center.

Encouraging more intensive, active commercial and residential uses on the site would enhance the vibrancy of West Newton, while making a more appealing connection between surrounding neighborhoods and the Village Center. The site has key advantages that make it an attractive location for new development. First, properties facing Washington Street are shielded from the Turnpike noise and unappealing views. The presence of this buffer provides the opportunity to convert Washington Street into a pleasant, walkable street, where people would be comfortable spending time.

Fig. 10-6 Catalyst Site: Cheesecake Brook



The catalyst site would have (1) street level retail facing onto Washington St., (2) parking in the back of those buildings, and (3) detached residential units facing onto Cheesecake Brook.

Cheesecake Brook has the potential to become an attractive, publicly accessible natural space. Currently, it is bounded by private space, offering little public amenity. It is highly channelized, reducing its ecological value. However, redevelopment could allow for a pedestrian thoroughfare and ecological restoration of this site.

The site also presents opportunities to improve West Newton's circulation system. Washington Street features ample pedestrian space, while Davis Court and Dunstan Street could become attractive lanes. Lastly, the site's topography may offer opportunities for cost-effective underground parking, making more intensive development possible.

Table 10-3 Current Minimum Parking Requirements[1]

Residential	1.25	stalls/unit
Commercial/Office	333	square feet/stall
Retail	300	square feet/stall
Manufacturing	1000	square feet/stall

Table 10-4 Estimated Parking for Proposed Development Scenarios Under Current Parking Requirements

	High Mix Scenario			Mainly Residential Scenario		
	Percent Floor Space	Parking Stalls	Parking (sq. ft.)	Percent Floor Space	Parking Stalls	Off-street Parking (sq. ft.)
Retail	8%	86	30,100	3%	36	12,429
Residential	60%	126	44,153	87%	182	63,639
Manufacturing	5%	15	5,298	0%	0	0
Commercial/ Office	27%	241	84,268	10%	91	31,822
On-street Parking Available	N/A	N/A	40,000	N/A	N/A	40,000
Total Off-street Parking Required	N/A	468	123,819	N/A	308	67,890

1 West Newton Zoning Ordinance

10.3.2 Proposed Interventions

The changes to zoning and circulation patterns proposed in this plan would encourage more vibrant and environmentally sustainable development in the Eastern Gateway.

Circulation

Streetscape improvements along Washington Street noted in other parts of this plan would be key catalysts to development of the East Gateway. Crosswalks and other pedestrian infrastructure would enhance the site's accessibility and safety. Narrower vehicle lanes would prevent speeding while maintaining road capacity. Bicycle lanes and other provisions for cyclists would be added. The site should also feature enhanced bus shelters.

Land Use

Proposed zoning would foster a sensitive transition between the Village Center and existing residential areas. The proposed zoning changes encourage taller, denser buildings near the Village Center and along Washington Street. Active ground floor retail would be encouraged on these

sites, providing life on the streets and commercial growth opportunities. Moving away from the Village Center on Watertown Street and Dunstan Street, the zoning changes encourage smaller scales and passive uses. These uses would generate less street-level activity, respecting the character of existing residential areas. Commercial or residential uses would be allowed on the upper floors of developments throughout the East Gateway. This freedom is intended to facilitate the establishment of a mix of uses while allowing market forces to determine the purpose for which the parcels could be used. In aggregate, the site would have an average FAR of 1.8 if all properties were developed to as-of-right densities. However, were all properties to qualify for a density bonus, the site would achieve a 2.3 FAR.

Parking

The provision of parking would be the main barrier to achieving this intensity of development. Current minimum parking requirements specified in Newton's zoning code result in significant off-street parking requirements for the site (see Tables 10-3 and 10-4). After accounting for on-street parking, approximately 124,000 square feet of off-street parking space would be required, were the whole site to be developed to its proposed as-of-right FAR and a mix of residential, commercial, and retail uses achieved. Developing an East Gateway dominated by residential use would reduce off-street parking requirements to 68,000 square feet or less.

Fig. 10-7 Current Conditions on Washington Street

This plan's zoning specifies that surface parking be located behind building frontages. Large parking areas in an interior courtyard could yield about 40,000 square feet of parking. This would leave 84,000 square feet of parking in a high mixed-use scenario and 28,000 square feet of parking in a more residential scenario. Additional parking could be located at ground level with building space developed above it. Underground parking could also be an option,


ARRIVA
MEXICAN GRILL

though its cost could limit the viability of the East Gateway's development. Off-site parking could also be developed.

Given the challenge of meeting current parking ratios, the City of Newton should reduce its ratios of parking required per residential unit or commercial square footage to make the development of the East Gateway more viable. The extent of parking ratio reductions possible is a product of the future provisions of transit, the amenities offered by development on-site, and the future culture of transportation in West Newton. The City should consider reducing parking ratios on the order of 20 percent in the short term, and anticipate future revisions of parking ratios if and when more resources are invested in the regional transportation system and a greater proportion of local trips are made via transit, walking, and cycling.

Natural Amenities

Cheesecake Brook would be made more accessible to pedestrians under this plan. To avoid rainwater runoff, pollution of the brook and to restore a more natural hydrological regime, permeable pavement for surface parking on this site should be specified. Additionally, the City of Newton should encourage roof rainwater capture for retention into the soil or reuse in buildings for non-potable water supply.

Fig. 10-8 Current Conditions of the Village Center

10.4 THE VILLAGE CENTER

The Village Center would be the heart of the Washington Street corridor in West Newton and would be full of some of West Newton's strongest cultural and commercial assets. Despite the embedded strengths that the Village Center already has in terms of existing properties in this area, there is room for improving the vibrancy. In particular, the current pedestrian transition between the residential areas and the Village Center clashes most unpleasantly at the intersection of Watertown Street and Washington Street, which has a tangle of street lights, a confusing traffic configuration and lacks clearly demarcated crosswalks. Apart from addressing circulation issues, there are few quality opportunities for passive recreation at the intersection, a missed opportunity given the intersection's role as

a gateway to the Village Center and the significant amount of available space.

Likewise, at the western end of the Village Center, there is a clear opportunity to improve the intersection of Elm Street and Washington Street. With some modest but well-considered circulation redesign and land use changes, the Village Center could become a space where villagers and visitors linger, contributing to a renewed street life for West Newton.

10.4.1 Existing Conditions

Figure 10-8 shows the current state of the Village Center, looking west from Sweet Tomatoes (at the intersection of Watertown and Washington) toward the West Newton Cinema and the Police Station.

This particular intersection was identified as a confusing and difficult place for residents and visitors alike. Improving the Village Center is important because many of the charming characteristics of West Newton come to life in this area, notably its walkable scale, small businesses and retail frontage. The image on the following page is a conceptual drawing of what this same area would look like if the recommendations in this proposal are implemented.

10.4.2 Proposed Interventions

Figure 10-9 illustrates the recommendations to improve this corner. The intersections are simplified, making them easier for drivers to navigate. Other changes include additional and improved pedestrian crossings, bicycle lanes down Washington Street, and the addition of two new pedestrian spaces. These changes would make this area much more walkable and livable. The rendering illustrates the impacts of more intensive redevelopment. The three to four story buildings retain the comfortable character of the neighborhood. The following sub-section provides a detailed outline of the specific recommendations.

Proposal

The roads within the Village Center have been identified as "Village Center Roads" by the City of Newton. These roads "are intended to be strongly pedestrian-oriented areas, so that roadway and other infrastructure improvements are to be designed to maintain and improve the pedestrian experience."

The following recommendations seek to improve the pedestrian experience while simplifying vehicular movements within the Village Center. With the exception of new movements to and from Waltham Street, all existing vehicular movements are maintained.

- Reduce lane widths from 11 feet to 10 feet.
- Install designated bicycle lanes in both directions on Washington Street and a shared bicycle path on Watertown Street.
- Rearrange the existing median space to reduce the crossing widths and create new pedestrian plazas.
- Allow left turns to and from Waltham Street with improved signaling.
- Improve the pedestrian experience on streets that link the Village Center to the residential neighborhood.

Install Designated Bicycle Lanes and Paths on Washington and Watertown Streets

The current street right-of-way along Washington Street is as large as the Macy's Thanksgiving Day Parade route in


Watertown St

Fig. 10-9 Proposed Changes to Village Center Intersection

New York City. Reducing vehicular lane widths would enable the right-of-way to accommodate four 10 foot vehicular lanes, two 5 foot bicycle lanes with a turning lane on to Watertown Street, and parking on both sides of Washington Street. Designated bicycle lanes should be painted on Washington Street and signage and street-paint should designate Watertown Street as a shared road for vehicles and cyclists. At the Village Center intersection, a turning lane should be provided for cyclists onto Watertown Street to improve awareness of cyclists among drivers at this high-trafficked intersection.

Improve the Pedestrian Crossings at the Core Intersection

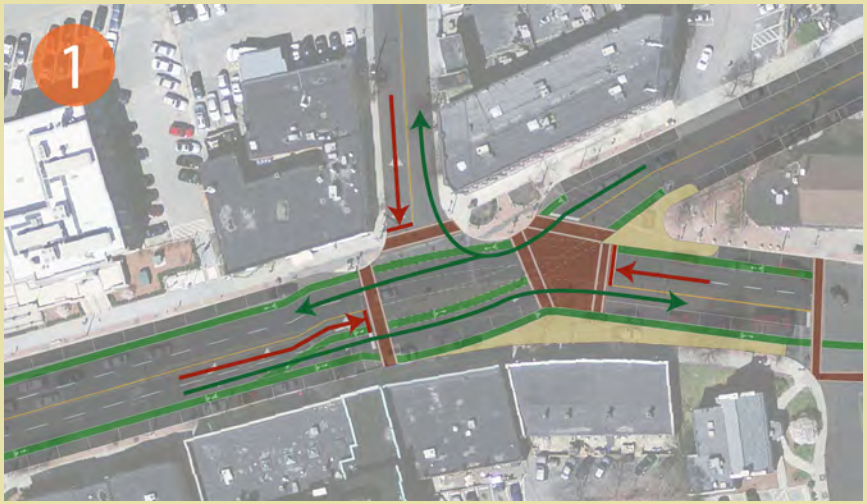
In order to properly accommodate the new bicycle lanes, a "reshuffling" of the median space would be required. These unused islands should be used to expand the size of the existing plaza near Sweet Tomatoes, and to widen a section of the sidewalk on the south side of Washington Street. The result would be the creation of new pedestrian crossings that reflect existing movements that the current painted crossings do not allow. The new pattern would also reduce the longest distance across Washington Street from 70 feet to 50 feet. The three crossings at the center should be paved and painted separately from the existing asphalt to increase the visibility of pedestrians.

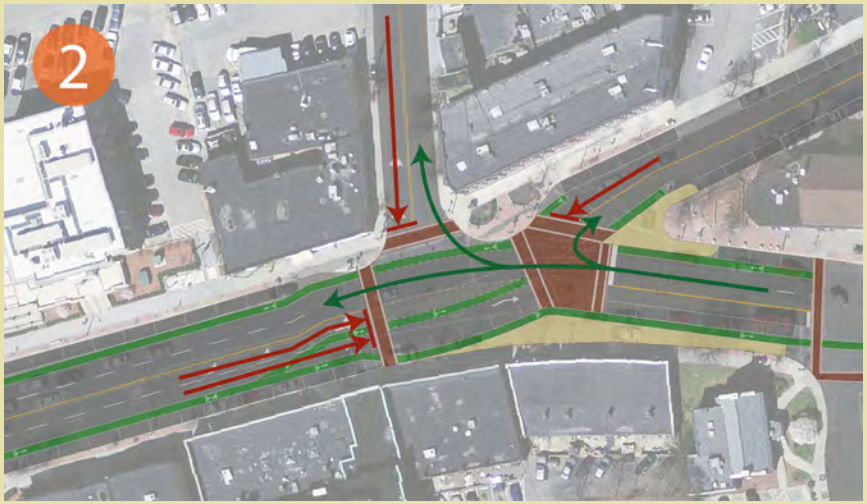
The resulting pedestrian plazas (see Figure 10-9) should be designed to integrate sitting space with existing pedestrian movements. The plaza on the southern sidewalk can be designed to be flexible and accommodate "pop-up cafés" in the warmer months of the year and other outdoor programming such as public art and community activities. The extension of the Sweet Tomatoes plaza would present an opportunity to perform a full design change, including upgrading street furniture and integrating stormwater management practices into the new plaza.

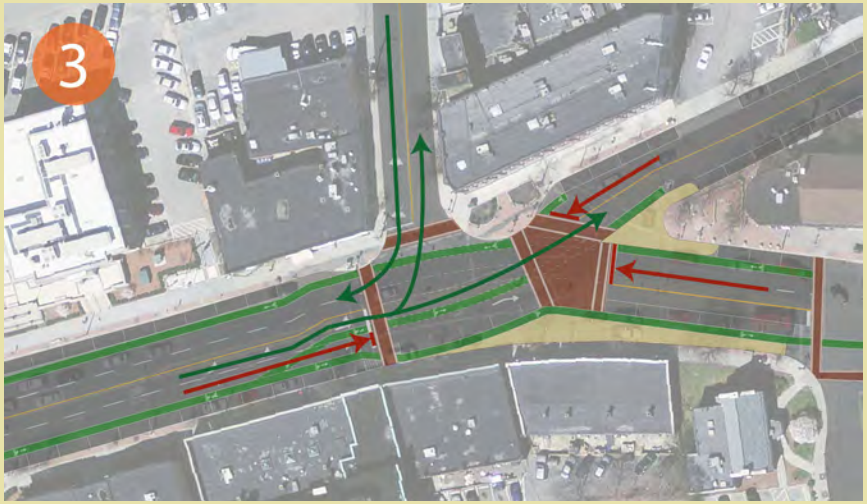
Improve the Signaling at the Core Intersection to Allow Turns to and from Waltham

The existing medians at the core intersection do not allow turns from Washington Street onto Waltham Street, or left turns from Waltham Street on to Washington Street. A new signaling system could allow such movements and reduce the likelihood of

Fig. 10-10 Signal Phasing







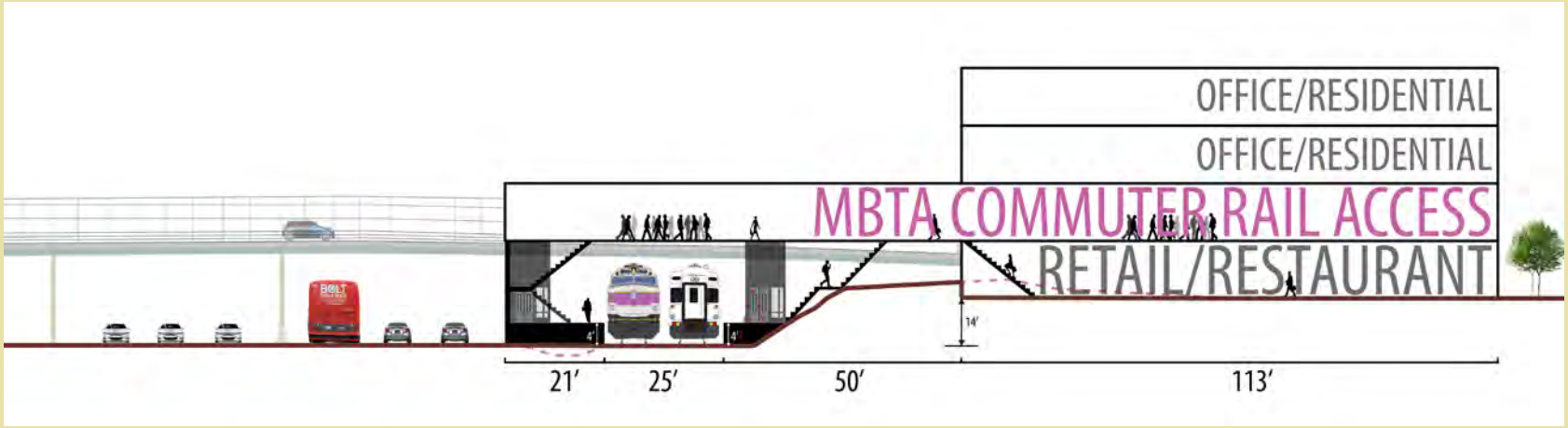
Traffic signals will operate with three phases:

Phase 1: Cars will be able to turn right onto Waltham Street from Watertown Street as well as continue down onto Washington Street.

Phase 2: Cars will be able to turn right onto Watertown Street from Washington Street.

Phase 3: Cars will be able to turn left onto Waltham Street from Washington Street and turn right from Waltham Street onto Washington Street.

Fig. 10-11 Catalyst Site: Section of Potential Commuter Rail Station



collisions (see Figure 10-10). A "universal" signal for all pedestrians to cross can be used after every second or third signal.

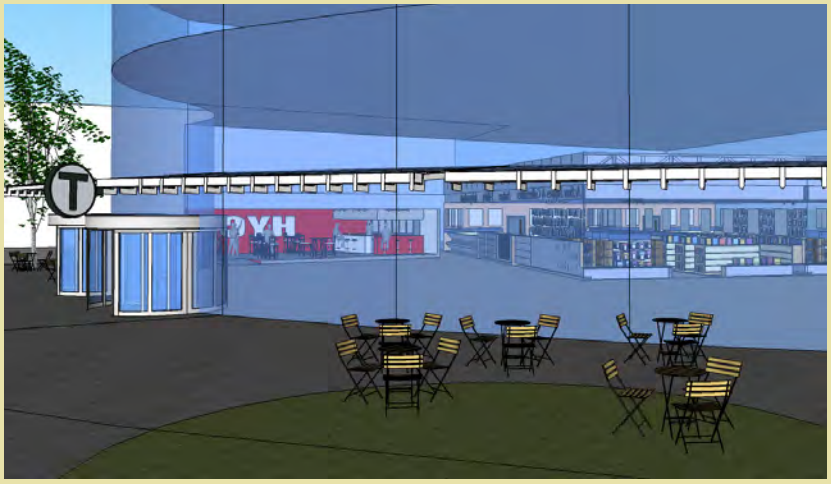
Improve the Pedestrian Experience on the Connector Streets

The pedestrian experience along Watertown, Waltham and Washington Streets connecting the Village Center to the residential neighborhood is nothing less than harsh: parking lots, impermeable surfaces and meager street trees dominate the one-block stretch separating the two zones. Low-cost interventions such as planter boxes and artwork can be installed to minimize the visual impact of the parking lots. Design elements along the length of the parking lot would also reduce the sense of an expansive impermeable surface and create a more human-scale, aesthetically-pleasing experience.

Implementation

In order to accommodate reduced lane widths and new bicycle lanes, new, low-cost striping would be required along Washington Street. The existing concrete medians would need to be stripped, and new concrete would need to be laid for the plaza and sidewalk extensions. The existing streetlights would then need to be re-configured to allow movements to and from Waltham Street and could follow the configuration outlined here.

Fig. 10-12 Catalyst Site: Views of Potential Commuter Rail Station



Commuter Rail Improvement: Village Center

The intersection of Elm Street and Washington Street, where Washington Street splits and crosses I-90, should be considered as another catalyst site in the Village Center. The visibility of the Commuter Rail station should be enhanced. This could be accomplished via new development on the current site of Tody's Service Inc., further bolstered by signage along Washington Street. Additionally, the Commuter Rail station should be retrofitted to become handicap accessible.

10.5 WEST WASHINGTON STREET

The fourth focus area is the western section of Washington Street, including its intersection with Elm Street, down past Blue Ribbon BBQ, and into the junction with the Turnpike.

10.5.1 Existing Conditions

An overarching vision for this area is to extend the character of the Village Center a block westward. This area has several cherished businesses and potential development sites, and is immediately adjacent to the Village Center. As a result, this area should extend the village feel west from the Village Center. Particular focus is laid on the current Jury Lot, a lot of approximately 1,900 square feet with a 180 foot frontage along Washington Street.

Fig. 10-13 Existing Intersection of Elm and Washington Street

Fig. 10-14. View of Border Street from Elm Street


Elm St
TWO HOUR PARKING
Keltic Krust

10.5.2 Proposed Interventions

Proposed land use changes in this area would allow for increased scale of development matching that of the Village Center, while maintaining the existing light manufacturing uses. Along Washington Street, this would translate into building up to four stories, including possible development on the Jury Lot site. These parcels should be permitted to have an FAR of 2.0 as-of-right and 2.5 by special permit.

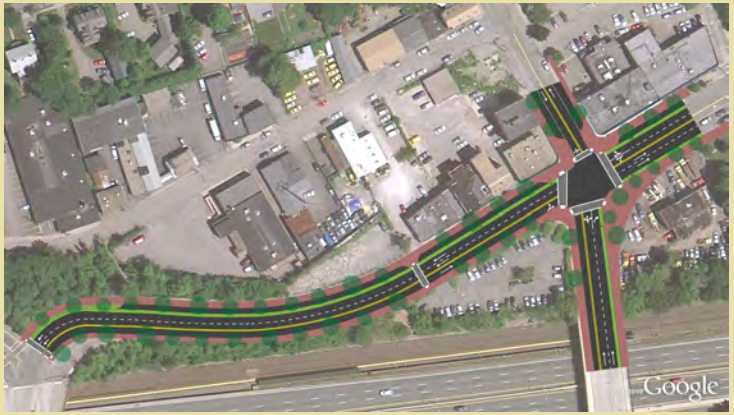
Form-based design guidelines for this site would be consistent with those of the Village Center. On the catalyst site, and those next to it, this would require 60 percent door and window coverage of the ground floor facade for a pleasant pedestrian experience. Store entrances would be no more than 30 feet apart. At present, the catalyst is home to at least two ground-floor businesses facing Washington Street.

To complement the commercial development, infill housing should be encouraged on Border Street while preserving existing businesses. This development could take the form of a two to three story structure, primarily residential, with 60 percent minimum frontage. Setbacks should be limited to 10 feet for a more proximate feeling to the street.

Circulation patterns would be improved throughout this area to provide a better environment for all users (see Figure 10-16). A redesigned intersection at Washington and Elm Streets would allow for simpler traffic flows while significantly improving the pedestrian environment. Crossings for pedestrians would be direct and short with bump-outs at the appropriate locations.

Fig. 10-15 Proposed Plan View of Washington Street Development Changes

Fig. 10-16 Proposed Plan View of Washington Street Circulation Changes




UNDER
CONSTRUCTION
!
CORNER MINI-MART

Fig.10-17 View from Commuter Rail Lot Looking onto the Existing Juror Parking Lot

Under this plan, the western section of Washington Street would be redesigned to accommodate wider sidewalks, a bicycle lane, and two-way traffic. This would simplify the movement pattern for traffic coming off the Turnpike, while also creating a much more inviting village feel. Providing for two-way traffic, street parking, and a bicycle lane, would create a more traffic-calmed area out of what exists—three westbound lanes. Border Street would be improved with brick sidewalks and street trees. These circulation changes comprise the first phase of improvements to the transportation network.

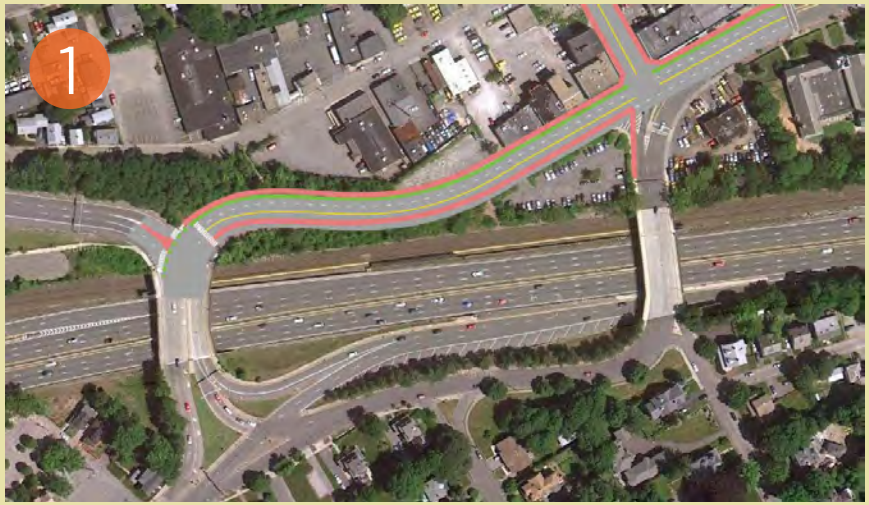
The second phase would be improving the connection to residential areas south of the Turnpike by redesigning the bridge for two-way traffic, a bicycle lane, and wider sidewalks. The final phase would be reconfiguring the intersection southwest of the Turnpike where Washington Street connects with Perkins Street and the Turnpike on-ramp. A traffic circle is recommended for this intersection to regulate the flow of traffic.

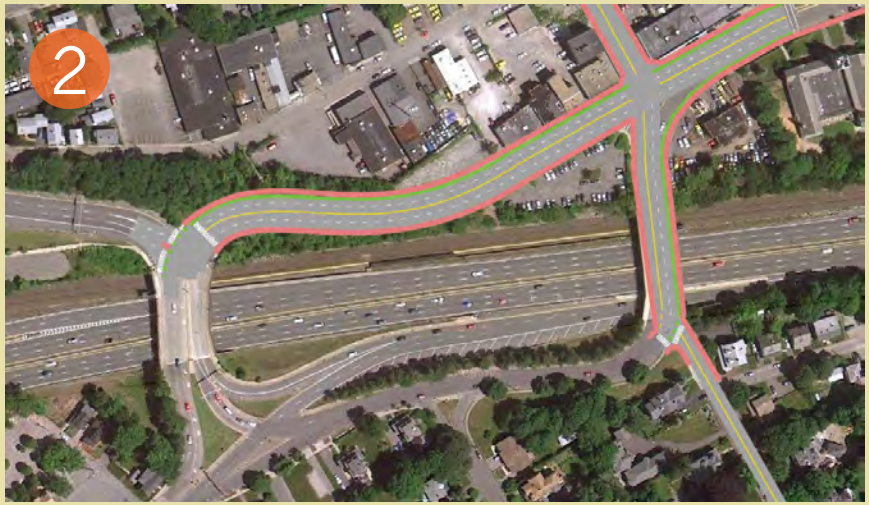
Recommendations for parking in this focus area would improve the conditions as well. The lot at the corner of Washington and Elm Streets should be re-purposed to focus on serving the businesses of West Newton. Specifically, time limits would be better enforced through metering and ticketing in order to increase turnover. Meanwhile, parking for MBTA commuters should be increased by improving and maximizing the use of the Commuter Lot to the western edge of this site that is accessible from Border Street and presently under-utilized. Re-striping this lot would allow for more cars to be parked, and wayfinding in the area should be implemented to help drivers find their way.

Washington Street in this area would have on-street parallel parking for nearly its entire length. This would provide 21 additional parking spaces to support the businesses on the catalyst site and other stores nearby. Provisions for shared parking in any new development along this part of Washington Street is recommended. It would enable better use of parking resources.

These changes in development, parking, and circulation can combine for a powerful transformation of this focus area. The more pedestrian-oriented, vibrant, and inviting section of Washington Street could be a welcome extension of West Newton Village.

Fig. 10-18 Proposed Plan View of Phased Circulation Changes





Phase 1: Convert Washington Street to two-way traffic, and add a westbound bike lane, from Elm Street to the western Turnpike overpass. Without changing the width of the roadbed, the street can be restriped for two lanes of westbound traffic and one lane of eastbound traffic to provide better access to the village center from the Turnpike.

Phase 2: Convert the Elm Street-Putnam Street overpass to two-way traffic and add a northbound bike lane. Without changing the width of the roadbed, the street can be restriped for two lanes of northbound traffic and one lane of southbound traffic to provide better access to the neighborhoods south of the Turnpike. Reconstruct and widen Washington Street from Phase 1 to four lanes in preparation for Phase 3.

Phase 3: Reconstruct the Washington Street-on ramp intersection as a traffic circle to simplify vehicular movement. Restripe the western turnpike overpass for two lanes of southbound traffic and two lanes of northbound traffic with a southbound bike lane.


KITCHEN
THE LOCAL

CHAPTER 11
NEXT STEPS

This section notes the immediate next steps that the City and other stakeholders should pursue to realize the vision outlined in this plan. The following tables note the organizations which should pursue implementation steps, summarizing the more detailed implementation guidelines noted throughout the plan.

Land Use

Actor	Actions
Zoning Reform Group	• Consider and implement proposed zoning changes; • Test plan with local residents, businesses, and potential developers; • Commission environment and traffic impact studies on proposed zoning changes; and • Consider staging of zoning changes.

Circulation

Actors	Actions
Planning and Development Department Engineering Department	Enhance walkability • Develop "complete streets" policy to enhance transportation by multiple modes; • Alternatively, develop a more limited sidewalk and crosswalk policy; and • Specify projects in Newton Capital Improvements Plan. Source funds from MPO Congestion Mitigation and Air Quality and/or Transportation Enhancement Programs.
MBTA Planning and Development Department Engineering Department	Improve transit • Improve bus connections to Watertown, Cambridge, and the Green Line; and • Fund renovations to the Commuter Rail station. The City should assess MBTA's transit plans and advocate for the improvements outlined in this plan.
Planning & Development Department Local Business Network (proposed)	Implement wayfinding signage. • Upon establishing Local Business Network, determine with members and the City the appropriate scope and available budget for way-finding; and • Contract wayfinding.

Parking

Actors	Actions
Parking Department	Implement parking management strategies • Reduce and enforce maximum parking times at 5-Hour lot. Provide signage directing drivers to the Commuter Lot; • Implement meters and align meter times with adjacent uses to enhance parking turnover; and • Implement wayfinding signage (see Chapter 6: Circulation).
Parking Department	Establish shared parking agreements – Convene stakeholders; develop and formalize a shared parking agreement. Stakeholders include: Sovereign Bank, Courthouse, CVS, and Continuum
Parking Department Planning and Development Department	Implement diagonal parking on appropriate streets feeding into Washington Street.
Parking Department Planning & Development Department	Consider flexible parking requirements in zoning. Revise zoning code.

Business Development

Actors	Actions
West Newton Businesses	Establish a Local Business Network • Collaborate with area's merchant's associations; and • Consider Business Improvement District and Main Streets structures, if successful.
Local Business Network	Implement streetscape improvements, such as street furniture, landscaping, street-sweeping, etc. • Conduct workshop to determine appropriate improvement and sharing of costs.
Local Business Network Planning and Development Department	Establish Design Guidelines and Facade Improvement Program • City or consultant could provide design skills; and • Establish Facade Improvement Grant.
Local Business Network Planning and Development Department	Plan and schedule public events relevant to the surrounding businesses and needs/interests of the community.
Local Business Network Planning and Development Department	Conduct business development training and networking • Consider neighborhood-based mentorship schemes.
Newton Historical Commission Local Business Network Planning and Development Department	• Design and implement historic plaques; and • Create a historical walking trail tour program.

Housing

Actors	Actions
Housing Development Department Planning and Development Department Housing advocates Zoning Reform Group	Revisit incentives for inclusionary housing in zoning and other regulations • Allow up to 20-unit housing development to pay fees in-lieu of housing; pro-rate fees to inflation; • Provide tax abatement incentives instead of/in addition to density bonus; • Strongly encourage onsite inclusionary housing in the Village Core; and • Encourage infill housing on Border street. Revisit accessory apartment program. Provide training and funds for homeowners.

Open Space & Environmental Design

Actors	Actions
Planning and Development Department	Address health concerns of street trees • Specify tree planting in budget; and • Request that gas utility address natural gas leaks that may be harming trees.
Planning and Development Department Engineering Department	Implement low impact design (LID) strategies to manage stormwater • Establish LID design standards.
Planning and Development Department	Implement solar design strategies for new buildings • Consider workshop with developers to test design strategies; and • Train development approvals staff in solar design. Consider holding workshop series with green design practitioners.

PLANNING REFERENCES

Ackley, Robert. Newton Massachusetts Natural Gas Leak Tree Survey, 2009-2010. Gas Safety, Inc., 2011.

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Newton, MA: City of Newton, 2009.

City of Newton. Newton Comprehensive Plan.
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Newton, MA: City of Newton, 2003.

Community Growth and Land Use Practicum. An Initial Plan for West Newton.
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Newton, Ma: Newton Conservators & Newton History Museum, 2006.

APPENDIX A
SOLAR DESIGN GUIDELINES

The City of Newton should adopt solar design guidelines to encourage development that makes optimal use of solar resources.

Buildings account for 50 percent of the energy use in Massachusetts, and more than half of the greenhouse gas emissions in the State. The City of Newton has shown leadership in implementing policies to reduce building energy use. Notably, the City adopted the Stretch Energy Code for new buildings, the most high-performance energy code in the USA. The Stretch Code includes performance standards, as well as prescriptive requirements for building systems such as wall assemblies, mechanical equipment, and lighting. However, the Stretch Code does not regulate the buildings' form (i.e. their shape and percentage of window area) or orientation (their position with regards to the sun).

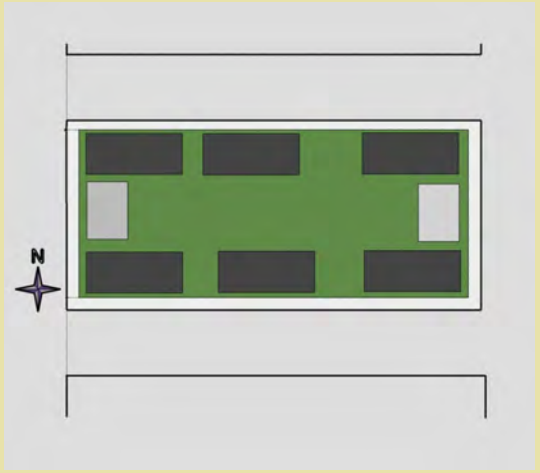
It is important to include the form and orientation of buildings in the design guidelines because they play a critical role in energy consumption. Form and orientation get impacted by the time of the day and year when the sun penetrates into the building, warming interior spaces. Also, these factors can allow buildings to make use of local wind patterns, providing passive ventilation and cooling.

Optimizing buildings' form and orientation reduces heating, cooling, hot water, and lighting energy requirements, which comprise the greatest uses of energy in buildings. Virtually all of the lowest energy consuming buildings are carefully designed to optimize the use of solar resources, via so-called "passive" or "solar" design strategies. Buildings that make optimal use of natural and renewable forms of energy also promote a healthier, green environment. Solar design strategies can often be achieved with no incremental upfront costs, while reducing energy spending and pollution for the lifetime of the building.

Solar design can be used on any property. However, the solar design potential of many sites in West Newton is especially rich. Washington Street and other streets are oriented with the length of their blocks running roughly east-west. This orientation provides buildings on the north side of streets with good access to winter sun for heating; buildings on the south side of streets likewise can collect solar energy from their rear.

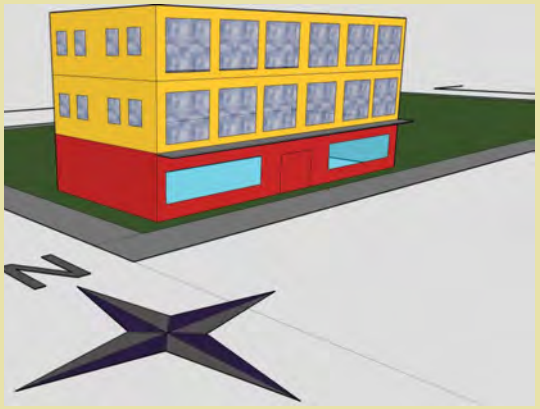
Cities throughout North America and around the world have adopted solar design guidelines to make optimal use of their solar resources. Santa Barbara in California, and Vancouver in Canada are two such cities. It is proposed that the City of Newton adopt solar design guidelines to complement the Stretch Energy Code and encourage low-energy buildings. These guidelines could be used throughout the city, and not only in West Newton, to contribute to more sustainable communities.

Fig. A-1 Building Orientation



Darker colored buildings are on properties fronting streets oriented east-west. These longer portions of buildings run east west.

Fig. A-2 South Facing Buildings



Building window area requirements. Yellow portions represent residences, red commercial areas. South face includes 60 percent window area, the west face 15 percent.

Guidelines

Most of these guidelines apply to the residential portions of buildings (including the residential portions of mixed-use buildings). Guidelines are limited for buildings in commercial areas because they vary substantially in their heating and cooling loads; commercial buildings differ in the amount of heat producing equipment, such as electronics or lights, and the number of people these buildings are designed to accommodate. In contrast, residential buildings are more consistent, though by no means uniform.

There are a variety of low-energy building design strategies. Therefore, the City of Newton should not consider these guidelines hard and fast rules; rather they should be used as guides to encourage architects and developers to optimize building performance early in the design process. Moreover, implementing these guidelines can help ensure that existing design review processes do not unintentionally discourage solar design strategies. City design review staff should continue to develop literacy in solar design strategies to encourage optimal design strategies in both residential and commercial properties. The following guidelines are suggested:

Orientation

All developments (residential, commercial, mixed-use, etc.) on properties fronting the streets within 20 degrees of the east-west axis should maximize the length of their southern faces, working with other development constraints. The buildings' longer faces should be oriented along the east-west axis where possible. This orientation can maximize solar heat gain during winter, when the sun is low in the sky to the south, while reducing heat gain during the summer. This design guideline is consistent with a continuous street wall, part of the proposed urban design guidelines for West Newton.

Window area percentage

South-facing residential walls with solar access during winter (e.g. those walls that

are not shaded) should have about 50 percent window area. East, west and north residential walls should have a maximum 15 percent window area. This would maximize solar heat gain during the winter, minimize heat gain in the summer, and reduce heat loss out of windows. The extent of shading should be examined using a massing model of the site and neighboring properties. The model should include existing properties, and also consider the potential for future development to shade the site. South-facing residential walls shaded from either current or future "as-of-right" development massing should not feature 60 percent window area. Instead, window area should be no more than 15 percent. South-facing window area may be substituted by an equivalent area of solar air heating equipment, or solar water heating equipment.

Thermal mass

Interior areas of buildings collecting solar energy through south facing windows should feature materials with high thermal mass such as concrete, masonry, or stone, in walls or floors. Thermal mass refers to the ability of materials to store heat. High thermal mass materials absorb heat over the course of the day, preventing over-heating. They then release heat during the evening, reducing heating requirements.

Exterior shading

South-facing and west-facing windows should feature exterior shading systems, including awnings, exterior venetian blinds, overhangs, roller screens, and other systems. Shading systems should reduce solar transmittance during the building's cooling season, while allowing for unimpeded solar access during the heating season.

Remove barriers to solar design through zoning regulation. Currently, some zoning language could inhibit solar design. The City should consider the following revision to its zoning code:

- Shading elements should be explicitly exempted from building setback calculations in the zoning code. Additionally, shading structures should be allowed to extend three feet into the public right-of-way. These provisions avoid penalizing solar design by reducing the amount of floor area that can be built out in buildings featuring solar design
- Exclude rooftop solar arrays from measurements of building height limits

Fig. A-3 Transparency and Orientation

Remington Court townhomes in Seattle use solar design strategies. The large south facing windows collect sunlight to warm interior spaces.
Source: HyBrid Architecture + Assembly

Fig. A-4 Shading Devices

Shading devices are used for passive solar design to reflect the hot sun.
Source: Digging in the Driftless

APPENDIX B
SHARED USE TEMPLATE AGREEMENT FOR PARKING FACILITIES[1]

Effective:_____

This Shared Use Agreement for Parking Facilities, entered into this ____ day of _____, _____, between _____, hereinafter called lessor and _____, hereinafter called lessee.

In consideration of the covenants herein, lessor agrees to share with lessee certain parking facilities, as is situated in the City of _____, County of _____ and State of _____, hereinafter called the facilities, described as:

[Include legal description of location and spaces to be shared here, and as shown on attachment 1.]

The facilities shall be shared commencing with the ____ day of _____, _____, and ending at 11:59 PM on the ____ day of _____, _____, for [insert negotiated compensation figures, as appropriate]. [The lessee agrees to pay at [insert payment address] to lessor by the _____ day of each month [or other payment arrangements].

Lessor hereby represents that it holds legal title to the facilities

The parties agree:

1. USE OF FACILITIES

This section should describe the nature of the shared use (exclusive, joint sections, time(s) and day(s) of week of usage.

-SAMPLE CLAUSE-

[Lessee shall have exclusive use of the facilities. The use shall only be between the hours of 5:30 PM Friday through 5:30 AM Monday

1 Stein Engineering, Shared Parking Handbook, Portland Metro, January 1997. p. 38-40.

and between the hours of 5:30 PM and 5:30 AM Monday through Thursday.]

2. MAINTENANCE

This section should describe responsibility for aspects of maintenance of the facilities. This could include cleaning, striping, seal coating, asphalt repair and more.

-SAMPLE CLAUSE-

[Lessor shall provide, as reasonably necessary asphalt repair work. Lessee and Lessor agree to share striping, seal coating and lot sweeping at a 50/50 split based upon mutually accepted maintenance contracts with outside vendors. Lessor shall maintain lot and landscaping at or above the current condition, at no additional cost to the lessee.]

3. UTILITIES and TAXES

This section should describe responsibility for utilities and taxes. This could include electrical, water, sewage, and more.

-SAMPLE CLAUSE-

[Lessor shall pay all taxes and utilities associated with the facilities, including maintenance of existing facility lighting as directed by standard safety practices.]

4. SIGNAGE

This section should describe signage allowances and restrictions.

-SAMPLE CLAUSE-

[Lessee may provide signage, meeting with the written approval of lessor, designating usage allowances.]

5. ENFORCEMENT

This section should describe any facility usage enforcement methods.

-SAMPLE CLAUSE-

[Lessee may provide a surveillance officer(s) for parking safety and usage only for the period of its exclusive use. Lessee and lessor reserve the right to tow, at owners expense, vehicles improperly parked or abandoned. All towing shall be with the approval of the lessor.]

6. COOPERATION

This section should describe communication relationship.

-SAMPLE CLAUSE-

[Lessor and lessee agree to cooperate to the best of their abilities to mutually use the facilities without disrupting the other party. The parties agree to meet on occasion to work out any problems that may arise to the shared use.]

7. INSURANCE

This section should describe insurance requirements for the facilities.

-SAMPLE CLAUSE-

[At their own expense, lessor and lessee agree to maintain liability insurance for the facilities as is standard for their own business usage.]

8. INDEMNIFICATION

This section should describe indemnification as applicable and negotiated. This is a very technical section and legal counsel should be consulted for appropriate language to each and every agreement.

-NO SAMPLE CLAUSE PROVIDED-

9. TERMINATION

This section should describe how to or if this agreement can be terminated and post termination responsibilities.

-SAMPLE CLAUSE-

[If lessor transfers ownership, or if part of all of the facilities are condemned, or access to the facilities is changed or limited, lessee may, in its sole discretion terminate this agreement without further liability by giving Lessor not less than 60 days prior written notice.

Upon termination of this agreement, Lessee agrees to remove all signage and repair damage due to excessive use or abuse. Lessor agrees to give lessee the right of first refusal on subsequent renewal of this agreement.]

10. SUPPLEMENTAL COVENANTS

This section should contain any additional covenants, rights, responsibilities and/or agreements.

-NO SAMPLE CLAUSE PROVIDED-

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date Set forth at the outset hereof.

[Signature and notarization as appropriate to a legal document and as appropriate to recording process negotiated between parties.]

APPENDIX C
LOCAL SHARED PARKING EXAMPLES[2]

Marlborough, MA: Shared Parking

City of Marlborough Zoning By-Law, §200-25 Off-Street Parking.

B. Application of Parking Requirements.

(3) [amended 4-23-90 by Ord. No. 89/90-3111] Common Parking Areas and Mixed Uses. Parking required for two (2) or more buildings or uses may be provided in combined parking facilities where such facilities will continue to be available for the several buildings or uses and provided that the total number of spaces is not less than the sum of the spaces required for each use individually, except that said number of spaces may be reduced by up to one-half (1/2) such sum if it can be demonstrated that the hours or days of peak parking need for the uses are so different that a lower total will provide adequately for all uses served by the facility. The following requirements shall be met:

(a) Evidence of reduced parking needs shall be documented and based on accepted planning and engineering practice satisfactory to the City Planner and Engineer.

(b) If a lower total is approved, no change in any use shall thereafter be permitted without further evidence that the parking will remain adequate in the future, and if said evidence is not satisfactory, then additional parking shall be provided before a change in use is authorized.

(c) Evidence of continued availability of common or shared parking areas shall be provided satisfactory to the City Solicitor and shall be documented and filed with the Site Plan.

(d) The determination of how a combined or multiuse facility shall be broken down into its constituent components shall be made by the Planning Department.

(e) If any reduction in the total number of parking spaces is allowed as a result of this subsection, then one hundred fifty (150) square feet of open space (per parking space reduced) shall be provided in addition to that required by lot coverage provisions of this Chapter.

2 MAPC Local Examples: Shared Parking

Waltham, MA: Shared Parking

The General Ordinances of the City of Waltham, Massachusetts, v.9, updated 8-2006, Part III. Zoning Code
ARTICLE V. Parking Requirements

Sec.5.2. Off-street parking requirements.

5.22 Footnotes.

(c) Notwithstanding any other parking requirements set forth in this chapter for individual land uses, when any land or building is used for two or more distinguishable purposes (i e , joint or mixed use development), the minimum total number of parking spaces required to serve the combination of all uses shall be determined in the following manner:

Table C-1 Parking Credit Schedule Chart

	Weekday	**Weekday**	**Weekday**	**Weekend**	**Weekend**
	Night Midnight to 7:00 a.m. (percent)	Day 7:00 a.m. to 5:00 p.m. (percent)	Evening 5:00 p.m. to Midnight (percent)	Day 6:00 a.m. to 6:00 p.m. (percent)	Evening 6:00 p.m. to Midnight (percent)
Residential	100	60	90	80	90
Office/Industrial	5	100	10	10	5
Commercial/Retail	5	80	90	100	70
Hotel	70	70	100	70	100
Restaurant	10	50	100	50	100
Restaurant associated with hotel	10	50	60	50	60
Entertainment/recreation (theaters, bowling allies, cocktail lounges and similar)	10	40	100	80	100
Day-care facilities	5	100	10	20	5
All other	100	100	100	100	100

Multiply the minimum parking requirement for each individual use (as set forth in the applicable section of this chapter for each use) by the appropriate %age (as set forth below in the Parking Credit Schedule Chart) for each of the five designated time periods and then add the resulting sums from each vertical column. The column total having the highest total value is the minimum shared parking space requirement for that combination of land uses.

Stoneham, MA: Flexible Requirements and Shared Parking

Town of Stoneham Zoning Bylaws, 6.0 GENERAL PROVISIONS AFFECTING ALL DISTRICTS

6.3 Off-Street Parking Requirements:

6.3.8 SPECIAL PERMITS FOR PARKING

6.3.8.1 Special permit for a change in parking space requirements: the number of off street parking spaces required by section 6.3.3, of this by law for a use or uses in the Central Business District and in the Commercial I District for Banquet Facilities, Function Halls and Dinner Theaters may be changed by Special permit in accordance with the following provisions:

(1) Special permit criteria: The Planning Board, by special permit, may allow remote parking lots, or shared parking lots which it deems reasonable, based on the following criteria, and other applicable provisions presented in this subsection:

(a) The capacity, location and current level of use of existing parking facilities, both public and private;
(b) The efficient and maximum use in terms of parking needs and services provided;
(c) The relief of traffic and parking congestion;
(d) The safety of pedestrians;
(e) The provision of reasonable access either by walking distance or shuttle vehicle arrangements;
(f) The maintenance of the character of the area.

(2) The following are allowed by Special Permit:

A. The substitution of parking spaces within municipal parking lots in lieu of or in reduction to the parking requirements of this section, provided they are located within 1600 feet of the building which is intended to be served.
B. A reduction in parking space requirements: The number of off-street parking spaces required by Section 6.3.3 of this bylaw for a use or uses in the non-residential districts may be reduced by special permit in accordance with the following provisions:

(1) Shared parking: Shared private parking facilities for different buildings or uses may be allowed by Special Permit, subject to the following provisions:

(a) Up to fifty % (50%) of the parking spaces serving a building may be used jointly for other uses not normally open, used or operated during similar hours. The applicant must show that the peak parking demand and principal operating hours for each use are suitable for a common parking facility.
(b) A written agreement defining the joint use acceptable to the Planning Board of the common parking facility shall be executed by all parties concerned and approved by the Planning Board as part of the special permit process. Such agreement shall be recorded at the Middlesex Registry of Deeds.
(c) Any subsequent change in land uses for which the shared parking proposal was approved, and which results in the need for additional parking spaces, shall require a new special permit application under this subsection.

(2) Remote parking: Remote (satellite) parking areas may be authorized by the Planning Board by special permit, subject to the following provisions:

(a) The satellite parking spaces will be used solely by the employees and, where practicable, clientele of the commercial use;
(b) The off-site parking spaces shall be located to adequately serve the proposed use and shall be within six hundred (600) feet of the building served for clientele of the commercial use. Off-site parking for employees of the business may be located within a distance of one thousand two hundred (1,200) feet, unless shuttle vehicle arrangements are provided as a condition of the special permit. The parking distance shall be measured by the shortest route of pedestrian access, entrance to entrance.

(3) Pedestrian access: Any proposals submitted, which, in the opinion of the Planning Board, provide direct and vital pedestrian access to other abutting commercial properties and serve to improve pedestrian accessibility may reduce the number of parking spaces required by fifteen % (15%). Pedestrian access shall be provided enough improved pathways, stairway access or other physical improvements, and such access shall be clearly marked.

Montgomery County, MD: Shared Parking[3]

The Montgomery County Zoning Ordinance allows for shared parking when any land or building is under the same ownership or under a joint use agreement and is used for 2 or more purposes. The uses being served by the shared parking arrangement must be within a 500 feet walking distance of the shared parking facility. The number of parking spaces required under a shared parking arrangement in Montgomery County is calculated by the previous mentioned method.

3 Maryland Governor's Office of Smart Growth, Driving Urban Environments: Smart Growth Parking Best Practices, March 2006; p. 6-7.

The following is a generalized example of calculating the shared parking requirement for a mixed use development, given the regulations in the Montgomery County Zoning Ordinance. The calculations are based on a development project with general retail and office uses. The retail use has a gross floor area of 100,000 square feet and the office use has a gross floor area of 100,000 square feet. The development is located in the designated Southern Area of Montgomery County and is located 1,000 feet from a Metro station. Given this location, the minimum amount of parking normally required for a retail use is 5 spaces per 1,000 square feet gross floor area and the minimum requirement for an office use is 2.1 spaces per 1,000 square feet gross floor area. The following table summarizes the calculations. The "percentage of parking requirement column" is based on the parking credit schedule in the Montgomery County Zoning Ordinance.

For this example, the minimum parking requirement for the shared parking arrangement is 521 spaces since that is the maximum number of spaces across the five time periods. This is significantly less than what would otherwise be required, 710 spaces, if shared parking were not permitted—a 26% reduction in the minimum parking requirement.

Table C-2 Shared Parking Requirement

	Office Use			**Retail Use**			
	Minimum Parking Requirement	Percentage of Parking Requirement	**Adjusted Parking Requirement**	Minimum Parking Requirement	Percentage of Parking Requirement	**Adjusted Parking Requirement**	**Parking Requirement Time Period**
Weekday Daytime	210	100%	**210**	500	60%	**300**	**510**
Weekday Evening	210	10%	**21**	500	90%	**450**	**471**
Weekend Daytime	210	10%	**21**	500	100%	**500**	**521**
Weekend Evening	210	5%	**10.5**	500	70%	**350**	**360.5**
Nighttime	210	5%	**10.5**	500	5%	**25**	**35.5**

APPENDIX D
CURRENT BUSINESS MIX

Table D-1 Business Mix by Type

Arts-related (4) 4.8%	Gift Shop (3) 3.6%	Service (6) 7.1%	Food & Drink (16) 19.0%	Auto-related (11) 13.1%	Beauty Service (7) 8.3%	Bank (4) 4.8%
Art, etc.	Morning Silver	Thanks Mama Cloth Diaper Store	Paddy's Pub	Newton Yellow Cab	M.T. Nails	The Village Bank
Artitudes	Monte Carlo	Andy's Lawn Mower Service	Mango Thai Cuisine	Galaxy Auto Body	Louis Du Gal Studio	Sovereign Bank
Putting on the Knitz	Sweet Center	Automatic Laundry	The Local Restaurant	Tody's	Hair by Hanna	People's Federal Savings Bank
WN Cinema		Axis Promotion and Events	Shogun	Shell Gas	Elements Therapeutic Massage	Bank of America
		Minuteman Press	Keltic Krust Bakery Café	Jacob's Auto Service & Gas	Sole Tan	
		Corner Cleaners	Blue Ribbon BBQ	Newton Auto Group	Unique Nails	
			HK Gourmet	Enterprise Rent-A-Car	Red Azalea Massage	
			Cherry Tree Restaurant & Bar	Garden City Auto Shop		
			Lumiere	Sullivan Tire Auto Service		
			Comella's	CITGO		
			L'Aroma Café & Bakery	JN Phillips Auto Glass		
			WN Pizza & Grill			
			Coney Island Ice Cream Café			
			Dunkin Donuts			
			Sweet Tomatoes			
			Shing Yee Restaurant			

Table D-1 (continued)

Community Center (5) 6.0%	Civic (3) 3.6%	Health Service (3) 3.6%	Convenience & Grocery (5) 5.6%	Athletics (5) 5.6%	Manufacturing (4) 4.8%	Other (7) 8.3%	Clothing Retail (1) 1.2%
Gary L Price Rehab Center	Newton Police Department	WN Hearing Center	Corner Mini Mart	Joanne Langione Dance Center	SLOAN Arichell Tech.	James A. Ryan Insurance Agency	Queen Bee
Anthony J. Bibbs Youth Center	Newton District Court	WN Dental Associates	West Newton Liquors	Energize Fitness Studio	Albeco Fastener Co.	Carley Realty	
Greater Boston Chinese Cultural Association	US Post Office	Bousson Family Dentistry	Trader Joe's	Boston Sports Club	John W. Egan Co. Inc.	Century 21 Shawmut Properties	
First Unitarian Society in Newton			NE Discount Retailers	Harris Cyclery	Sheet Metal Shop	Continuum	
Newton Community Center			CVS	Centre Ski & Bike		Brezniak Rodman Funeral Directors	
						MA National Army Guard Reserve	
						Heritage Corp.	

APPENDIX E
ADAPTIVE REUSE

Historic properties that are unused or vacant for a long period of time offer great opportunities for adaptive reuse. Such spaces could be used for mixed use as well as residential development. This is especially significant for historic properties because the external structure of a property can be preserved with modifications to the interior to match the requirements of its use. The City of Vienna, Austria is known for its Gasometers[1].

Structures that served a role in supplying gas to Vienna and lighting the city's streets with gas lanterns under the Simmering Gas Works now provide spaces for 615 affordable housing units, 70 stores, offices and a shopping mall within its premises. The outer structures of these gas supply tanks that are historically significant to the city are preserved while the interior is reused to accommodate mixed uses.

Although this may not be immediately possible, this option is worth consideration by the City in planning new development in historic villages like West Newton where the external structures that add historic character to the villages could be retained and adapted to accommodate new development.

Fig. E-1. Adaptive Reuse in action: Gasometers in Vienna.

Source: The Daily Dig-Gasometer City Edition

1 http://www.duncanjdsmith.com/uploads/phjpri/gasometer_db_article.pdf

GLOSSARY: TAXONOMY OF PLACES

This plan examines and makes recommendations for different sections of the study area of West Newton. The process of developing this plan and proposing suggestions led to the creation of sites within the study area that we identified with distinct names. These names have been regularly referred to throughout the document with an explanation of what they mean cited during their first usage.

Since some of these names refer to a more general usage of the term, we realized that it was important to identify these places and describe the context within which these names have been used in this document. Although the boundaries between descriptions of these places may not be as distinct, the names of these places identify their closest reference.

City: This term refers to the City of Newton as an administrative entity and a unit of government (usage: the City, the City of Newton, Newton).

Village: The Village refers to West Newton. It does not refer to a territorial area having the status of a village especially as a unit of local government (usage: the Village, West Newton Village, West Newton)[1].

Study area: It refers to the area of West Newton Village bounded by I-90 to the south, the limit of the Exit 16 off-ramp to the west, Brookside Avenue to the east, and residential areas to the north. The area includes the Village Center, peripheral areas along the eastern section of Washington Street along Watertown Street and in the light industrial area on Border Street (usage: the study area, the site)

Village Core: Village Core refers to an area that stretches along Washington Street from beyond the current western edge of West Newton's commercial center to the intersection of Washington and Dunstan Streets (see Figure 5-3) (usage: Village Core, the Core).

Outer Core: This term is used to refer to the land parcels that lie at the periphery of the Village Core. These are commercial clusters

1 http://www.merriam-webster.com/dictionary/village

of a scale and orientation different from the Village Core and comprise a preponderance of auto uses, light manufacturing, and chain retailers (see Figure 5-6) (usage: Outer Core).

Transition Zone: This area is made up of the land parcels on the southern edge of West Newton Village that is cut off from West Newton Hill by I-90. It also includes parcels near the northern boundary separating the Village Core and Outer Core from the residential neighborhood beyond (see Figure 5-8). This zone is based on remarks made in the Zoning Reform Group's recent report, "village centers have blended most successfully with surrounding neighborhoods where the commercial core has transitioned gradually to the residential neighborhoods that surround it," (usage: Transition Zone).

East Washington Street: This term refers to one of the focus areas developed as a part of the vision. It is that section of the Washington Street corridor that serves as an approach to the Village Center from the eastern section of the study (see Fig. 10-1, Fig. 10-2) (usage: East Washington, East Washington Street).

East Gateway: East Gateway is a catalyst site that refers to a series of parcels that lie between Washington Street, Cheesecake Brook, Davis Court and Dunstan Street (see Fig. 10-1, Fig. 10-5) (usage: East Gateway).

Village Center: The Village Center is at the heart of the Washington Street corridor and the study area and transitions from the East Gateway. It includes the area of the intersection of Washington Street and Watertown Street with Elm Street at the western edge of this area (see Fig 10-1, Fig. 10-8, Fig. 10-9). It contains the elements of a village center identified under the Taxonomy of Places in the Newton Comprehensive Plan (2007)[2] (usage: Village Center).

West Washington Street: This catalyst site refers to the western section of Washington Street, including its intersection with Elm Street, down past Blue Ribbon BBQ, and into the junction with the Turnpike (usage: West Washington Street, West Washington).

2 Village center – a relatively compact area which importantly provides services and/or employment for a surrounding residential (once rural) area of lower density. The classic village center also contains civic facilities and compact residential development. In varying degrees, the areas called "villages" in Newton generally contain village centers, ranging from a tiny one in Oak Hill Park to a classic one in West Newton. (from Newton Comprehensive Plan (2007))