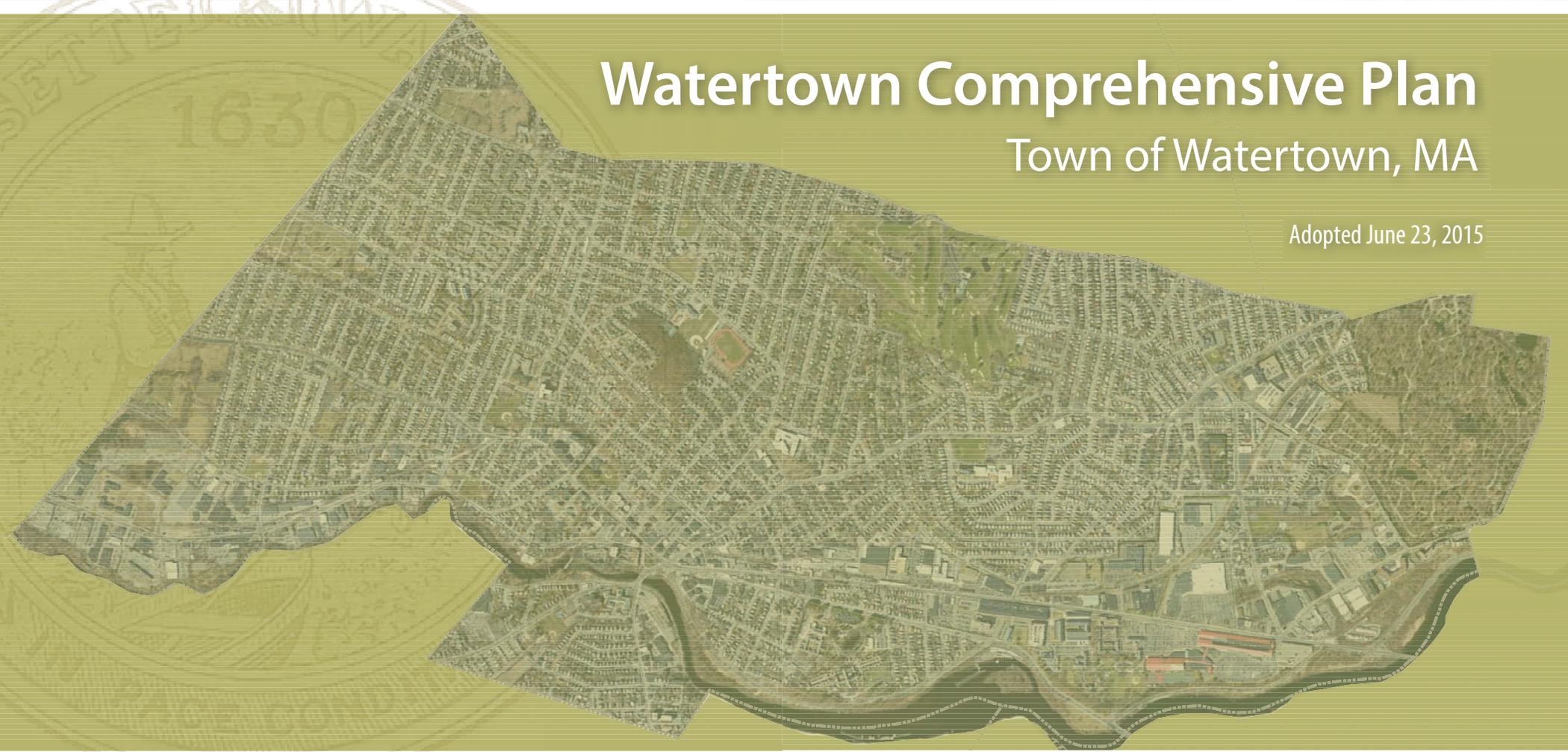




Watertown Comprehensive Plan

Town of Watertown, MA

Adopted June 23, 2015



Watertown Comprehensive Plan

Watertown, Massachusetts



Prepared for
Town of Watertown, Massachusetts

Prepared by



Adopted _____, 2015

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Spring on Charles River



VISION STATEMENT

1

Watertown's people and history

Since Watertown's founding in 1630, the community has evolved from an original Puritan Settlement based on agriculture into a hub for trade and commerce, then becoming a key industrial center, and now transitioning into a post-industrial community with a mix of cultural, racial, educational, and economic diversity. Watertown is a place where residents appreciate and benefit from a strong sense of community, diverse urban neighborhoods, robust school system, rich culture, and a number of people that live and work in town. With a network of squares and multi-modal corridors, Watertown is a well-connected and attractive place to live and work. A variety of housing types throughout the community and innovative re-use of old industrial sites along the river and former rail corridor provides flexible options for a strong business and residential mix.

Watertown's setting

Located six miles west of Boston, Watertown has many local retail, cultural, and natural assets while enjoying the advantages of a diverse metropolitan area and regional economy. Along with the cultural and natural attractions, the community has a balance of residential neighborhoods and retail centers and a strong transportation network -- all making Watertown a great place to live, work, and play. With just over 4 square miles of land and more than 4 miles of direct frontage along the Charles River, Watertown strongly identifies itself with the river, providing residents and visitors with a tremendous natural setting that includes waterfront parks, trails, and recreational opportunities. This system of parkland and open space has also helped define development patterns.

Watertown also identifies with its many longstanding residential neighborhoods. These neighborhoods vary in character and form of development, but provide another basis for residents to identify with and associate with their neighbors. Many residents also connect through their children at a neighborhood scale and within the school system. The schools are an integral part of the community and it is important to acknowledge the role the school system plays for residents in identifying with the community.

Two primary retail centers, Watertown and Coolidge Squares, are local and regional landmarks that are embraced by town residents and businesses as vibrant destinations where people

can live, shop, and eat. A third regional retail center exists along Arsenal Street with two shopping malls and a number of large national retailers. Watertown's amenities include regional destinations such as the Charles River Greenway, the Arsenal Center for the Arts (located within the Watertown Arsenal National Historic District), and the historic Mount Auburn Cemetery. The Cemetery is a national historic landmark, botanical garden, museum, home to urban wildlife, and is a tremendous resource to residents and visitors. Watertown is connected to the region by mixed-use corridors – Galen, Mt. Auburn, Arsenal, and West Main – with easy access to the Massachusetts Turnpike, MBTA bus service, and multi-use trails.



Spring at the Arsenal

Vision for 2025

Watertown envisions a vibrant and diverse future for its community that builds upon its rich foundation of neighborhoods, culture, commercial districts, town squares, diverse street corridors, civic assets, and proximity to the Charles River and Boston. Watertown will continue to foster and strengthen community, ensuring a built environment with diverse institutions, supported schools, celebrated cultural amenities and recreational facilities that provide the cultural cohesiveness so important to the community.

With these great qualities and resources in place, the Watertown community envisions a future that:

- ▶ has a stronger relationship with the Charles River Reservation, where residents and businesses benefit from enhanced connections to the river, more waterfront activities, preservation and respect of the ecology of the river and its natural habitat, making Watertown known to the region as a community that respects and appreciates its natural features.
- ▶ is shaped by a built environment along each of its squares and corridors that reinforces Watertown's character, achieving balance between design, preservation, and redevelopment efforts in ways that make Watertown known for being a destination and context sensitive design community.
- ▶ is innovative and a leader in economic development, targeting growth of specific types of development and housing opportunities in ways that support diverse, successful, and environmentally conscious employment centers in balance with neighborhood character and existing development, making Watertown known as a place for innovation.
- ▶ is proactive in maintaining and developing its infrastructure and public services, with continued support and improvements of the school system, parks and recreation, library, and cultural assets.
- ▶ is known for celebrating its unique neighborhoods, historic and cultural heritage, and diversity, where visitors and residents alike mingle in distinctive local shops and restaurants, arts venues, beautiful parks, and active plazas, making Watertown known for its eclectic mix of local venues and amenities.
- ▶ incorporates welcoming, attractive streetscapes and gateways on well-designed pedestrian-oriented, bicycle-friendly, tree-lined streets.
- ▶ is progressive about sustainability, by investing in smart infrastructure and program choices, making Watertown known as a community that embraces state-of-the-art sustainable practices for the public and private sectors.
- ▶ Is a community that promotes an active, healthy lifestyle where residents have access to social services, nutritious and affordable food, and places to be physically active.



The Arsenal on the Charles

LAND USE

2

Introduction

Founded in 1630, Watertown has been described as the “mother town” as it was one of America’s earliest colonial settlements and served as an entry into the heartland of America for early settlers. The early town boundaries encompassed what is now Weston, Waltham, Belmont and large sections of what is now Lincoln, Newton, and Cambridge. The existence of the Charles River was a critical factor in the settlement of the Town. Being a transit point into the early colonial frontier with a river, Watertown began to see manufacturing and milling industries soon after it was founded. Damming the Charles River became commonplace by the early 1800’s, providing water power for various industries such as cotton weaving, sail making, and linen cleaners. Raw materials and finished products were shipped via water to the port at Boston Harbor and continued to final destinations throughout the new nation and the rest of the world.

In the late 18th century, Watertown’s early industries helped to fuel the American industrial revolution. Spurred by the Civil War, Watertown evolved to become a significant national industrial center in the early 19th century. The new nation’s need for munitions found Watertown to be ideally located for such manufacturing, resulting in the founding of the U.S. Army Arsenal in 1816, which at its height of operations before World War I covered over eighty acres of land with more than sixteen hundred employees, and continued in operation until its complete closure in 1995.

With a burgeoning industrial base, Watertown attracted substantial worker populations. Housing in Watertown became a major concern in the early 20th century. Typical development patterns ensued in which industrial workers settled near the factories of East Watertown and the mills along Pleasant Street

west of Watertown Square. The northern and northwestern areas of town were developed from large estates, orchards, and farms. One such estate is “The Oakley” whose remnants are now part of the Oakley Country Club, one of America’s first golf courses.

Due to the changing political realities and new economic and technology trends, for several decades after the mid-20th century Watertown experienced a period of industrial decline with population decrease and infill development. Although most of the Town’s industries have long since departed, Watertown’s housing stock continues to reflect the earlier socio-economic landscape of the past centuries. Larger homes and lots in the northern and northwestern segments of the Town give way to higher population density and more urban development as one moves from the northern border with Belmont to the southern and eastern edges that border on Cambridge and Newton where factories once operated.

During the past 300 years, the Charles River has changed from a bountiful aquatic habitat to a polluted waterway, damaged by former use as an open sewer for industrial and human wastes. It was reborn as a “water parkway” in the late 1890’s only to decline in the mid-20th century and then to be rediscovered as a regional recreational asset. In Watertown, industrial effluent began discharging into the Charles in the early 1800’s with such industries as Lewando’s Cleansing and Dying Company on Pleasant Street, Whitney Paper Mill on Morse Street, and the Aetna Mills on Bridge Street. Today, with most of Watertown’s industries gone, effluent into the Charles continues to a much lesser degree from smaller sources like surface runoff, isolated spills, and improper sewer ties from households. The river has begun to rebound with aquatic life, improved water quality, preservation of shoreline, creation of parks, and a significant return of recreational activities such as the annual “Run of the Charles”.

Watertown provides a diverse mix of close-knit neighborhoods with prime access to regional economic, medical, and educational centers, as well as a rich 383 year history going back to America’s earliest colonial heritage. While land use is shaped by various geographic, economic, and social factors, it is important to understand how land use patterns in Watertown have evolved over time in order to inform the land use strategies for the next 20 to 25 years that will guide desired developments, improve the natural environment, and enhance the social and economic vibrancy in the community.

The following sections provide an overview of the historic and current land use patterns in Watertown.

Baseline Assessment

Purpose

Land use forms the basis for comprehensive planning and determines, to a large extent, Watertown’s need to provide public facilities and infrastructure, transportation networks and services, and protection of environmental resources. As Watertown plans for its future, determining how and where growth and development should occur provides the basis for planning where investments in municipal services are needed, as well as determining what controls will be necessary to protect areas of the Town from unwanted development. The Town has the ability to control land use and development patterns through a variety of mechanisms, including zoning and subdivision regulations, provision of public utilities and infrastructure, and protection of open space lands through direct acquisition and the acquisition or acceptance of conservation restrictions and easements.

Historical Land Use Patterns

The context for the Town’s growth and development can be traced through the changes in land use over time. According to the historical land use data of Watertown, accessible through MassGIS, in 1971 about half of the land in Watertown was used for residential purpose; 605.6 acres or 23% was dedicated to institutional and recreational uses; industrial land comprised nearly 14% of the community and commercial land more than 7%; in addition, 18.5 acres or 0.7% of the land in Watertown was classified as open undeveloped land (see Figure 2-1).

As shown in Table 2-1 below, agricultural land and natural land had remained unchanged between 1971 and 1999, accounting for respectively 1.1% and 1.2% of the total land in Town. Residential land increased slightly from 1,315 acres in 1971 to 1,327 acres in 1999, while land for urban institution/recreational decreased by 2.6% from 605.6 acres to 589.6 acres. The biggest increase occurred in commercial land with more than a 36%

increase from 191.9 acres in 1971 to 261.1 acres in 1999. Development over these years resulted in further loss of open undeveloped land, which decreased by 72.4% from 18.5 acres to only 5.1 acres in 1999. Industrial land also experienced more than 14% decrease from 361.9 acres in 1971 to 310.1 acres in 1999.

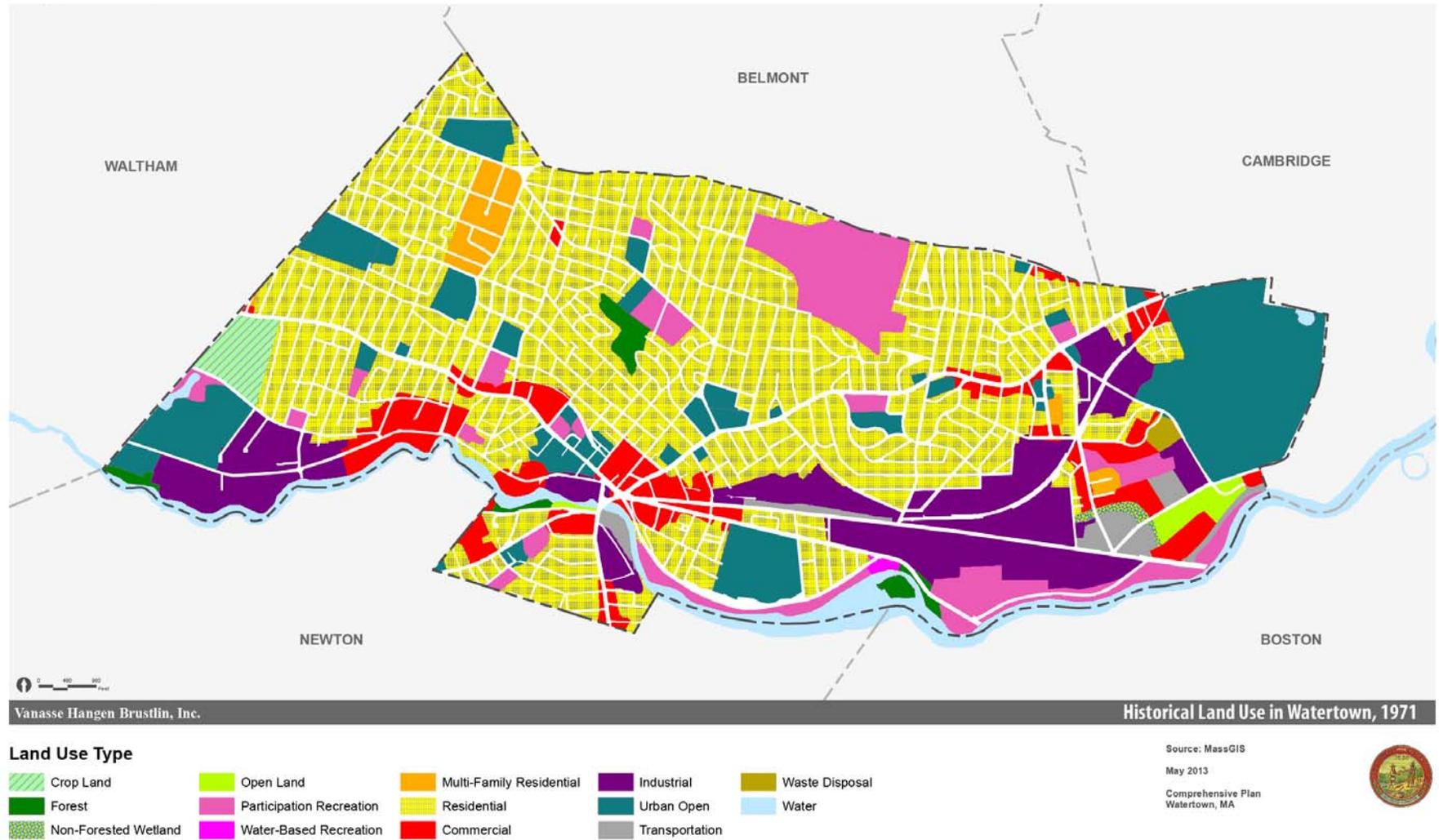
Overall, land use change in Watertown during the late 20th century was characterized by a steady transition from industrial and undeveloped open land into residential and primarily commercial land. While large industrial complexes such as Raytheon, the Arsenal and Hood Rubber generated truck traffic and employed a lot of people, many of them lived in nearby worker housing. The evolution over time to residential and commercial uses has resulted in different traffic patterns and will shape many of the recommendations that come out of this Plan.

Table 2-1 Historic Land Use Patterns in Watertown, 1971, 1985, and 1999

	1971		1985		1999		Percent Change 1971-1999
	Acreage	Percent of Total	Acreage	Percent of Total	Acreage	Percent of Total	
Agriculture	28.9	1.1%	28.9	1.1%	28.9	1.1%	-
Open Undeveloped Land	18.5	0.7%	5.1	0.2%	5.1	0.2%	-72.4%
Commercial	191.9	7.3%	257.1	9.8%	261.1	9.9%	36.1%
Industrial/Transportation/Mining	361.9	13.7%	310.1	11.8%	310.1	11.8%	-14.3%
Residential	1,315.0	49.9%	1,315.0	49.9%	1,327.0	50.3%	0.9%
Urban Open/ Institutional/Recreation	605.6	23.0%	605.5	23.0%	589.6	22.4%	-2.6%
Natural Land	31.9	1.2%	31.9	1.2%	31.9	1.2%	-
Water	82.8	3.1%	82.8	3.1%	82.8	3.1%	-
Total	2,636.6	-	2,636.6	-	2,636.6	-	-

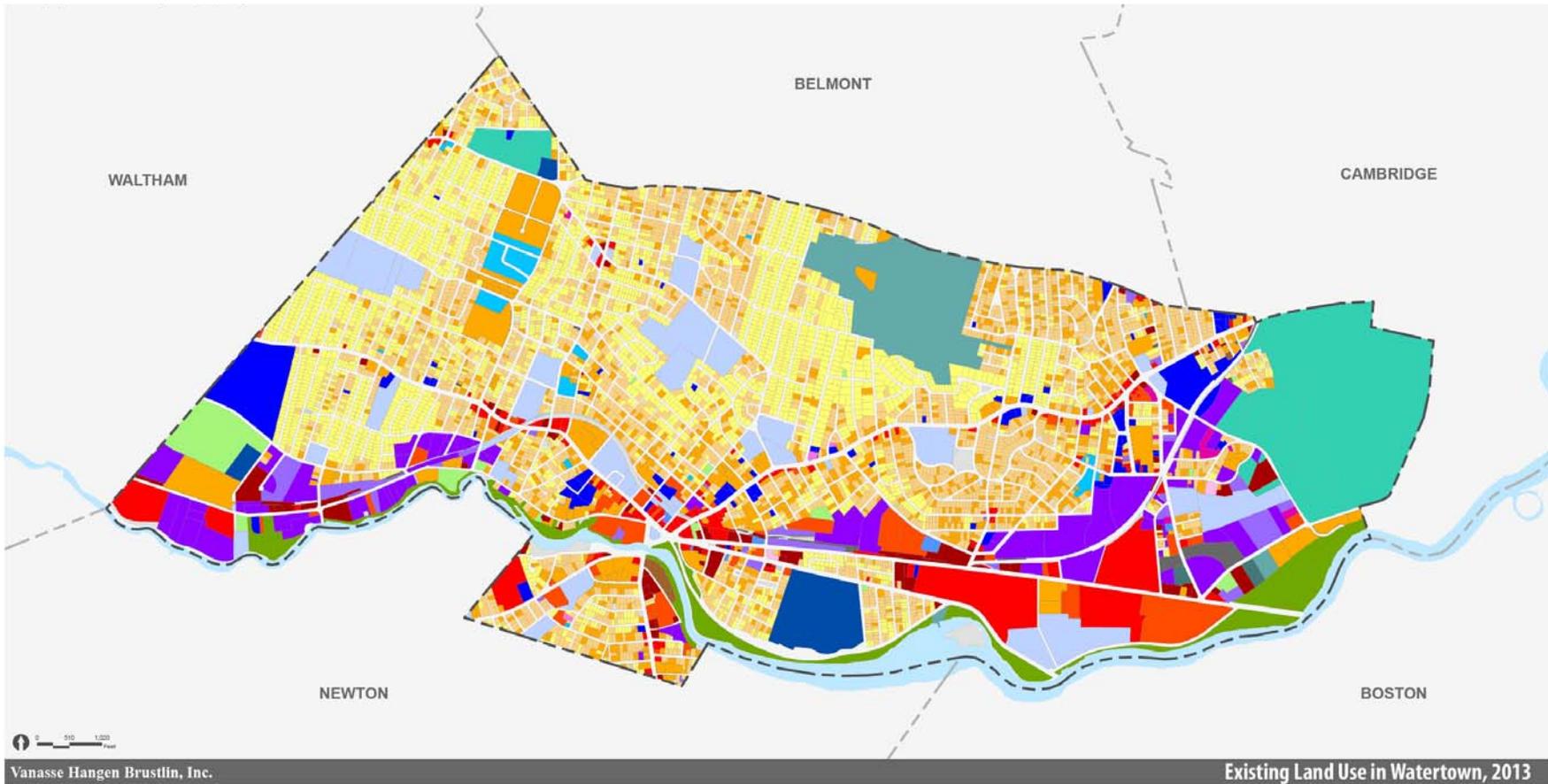
Source: MassGIS land use data

Figure 2-1 Historical Land Use in Watertown, 1971



Note: Road network reflects 2013 conditions

Figure 2-3 Existing Land Use in Watertown, 2013



Land Use Type

- | | | | | |
|--|---|--|---|--|
| Single Family | Office | Utility | Non-profit and Religious | State - Other |
| Two Family | Indoor Recreational Facilities | Public Service Properties | Cemeteries | Housing Authority |
| Other Residential | Outdoor Recreational Facilities | Child Care Facilities | Vacant Land - Developable | Town-owned |
| Retail Trade | Manufacturing and Processing | Transient Group Quarters | Vacant Land - Undevelopable | Other |
| Automotive Sales and Services | Storage and Distribution Facilities | Private Schools | State - DCR | |

Source: Watertown Assessor's Database
 May 2013
 Comprehensive Plan
 Watertown, MA



Existing Land Use

More recent land use data from MassGIS shows that in 2005 the largest three categories of land in Watertown were residential (51.5%), urban open / institutional /recreation (19.7%), and commercial (15.5%). Industrial land made up 6.6% of the total area of Watertown and agricultural land accounted for 0.8% (see Figure 2-2 below). Approximately 72 acres or 2.7% of Watertown was classified as natural land / undisturbed vegetation, most of which were forested areas¹. There was no open developable land left in 2005.

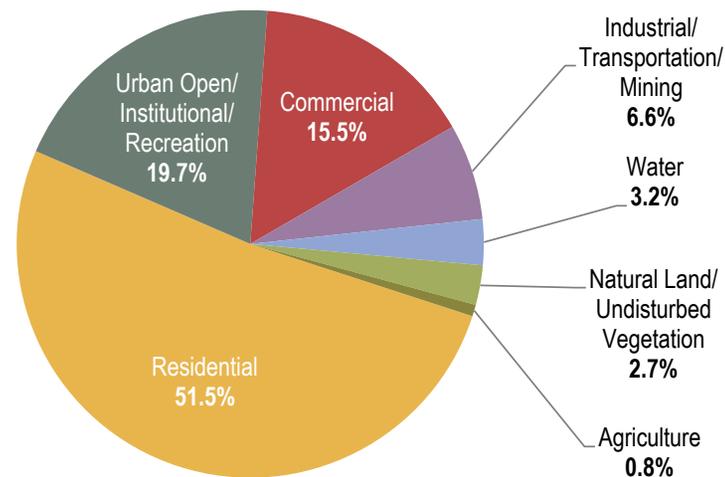
Although 2005 land use data cannot be legitimately compared to data from previous years due to data limitations², the general land use trend indicates that commercial uses are steadily growing while industrial land is declining. Residential uses, with limited land available for new development, are expanding

through redevelopment of vacant and underutilized parcels and increased density along certain corridors, most notably Pleasant Street.

Land use patterns form a tightly knit mosaic created by its historic development as a mill town and a streetcar suburb of Boston³. The Existing Land Use Map (see Figure 2-3), visualized from the Town's 2012 assessor's database, vividly profiles the land use composition in the community at parcel level. As shown in the map, single-family residential areas are primarily concentrated in the west end of the Town and in the upper middle portion near the Oakley Country Club. Two-family and other multi-family residential uses cover large areas in the mid-east and mid-west part of the Town, and are also distributed in the southern part of the Town on both sides of the Charles River. The distribution of residential land reflects the history of housing development in close proximity to the streetcar lines along Mt. Auburn Street, Belmont Street, and Galen Street, and later expanding to the west side of the town.

Commercial uses, on the other hand, have shaped distinctive nodes and corridors throughout the community. There are three major commercial nodes, each with unique characteristics. Watertown Square, located near the crossing of the Charles River and serving as a crossroad at the present time, is characterized by a mix of commercial and retail uses, as well as river views segregated by major roads. There is little residential development in Watertown Square, with some two- and multi-

Figure 2-2 Land Use in Watertown, 2005



Source: MassGIS land use data, 2005

¹ According to MassGIS, 2005 land use data is not strictly comparable to land use data from 1971, 1985, and 1999 due to evolved image interpretation and data production methods, as well as changes in land use categories. Data discrepancy, such as increased natural/vegetated areas in 2005, exists when cross-comparing data from 2005 and previous years.

² See 1

³ Strategic Framework for Economic Development, Town of Watertown, 2011

family buildings mostly located on the periphery. Coolidge Square, located on the northeast side of town, has a stronger appearance as a village center populated by local neighborhood retail stores and specialty food establishments. Along Arsenal Street, the major commercial activity is dominated by the Arsenal Mall, Watertown Mall, and a number of office buildings. Anchored by these main commercial nodes, five major corridors expand to the east, west, and south of Watertown Square.

Neighborhoods

Watertown has over 50 percent of its land dedicated to residential uses. The diverse fabric of the community has created a mix of residential types that support single and two-family neighborhoods, higher density residential complexes, and mixed-use. Residential development is spread throughout town with many neighborhoods where there is little to no transition into more intense commercial and industrial areas. These areas create conflict points, as well as wonderful organic success stories (Iggy's Bakery and other small business successes in the industrial residential conflict zone), in Watertown's constant



*Residential neighborhood
along Pleasant Street*

juggling act to deal with a complex urban form where over 30,000 people live and 20,000 people work, all in a little over four square miles.

The residential neighborhood character is also often associated with the schools that serve a particular area. The community makes connections through the activities of their children, but schools also can be a central gathering point, in terms of civic activity, recreation, and other educational programs. The perceived and actual quality of the schools and their facilities can be a significant determinant of the character of a particular neighborhood.

The planning process included an initial meeting with over two hundred residents and also included on-line discussions. The public discourse provided diverse comments in regards to types of housing options and resident opinion. Several critical issues and key steps that can help maintain Watertown's neighborhoods while supporting commercial nodes throughout the town were identified. Key issues raised during the planning process included:

- ▶ Preservation of neighborhood character and historic fabric of the housing stock
- ▶ Non-conforming houses
- ▶ Large additions that are out of character with the existing neighborhood
- ▶ Tear-downs and the resultant larger home that replaces the original one
- ▶ Cut-through traffic on residential streets due to congestion along the Town's major roadways
- ▶ Pedestrian safety and the need to provide safe routes for students to schools located in residential areas

Watertown's Squares and Corridors

When reviewing Watertown's historic development pattern and current conditions, it is clear that the Town's potential future development and growth should be directed toward its commercial centers and the connecting roadways. The areas to consider include Watertown Square and the Main Street corridor traveling west toward Waltham; the Galen Street corridor that connects Watertown Square and the Massachusetts Turnpike; the Arsenal Street corridor from Watertown Square to the Boston city line; Coolidge Square and the Mt. Auburn Street corridor that connects Watertown with Cambridge; and the Pleasant Street corridor. The following is a description of the key commercial squares and connecting corridors, the potential development opportunities, and how those opportunities can be accommodated in a manner that enhances Watertown as a place to live, work, and play.



Main Street

Watertown Square and the Main Street Corridor

Watertown Square is considered by many to be “the town center” of Watertown. Seven roads converge on the Square, it is the site of a major transportation hub at the MBTA bus yard, and it is adjacent to the Charles River. As summarized in the 2011 Strategic Framework for Economic Development, Watertown Square “contains a vital mix of business, government, and restaurant amenities for the entire area. Nowhere else in Town does such an active mix of uses touch the Charles River.”⁴

Currently, Watertown Square is characterized by a mix of mostly commercial uses including offices, banks, personal service retail such as a pharmacy, some restaurants and other smaller-scale retail. Civic uses in the Square include the Watertown Administration Building (Town Hall), the Watertown Free Public Library, and the Fire Station. Building heights vary but most of the buildings are three stories or less. Recent residential development includes a new five-story condominium building and the five-story Residence at Watertown Square project, which features 90 assisted living units, and is scheduled to open in the Fall of 2014. At the main intersection in the Square, there is a public plaza and a main entry to the Charles River Reservation including the historic Watertown Landing and dock.

While most of the businesses in the Square front the street and rely on municipal parking, there are several buildings along the southern end of Mt. Auburn Street that have a more suburban feel with a number of curb cuts leading to parking along the sides or in front of the businesses.

Most of the parking to service the business in the Square is centered in a public parking lot behind the storefronts on Main

⁴ Strategic Framework for Economic Development, August 2011, p. 24

Street. Lack of parking is one of the more frequently mentioned problems in the area and is seen as a limiting factor in accommodating future growth and development in the Square.

With MBTA bus service running along the Main, Mt. Auburn and Arsenal Street corridors and the MBTA bus yard located across the river, the Square is a hub for transportation to Boston, Newton and Cambridge. It is also a major source of traffic congestion given the volume of traffic that flows through the Square every day and the configuration of the roadways that traverse the Square. As a result, it is a difficult area for pedestrians and cyclists to maneuver. The combination of traffic and the difficulties faced by other modes of transportation will need to be addressed when considering the future of Watertown Square. The potential for the Watertown Community Path to bring a multimodal opportunity to travel to and through the square also presents an opportunity that the community has broadly supported.

The most commonly raised issues about Watertown Square include:

- ▶ It is not a destination. Aside from a few restaurants, the mix of businesses does not draw people to visit the Square
- ▶ New businesses, such as boutique retail and bistros with sidewalk dining, along with better pedestrian accommodations are needed.
- ▶ There is a lack of parking
- ▶ Traffic congestion and the difficulties faced by pedestrians and bicyclists are concerns
- ▶ There should be ways to better capitalize on the proximity to the Charles River such as enhanced bicycle and pedestrian connections and recreational-oriented business located in the Square

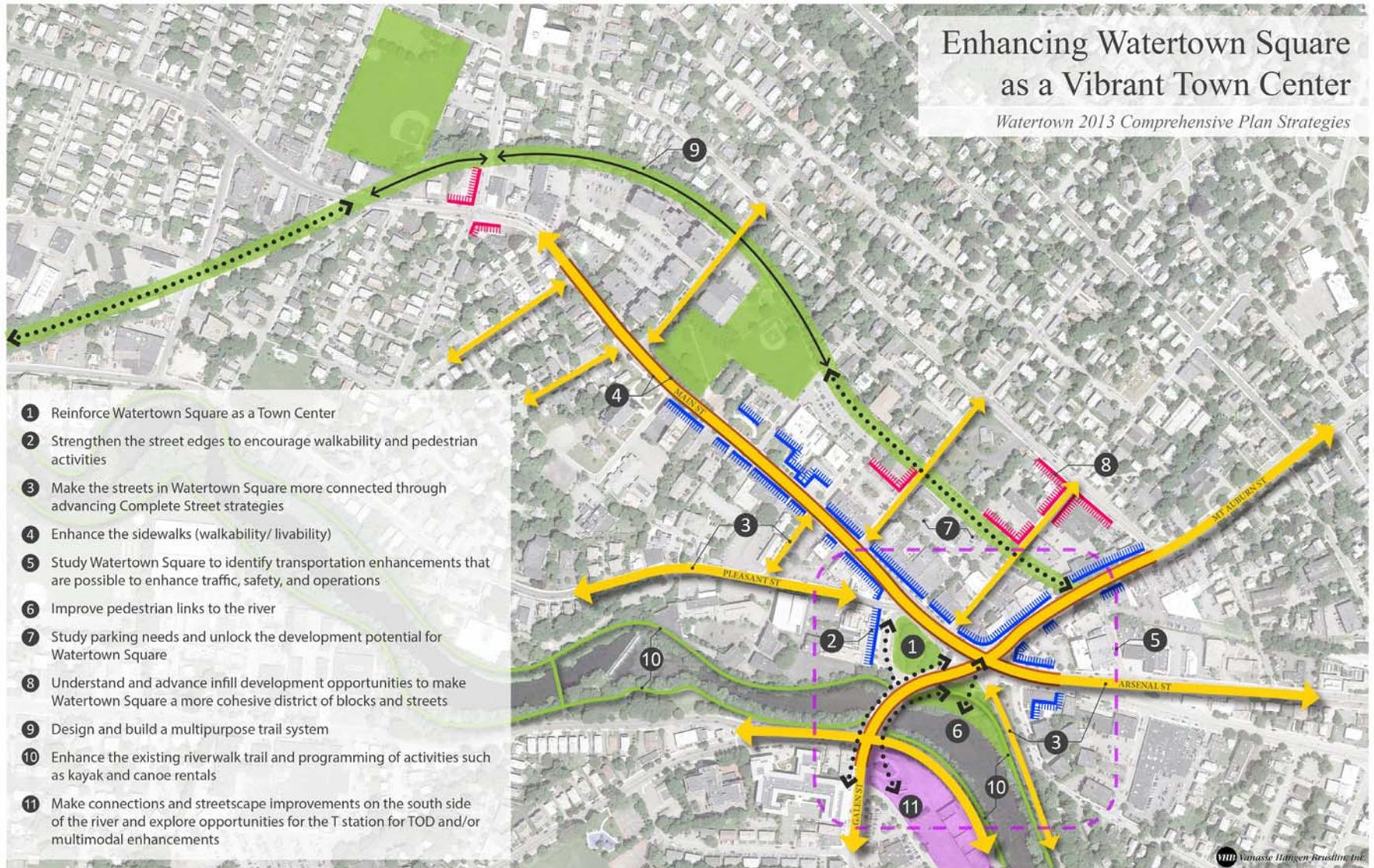
The commercial corridor extending from Watertown Square along Main Street features the historic town center that offers a variety of dining, government services, banking, convenience retail and cultural attractions, as well as upgraded streetscape and sidewalk amenities. The configuration of parking behind the buildings that front the section of Main Street near Watertown Square reinforces an intimate pedestrian environment. Several parks, ball fields, and the Watertown Linear Park, interlace with commercial, residential, and public facilities in the east half of Main Street in Watertown.

See Figure 2-4 that illustrates ways in which to enhance Watertown Square as a vibrant Town Center.

To the west, a business cluster extends along Main Street between Lexington Street and Waverly Avenue, mainly serving local residents and nearby employees with shops and restaurants. The commercial character transitions further to the west along Main Street as residential development becomes the predominant land use. Along the town line with Waltham is the site of the historic Gore Place, which provides a unique historic and scenic open space opportunity for area residents as well as the Town's only significant agriculture operation. This National Historic Landmark includes the house and estate of Massachusetts Governor Christopher Gore, as well as a small working farm.

It is not anticipated that the Main Street corridor will change much over time. As described below, much of the future redevelopment opportunities will be realized along other corridors. Thus, the goal for the Main Street corridor is to maintain and promote the neighborhood character and commercial nodes, while focusing on ways to improve the aesthetics as well as transit, pedestrian and bicycle access and safety.

Figure 2-4 Enhancing Watertown Square as a Vibrant Town Center



Galen Street Corridor

As the only direct vehicular access between the Massachusetts Turnpike and Watertown, Galen Street serves as a major connector between Newton, Watertown and beyond. Accompanied by heavy through traffic year round, the section of the corridor within Watertown is populated with a mix of higher density residential uses alternating with commercial uses such as office, retail, and automotive sales/service. There is no unifying character to the land uses or the design of the buildings along this corridor. With the MBTA bus hub (Watertown Yard) and land with development potential located on the north end of the corridor, this section of Galen Street has been considered as a site for potential higher density transit oriented development and an improved public realm that would reinforce the visual and pedestrian connections to Watertown Square across the river, as well as the river itself.

If the MBTA bus barn were to become available, new development could create a new urban square and multi-modal transit center. Pedestrian and streetscape improvements can further enhance this area and create additional public open space that better connects Galen Street with Watertown Square, the bridge and the riverfront. Moreover, by taking advantage of mass transit connections, greater density in this area can create transit-oriented development and help in reducing automobile reliance. With careful consideration of building massing, new development can define the open space and activate the streets, building better pedestrian connections to the Square.⁵

Arsenal Street Corridor

The Arsenal Street corridor, located in the southeast section of the Town, is characterized by large format retail services, shopping malls and repurposed office and restaurant spaces that formerly served as places for the receipt, storage, and issuance of

ordnance by the U.S. Army. Arsenal Street, as the Town's main spine in the south connecting directly to Boston, is an important gateway to the Town and possesses the most significant potential for positive land use change. Historically an industrial corridor, Arsenal Street today has been fragmented by different types and intensity of uses along its length. Automotive sales and services dot some of the prime locations near Watertown Square and along the corridor to the east. On the northern side of the street, large tracks of industrial land lie underutilized in the western half between Arsenal and Walnut Street and in the eastern half extending along the Watertown Greenway towards Coolidge Square as well as along Coolidge Avenue.

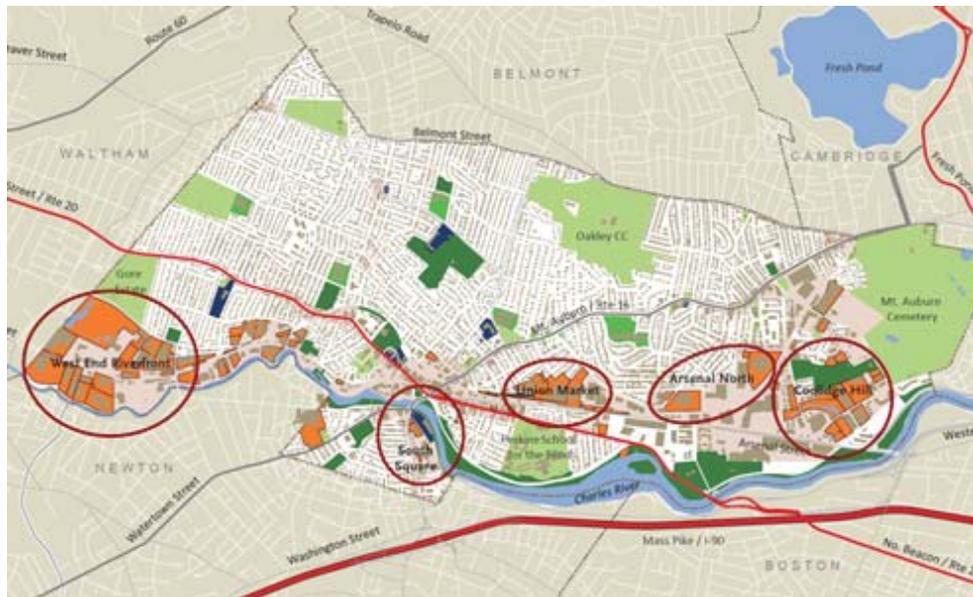
The Arsenal on the Charles, with over 760,000 square feet of office space retrofitted from the early 19th century Army complex, is the prominent development along the midpoint of Arsenal Street. To the east, the Arsenal Mall and Watertown Mall across the street from one another represent the major commercial uses in eastern Watertown and serves a regional market. The Watertown Target and Home Depot are among the highest grossing stores in the region.

In the 2011 Watertown Strategic Framework for Economic Development study, three industrial sites along the Arsenal Street Corridor were identified as development opportunity focus areas (see Figure 2-5) with potential for additional and improved office/lab or residential uses that will create a new identity for the corridor.⁶ Recognizing that this corridor is the source for much of the employment base in Watertown, it is important to the Town to maintain that focus. As a result, future land use along the Arsenal Street corridor should emphasize

⁵ Strategic Framework for Economic Development, August 2011, p. 24

⁶ This study is discussed in more detail in the Economic Development element of this Comprehensive Plan. See Chapter 5

Figure 2-5 Development Opportunity Focus Areas



Note: Properties with assessed values less than \$30/sf highlighted in orange
 Source: Strategic Framework for Economic Development, Town of Watertown, 2011

commercial, office and retail development. Mixed use can be encouraged with a required percentage commercial considered, but residential development with direct frontage on the corridor should generally be discouraged.

There is significant development interest in Arsenal Street that can transform it into a more vibrant mixed use environment for people to live, work, and play. Several proposals will likely to be advanced in 2014 and 2015 including a proposed hotel on the site of the former Saab dealership, the redevelopment of the Arsenal Mall into a more densely developed mixed use project (including the potential for some residential uses) that will bring the buildings closer to the street and add a number of amenities, and the redevelopment of Arsenal on the Charles by athenahealth into a campus with a mix of office and retail uses.

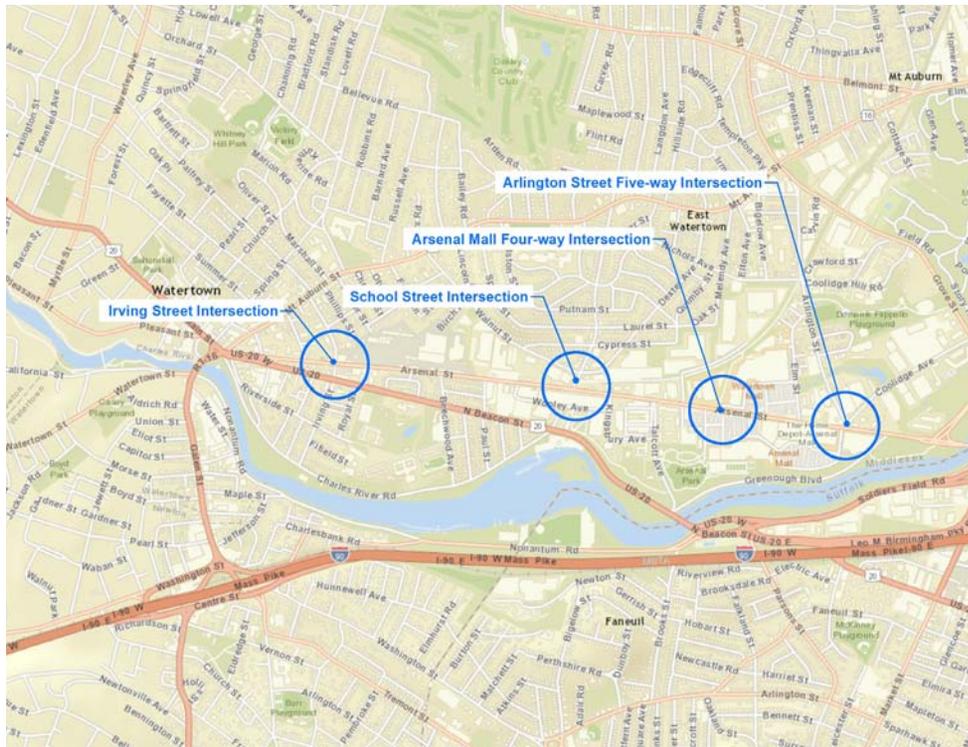
Additionally, a proposal has been submitted and is under review by the Town to develop a site near the intersection of Arsenal and Irving Streets for an approximately 300 residential unit complex and 37,000 square feet of commercial space that could include a grocery store.

Given this level of activity, it is important for the Town to craft a land use planning strategy that ensures that its vision for this key corridor is implemented as part of the planned redevelopment over the next five to ten years. The preliminary plans for the hotel, Arsenal Mall and Arsenal on the Charles projects provide opportunities to generate new jobs and tax revenues for the Town, but also create challenges to the Town due to the increased level of activity these projects will bring to the area from new visitors and workers. Anticipated increases in traffic (automobile, bus, bike and pedestrian) necessitate comprehensive transportation solutions (see Chapter 2 on Transportation, Circulation and Parking) and streetscape improvements to minimize impacts along the corridor. Through the recommendations of this Comprehensive Plan, the Town can consider establishing design and streetscape parameters for future development along the corridor, how it interfaces with the street, and how it functions internally through its expected mix of uses. The Transportation element will further discuss these potential solutions.

There has been a significant amount of public input on the future of the Arsenal Street corridor. It is generally recognized that the corridor is the primary location for future economic development in Watertown. A summary of the comments heard during the planning process includes:

- ▶ Increase and enhance the mix of uses along the corridor to include new residential uses, more restaurants, smaller-scale retail, hotels, and high-end office uses

Figure 2-6 Important Land Use Nodes along Arsenal Street



- ▶ The corridor should be more pedestrian friendly, including finding ways to reduce or slow down traffic
- ▶ Provide pedestrian and bicycle connections to nearby residential neighborhoods, as well as the Charles River and Watertown Square
- ▶ Increase the number of street trees and enhance the streetscape
- ▶ Bury the utility lines

Along Arsenal Street, there are four important nodes that should be the focus of activity (see Figure 2-6) given the existing traffic patterns and land uses (present and future).

- ▶ The signaled intersection of Irving Street and Arsenal Street with commercial and residential uses on the south and commercial and industrial uses on the north.
- ▶ Intersection of School Street and Arsenal Street, where Building 311 of the Arsenal complex is located to the south of Arsenal Street. On the north side of the street is the Lexus dealership and a gas station.
- ▶ The four-way (non-aligned) intersection on Arsenal Street with the main entrance to the Arsenal Mall and an access road. Parking lots front this intersection on three sides.
- ▶ The five-way intersection at Arsenal Street and Arlington Street, including the access road to the mall complex, Home Depot and a restaurant in the parking garage and office building. This intersection is also adjacent to the United Parcel Service (UPS) facility and is frequently congested with mall traffic, commuters heading to and from Boston via Greenough Boulevard and UPS trucks.

In order to accommodate anticipated future development and address the issues raised during the public process, the zoning should be amended in several ways. First, additional land uses should be considered in parts of the corridor, specifically multi-family residential, retail and structured parking. Moreover, mixed use is not currently listed as an allowed use in most of the corridor. Defining mixed-use development options and considering options for locating it within key areas in the corridor should be considered. Second, updating the dimensional requirements should be considered to allow for

Figure 2-7 Transform Arsenal Street into a Dynamic Mixed-use Corridor



- 1 Implement "Complete Street" initiatives. Maximize traffic flow to facilitate growth along the corridor while balancing the needs of other transportation modes including pedestrians, bicycles and transit. Special considerations should be given to sidewalk widths and streetscape amenities and the ability to accommodate either an on-street bicycle lane or cycle track where feasible.
- 2 Enhance the visibility of pedestrian crossings at intersections to improve safety and walkability.
- 3 Identify goals and design criteria for streetscape elements such as street trees, plazas, public art and street furniture to help brand the corridor and improve its aesthetic. Develop design standards for sidewalks with a focus on special enhanced areas at intersections.
- 4 Develop standards for signage, light poles and banners that consider the needs of businesses, vehicles and pedestrians.
- 5 Objectives for setbacks should be established to create outdoor plazas and public realm improvements that reinforce intersections, and pedestrian/bicycle zones. These setbacks could vary to accommodate a variety of urban forms such as buildings that have special architectural features that project into the corner, or that recede from the corner to create a plaza or small square.
- 6 Work with the MBTA to enhance bus stops and bus services along the corridor; by exploring items such as Bus Rapid Transit (BRT), exclusive bus lanes, and setting signal priorities.
- 7 Establish incentive bonuses for future development that allows additional stories or building height. Development or density bonuses could be tied to achieving desired land use mix, activation of ground floor uses, articulation of building form, and the inclusion of amenities such as plazas or public realm improvements.
- 8 Work with property owners to identify opportunities to make pedestrian, bicycle and other connections to adjacent areas along Arsenal Street.
- 9 Supplement existing zoning with Architectural Design Guidelines that address form, scale, and other design features.
- 10 Develop goals and strategies for access and parking that consider best practices for access management of vehicles, and preferences for placement of parking (and parking structures) at the rear of sites or potentially "wrapped" with development.
- 11 Establish goals for active ground floor uses at key locations that will reinforce pedestrian activities along the corridor.
- 12 Consider establishing goals and criteria for limited use of parking in the front of buildings at key locations along the corridor to enhance the pedestrian and public realm.

Note: This diagram is not site specific. It depicts a variety of strategies that are contemplated for the Arsenal Street Corridor. Further consideration by the Town and a more detailed assessment will be required to determine the feasibility of specific streetscape, traffic, bicycle, pedestrian, and land development improvements that are illustrated above.

potential increases in building height, building coverage and setbacks for new construction using incentives and other tools for public contributions, etc. For example, if buildings are to be allowed along the street line, the front setback would need to be reduced from the current 25 feet. Third, there is currently a minimum 15% requirement for open space. The Town could consider revising that standard to accommodate some form of public or civic space that can be incorporated as a feature that better supports the interface between new development and the public realm. This newly created public open space could also include private contributions/locations for public art. Finally, the parking standards should be updated to reflect any new uses allowed within the district, as well as to consider updated provisions and requirements for shared parking and potential reductions for transportation demand management (TDM) measures employed to reduce automobile use.

A combination of zoning amendments and design guidelines can address the specific elements of the redevelopment plans including the project's interface with the street and project impacts. These recommendations to transform Arsenal Street into a complete mixed use corridor are illustrated in Figure 2-7 which shows how a mix of commercial and office land uses serve a regional market area in a context sensitive way. The suggested standards could apply in the relevant zoning districts such as the I-1, I-2, and I-3 Industrial zones, and other areas where redevelopment is anticipated. The Town could consider using some of the AODD historic guidelines in order to create a more unified vision for the corridor. Guidelines from the AODD consider:

- ▶ Building and structure exteriors
- ▶ Fenestration

- ▶ Scale
- ▶ Color
- ▶ Use of material
- ▶ Mass
- ▶ Views to, from, and across the landscape

New, updated design guidelines should be established for the Arsenal corridor.

- ▶ Design guidelines should address streetscape improvements including planting street trees, incorporating sidewalk amenities, accommodating bicycle and pedestrian access, signage, burial of utility lines and creating public civic spaces, and including public art.
- ▶ Project impacts, especially those related to transportation, should be addressed and mitigated. The Town should require a Transportation Management Association that considers shuttle buses to locations such as MBTA stops (the Watertown bus yard, Harvard, Alewife Station, etc.), employee transit benefits, carpooling, traffic calming, worker flextime, bicycle sharing programs, car sharing programs and access management. See more details in Chapter 3 - Transportation, Circulation and Parking.
- ▶ The principles of a complete streets policy, in which streets are designed and operated to enable safe access for all users, should be embodied in the future vision for Arsenal Street. See more details in Chapter 3 - Transportation, Circulation and Parking.

Coolidge Square and Mt. Auburn Street Corridor

Mt. Auburn Street is a major throughway that runs from Watertown Square into Cambridge. Land use along this corridor is characterized by a mix of residential, commercial, and municipal uses. The west end is essentially the extension of Watertown Square filled with local restaurants and retail services, as well as small commercial plazas. The commercial area near the east end where Mt. Auburn Street meets Bigelow Avenue is known as Coolidge Square. This is a burgeoning and regionally popular neighborhood retail center in Watertown known for its diverse retail and services including ethnic and specialty food stores and restaurants, banking, small shops, and other services. Much of the commercial space is in either one or two story buildings.

Residential uses line both edges of Mt. Auburn Street in between these two commercial clusters, with small corner retail stores intermittently located along the corridor where historic trolley stops were located. Residential uses include single and two-family homes, along with a few multi-family dwellings and mixed use residential located above businesses.

The Town's only designated Historic Overlay District is on Mt. Auburn St. between Summer Street and Lincoln Street, extending back into adjacent residential properties.

Mt. Auburn Cemetery is located along the Town's border with the City of Cambridge. Mount Auburn, the first "rural" landscaped cemetery in the U.S., launched the 19th century rural cemetery and public park movements. In 2013, this cemetery was designated a Great Place in America by the American Planning Association. It is recognized as one of the country's "most significant designed landscapes" and is listed in the National

Register of Historic Places as well as being a designated National Historic Landmark.

Dramatic changes to the character of this corridor are not anticipated, so preservation of community character is important. Any redevelopment activity along this corridor should remain smaller in scale and compatible with the one- and two-story buildings in existence. However, as is the case with other sections of town, design guidelines, façade upgrades, pedestrian and bicycling amenities, and streetscape improvements such as street trees and planters, are deemed necessary. While Coolidge Square offers a diverse mix of ethnic restaurants and stores, public comment suggests that it needs more of an identity to distinguish itself from other commercial centers. This is an area that would lend itself to outdoor seating at restaurants, bistros and bakeries and may support a more mixed-use future. Many of the current uses do not provide off-street parking, which presents a potential constraint on future expansion of these uses or a change in use unless parking requirements are relaxed or addressed in a combined facility.

Pleasant Street Corridor

Historically an industrial corridor known for its mills and factories along the riverfront and the rail lines, Pleasant Street still shows a strong industrial character defined by light industrial uses, warehouses, and contractor yards along its length, particularly west of Bacon Street. It has long been recognized that a significant amount of land within the corridor is underutilized or vacant and the corridor itself has been generally characterized by single story buildings and parking lots. In recent years some new businesses including biotech, medical devices, and some small research and development facilities, as well as new residential development such as Repton Place and Riverbend on

the Charles, have developed along the corridor. The corridor is adjacent to a number of residential areas which are primarily single and two-family neighborhoods. Most recent development along the corridor has been predominantly higher density residential, although recent projects have also included some commercial uses.

In March 2007, the Watertown Town Council established a six-month moratorium on development along the Pleasant Street Corridor in order to allow the Town Council, staff, and constituents to determine the appropriate response to several proposed residential projects in the former I-3 industrial district. To help create a vision and implementation strategy for the corridor, the Town initiated the Pleasant Street Corridor Concept Plan and Implementation Strategy study in April 2007. The study

developed a number of goals to guide the planning and future of the corridor.

- ▶ Long term development of Pleasant Street should help define the character of the corridor with appropriate scale, size, and mix of uses.
- ▶ Enhance connections and open space opportunities through improved access to the Charles River and protect wildlife habitat, manage stormwater, calm traffic, and improve transit, bike and pedestrian access.
- ▶ Future development should support the Town's tax base while creating incentives for appropriate development along the corridor.



*Recent residential development
along Pleasant Street*

The study also identified development potential along the corridor for business centers, residential neighborhoods, as well as neighborhood retail and restaurants. For implementation, the study suggested a number of priority actions including amendments to the zoning ordinance, seeking opportunity for Chapter 40R zoning, providing financial incentives, and advocating for transit improvements. Ultimately, the Town adopted the Pleasant Street Corridor District in 2008, which is described in the section below.

One of the goals of the new zoning was to encourage a mix of uses including residential, office, research and development, hotel and retail. However, that has not materialized as envisioned, in part because of the recession that began as the zoning was adopted. Since 2008, several major residential

developments sprouted along the corridor, introducing hundreds of rental units into this part of the Town. While these new projects further stimulated redevelopment of the Pleasant Street corridor, the impacts have been controversial among various stakeholder groups, particularly local residents. Concerns include traffic congestion, decreased pedestrian safety, impeded view and access to the riverfront, and unappealing aesthetics resulting from large-scale developments perceived as being not set back sufficiently from either the street or the river, although they often are set back further than pre-existing uses. Although concerns were raised regarding impeded views and access to the river, it should be noted that visual access is limited from Pleasant Street as a result of existing buildings, trees, and topography. Also, access to the river is available, but could be enhanced by better signage.



Residential along Pleasant Street

In order to address these issues, it is recommended that the Town consider a number of changes to the district regulations including:

- ▶ Given that much of the new development along the corridor has been residential, revised zoning should specify that mixed use and commercial development nodes be considered within the district to better match the vision espoused in the 2007 Concept Plan for the corridor and refine how and where particular uses should be established.

The corridor could be separated into separate “sub-districts” as a way to maintain the economic diversity along the corridor and direct future development in a manner that respects the character of the corridor. From the Waltham line to Bridge Street, Pleasant Street is primarily commercial with the exception of the new residential projects such as Repton Place. Bridge Street is a major connecting roadway to Newton. Future development within this node should be considered for commercial or mixed use where any residential component is removed from direct frontage on Pleasant Street. Between Bridge Street and Rosedale Road, the emphasis should be on commercial or mixed use given that the existing land use there is primarily commercial. Opportunities to provide pedestrian connections to the Charles River should be identified, including use of a Town-owned parcel across from Rosedale Road. From Howard Street east toward Watertown Square, the land use transitions to a mix of residential until Church Lane, where there are some offices within reused historic buildings adjacent to the Square. In order to maintain that character, the existing mix of residential development should be maintained.

- ▶ Design guidelines should be established to address issues of building massing, the relationship among the building, street and river, and overall aesthetics.

- ▶ Setbacks from the street should be revisited, as the current build-to-line regulation creates concerns when combined with the current heights.

The building height regulations should more clearly identify appropriate heights within the district to create context sensitive design. The maximum allowable height should be reconsidered at the street edge to be lower while allowing buildings to reach the current maximum height only if buildings are stepped back a sufficient distance to avoid sight lines that could create the “canyonization” of the corridor along Pleasant Street and along the Charles River. Additional stories could continue to be considered with greater step backs if development enhancements identified in the ordinance are included such as public open space, structured parking, alternative transportation, and conforming with design or sustainability guidelines. Consider flexible and varied setbacks with respect to the shape of properties

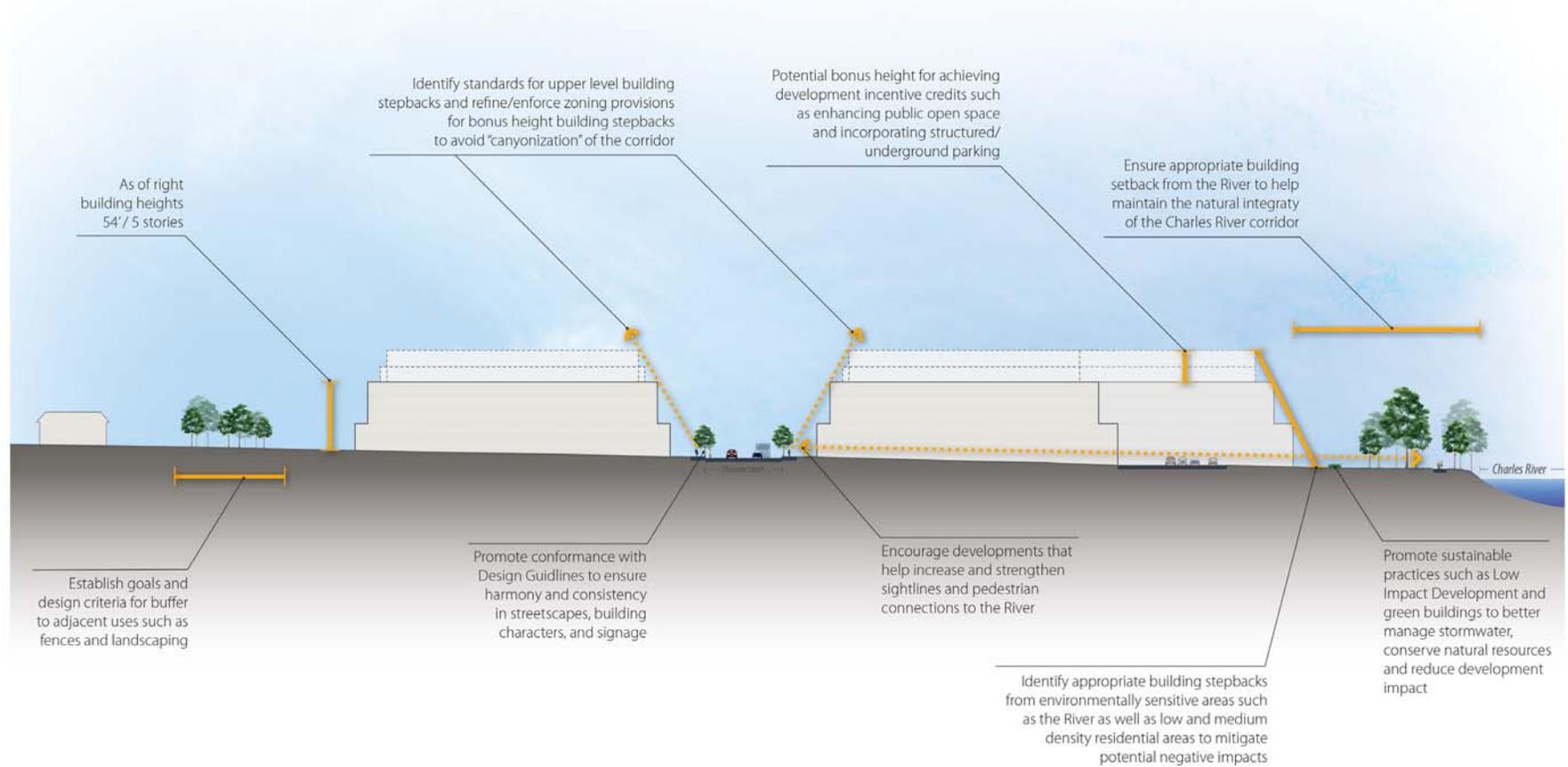
- ▶ Zoning should continue to promote areas along the corridor where breaks should be provided for public access points to the Charles River, as well as view corridors to the river. Opportunities for buffers and public spaces should continue to be considered for future development proposals.
- ▶ Streetscaping, lighting and other amenities should be provided along the corridor.
- ▶ Consider implementing a stronger exterior lighting ordinance to control light pollution for the PSCD and other mixed-use districts.
- ▶ Better wayfinding is needed to provide enhanced visual and physical access to the Charles River.

The Pleasant Street cross-section diagram (see Figure 2-8) illustrates some of the above-mentioned recommendations.

Figure 2-8 Define Pleasant Street as an Inviting Riverside Corridor

Define Pleasant Street as an Inviting Riverside Corridor

Watertown 2013 Comprehensive Plan Strategies



Zoning Regulations vs. Future Land Use

Land use in Watertown is regulated by the Town's Zoning Ordinance and Zoning Map. There are currently thirteen general zoning districts, including seven residential districts, three business districts, and three industrial districts. In addition, the Town has six special zoning districts. The following is a summary of the different zoning districts based on definitions, the use table and the dimensional regulations. The general zoning districts do not include purpose sections describing the districts.

Residence Districts

- ▶ The two Single Family zoning districts (S-6 and S-10) allow single-family residences only. The minimum lot size in the S-6 district is 6,000 square feet and is 10,000 square feet in the S-10 district. Most of the land zoned for single-family in Watertown is S-6.
- ▶ Much of the land zoned for residential uses is within the Two Family zoning district (T). Both single- and two-family homes are allowed, with a minimum lot size of 5,000 square feet.
- ▶ The Single Family Conversion district (SC) allows single- family development by right and conversions of single-family to two-family dwellings by special permit. Two-family dwellings are also allowed with a special permit. The minimum lot size is 6,500 square feet.
- ▶ There are two residential multi-family districts (R.75 and R1.2), which allow single- and two-family homes by right, and multi-family homes with a special permit with site plan review. For the R.75 zoning district, the minimum lot size is 5,000 square feet, the minimum lot area per dwelling unit is 1,500 square feet, the maximum height is 35 feet, and the Floor Area Ratio

(FAR) is 0.75. Within the R1.2 district, the minimum lot size is also 5,000 square feet, but the minimum lot area per dwelling unit is 1,000 square feet. The maximum height is 45 feet and the FAR is 1.2. Most of the land zoned for multi-family housing falls within the R.75 district, much of which is located around Watertown Square.

- ▶ The Cluster Residential district (CR) can be found in two locations – around the Oakley Country Club along the Town's border with Belmont and a small area in the western part of town. Single- and two-family homes are allowed by right, while multi-family is allowed with a special permit with site plan review. Development within the CR district requires a minimum lot size of 40,000 square feet and a minimum lot area of 10,000 square feet per dwelling unit.

Business Districts

- ▶ The Neighborhood Business district (NB) allows some multi-family housing with a special permit with site plan review, and a variety of business, retail, and consumer service uses. New construction or conversions in excess of 4,000 square feet requires a special permit with site plan review. There is no minimum lot size, the maximum height is 35 feet or 2 ½ stories, and the maximum FAR is 0.5. These districts are scattered among various residential neighborhoods around the Town and tend to be relatively small.
- ▶ Similar to NB, the Limited Business district (LB) is exactly the same as NB in terms of the Table of District Regulations. It also does not have a minimum lot size, but the maximum height is 40 feet or 4 stories and the maximum FAR is 1.0. The LB district is generally located

along sections of the Town's major corridors such as Mt. Auburn St. around Coolidge Square, and Mt. Auburn St., Galen St., and Main St. in the vicinity of and heading away from Watertown Square.

- ▶ Watertown Square is the location of the Central Business district (CB). Multi-family housing is allowed by site plan review (up to three units) or with a special permit with site plan review (greater than three units) as part of a mixed use project where the first floor is a retail or business use. All business, retail and consumer service uses are allowed, along with offices. Similar to the other two business districts, a special permit with site plan review is required for new or expanded businesses greater than 4,000 square feet. There is no minimum lot size requirement, the maximum height is 55 feet or 5 stories, and the FAR is 4.0.

Additionally, there is a Watertown Square Design Overlay District, which governs façade alterations and signs. In 1989, the Town adopted a detailed Watertown Square Design Handbook, focusing on façade improvements, which establishes the applicable standards and guidelines.

Industrial Districts

The Town's three industrial districts (I-1, I-2, and I-3) are largely located in the eastern portion of town along Arsenal St. (including land currently occupied by the Arsenal and Watertown Malls), Coolidge Ave., and Grove St. The uses allowed are, for the most part, the same in each of these districts. All three allow both commercial and industrial uses. The main exception is that heavy industry is permitted in the I-1 district and the I-3 permits multi-family and mixed use with a special permit with site plan review. The dimensional regulations are

also consistent between these zoning districts – no minimum lot size and a maximum height of 50 feet or 5 stories. The FAR is 2.0 for the I-1 and I-2 districts, and 1.0 for the I-3 district except for mixed use developments (where it is 2.0) and for residential uses depending on the lot size in which R.75 and R1.2 regulations apply. A special permit can be obtained to increase the FAR up to 2.0.

Special Zoning Districts

- ▶ The Assisted Living Overlay District (ALOD) establishes the standards for assisted living projects and the only designation for this district on the zoning map is the location of Brigham House at 341 Mt. Auburn St.
- ▶ Arsenal Overlay Development District (AODD) establishes the standards for the orderly conversion and redevelopment of the former US Army Materials Technology Laboratory.
- ▶ The Open Space and Conservancy District (OSC) covers the Town's open spaces and parks, including Mt. Auburn Cemetery and the Charles River Reservation.
- ▶ The Revitalization Overlay District (RO) can be designated by the Town Council to encourage redevelopment of parcels within the overlay zone. The only one so designated at this point is along Galen St. south of Watertown Square and encompasses land occupied by the MBTA bus yard. Specific standards are established including a minimum lot size of 10,000 square feet and increases in height, FAR and density are allowed to try to encourage redevelopment.
- ▶ The Limited Redevelopment District (RD) allows more flexibility in the retail uses allowed in the designated

RD district to encourage revitalization of the property. The only area zoned RD is on Pleasant St. along the Waltham border.

- ▶ The Religious/School Building Overlay District (R/SOD) was established to encourage the reuse and redevelopment of former school and religious buildings. A former church on the corner of School St. and Mt. Auburn St. has been redeveloped into a condominium building and the Apartments at Coolidge School have been built pursuant to this provision.
- ▶ The Pleasant Street Corridor District (PSCD) was established after the completion of the 2007 Pleasant Street Plan described earlier. The intention was to encourage a mix of uses, although most of the development since adoption of the zoning change has been residential. The maximum FAR in this district is 2.0 for mixed use projects and 1.0 for all other development (some incentives are provided which allow the FAR to be increased). The minimum height is 24 feet and the maximum height is 54 feet or 5 stories. Height can be increased to 79 feet or seven stories by special permit if certain benefits (open space, connections to the Charles River, structured or underground parking, and alternative transportation) are provided and step backs are incorporated into the design. Parking reductions can be granted by special permit as well. The district regulations include design and environmental sustainability guidelines.

Future Land Use

Figure 2-9 shows the Land Use Vision for the Town that identifies the Town's residential neighborhoods as areas to preserve, key

commercial centers such as Watertown Square and Coolidge Square as areas to enhance (this also includes some neighborhood retail centers and the Main Street and Mt. Auburn Street corridors), and the Pleasant Street and Arsenal Street corridors as areas to transform.

Figure 2-10 is the Future Land Use Map for Watertown and it provides additional detail to the Land Use Vision. It illustrates the future land use designations and shows the changes that are envisioned for Pleasant Street and Arsenal Street that are outlined in this chapter of the Plan. Based on these two maps, the future land use designations are described below in Table 2-2.

It is important to re-emphasize that these land use designations describe the Town's existing character and fabric and do not represent wholesale changes to land use in Watertown. Nor are they intended to create new zoning districts. Rather, it demonstrates that future land use changes will be focused along Pleasant Street (where commercial and residential mixed use will be encouraged instead of only residential development) and on Arsenal Street, which will transform from a commercial corridor dominated by large format retail into a regional commercial mixed use corridor with streetscape and public amenities that make a more inviting place that is also pedestrian and bicycle friendly.

The recommendations in this Plan address both the use designations and the design elements that will help to transform both Pleasant Street and Arsenal Street. Additionally, the Plan suggests how neighborhood character can be preserved and their retail centers enhanced.

Figure 2-9 Land Use Vision for Watertown

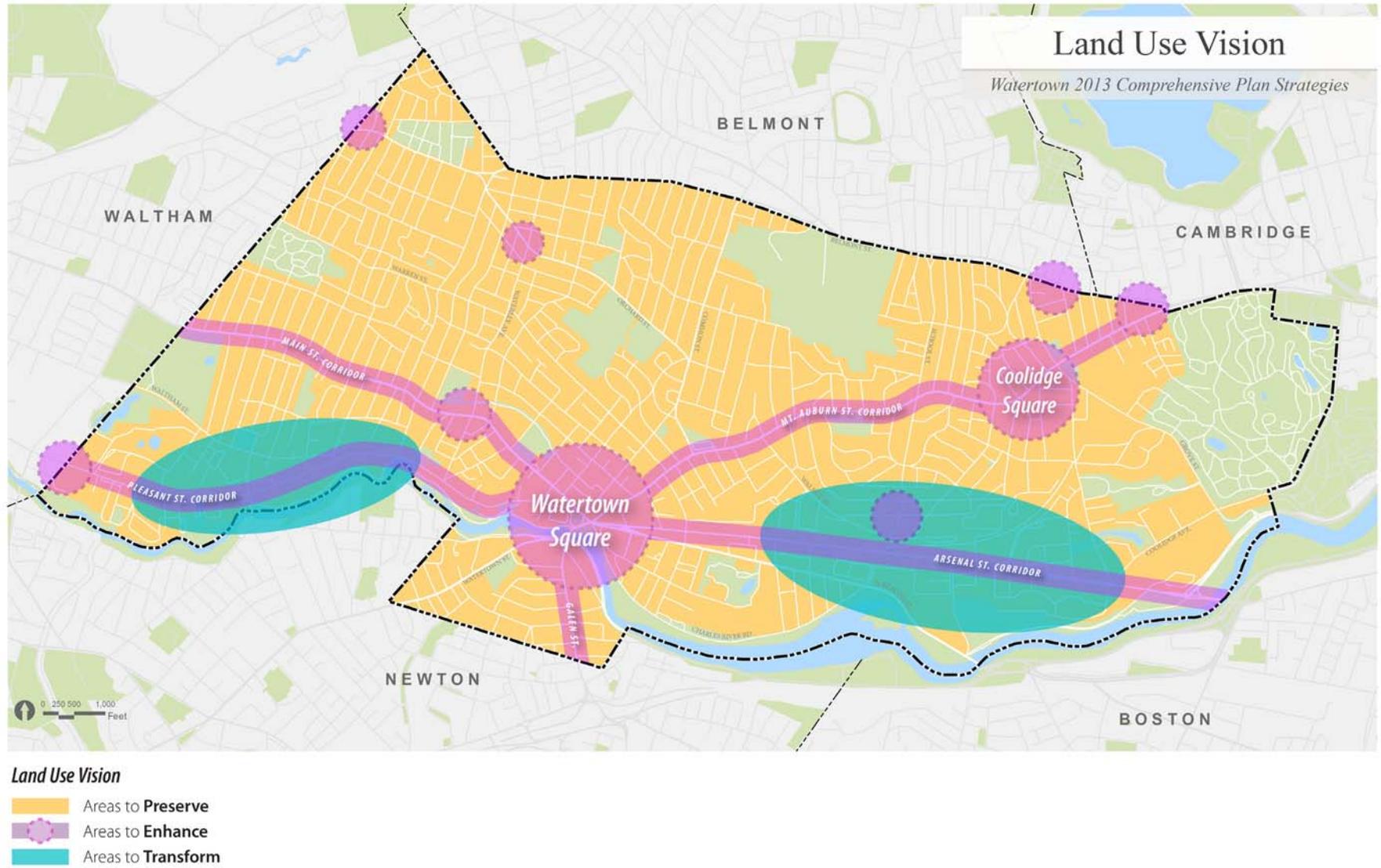


Figure 2-10 Future Land Use Map for Watertown

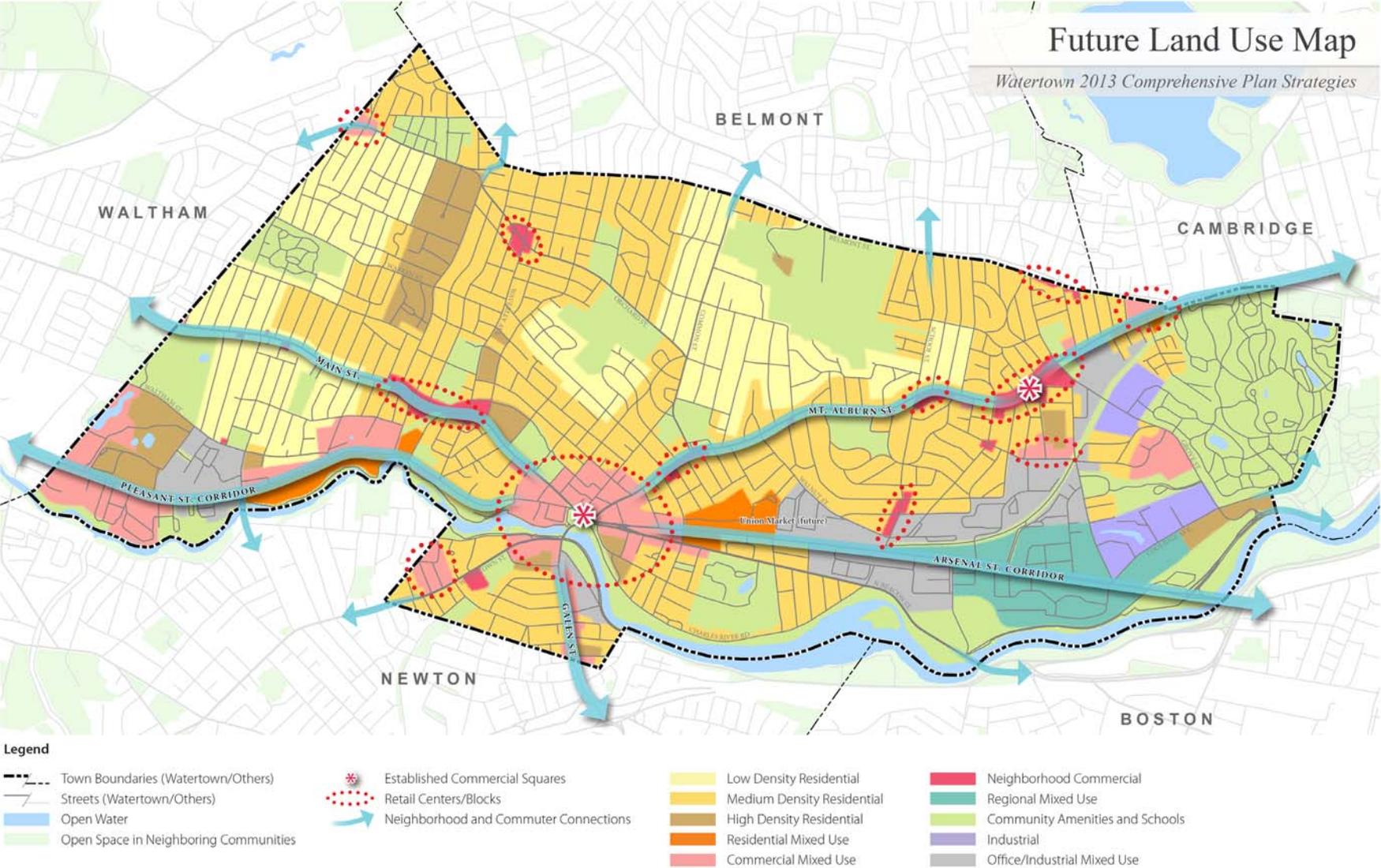


Table 2-2 Future Land Use Designations

Future Land Use	Predominant Zoning Districts	Future Land Use Description
Low Density Residential	S-6, S-10	Existing residential areas to be preserved with lower density (between 6,000 – 10,000 sq. ft. lots), primarily single family homes
Medium Density Residential	T, SC, LB	Existing residential areas to be preserved with medium density on 5,000 – 6,500 sq. ft. lots, primarily where single and two family homes are allowed, including the conversion of single family dwellings into two family
High Density Residential	R1.2, R.75, CR	Existing residential areas to be preserved with higher density, primarily multi-family and cluster residential development
Residential Mixed Use	PSCD, I-3, LB	Areas to be enhanced (primarily along the middle portion of Pleasant Street and the Union Market area) with mixed land uses where multi-family residential development is the primary use, along with some retail or office use
Commercial Mixed Use	PSCD, LB, CB, I-3, NB	Areas to be enhanced such as Watertown and Coolidge Squares, and transformed, including parts of Pleasant Street, with mixed land uses where commercial development is the primary use, including light industrial, research and development, office and retail uses, where residential development could be considered in certain areas above or behind commercial components
Neighborhood Commercial	LB, NB, T, S-6	Commercial clusters serving local residential neighborhoods featuring neighborhood retail businesses that are to be enhanced
Regional Mixed Use	I-1, I-3	Area along the Arsenal Street corridor that is to be transformed and has some existing residential uses, but where a mix of retail (large and small scale) office, and research and development uses serve a regional market area
Schools and Community Amenities	OSC, PSCD, I-3, T	Areas set aside for schools, municipal facilities, parks and open spaces where the land uses are to be preserved and the facilities enhanced
Industrial	I-2	Areas designated predominantly for industrial uses that are likely to remain mostly unchanged
Office/Industrial Mixed Use	I-2, I-1	Areas of mixed commercial and industrial use with primarily office, light industrial and research and development uses in various areas, including areas that are to be transformed along Arsenal Street, creating a vibrant business atmosphere

GOALS

The Land Use Element addresses the future land use direction for Watertown's main corridors, commercial centers and residential neighborhoods. Based on input received during the public outreach process and the baseline assessment, the following land use goals have been established.

Goal 1

Address design issues along the major corridors and Watertown and Coolidge Squares that enhances aesthetics while preserving neighborhood character.

Goal 2

Through the use of innovative zoning tools, encourage Watertown's business districts to thrive by redeveloping vacant or underutilized parcels and allowing a mix of businesses that attract foot traffic.

Goal 3

Identify strategies to develop and maintain economic vitality within major squares and corridors with a diverse mix of innovative business and residential choices.

Goal 4

Establish criteria for development along Pleasant and Arsenal Street to ensure projects are sensitive to the Charles River and public ways.

Goal 5

Maintain existing character of residential neighborhoods.

RECOMMENDATIONS

Goal 1. Address design issues along the major corridors and Watertown and Coolidge Squares that enhances aesthetics while preserving neighborhood character.

- A.** Enhance building, parking, and streetscape aesthetics by adding design and landscaping standards to the Limited and Central Commercial district regulations, including provisions for public art.
- B.** Incorporate 'green' building practices to encourage energy efficiency and that projects are planned, designed, constructed, and managed to maximize positive environmental benefits. This would include:
 - 1. Low impact development standards to reduce and retain stormwater on-site
 - 2. Energy efficient design inside and outside of the buildings
 - 3. Consider using tools like LEED criteria for green buildings or other programs to recognize leadership in green building.
 - 4. Amenities that promote health and wellness
 - 5. Support successful commercial use of existing historic neighborhood business blocks.
- F.** Update the Watertown Square Design Handbook and relevant sections of the zoning ordinance to include signage and street façades and extend to other business districts. Design should consider a project's relation to the Square, its streetscapes, and those projects that enhance the Square should be encouraged.
- G.** Encourage uses that will bring interest and vitality to Watertown Square, attract foot traffic and increase street life. Utilize cultural assets and uses to seed this process.
- H.** Reinforce Watertown Square as a Town Center.
- I.** Make the streets in Watertown Square more connected through advancing Complete Streets strategies.
- J.** Study Watertown Square to identify transportation enhancements that are possible to enhance traffic, safety, operations and parking.
- K.** Consider options for a Conceptual Master Plan for the Arsenal Street Corridor, to guide the revision of zoning, transportation planning, investments in public spaces and amenities, infrastructure planning, promotion of economic development, design standards, and integration with adjacent neighborhoods.

Goal 2. Through the use of innovative zoning tools, encourage Watertown's business districts to thrive by redeveloping vacant or underutilized parcels and allowing a mix of businesses that attract foot traffic.

- A.** Within the squares, consider strategies to create a diverse retail mix with shopping and dining choices to encourage foot traffic and browsing of restaurants, cafes, retail boutiques, and bookstores. Consider incentives such as expedited permitting to encourage mixed-use development where appropriate and allow for increased density in Watertown Square.
- B.** Support infill and redevelopment of vacant/underutilized sites.
 - 1. Consider flexible zoning standards that allow developers to adapt to existing site constraints. Density bonuses, mixed uses, and reduced parking standards (or shared parking) are examples of the types of incentives that can be applied to this type of redevelopment.
 - 2. Work with prospective developers to assess the specific obstacles to expanded reuse and/or redevelopment of historic and other existing properties, and create public/private partnerships to address those obstacles.
 - 3. Consider flexible minimum lot size and frontage requirements to encourage infill development.

Goal 3. Identify strategies to develop and maintain economic vitality within major squares and corridors with a diverse mix of innovative business and residential choices.

- A.** Develop an inventory of and strategy for reusing vacant or abandoned properties, and provide incentives for those properties to be redeveloped.
- B.** Establish design guidelines appropriate to proactively plan for redevelopment within Watertown's squares and corridors.. The guidelines should focus on the building massing, setbacks and streetscape/landscaping improvements to ensure an attractive and healthy connection with the street. Parking should be removed to the rear of the buildings.
- C.** Develop zoning changes described earlier in the Arsenal Street Corridor subsection of this element. The objective is to ensure that future land use along the corridor emphasizes commercial, office and retail development and protects and enhances a transition between Arsenal Street and the abutting residential neighborhoods. Any mixed use development should consider a minimum required percentage of commercial space, and purely residential development should not be allowed. Other changes could include allowing multi-family residential, retail and structured parking; reducing the setbacks to allow buildings to be built to the street line; revising the required open space set aside to be used as a civic amenity; and updating the parking standards.
- D.** Consider design guidelines for new construction and proposed improvements to existing buildings to protect and retain the local historical context (prevailing streetscape and the traditional building styles found in the neighborhoods), and to enhance landscaping (6/18/14 Forum).
- E.** Consider transit-oriented mixed use development around the site currently occupied by the MBTA yard. A number of buses go through this yard on a daily basis and there may be opportunities to redevelop some of the land utilized by the MBTA. When that land becomes available, it should be zoned for higher density mixed use development with retail uses that cater to the needs of commuters and have reduced parking standards in light of the onsite mass transit connections.
- F.** To enhance the vibrancy of Watertown Square, consider options to make connections and streetscape improvements on the south side of the river, and explore opportunities for the MBTA yard for TOD and/or multi-modal enhancements.
- G.** Develop options to make Watertown Square more pedestrian friendly and safe.
- H.** Identify and design Town gateways to clearly mark entrances into Watertown and to support the town identity.
- I.** Improve pedestrian links from Watertown Square to the River.
- J.** Enhance the vibrancy of Watertown Square by designing and building a multipurpose trail system, including enhancing the existing riverwalk and programming additional activities.

Goal 4. Establish criteria for development along Pleasant and Arsenal Street to ensure projects are sensitive to the Charles River and public ways.

- A. Consider options for differentiating uses that are By Right and By Special Permit.
- B. Consider revisions to height requirements to allow only the first several stories of a building be built to a build-to-line, and require additional stories to be stepped back a sufficient distance to improve sight lines. Also, consider options for increasing setbacks from the sidewalk.
- C. Consider options for allowing additional stories with further step backs if development enhancements are provided. Incentives for the additional height could include historic preservation renovations, providing public and/or visual access to the Charles River, developing a mixed use project, and including greater than the minimum affordable housing as part of the development, for example.
- D. Ensure projects are sensitive to the Charles River along Pleasant St. The step backs should apply along Pleasant St. and for any buildings on the Charles River side. Consider increases in the rear setbacks and landscaping requirements for buildings along the Charles River and in transitions zones abutting single and two-family residential neighborhoods.
- E. Consider options for refining the Pleasant St. Corridor District by identifying areas where mixed-use is mandatory and where only commercial development is incentivized. Also consider this for the Arsenal Street Corridor.
- F. Provide development incentives to encourage preservation and restoration of historic buildings in addition to the other incentives provided in the district.
- G. Provide for public access, as well as visual corridors, to the Charles River where practicable.
- H. Seek opportunities to bury utility lines where possible.

Goal 5. Maintain existing character of residential neighborhoods.

- A.** Consider revising zoning requirements for conversions of single- to two-family homes in the CR, SC, T, R.75 and R1.2 districts to determine whether the locations of such conversions should be specified within those districts. Restrictions similar to those in the T-zone could be considered in other districts in order to avoid conversions that are out-of-scale when compared to the neighborhood in which the home is located.
- B.** Reconsider allowing accessory units, including in separate structures (such as carriage house conversions), as these would be opportunities to provide additional units without tearing down or substantially adding on to an existing single family.
- C.** Enhance streetscape amenities, crosswalks and traffic calming measures (see Chapter 2 - Transportation, Circulation and Parking).
- D.** Continue to require new development to include sidewalks, and to connect to municipal sidewalks where feasible (see Chapter 2 - Transportation, Circulation and Parking).
- E.** Develop basic design criteria for roof types, dormers, street façade, and encroachments into setbacks (overhangs, open porches, etc.).

Additional Zoning Considerations

- A.** New construction or conversion from one use to another in excess of 4,000 square feet generally requires a special permit with site plan review. This is a relatively low threshold and probably captures projects with very little real impact to adjacent properties. The Town could consider raising the threshold for a special permit and site plan review, and should contrast and compare with other similar jurisdictions at that time.
- B.** The zoning ordinance categorizes all retail uses the same way in the Table of District Regulations. Since not all retail uses have the same impacts in terms of traffic generation and parking requirements, the Town should differentiate retail uses in more detail. For example, convenience and grocery stores are different from other retail stores such as shoe and clothing stores. Thus, projects that will generate more traffic and parking can be mitigated properly.
- C.** The parking standards should be reviewed and updated to reflect current best practices, including considering options for parking reductions, clarifying the shared parking provisions and allowing off-site parking. The breakdown of land uses in the parking regulations is more detailed than in the Table of District Regulations, so there is no consistency between the two. In some districts, it appears as if the parking requirements are additive if mixed uses are proposed (i.e. in the RO district).
- D.** Site Plan Review is conducted by the Planning Board and the Special Permit Granting Authority is the Board of Appeals. In order to simplify some of the permitting processes, the Town could consider consolidating the special permit and site plan review process so that the Planning Board is the sole review and permit granting authority. To further streamline the process, the Town could consider designating certain projects as “minor” projects requiring only an administrative review by staff or be limited to a single meeting by the reviewing authority.
- E.** Consider increasing the amount of open space/green space required for larger scale new development.



Mt. Auburn Street @ Watertown Square

TRANSPORTATION

3

Introduction

The Town of Watertown is located in Middlesex County of eastern Massachusetts. The community is bordered by Boston and Cambridge to the east, Belmont to the north, Waltham to the west and Newton to the south. Watertown is approximately six miles west of downtown Boston. The roadways in the community offer excellent local access and mobility; however, the community is somewhat isolated from the regional transportation network. Roadways that are classified as arterial roadways within Watertown are summarized below. An arterial roadway is typically used for mobility more so than access.

Main Street/North Beacon Street (Route 20)

An arterial roadway that bisects the Town and provides east-west mobility to the regional highway system; I-95 to the west and Interstate 90 / Massachusetts Turnpike to the south.

Watertown Street/Galen Street/Mt. Auburn Street (Route 16)

An arterial roadway that bisects the Town and provides north-south mobility and is one of four roadways that cross the Charles River in Watertown.

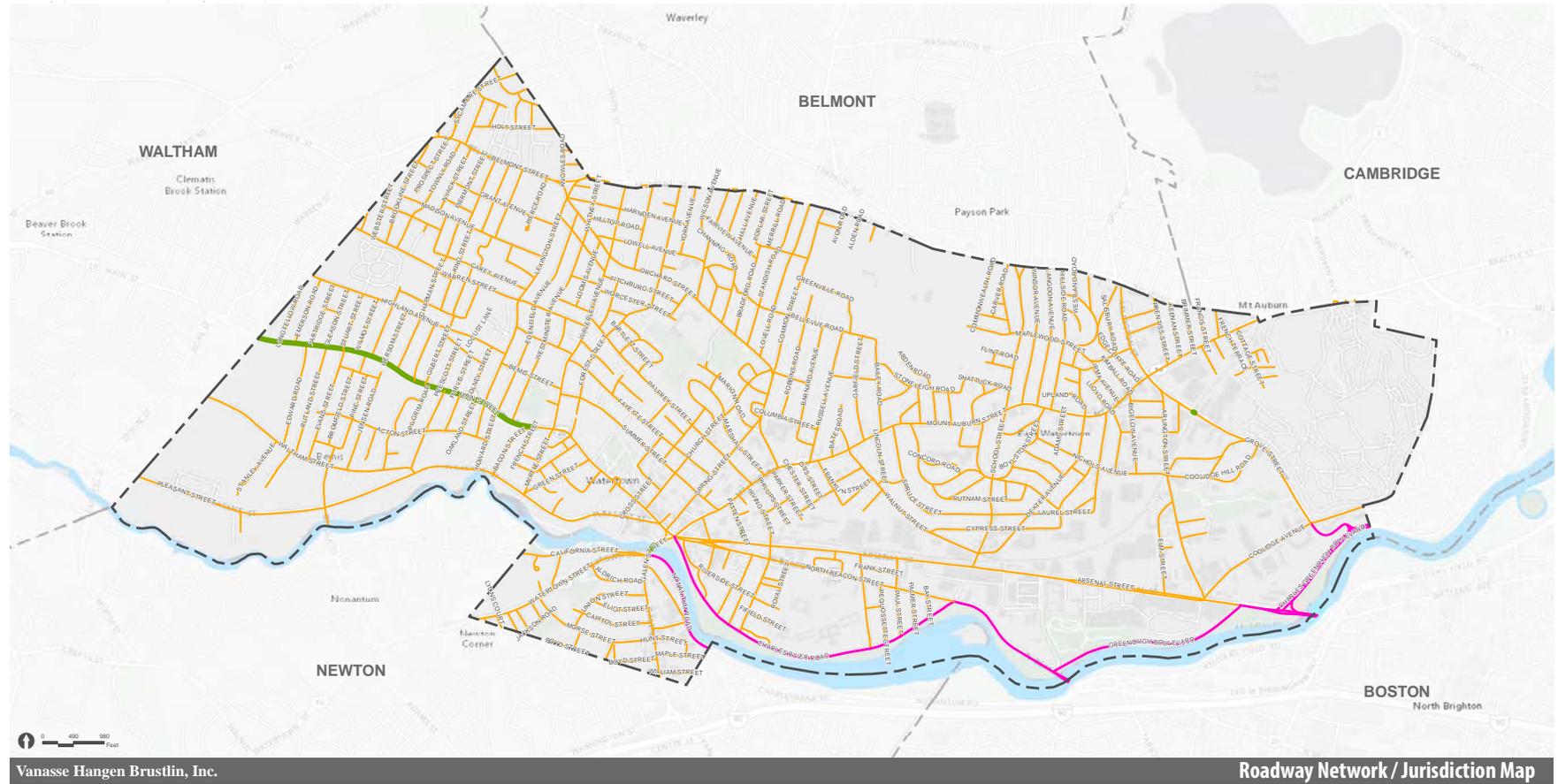
Arsenal Street

An arterial roadway on the easterly side of Town that provides east-west mobility and serves as a principal retail, commercial and industrial corridor.

Galen Street

The Watertown portion of Galen Street that is not part of Route 16 is an arterial roadway that provides north-south mobility and access to the Interstate 90 / Massachusetts Turnpike via Newton.

Figure 3-1 Roadway Network/Jurisdiction Map



Road Type by Ownership

- MassDOT-owned Roads
- DCR-owned Roads
- Town-owned Roads

Roadway Network / Jurisdiction Map

Source: Watertown Assessor's Database

May 2013

Comprehensive Plan
Watertown, MA



Belmont Street/ Orchard Street

An urban minor arterial that runs east-west along the Belmont Watertown line. Orchard Street intersects near Belmont Street/ Lexington Street near the Belmont Town line, but traverses southeasterly toward (and eventually intersecting) Common Street.

Common Street

A collector roadway that provides a north-south route to Belmont Center and traverses southerly intersecting Mt Auburn Street.

Nonantum Road

A two-lane arterial roadway that travels east-west along the south side of the Charles River between Watertown and Newton. This roadway provides a connection to Route 20 and Soldiers Field Road to the east.

Greenough Boulevard

A four-lane arterial roadway that travels north-south along the Charles River between Arsenal Street and Memorial Drive (Route 3) in Cambridge; planted medians are located leading up to the intersection of Arsenal Street.

There are a number of other significant streets that serve the community, these “collector” roadways, which connect local roads to arterials, include: Pleasant Street, Waltham Street, Howard Street, Myrtle Street, Green Street, Lexington Street, Waverly Avenue, Summer Street, Church Street, Walnut Street, Charles River Road, School Street, Dexter Avenue, Nichols Avenue, Arlington Street, Coolidge Avenue, California Street and Jackson Road. The locations of the arterial, collector and local roadways are illustrated later in this chapter.

Figure 3-1 illustrates the Watertown transportation network. While Watertown does not have direct access to the commuter rail, each of the adjacent towns offers access to commuters traveling east to Boston, or west to a variety of destinations. In addition, the Massachusetts Bay Transportation Authority (MBTA) provides eight bus routes along Galen Street, Mt. Auburn Street, Arsenal Street and Main Street.

Prior planning efforts locally and regionally have identified a number of challenges for the community; which need to be taken into account as part of this plan so that future improvements can be focused on.

During outreach meetings with the community, Town officials, and online surveys, a number of transportation themes were identified, including:

- ▶ Safety: there are seven intersections/roadways in Town that may be eligible for Highway Safety Improvement Program (HSIP) funding through MassDOT/ FHWA, which are listed later in the chapter;
- ▶ Congestion: there is extensive vehicle queuing and delay in Watertown Square and along Main Street due to the significant commuter traffic in Town, and it appears that most of this traffic is actually traveling through Watertown to other destinations in adjacent communities;
- ▶ Function: due to congestion on major roadways/ intersections, drivers are seeking alternative routes through local roadways that are more residentially developed;
- ▶ Multi-modal: not all roadways within Town accommodate bicycles or have bus routes;

- ▶ Implementation: need a plan to address existing issues and future transportation concerns; and
- ▶ Corridor use experience: lack of streetscape and more oriented to the automobile.

This Transportation Element identifies the range of transportation issues, needs, and deficiencies over the near and long-term and establishes goals and strategies for physical enhancements and policies that should be implemented.

Baseline Assessment

Regional Context

Watertown is positioned on the westerly edge of the cities of Boston and Cambridge, bordering Boston's neighborhoods of Allston and Brighton. The Town also borders Newton to the south, Waltham to the west, and Belmont to the north, all of which produce significant through traffic. Local roadway connections that lead to the regional network are provided via Route 20, Route 16, Arsenal Street and Galen Street. The Massachusetts Turnpike (Interstate 90) runs just south of the Town and can be accessed in Newton, via Galen Street, and in Allston, via North Beacon Street (Route 20). Route 2 is located to the northeast and can be accessed via Mt. Auburn Street (Route 16) or via Belmont. While the town is positioned close to other major urban centers, Watertown is a center for business and commerce.

Background

Regional Planning

For the development of this Comprehensive Plan, it is important to acknowledge and understand past transportation planning

and land use efforts in town and the region to ensure that recommendations are consistent and complementary. Regional planning agencies (RPAs) play a key role in the development and execution of any municipality's planning efforts. As overseers of a larger area, RPAs help ensure that regional plans are complementary to each community. The Metropolitan Area Planning Council (MAPC) is the RPA to which Watertown belongs. The MAPC also provides support for the Boston Region Metropolitan Planning Organization (BRMPO). The past studies/plans worth noting include:

BRMPO Regional Bicycle Plan (2007): The Boston MPO Regional Bicycle Plan outlines a number of goals and strategies related to bicycle travel for the future of the region. This plan was structured off the MAPC Regional Bicycle and Pedestrian Plan (1997) and the Massachusetts Statewide Bicycle Transportation Plan (1998). The following summarizes the regional goals:

- ▶ Encourage more trips by bicycle in each community;
- ▶ Make bicycling and bicycle accommodations a part of "standard operating procedure";
- ▶ Improve evaluation and prioritization of bicycle project proposals;
- ▶ Assist and encourage local initiatives;
- ▶ Work with state and federal agencies to simplify and coordinate funding programs;
- ▶ Increase regional knowledge about bicycling; and
- ▶ Improve the time and cost efficiency of the transportation system;

Path's to a Sustainable Region BRMPO Long-Range Transportation Plan – Needs Assessment (2011): The BRMPO Long-Range Transportation Plan summarizes existing transportation

conditions within the region as well as providing a needs assessment for the specific locations in the region. Route 20 and Route 16 in Watertown were listed as having priority intersections as part of the assessment. The following summarizes some of the regional transportation related goals and needs identified as part of this study:

- ▶ Envisions a highway system that is well maintained and has less congestion and fewer severe crashes. Route 16 in Watertown was noted as a critical bottleneck area.
- ▶ Envisions a transit system that is safe and maintained in a state of good repair and generates greater use to reduce auto dependency and emissions causing climate change. The lack of transit service in portions of Watertown was noted as an issue to watch.
- ▶ Envisions a transportation system in which all freight modes operate efficiently.
- ▶ Calls for linking bicycle, pedestrian and transit facilities in a network, increasing the use of sustainable modes and improving options and accessibility for all modes of transportation. The lack of roadways with on-road bicycle accommodations was noted as a concern.
- ▶ Envisions a transportation system that provides affordable transportation options and accessibility and does not inequitably burden any particular group.

BRMPO Newton Corner Rotary Study Phases I & II: While located in the adjacent community of Newton, the Newton Corner interchange is a critical node for regional transportation. This interchange; which controls access to and from the Massachusetts Turnpike (Interstate 90), is one of the major controlling points for vehicles entering or leaving Watertown to the south.

Local Master Plans: Several abutting cities and towns have conducted planning studies in recent years, including:

- ▶ Belmont (2010): The Town of Belmont's Comprehensive Plan was approved in April 2010 and focuses predominantly on Land Use and Zoning issues. Specific elements focus on Historic Preservation, Commercial Development, Open Space, Transportation & Energy, Housing and Public Facilities & Finance. Several issues relevant to Watertown were noted including:
 - ▶ Advocating for improved transit connections between Belmont and Watertown Center;
 - ▶ Investigating connections to existing and proposed bicycle trails in Waltham and Cambridge; and
 - ▶ MBTA is considering eliminating one of the existing commuter rail stations in Belmont due to lack of users.
- ▶ Waltham (2007): The Waltham Community Development Plan was finalized in June 2007. The Plan was developed by the Metropolitan Area Planning Council (MAPC) in connection with the Central Transportation Planning Staff (CTPS) and the Waltham Planning Department. The main objective called out that Watertown is working with DCR on the long-range plan for extending the Charles River Greenway.
- ▶ Harvard University, Allston Campus: Harvard University's Institutional Master Plan was approved by the Boston Redevelopment Authority (BRA) in October 2013. Development in this area will likely increase traffic volumes on major east-west roadways in Watertown such as Arsenal Street and North Beacon Street (Route 20); however, an assessment of Watertown's transportation network was not conducted.

While these plans focus on specific issues to their community, each has several similar underlying goals:

- ▶ Improved traffic safety;
- ▶ Upgraded facilities and access for pedestrians and cyclists;
- ▶ Adopt complete streets methodologies; and
- ▶ Pursuit of a wide-range of funding sources.

Local Planning

For the development of a Comprehensive Plan, it is also important to acknowledge and reflect on previous plans developed in town. The Town of Watertown has undertaken several planning efforts, often with the assistance of residents, citizen organizations, and volunteer groups; over the past ten years that should be noted and referenced, these include:

Bicycle Accommodation Master Plan and Bicycle Parking Plan: The purpose of the plan, prepared in 2002, was to recommend bicycle accommodations including bike lanes on Watertown roadways, signage and directional devices, roadway designs, and safety improvements. The focus of the plan was to review existing conditions for bicycle accommodations on selected roadway corridors, identify key destination points, and establish a town wide bicycle network.

Watertown Square Parking Study: A draft plan was prepared a few years ago, but there was no consensus on how the Town should proceed. Parking in Watertown Square continues to be an issue that should be addressed because parking constraints can hamper future development in the Square. This makes it difficult to achieve the vision for the Square with a wider variety of retail, restaurant and other uses designed to attract people to visit.

The Watertown Community Path: The State completed a portion of a multi-use path in 2010 from School Street west to Arlington Street with a planned extension to Fresh Pond in Cambridge. The Watertown Community Path is intended to develop a similar multi-use path that would run east-west from the Charles River near Howard Street, through Watertown Square and connect to the completed portion of the State path at School Street and Arsenal Street. The intent is to provide a connection to the 18-mile Charles River Reservation Path and the 11-mile Minuteman Bikeway. Some of the recommended actions include the following:

- ▶ Incorporate the Community Path into the Town's Comprehensive Plan;
- ▶ Begin to complete sections as redevelopment occurs;
- ▶ Design portions that are not subject to redevelopment opportunities; and



Planned sections of the Watertown Community Path study
Image source: Town of Watertown

- ▶ Place portions under Town control into the CIP for construction to provide the most critical connections in the short term, and a complete corridor in the long term.

Existing Conditions

Mobility in and around Watertown is the central theme of the Transportation Element of the Comprehensive Plan. The sections below discuss the components that comprise the existing transportation network in Watertown. During the community outreach sessions, several major assets were identified for Watertown. It is important to note these so that as the existing transportation conditions are reviewed, one can begin to strategize on how to capitalize on these assets. The proximate location to Boston and the Charles River were most important in this regard.

Roadway Jurisdiction/Functional Classification

The jurisdiction of roadways in Watertown is depicted on Figure 3-1 and summarized on Table 3-1. The jurisdiction of a roadway indicates the ownership and responsibility for maintenance, enhancements, and repairs.

Table 3-1 Jurisdiction of Roadways in Watertown

Roadway Ownership	Length (miles) ¹	Length (%)
Town-owned roads	74	92.5
MassDOT-owned roads	1	1.3
DCR-owned roads	4	5.0
Unaccepted roads	2	2.5
Total²	81	100.0

Source: Office of Geographic Information (MassGIS), Commonwealth of MA Information Technology Division

1. All values are approximate.

2. Does not include driveways/internal roadways (totals approximately 24.5 miles)

The majority of the roadway system falls under the jurisdiction of the Town of Watertown (74 miles, or 92.5 percent). The Department of Conservation and Recreation (DCR) controls the next highest percentage of roadway within the Town (4 miles, or 5.0 percent), as it controls Charles River Road, Nonantum Road and Greenough Boulevard. The state owned roadways include the segment of Route 20 (Main Street) between the Waltham city line and Myrtle Street, as well as multiple bridges.

The functional classification of roadways in Watertown is depicted on Figure 3-2 and summarized in Table 3-2. A roadway functional classification indicates its design function to serve local demands with multiple driveways to maximize access; or to serve regional demands with limited access points to maximize mobility.

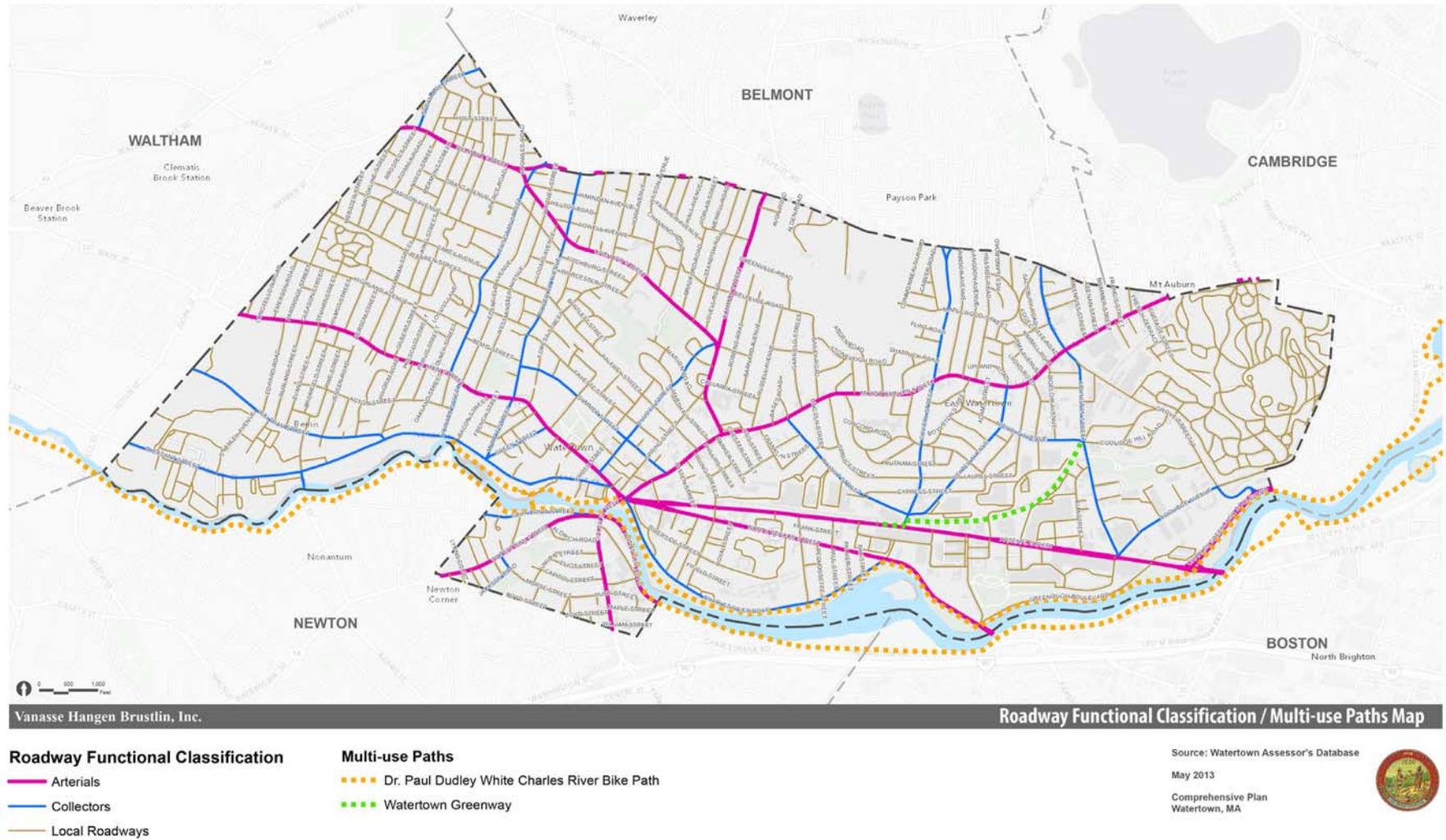
Table 3-2 Functional Classification of Roadways in Watertown

Functional Classification	Length (miles)	Length (%)
Interstate	0	0
Arterial	12	15
Collector	11	14
Local Roadways	58	71
Total	81	100%

Source: Office of Geographic Information (MassGIS), Commonwealth of MA Information Technology Division

The majority of the roadways in Watertown are classified as local type roadways, with approximately 58-miles, or 71-percent of the all roadway miles (81-miles in all) in Town. Arterials and Collectors follow as the second highest; which each comprise 12-percent of the roadway network. There are no Interstate roadways in Town, and as such Route 20 and Route 16 provide mobility through Town, while Main Street and Arsenal Street provide access to a significant amount of retail and commercial type land uses.

Figure 3-2 Roadway Functional Classification/Multi-Use Path Map



Roadway Network

Vehicular traffic in Watertown is carried on several key roadways. The major northeast-southwest roadway in Watertown is Mount Auburn Street (Route 16), and the major east-west roadways are Main Street (Route 20), North Beacon Street (Route 20), Pleasant Street and Arsenal Street. Belmont Street runs along the northern perimeter.

Two regional roadways travel through the Town: U.S. Route 20 in the east-west direction and MA Route 16 in the north-south direction. These roadways provide local access to Interstate 90 (MassPike), and Interstate 95.

It is noted that there are a number of other significant roadways in town, these “collector” roadways include: Pleasant Street, Waltham Street, Howard Street, Myrtle Street, Green Street, Lexington Street, Waverly Avenue, Summer Street, Church Street, Walnut Street, Charles River Road, School Street, Dexter Avenue, Nichols Avenue, Arlington Street, Coolidge Avenue, California Street and Jackson Road. All arterial, collector and local roadways are illustrated in the Roadway Functional Classification map presented in this chapter.

The following section provides an overview of the major and minor arterial classified roadways in Town.

Main Street (Route 20)

Main Street (Route 20) provides the primary east to west access between Watertown Square and the City of Waltham and beyond to Interstate 95. Main Street is a two-lane roadway with on-street parking provided on both sides. Sidewalks are also provided on both sides of the roadway along its entire length. Land use and roadway characteristics along Main Street vary from local retail and restaurants in the area of Watertown Square, to residential uses as the corridor moves towards the Waltham

City Line. Main Street also serves as a principal commuter route to Boston for residents of Watertown, Waltham and communities further to the west. The portion of Main Street between the Waltham City Line and Myrtle Street is under MassDOT jurisdiction. Route 20 from the Waltham line to Watertown Square is part of the National Highway System (NHS).

North Beacon Street (Route 20)

North Beacon Street (Route 20) provides the primary east to west access between Watertown Square and the City of Boston. North Beacon Street is a two-lane roadway with striped bicycle lanes and on-street parking provided on both sides for the majority of its length. Sidewalks are also provided on both sides of the roadway along its entire length. The land use and roadway characteristics along North Beacon Street vary between commercial, industrial, institutional and residential type uses. Similar to Main Street, North Beacon Street also serves as a principal commuter route to Boston for residents of Watertown, Waltham and communities further to the west.

Mt. Auburn Street (Route 16)

Mt. Auburn Street (Route 16) provides a southwest to northeast access between Watertown Square and the City of Cambridge, as well as providing access to the regional roadway and transit network beyond the Town. Mt. Auburn Street is a narrow four-lane roadway with on-street parking provided on at least one side for the majority of the roadway for its entire length and two-sides for short segments. Sidewalks are also provided on both sides of the roadway along its entire length. The land use and roadway characteristics along Mt. Auburn Street vary between commercial, institutional and residential type uses. Mt. Auburn Street serves as a principal commuter route between Watertown, Cambridge and communities further to the north and east. Route 16 from Watertown Square to Cambridge is part of the National Highway System (NHS).

Arsenal Street

Arsenal Street provides an alternate east-west route between Watertown Square and the City of Boston, with indirect access to the City of Cambridge. Arsenal Street begins as a two-lane roadway at its westerly end, before transitioning to a four-lane roadway just west of School Street. Starting at Louise Street, striped bicycle lanes are provided for a length of approximately 800-feet before transitioning to a shared use path ending at School Street and providing a connection to the Watertown Greenway path. A sidewalk is provided on both sides of roadway for its entire length. The land use and roadway characteristics along Arsenal Street vary between commercial, retail and industrial uses.

Belmont Street/ Orchard Street

Belmont Street, while not entirely in Watertown, is an important corridor that runs along the Belmont Watertown line. Not only does this roadway serve as a busy commuter roadway, but it connects Watertown with residential neighborhoods and community business centers in Watertown and Belmont. Land use on the Watertown side of Belmont is predominantly residential, although there is some commercial activity as it nears the intersection with Mt. Auburn Street. Orchard Street; which intersects the Belmont Street/ Lexington Street area consists primarily of residential homes; in addition, there are numerous residential side streets intersecting Orchard Street. The Town's Department of Public Works and Victory Field are also located on this roadway; which eventually intersects Common Street to the southeast.

Common Street

Common Street runs in a north-south direction that runs from Mt. Auburn Street over Meeting House Hill to Cushing Square on the Watertown – Belmont town line to Belmont Center. It carries local residential and business-oriented traffic as well as serving as a significant commuter route.

Nonantum Road

Nonantum Road is a two-lane arterial roadway that travels east-west along the south side of the Charles River between Watertown and Newton. This roadway provides a connection to Route 20 and Soldiers Field Road to the east and consists of mostly industrial/ commercial type uses along with the MBTA bus maintenance facility.

Greenough Boulevard

Greenough Boulevard is a four-lane arterial roadway that travels along the Charles River between Arsenal Street and Memorial Drive (Route 3) in Cambridge; planted medians are located leading up to the intersection to Arsenal Street and there are no land uses that intersect this section of the boulevard; although Grove Street intersects the boulevard just south of the Cambridge line. Current plans call for limiting most segments through lane reductions and maintaining intersections, while expanding the adjacent pathway and open space.

Vehicular Traffic

To gain an understanding of existing travel patterns, historical traffic data and transportation mode choice data were obtained.

Traffic Volumes

Table 3-3 summarizes traffic volumes on various roadways throughout Watertown using MassDOT⁷ historical traffic volume data and traffic volume data collected in the town for other transportation or development projects. The volumes summarized below are being provided for the town's future reference when assessing future growth along some of the town's major corridors.

⁷ <http://www.mhd.state.ma.us/default.asp?pgid=content/traffic01&sid=about>, accessed October 12, 2010

Table 3-3 Traffic Volumes on Select Roadways in Watertown

Route	Source	Count Date	Average Daily Traffic Volume ¹
Galen Street south of the Charles River	MassDOT	2013	42,800
Route 20 between Spring and Church Streets	MassDOT	2009	24,800
Mt Auburn Street, northeast of Common Street	WorldTech	2010	23,380
Arsenal Street, east of Elm Street	VAI	2014	21,000
Route 20 between Lexington and Olney Streets	MassDOT	2009	20,700
Mt. Auburn Street, east of Arsenal Street	Conley Associates	2013	17,500
Route 20 between Beal and Brigham Roads	MassDOT	2009	15,600
Pleasant Street, east of Howard Street	Conley Associates	2010	11,800
Arlington Street	MassDOT	2012	10,000
Greenbough Boulevard, east of Grove Street	VHB	2014	12,400
Greenbough Boulevard, west of Grove Street	VHB	2014	9,500
School Street	MassDOT	2012	7,300

Source: Historical MassDOT and traffic study traffic count data

1. Average daily traffic volumes expressed in vehicles per day (vpd). Traffic on Galen Street was projected based upon a 0.5% per year growth rate, from the year 1990. The total traffic in 1990 was 38,130.

Journey-to-Work

A review of the most recently available US Census American Community Survey journey-to-work data⁸ for Watertown residents and employers reveals commuting trends - specifically work location and mode choice. Tables 3-4 and 3-5 summarize these data.

Approximately 25 percent of the 18,918 Watertown residents surveyed commute to Boston; which is significantly higher than the 17 percent of residents that remain in Watertown. Following Boston the top commute single destinations outside Watertown were the adjacent communities of Cambridge (12 percent), Waltham (8 percent) and Newton (6 percent). The remaining commuting destinations represent a variety of Massachusetts

8 U.S. Census Bureau, 2006-2010 American Community Survey

Table 3-4 Census Journey-to-Work Data for Watertown Residents

Location of Employment	Percent of Residents
Boston	25%
Watertown	17%
Cambridge	12%
Waltham	8%
Newton	6%
Lexington	2%
Burlington	2%
Belmont	2%
124 other communities (total)	26%

Source: U.S. Census Bureau, 2000 Census Journey-to-Work Data

1. Other towns and cities not listed comprise one percent or less each of employment locations of Watertown residents.

Approximately 25 percent of the 18,918 Watertown residents surveyed commute to Boston; which is significantly higher than the 17 percent of residents that remain in Watertown. Following Boston the top commute single destinations outside Watertown were the adjacent communities of Cambridge (12 percent), Waltham (8 percent) and Newton (6 percent). The remaining commuting destinations represent a variety of Massachusetts cities and towns, the majority of which are located in Middlesex County and within 15 miles of Watertown. The table above summarizes three other communities (Lexington, Burlington and Belmont) that draw approximately two percent of residents working outside Watertown. The balance of the residents, or approximately 26 percent, worked in a total of 124 other communities.

The journey-to-work census data was also reviewed to determine where people live who commute to Watertown; Table 3-5 summarizes this data.

Table 3-5 Census Journey-to-Work Data for Watertown Employees

Location of Residence	Percent of Employees
Watertown	21%
Boston	12%
Waltham	8%
Newton	4%
Cambridge	4%
Somerville	3%
Belmont	3%
Medford	2%
Arlington	2%
Brookline	2%
202 other communities (total)	39%

Source: U.S. Census Bureau, 2000 Census Journey-to-Work Data
 1. Other towns and cities not listed comprise one percent or less each of resident locations of Watertown employees.

Approximately 21 percent of 15,753 Watertown workers also live in Watertown. Approximately 12 percent of people employed in Watertown resided in Boston, while the next three top locations were all Cities adjacent to Watertown (8 percent in Waltham, 4 percent in Newton, and 4 percent in Cambridge). The majority of the remaining locations of residence of employees of Watertown are within Middlesex County or other areas of eastern Massachusetts. The table above illustrates five other communities that have between two and three percent of workers in Watertown. The balance of the workers in Watertown, or approximately 39 percent, traveled from 202 other communities.

Mode Choice

Similar to the journey-to-work evaluation, Table 3-6 summarizes the mode choice for Watertown residents.

Table 3-6 Watertown Journey-to-work Mode Choice

Mode	Percent of Employed Residents
Single-Occupant Automobile	68%
Multiple-Occupant Automobile	8%
Transit	15%
Walk / Bicycle / Other	4%
Work at Home	5%
Total	100%

Source: U.S. Census Bureau, 2007-2011, American Community Survey

Approximately 76 percent of Watertown residents take a car to work – either alone (68 percent) or with others (8 percent). Approximately 15 percent of Watertown residents use public transportation, while approximately 4 percent walk, use a bicycle or commute via other means.

The low walk/bicycle mode share for Watertown residents and workers reflects that the majority of Watertown residents likely work outside of the Town.

Safety

Potential transportation safety issues in the Town of Watertown were identified through the MassDOT crash cluster database; which depicts locations in town that could be considered eligible for safety funding under the Highway Safety Improvement Program (HSIP).

A total of seven locations in Watertown could meet the 2010 HSIP eligibility requirements. The locations, in no particular order, include:

1. Watertown Street (Route 16) at Galen Street/Nonantum Road, where 34 incidents were identified including 8 injuries;
2. Route 16 at Route 20 (i.e. Watertown Square) where 34 incidents were identified including 9 injuries;
3. Mt. Auburn Street (Route 16) at Irving Street/Palfrey Street, where 18 incidents were identified including 8 injuries;
4. Arsenal Street at Greenough Boulevard (south), where 32 incidents were identified including 12 injuries;
5. Mt. Auburn Street (Route 16) at Mt. Auburn Cemetery/ Aberdeen Avenue (Cambridge), where 28 incidents were identified including 8 injuries;
6. Watertown Square (pedestrian cluster), where 9 incidents were identified including 8 injuries; and
7. Main Street (Route 20) – Whites Avenue to Mt. Auburn Street (bicycle cluster) where 9 incidents were identified including 8 injuries.

As can be seen in the list above, Watertown Square is listed separately as a crash cluster for vehicles, pedestrians and bicycles. This location was ranked 137th and 193rd, respectively,

on the 2008 and 2009 list of Top 200 Intersection Clusters for the region.

In 2007, MassDOT began a Road Safety Audit (RSA) program to study roadways in which fatal and incapacitating injuries had occurred. Today the RSA program has become an integral part of their HSIP program. MassDOT now requires that all HSIP locations have a RSA performed to determine if they are eligible for HSIP funding. As noted above, seven locations could be eligible for funding if a RSA was performed and improvements justified.

Traffic calming measures are something that should be considered to help address safety issues. They consists of physical design and other measures, including narrowed roads, raised tables, enhanced crosswalks, etc., put in place on roads for the intention of slowing down or reducing motor-vehicle traffic. The intent is to slow traffic and make the area safer without reducing roadway capacity to a great extent.

Transit

The availability of public transit provides greater mobility to populations that do not have access to a private automobile such as low income, disabled community, young adults, and the elderly. The MBTA is responsible for public transportation services within the region. While Watertown does not have direct access to the commuter rail, each of the adjacent communities offers access to commuters traveling east to Boston, or west to a variety of destinations. In addition, the MBTA currently provides nine fixed bus routes that pass through Watertown, with eight of the nine passing through either Watertown Square or the Watertown Transit Yard at Nonantum Road; which is on the southerly side of the Charles River.

Several of the MBTA bus routes experience capacity issues during rush hour service. This has raised concerns regarding the ability to serve and support future economic development efforts ongoing in the Pleasant Street and Arsenal Street corridors.

The nine current bus routes are:

Route 502 – Express Bus Watertown Yard/Copley Square, Boston:

This route runs between the Watertown Transit Yard and Copley Square in Boston, via Newton Corner and the MassPike. The headway, or spacing between the buses, for this route is 8 minutes in the morning and 15 minutes in the evening.

Route 504 – Express Bus Watertown Yard/Downtown, Boston:

This route runs between the Watertown Transit Yard and the Financial District in Boston, via Newton Corner and the MassPike. The headway for this route is 10 minutes during peak periods and 30 minutes off-peak.

Route 52 – Dedham Mall, Dedham/Watertown Yard:

This route runs between the Dedham Mall and the Watertown Transit Yard, via Oak Hill and Newton Center. The headway for this route varies between 30 and 40 minutes.

Route 57 – Watertown Yard/Kenmore Station, Boston:

This route runs between the Watertown Transit Yard and the Kenmore T Station in Boston, via Newton Corner and Brighton Center. The headway for this route is 10 minutes.

Route 59 – Needham Junction, Needham/Watertown Square:

This route runs between Needham Junction, in Needham and Watertown Square, via Newtonville. The headway for this varies between 30 and 45 minutes.

Route 70 – Central Square, Waltham/University Square, Cambridge:

This route runs between Central Square in Waltham and University Square in Cambridge, via Main Street, Watertown Square and Arsenal Street. The headway for this route varies between 10 and 30 minutes.

Route 70a – Central Square, Waltham/University Square, Cambridge:

This route runs between Lincoln Street in Waltham and University Square in Cambridge, via Main Street, Watertown Square and Arsenal Street. This route does not run on Sundays. The headway for this route varies between 30 and 60 minutes.

Route 71 – Watertown Square/Harvard Station, Cambridge:

This route runs between Watertown Square and the Harvard Red Line Station in Cambridge, via Mt. Auburn Street. The headway for this route is 7 minutes in the morning and 10 minutes in the evening.



MBTA Bus 71 at Watertown Square

Route 73 – Waverly Square/Harvard Station, Cambridge: This route runs between Lexington Street in Belmont and Massachusetts Avenue in Cambridge. While it does not travel through Watertown, it runs along the entire northerly edge of Town along Belmont Street and Trapelo Road, and plays a substantial role in serving the commuter population in northern and eastern populations of Town. The headway for this route is 5 minutes during peak periods and 10 minutes off-peak.

Route 554 – Waverly Square, Belmont/Downtown Boston: This route runs between Waverly Square (commuter rail station) in Belmont and the Financial District in Boston, via Belmont Street in Watertown, Central Square in Waltham, Newton Corner and the Massachusetts Turnpike. This is the only bus route that runs through the northwest portion of Watertown. The headway for this route varies between 30 and 60 minutes.

Route 558 – Riverside /Downtown Boston: This route runs between Riverside in Newton through Waltham Center. It enters Watertown at the intersection with Seyon and follows Pleasant Street to Bridge Street where it enters Newton and continues through Nonatum to I-90. The Town has advocated to change this route to continue the full length of Pleasant Street through Watertown Square.

Bicycle Facilities

There are several current planning efforts that aim to improve bicycle facilities and provide continuous routes through Town. Currently, the Watertown Greenway; which runs between the Arsenal Street/School Street intersection and the Nichols Avenue/Arlington Street intersection is a designated off-road multi-use facility within the Town. Based on the BRMPO's Long-Range Transportation Plan (LRTP), on-road bicycle facilities are limited to approximately 2.5 miles of roadway that include

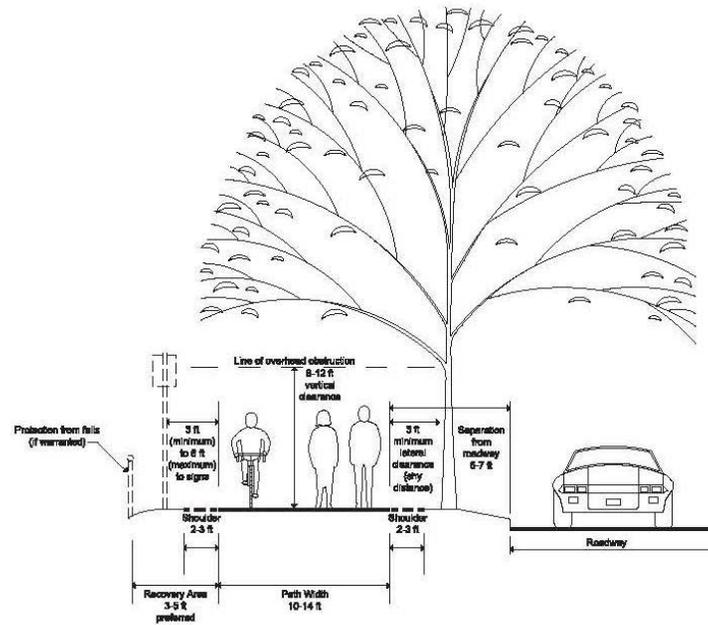
designated bicycle lanes. As noted previously, the Community Path is a proposed multi-use path running east-west between Pleasant Street and the Watertown Greenway at School Street. Watertown also participates in the Boston Region MPO's program for funding the installation of bicycle racks.

The Paul Dudley White Charles River Bikepath is a 14-mile loop that follows both banks of the Charles River from the Museum of Science in Boston to Watertown Square, in Watertown. The pavement varies from 12 feet wide with center stripes to 4 feet wide with 6-inch drops at the edges. In some places it is barely wide enough for one bicycle to pass another safely; in others, there are separate bicycle and pedestrian paths. The Urban Parks Division of the Massachusetts Department of Conservation and Recreation (DCR) manages and maintains this path. This path should be reviewed more closely to see if enhancements can be made to meet current standards; in addition, a connection to/from the Watertown Greenway should be made. The DCR, in cooperation with both private donors and the Town have permitted a project to improve the Charles River Path from Watertown Square to the Yacht Club, with the first phase to be constructed in the spring of 2014.



The Paul Dudley White Charles River Bikepath near the Watertown Dam

The following exhibit is an extraction from the MassDOT Project Development & Design Guide.



Pedestrians Facilities

Pedestrian facilities are widely available providing a well-connected network throughout the Town. Based on the LRTP, approximately 86 percent of all roadway miles (70 out of 81 total miles) within the Town have a sidewalk on at least one side of the road. However, there is concern that there are a number of corridors with a wide pavement cross sections that require pedestrians to cross long distances without refuge. This can have safety impacts as well as decreased efficiency at signals due to the amount of time vehicles are required to stop.

The Department of Conservation and Recreation and MassDOT prepared the Charles River Basin Pedestrian and Bicycle Connectivity Study in May 2013. The goal of the study was to

identify “gaps that preclude a seamless connection across the ten Charles River Basin bridges and their adjacent intersections and along the path system throughout the Charles River Reservation”. Recommendations are made to enhance connections between the municipality and the Reservation. This study is addressed in more detail in Chapter 6 - Open Space and Recreation.

Bridges

There are several bridges in Watertown that are routinely inspected by MassDOT using National Bridge Inspection Standards (NBIS). The primary purpose of the NBIS is to locate, evaluate, and act on existing bridge deficiencies to ensure that the bridges are safe for the traveling public. Each NBIS bridge is inspected at regular intervals of two years with certain types or groups of bridges requiring inspections at less than two-year cycles. The following is a list of bridges that are routinely inspected by MassDOT in Watertown:

- ▶ Bridge Street over the Charles River;
- ▶ Pedestrian Bridge (Joseph U. Thompson) near Fifth Avenue Charles River;
- ▶ Galen Street (Route 16) over the Charles River;
- ▶ North Beacon Street over the Charles River; and
- ▶ Arsenal Street over the Charles River.

According to the MassDOT 2005 NBIS list, all of these bridges need some corrective action to improve deficiencies, whether it is the superstructure, substructure or deck/roadway. It is noted that the pedestrian footbridge near Fifth Avenue over the Charles River is currently being redesigned and is listed on the TIP but a construction year has not been identified.

Future Conditions

The next step in the planning process is to identify growth trends in the area. These trends are often based on previous traffic volume patterns (as described in Table 3-3), past and forecasted population growth, and major development projects.

Future Challenges

Watertown’s population has been declining slightly over the last three decades, but this trend is expected to change in the near future. MAPC is projecting a 13 percent increase in population between 2010 and 2030. While the population has been decreasing, congestion appears to be increasing or remaining constant, which might suggest that the issue is being exacerbated by increasing business growth, as well as residents from other communities using Watertown as a cut through to their final destination.

Planned Developments

If not planned for correctly, future redevelopment or development in Watertown could have a negative impact on the Town’s transportation system. The following identifies areas in town that could be subject to transition in the future:

- ▶ Along the Pleasant Street corridor from the Waltham line to Myrtle Street;
- ▶ Around the Watertown Transit Yard at Nonantum Road and Galen Street;
- ▶ Along the Arsenal Street corridor;
- ▶ Nichols Avenue southerly side near Verizon
- ▶ Grove Street near the Atrium School; and
- ▶ Coolidge Avenue corridor from Arlington Street to Grove Street.

In addition to potential development areas (or redevelopment areas), Table 3-7 summarizes developments in Town that are currently planned, under review or are in the planning stage.

Table 3-7 Planned or Projects Currently Under Review

Project Name	Address	Project type	Status
Watertown Mews (Repton Phase II)	Pleasant Street	206 dwelling units	Complete
Alta at the Estate	Waltham Street	155 dwelling units	Complete
Bacon Howard development	Bacon Street	65 dwelling units with 10,000 s.f. retail	Approved
Residence at Watertown Square	Spring Street	90 assisted living units	Under construction
Ionics Site	Arsenal Street	300 dwelling units with 37,000 s.f. retail/grocery	Submitted and under review
Pirolli Site	Arsenal St & Irving	Mixed-use	Concept
Reinvention/ Expansion of Arsenal on the Charles	Arsenal Street	To be determined	Planned
Arsenal Mall	Arsenal Street	Mixed use redevelopment	Planned
270 Pleasant Street	Pleasant Street	Mixed use development	Complete
Lexus expansion	Arsenal Street	Relocate used car dealership	Under construction
Saab dealership	Arsenal Street	Hotel	Approved

Source: Town of Watertown

GOALS

This Transportation Element identifies the range of transportation issues, needs, and deficiencies over the near and long-term and establishes goals and strategies for physical enhancements and policies that should be implemented. Goals identified include:

Goal 1

Traffic Calming. Encourage traffic calming measures and other techniques at appropriate locations to create safer roads for all forms of transportation while maintaining needed capacity.

Goal 2

Expand Mass Transit/. Work with the MBTA and others to expand mass transit. Promote alternative transportation options in town by further improving intermodal access and connections.

Goal 3

Pedestrian and Bicycle Access. Promote, improve and enhance pedestrian and bicycle access and facilities to ensure that Watertown can accommodate non-motorized forms of transportation.

Goal 4

Improve Roadway Infrastructure. Improve roadway infrastructure using Complete Streets techniques and considering all users, and consider bike share and shuttle service options as ways to improve capacity in problem areas.

Goal 5

Reduce Congestion and Efficiency. Reduce congestion and improve efficiency at major intersections and corridors.

Goal 6

Alternative/Reduced Parking. Consider zoning revisions to relax parking requirements in the business districts. Assess current and long-term parking needs along the major corridors and business centers.

RECOMMENDATIONS

Many of the concerns identified in this chapter can be addressed through implementing Complete Streets concepts. Watertown's transportation network must meet the needs of its residents, commuters, and businesses through vehicular, public transportation, bicycle and pedestrian means. Transportation needs to be convenient, safe, aesthetically pleasing and environmentally friendly as it meets the complex needs of residents and travelers. A comprehensive transportation plan; which both provides active and passive connectivity internally to neighborhoods within Watertown (and to the greater region) is essential to ensure a sustainable system over the long-term. The goals and strategies described in this section are based upon this framework.

Taking into account the existing and future issues, needs, and the goals of the transportation element, the following strategies have been developed to assist in meeting the previously identified goals.

Goal 1. Traffic Calming Policies:

A. Consider Traffic Calming Measures: Traffic calming involves changes in street alignment and other physical measures to reduce traffic speeds in the interest of street safety and livability. Traffic calming reduces vehicle speed, and therefore greatly reduces the number of accidents, and similarly reduces the severity of accidents that do occur. The following are some of traffic calming elements that could be considered for the Watertown Square area and within established neighborhoods that abut high-volume

roadways, or any residential streets that experience high volume cut through traffic:

1. Curb extensions, bump outs, and/or neckdowns along with on-street parking.
2. Narrowed travel lanes and widened shoulders with potential for bike lanes.
3. Raised crosswalks or table top intersections.
4. Roundabouts.

Goal 2. Expand Mass Transit:

- A.** Encourage the enhancement of bus stops and expanding of bus routes to reduce the use of the single occupancy vehicle should be explored.
- B.** Consider the creation of a transit sub-committee or a liaison that can work with the MBTA and others to expand mass transit service, particularly along the #70/70A, 71 routes and 73 routes, and Pleasant Street (this is currently being considered by the Town).
- C.** Work with the MBTA to install more bus shelters and benches at bus stops, as well as fare vending machines, to encourage more people to utilize the service.
- D.** Coordinate with private businesses and residential complexes, especially along Arsenal and Pleasant Streets, to provide expanded, shared shuttle bus services to accommodate demand between business locations and key transit stops such as Harvard Square, Alewife, etc.
- E.** Consider options for developing a bus rapid transit route along the Arsenal Street corridor to accommodate anticipated future growth. Also consider options to make connected bus routes north-south to Belmont, and Brighton transit centers and nodes
- F.** Coordinate with the MBTA to install Charlie Card machines at strategic locations in Watertown
- G.** Consider other modes of transit, such as via water (Charles River) and light rail to reduce congestion on Watertown's major arterials.
- H.** Evaluate future development in terms of its relationship to public transportation. Include a design criterion for future development that promotes alternate modes of transportation.

Goal 3. Pedestrian and Bicycle Policies:

A. Pedestrian

1. Design ADA compliant sidewalks that include a landscaping buffer, where feasible, between the sidewalk and roadway.
2. Where appropriate, replace the existing faded crosswalks with imprinted/textured crosswalks at intersections and mid-block locations along major redevelopment corridors such as Arsenal Street and in Watertown Square.
3. Construct crosswalks that enhance the awareness of drivers to pedestrians such as raised crosswalks, textured treatments or table top at intersections and other common pedestrian crossing points (especially on wide streets) and other current techniques.
4. Enhance the areas in and around public open spaces (parks, schools, athletic fields) so that children and parents won't have the perception that walking is not a safe option. This should consider enhancing the street tree inventory to provide protection and shade to pedestrians.
5. Continue to look for ways to expand the Safe Routes to School Program and encourage the use of tools like the "walking school bus" programs at the elementary and middle schools.
6. Install crosswalk signage to reinforce vehicle and pedestrian awareness. Consider illumination of signage and crosswalks.
7. Install countdown pedestrian signal heads at signalized crossings that do not currently have them.
8. Educate pedestrians to "Stop- Look- and Wave" at crosswalks.
9. Investigate locations for installation of future walking trails and connections with existing trails in addition to the "Community Path" such as along Pleasant Street and the Charles River Reservation. Existing and future streetscape enhancements along roadways should connect directly to the Reservation.
10. Where there is a suitable ROW, encourage wider sidewalks to better accommodate pedestrians and to allow for outdoor dining in places like Watertown Square and other business districts.

B. Bicycle

1. Update the 2002 Bicycle Transportation Plan including reviewing routes identified and update as needed to reflect current land use/ bicycle demands, including bicycle counts, and an implementation/ prioritization plan should be developed.
2. Develop and sign/stripe on-road bicycle routes, considering the latest technology, in accordance with the updated recommendations in the Bicycle Transportation Plan.
3. As Arsenal Street, Mount Auburn Street, and others as appropriate, is redeveloped ensure that Complete Streets techniques are used that include the option to provide bicycle lanes/features along the entire corridor.
4. Bicycle racks should continue to be installed and maintained at all public and private activity centers.

5. Improve bicycle mobility on roads through the implementation of roadway markings (sharrows) and strategic signage.
6. Educate the public about existing bicycling opportunities through wayfinding signage, maps and information on the Town website.
7. Continue to identify potential opportunities for on and

off-road bicycle connections between corridors and traffic destinations.

8. Investigate the feasibility of a bike share program, perhaps through the expansion of the Hubway program.

Goal 4. Roadway Infrastructure Improvement Policies:

- A. Encourage the incorporation of multimodal designs into roadway projects to ensure that streets are shared by all users and not dominated by cars.
- B. An emphasis on green design elements that promote an environmentally sensitive, sustainable use of the public right-of-way should be a priority. Greener designs could consider incorporating ideas like ‘parklets’ in place of parking spaces (public green spaces), street trees, rain gardens, bio-swales, paving materials and permeable surfaces, with plants and soils collecting rain water to reduce flooding and pollution.
- C. Encourage the use of smarter technology-assisted design elements that incorporate intelligent signals, electric vehicle sharing, car and bicycle-sharing, way-finding and social networks for greater system efficiencies and user convenience.
- D. The Town should consider developing a “Complete Streets” policy and checklist or toolbox that is appropriate for the community goals. Elements should be respectful of the specialized needs and any environmental resources within

the Town. These should be balanced with the overarching goal of providing for all modes of transportation.

- E. Durable landscaping that is close to roadway corridors or along new or existing medians can increase the driver’s awareness of the immediate environment and alter behavior, resulting in slower speeds and a safer street. The following streetscape strategies should be considered:
 1. Consider expanding streetscape and hardscape elements along Arsenal Street and in Watertown Square and Coolidge Square, creating key gateways or nodes at specified locations.
 2. Include a landscaping buffer between the sidewalk and roadways where feasible.
- F. Develop access management and traffic impact study guidelines and incorporate them into the zoning ordinance. Minimizing curb cuts and greater separation between driveways improve safety, appearance, and the viability of roadways. An access management approach could benefit many corridors where vehicle conflicts are present or there is an opportunity for future redevelopment; Arsenal Street, Pleasant Street, etc.

- G. Review the zoning ordinance and consider amendments that would encourage mixed-use (residential, office, retail) and compact/clustered development in areas already served by transit.
- H. The Town should address signage clusters on town roadways, and develop a wayfinding signage program that enhances the “Watertown Experience”, taking any design guidelines into account:
 1. Remove existing sign clutter along major corridor roadways.
 2. Revise and update the Town’s sign ordinance to address current sign technology such as flashing and LED signs that can distract drivers.
 3. Commission a “Way-finding Program” to promote and celebrate Watertown’s distinct areas of interest and promote key nodes in Town including areas like: Galen Street, Coolidge Square, and Watertown Square.
 4. Upgrade the overall consistency of traffic signage throughout Town by reviewing current regulatory signage and assuring that it is consistent with the current Manual on Uniform Traffic Control Devices (MUTCD) guidelines.

Goal 5. Roadway Congestion and Efficiency Policies:

The existing vehicle congestion has far-ranging impacts that can impact bus efficiency, increase cut-through traffic within residential neighborhoods, and generate higher numbers of crashes at intersections.

- A. Consider developing a Town-wide traffic counting/ monitoring program to help determine overall vehicular, pedestrian and bicycle travel patterns and volumes to help identify demands and opportunities to expand multi-modal options for improving congestion. Some of this data could likely be generated/reported as part of the permitting process.
- B. Locate new residential, commercial and other services in transit-oriented locations (i.e., Arsenal, Galen, and North Beacon Streets, Watertown Square) to reduce the need for cars and enable people living near transit and services to reduce auto trips. Other areas should be promoted as viable locations for transit.
- C. Any higher density/mixed use housing and commercial infill development that is consistent with this Plan and zoning standards should only be in areas approximate to existing public transportation services. Encourage child-care facilities and other high volume traffic generator services in residential or commercial facilities/ developments to reduce traffic impacts associated with child-care drop-off and pick-up.
- D. Establish multi-modal levels of service (LOS) standards that consider all modes of transportation, including transit, bicycles, and pedestrians in addition to automobiles.
 1. Developments should be reviewed for measurable impacts on the level of service and be required to

provide appropriate mitigation to ensure that they do not impact the existing LOS for a particular mode/all modes over what it is currently. When the mitigation for vehicular traffic is infeasible, the Town may consider alternative mitigation measures or in-lieu fees.

2. Establish transportation demand management mitigation measures, including improvements to transit, bicycle, and/or pedestrian facilities, for projects whose required traffic mitigation would result in an unacceptable impact on an affected neighborhood or Town street.

- E. Where appropriate, install timed signals along Arsenal Street and other major streets to allow traffic to move at a steady rate to minimize air quality impacts from “stop and go” traffic. Also consider signal prioritization for transit, in coordination with the MBTA.

- F. Work with the State to apply for funding through the State Transportation Improvement Program (TIP) and address intersection congestion under the Highway Safety Improvement Program (HSIP) through the Healthy Transportation Policy established by MassDOT. Traffic flow, character, and safety should be reviewed and improved. MassDOT has identified several intersections eligible for HSIP funding; which should be investigated by the Town for improvement and to understand operational deficiencies. Road Safety Audits (RSA) should be conducted (with key public officials input) to determine issues and opportunities for these areas.

- G. Develop corridor improvement strategies for major roadways in Town, including but not limited to Main Street, Arsenal Street, North Beacon Street, Pleasant Street, Galen Street, Mt Auburn Street, etc. Incorporate improvements that focus on roadway/intersection operations, pedestrian/bicycle accommodations, and traffic calming strategies, as described above.

Goal 6. Alternative/Reduced Parking Policies:

- A.** Create a parking plan that focuses exclusively on the current and future needs of Watertown Square. Addressing parking options in the Square should be done in order to focus on meeting economic development goals for the Square and should consider the conditions under which the parking requirements could be reduced, including shared parking.
- B.** Evaluate future development proposals with an eye towards increasing the publicly available parking supply, particularly in Watertown Square.
- C.** Revise zoning to provide incentives to (re)development projects that develop creative ways to reduce or share parking needs.
- D.** Reduced parking requirements should be considered for certain projects when located within a five minute walk radius from an existing or planned and funded bus stop/route.
- E.** Encourage reduced parking for local development/employers that implement:
 - 1. Trip reduction incentives;
 - 2. Flexible work hours and telecommuting to reduce peak-hour commute congestion;
 - 3. Publicly available shuttle bus service to area MBTA stations and points of interest.
- F.** Encourage shared parking agreements, which would make the most efficient use of existing and new parking.
- G.** Encourage consolidation of surface parking lots into structured parking facilities and redevelopment of surface lots with residential or commercial development where allowed by zoning, or to create more open space.
- H.** Re-evaluate parking policies for on-street parking, signage, meters, hours, lots, administration, and signage, etc. to help make Watertown more user-friendly and welcoming.



Housing on Pleasant Street

HOUSING

4

Introduction

Watertown is a built-out community with just over fifty percent of its land categorized as residential. Many of the Town's residential neighborhoods are well established and are dominated by single- and two-family homes. Aside from concerns raised about teardowns and conversions of smaller homes to larger ones or two-family homes, these neighborhoods are not likely to change. Future residential growth will come from redevelopment along the Town's major corridors.

This scenario is described in the Land Use element of this Plan and the Future Land Use Plan, which shows preservation of the character of the residential neighborhoods as an important focus of Watertown's long-term vision. These neighborhoods provide housing for a diverse range of income levels and are predominantly built-out. Recommendations in the Land Use element include several that are designed to preserve the

architectural heritage and fabric of Watertown's existing residentially zoned areas, and prevent development that is out of scale with surrounding homes. Additionally, residential neighborhoods can be further enhanced through streetscape and pedestrian improvements designed to make them safer and more attractive.

Development of multi-family housing is projected to occur in the areas of Watertown that are likely to be enhanced or transformed, particularly along Arsenal Street and Pleasant Street. Multi-family housing has been recently developed in these areas over the last few years, particularly along Pleasant Street. As described in the Land Use element, there is potential for several new multi-family projects Arsenal Street, in conjunction with the proposed commercial redevelopment of the Arsenal Mall and Arsenal on the Charles and there continues

to be interest in residential projects along Pleasant Street. Redevelopment will likely continue to provide housing opportunities for people working in Watertown and nearby communities.

In 2013 the Town of Watertown adopted a Housing Production Plan (HPP) that was accepted by the Massachusetts Department of Housing and Community Development. This document allows the town to phase development over a period of time to comply with the required ten percent affordable housing threshold established under Chapter 40B. The goal of a HPP is to encourage communities to make steady progress in producing affordable housing on an annual basis, which allows municipalities to manage housing growth and meet affordable housing needs.

This element of the Comprehensive Plan summarizes the key findings and recommendations of the MAPC housing plan and addresses housing as it relates to the other elements of the Comprehensive Plan and the broader housing issues facing the community.

Baseline Assessment

Demographics

In the Watertown HPP, MAPC prepared two sets of population projections, Current Trends and MetroFuture⁹. MetroFuture projections were developed for MAPCs regional plan, MetroFuture. Current Trends projections are based on a picture of likely future growth patterns if historical trends in population change are extended. For the purposes of this document, MAPC's MetroFuture projections will be used, since they are based on extensive technical analysis developed to quantitatively analyze patterns of future growth as envisioned in the region, including

focusing growth in already developed areas to use land more efficiently, protecting open space, and reducing the need for more infrastructure.

According to U.S. Census data, Watertown's population decreased 1.3% from 2000 to 2010. The MetroFuture projection indicates that this trend will be reversed by 2030. By the year of 2035 Watertown is projected to have a population of 32,297, which is a 1.2% increase from 2010 (Table 4-1). Given the recent projects that have been approved by the Town, as well as those that are in the pipeline, especially along Arsenal Street, it is likely that the population decline could be reversed sooner than 2030. While no significant population growth is projected, Watertown's elderly population (65 years old and over) is expected to grow by 85.9% or 1,931 total residents between 2010 and 2035 while all other age groups are expected to decline (see Table 4-2 and Figure 4-1).

Watertown has seen a 5% increase of the number of households between 2000 and 2010. Coupled with the slight decrease in population during the same decade, the average household size in Watertown dropped from 2.17 in 2000 to 2.15 in 2010, which is significantly smaller than the MAPC region and the state (Figure 4-2), reflecting the downward trend seen nationally. Among all Watertown households in 2010, half were family households while 36% were single person households. More than 10% of all households contain a single person 65 years of age or older. MAPC projects that by 2035 Watertown will have an additional 1,401 households with the majority senior citizen households.

⁹ MAPC's MetroFuture and Current Trends projections were calculated prior to the release of 2010 Census data. Updated projections are currently under development, but were not available within this project's timeframe. The existing figures used for this analysis are the best population and household projections currently available

Table 4-1 Population Change, Census and MAPC Projections

	2000	2010	2020	2030	2035	Change 2010-2035	% Change 2010-2035
Census	32,330	31,915	n/a	n/a	n/a	n/a	n/a
MetroFuture	32,330	31,915	31,395	31,804	32,297	382	1.2%
Current Trends	32,330	31,915	31,212	31,872	32,471	556	1.7%

Source: US Census and MAPC

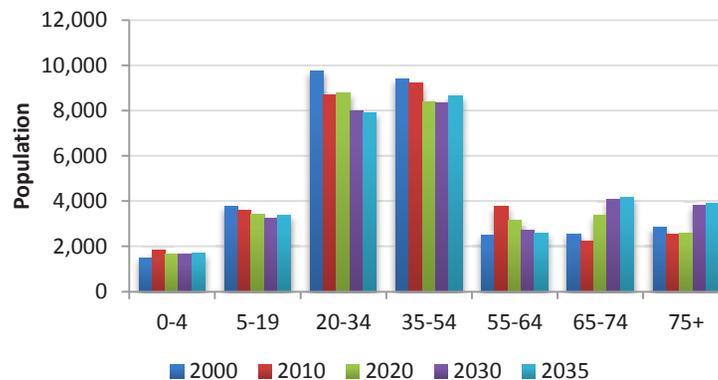
Note: MetroFuture and Current Trends figures revised to reflect 2010 Census data.

Table 4-2 Age Trends, MetroFuture Projections, 2000 - 2035

	2000	2010	2020	2030	2035	Change 2010-2035	% Change 2010-2035
0-4	1,504	1,823	1,641	1,636	1,685	-138	-7.6%
5-19	3,784	3,578	3,423	3,238	3,360	-218	-6.1%
20-34	9,768	8,704	8,794	8,000	7,910	-794	-9.1%
35-54	9,380	9,242	8,415	8,338	8,664	-578	-6.3%
55-64	2,498	3,786	3,154	2,712	2,598	-1,188	-31.4%
65-74	2,544	2,249	3,369	4,077	4,180	1,931	85.9%
75+	2,857	2,533	2,599	3,899	3,899	1,366	53.9%

Source: MAPC

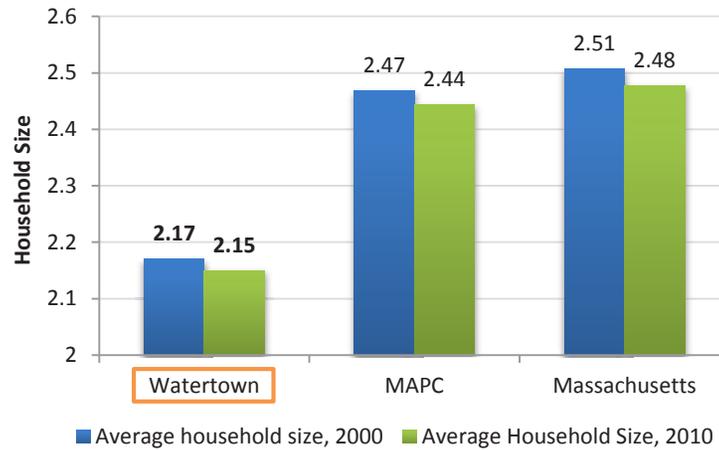
Figure 4-1: Age Trends, MetroFuture Projections, 2000 – 2035



Source: Census 2010

These changes, particularly the increase in elderly populations, mirror the demographic shifts that we see throughout the MAPC region, the state and nation, and will have major implications on the housing types needed in coming years. As Watertown's elderly population increases, the need or preference for smaller units with lower attendant costs, as well as the need for special housing facilities such as assisted living and nursing home units, is likely to increase. A 90 unit assisted living facility is currently under construction just outside of Watertown Square.

Figure 4-2 Household Size, Watertown vs. MAPC Region and State, 2000-2010



Source: Census 2000 and 2010

Table 4-3 Households by Type, 2010

	Number	%
Total households	14,709	100
Family households	7,412	50.4
With own children under 18 years	2,876	19.6
Husband-wife spouse	5,690	38.7
With own children under 18 years	2,274	15.5
Male householder, no spouse present	499	3.4
With own children under 18 years	118	0.8
Female householder, no spouse present	1,223	8.3
With own children under 18 years	484	3.3
Nonfamily households	7,297	49.6
Householder living alone	5,260	35.8
Householder 65 years and over living alone	1,774	12.1
Average household size	2.15	n/a
Average family size	2.87	n/a

Source: ACS 2006-2010
 Note: The above household and family household breakdown is provided by the U.S. Census Bureau.

Additionally, with middle-aged, young-adult and under-19 cohorts expected to decline, there will be less need for larger units resulting in increased demand for one- and two-bedroom units, typically in multi-family structures. Analyzing household types is important to help project the type of housing units that will be needed within a specific community over time (Figure 4-3). Since Watertown has a large number of non-family households and couples without children, the Town should ensure that housing options such as multi-family rental and condominium units that are attractive to these households are available in the community. Recent multi-family residential projects built along the Pleasant Street and Arsenal Street corridors have included mostly smaller dwelling units.

Housing Characteristics

The following section looks at Watertown’s current housing stock and how it changed over time. Understanding the types, age and size of existing units is essential for housing planning because it assists with determining what type of new housing might be needed to meet the current and projected population.

Housing Stock by Type & Age

Watertown’s housing stock tends to be more diverse and older than in surrounding communities, with single family structures making up a third of housing units in Watertown. More than a third of Watertown’s housing are 2-family structures, with the remainder of units in multifamily structures, most of which are found in structures with 20 or more units.

Watertown’s housing stock is older than in many surrounding communities. Over 55% of all units were built prior to 1940, the third highest percentage when compared with nearby communities. Further, only 2% of units were built after 2000,

which ties for the lowest percentage (this number is deceptive because the total number of new multi-family units is high as described below). This is significant because older structures often lack modern heating and energy standards, which adds to monthly utility costs, impacting affordability for both owners and renters. Additionally, many of these structures were not built to today's accessibility requirements, and may present challenges to residents who wish to remain in Watertown as they age.

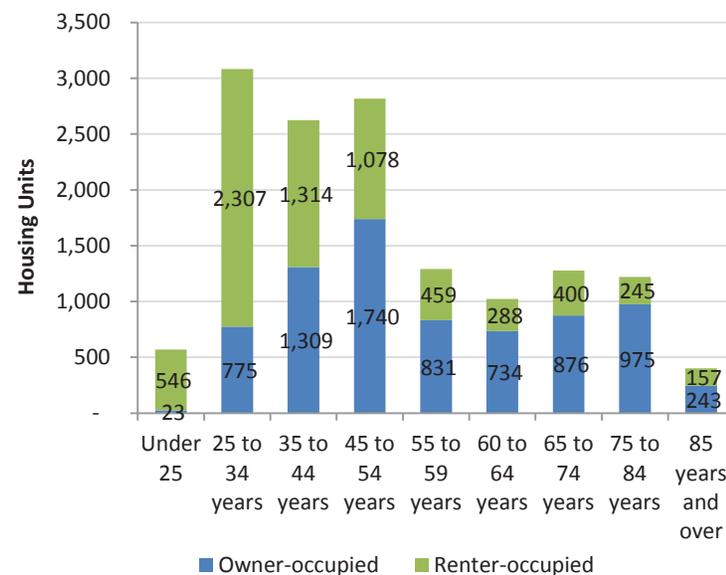
Table 4-4 Housing Units by Type, Watertown, 2010

	Units	%
Single Family	4,932	32.1%
Two-Family	5,686	37.0%
3 to 4	1,751	11.4%
5 to 9	445	2.9%
10 to 19	497	3.2%
20 or more	2,003	13.1%
Other	34	0.2%
Total	15,348	100%

Source: Census 2010

Occupied housing units in Watertown are evenly split between owner-occupied and renter-occupied (52% and 48%, respectively). This is quite different from the majority of communities analyzed for comparison, where owner-occupied units are the majority. The high percentage of rental units may indicate a more short term residential community. According to American Community Survey (ACS) estimates, more than half (56%) of all households moved to Watertown between 2000 and 2010. Further, when looking at the breakdown of owner-occupied and renter-occupied units by age, the largest number and highest percentage (by age) of renter-occupied units are people under 25 (Figure 4-3).

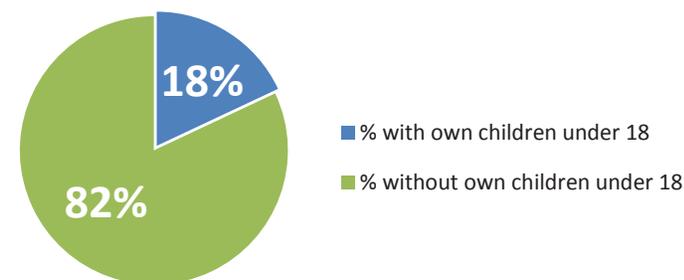
Figure 4-3 Housing Tenure by Age, Total Units, 2010



Source: ACS 2006-2010

Renter-occupied households on average are smaller than owner-occupied units, and few have children under the age of 18. Thus, many of these rentals are occupied by single person households or couples without children. Family households with children are more likely residing in Watertown's ownership units.

Figure 4-4 Renter-Occupied Units with Children Under 18



Source: ACS 2006-2010

Table 4-5 Average Household Size by Tenure

	HH Size
Watertown – All HHs	2.15
Owner-occupied	2.29
Renter-occupied	2.06

Source: Census 2010

Vacancy

Watertown’s 5.6% vacancy rate is lower than that of the MAPC region (5.9%) and significantly lower than that of the State (9.3%). A larger percentage of the vacant units on the market in Watertown are for rent versus for sale (34.4% for rent; 19.7% for sale).

Building Permits

Between 2000 and 2011, Watertown issued a total of 101 building permits for new housing structures. Of this number, 28 were for single family structures, 61 were for buildings with 2-4 units, and 12 were for buildings with 5+ units. When looking at actual numbers of housing units permitted, it is clear that Watertown permitted a total of 733 housing units, the majority of which (573) were in multi-family buildings (5+ units), or in 2-4 unit structures (108). A significant number of units (220) were permitted in 2011, the majority of which (214) were in buildings with over 5 units. Many of these projects were located on Pleasant Street. Several multi-family projects (with 500+ combined units) are either under construction, permitted, or proposed.

Housing Market Conditions

Housing market conditions influence affordability of the housing stock within a community. Competitive housing markets tend to have a limited supply of available units (ownership or rental),

compared to the number of households looking to live in or move to the community. This can lead to increasing housing prices and rents. These factors can significantly reduce affordability within a community, both for potential new residents or existing residents who can no longer afford their current unit. Generally, Watertown’s single family and condo median sales prices are lower than the subregion average, despite that the median sales prices for single family homes and condos have increased 148% and 124%, respectively, over the last 20 years. Rents in Watertown are moderate compared to other surrounding communities, but still above Fair Market Rents established by the Department of Housing and Urban Development (HUD).

Median Sale Prices and Total Annual Sales

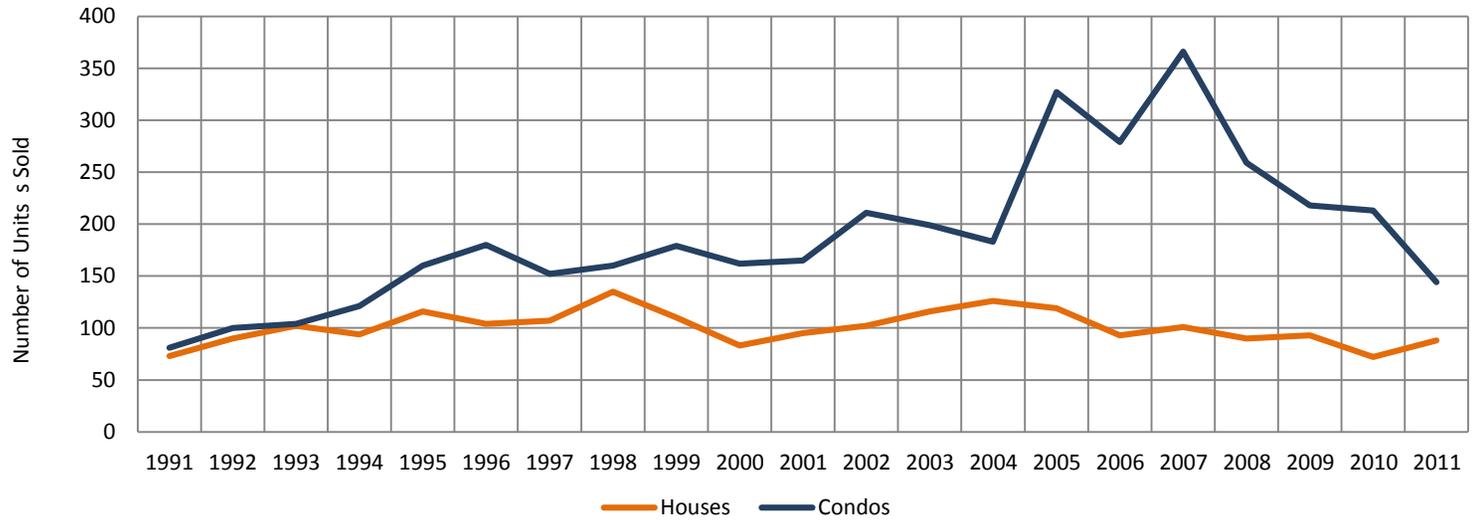
Over the last two decades, Watertown’s median single-family sales price rose 148% from \$179,500 in 1991 to \$446,000 in 2011 (\$441,000 in 2013)¹⁰. Prices peaked in 2004 (\$470,000), and have fallen slightly since. In 2011, Watertown’s median single-family sales price was \$193,670 less than the subregion average, and was the fifth lowest in the subregion.

Watertown’s median condominium sales price increased 124% over the last two decades from \$142,500 to \$319,000 in 2011 (\$322,500 in 2014)¹¹. Condominium prices peaked in 2008 (\$338,000) and remained relatively stable through 2011. Like single family home values, the median sales price for Watertown condos is lower than that of the subregion and the fourth lowest of all comparative communities.

¹⁰ The Warren Group, Town Stats, April 2014.

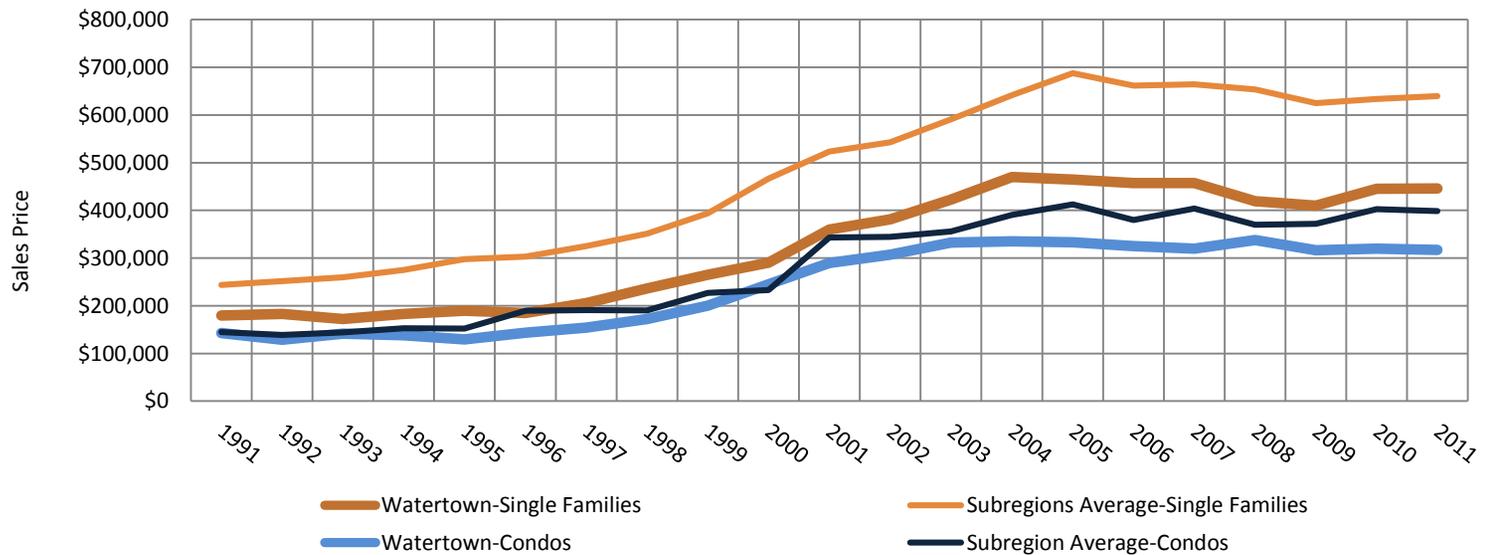
¹¹ Ibid.

Figure 4-5 Annual Volume of Single Family Home Sales vs. Condos, 1991-2011



Source: The Warren Group Town Stats, 2012

Figure 4-6 Single Family Home and Condo Prices, Watertown vs. Subregion 1991-2011



Source: The Warren Group Town Stats, 2012

Gross Rents

Rents within Watertown are moderate compared to the subregion. According to the Census, average gross rent¹² in Watertown in 2010 was \$1,368, which puts it in the middle range of rents when compared to other subregion communities. However, Watertown's gross rent is somewhat higher than the average gross rent for the Boston-Cambridge-Quincy MSA, which is \$1,146. This may indicate a housing cost burden for many rental households.

Housing Affordability

A housing affordability assessment examines the overall demographic profile of Watertown, along with the household income of the population and housing costs to determine how the Town can best meet its needs for providing a diverse and affordable housing stock for its citizens.

Household Income

In 2010, Watertown's estimated median household income was \$74,081, an increase of 24% over the last 15 years. It is lower than that of the Boston-Quincy-Metro area (\$94,400), and in the bottom third of subregion communities. Approximately one third of households earn more than \$100,000 annually, with 42% earning in the middle income ranges between \$40,000 and \$99,000. It is worth noting that nearly 25% of households earn below \$40,000, the fourth highest percentage of all comparative communities.

Affordability Gap

Another way to measure housing affordability is to compare the median home sale price in a community to the price that a household at the community's median income can afford. The

difference between these values is defined as the affordability gap. As housing prices increase, the affordability gap widens.

Households are considered cost burdened if they pay more than 30 percent of their gross income for housing costs, which include rent, utilities and fuel costs for renters. They include mortgage or purchase contract payments, utilities, fuel costs, taxes and insurance for homeowners.

To afford the 2011 median sales price of a one-family at \$446,000, a household would have to earn \$110,775 annually. A household earning the FY2012 HUD metro area median income (AMI) of \$97,800 could not afford a home priced at this amount, assuming it spent no more than 30% of gross income on housing costs. Housing cost burden is a significant issue in Watertown. 45% of owners and 35% of renters are cost burdened and 16% of owners and 15% of renters are severely cost burdened (spend more than 50% of gross income on housing costs).

To afford the 2011 median sales price of a condominium at \$317,132, a household would have to earn \$80,470 annually. This figure factors in the cost of both monthly mortgage costs and utilities. A household earning the FY2012 HUD metro AMI could afford a home priced at this amount.

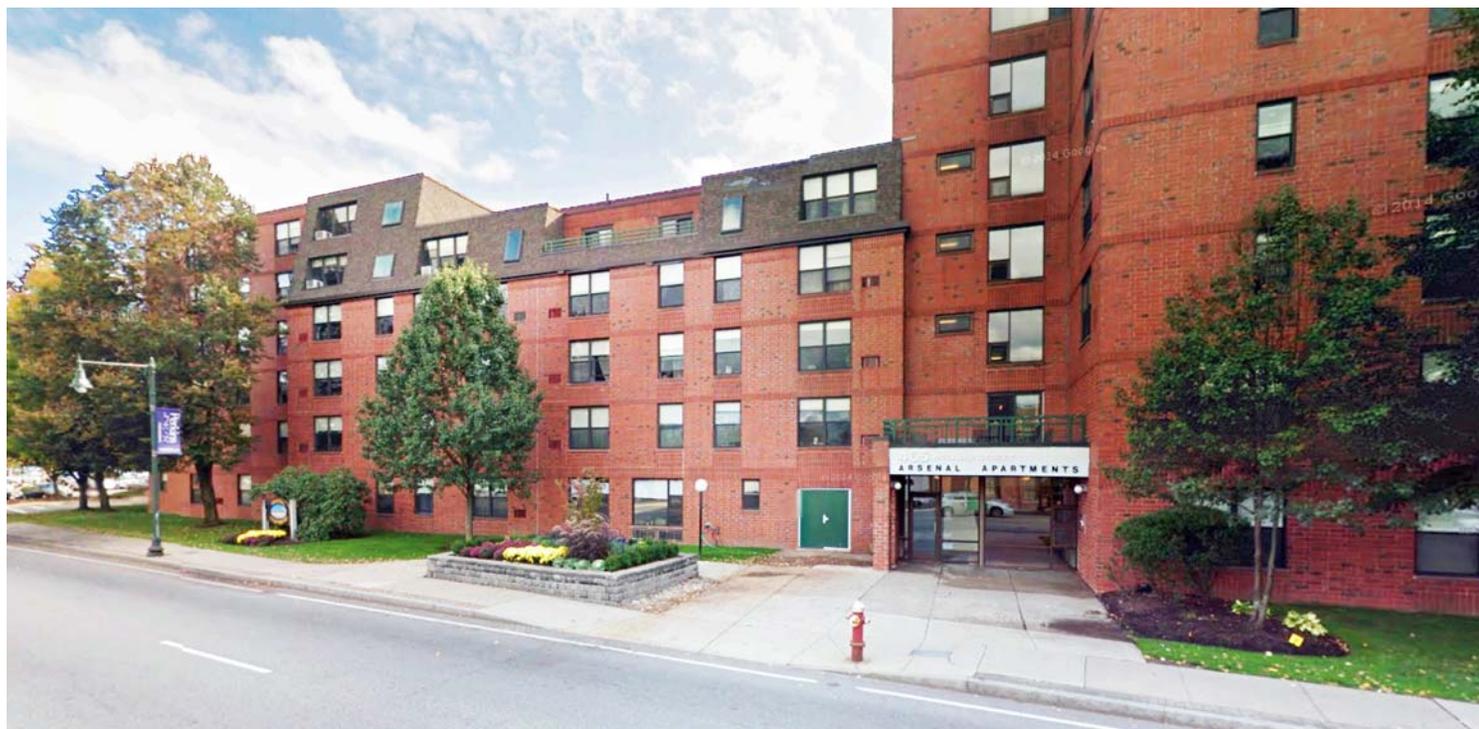
A Watertown household earning the median household income of \$74,081 could afford a home priced at \$368,000, resulting in an affordability gap of \$78,000 for a single family home. However, there is no affordability gap for the median priced condominium.

¹² Gross rent is the sum of the rent paid to the unit's owner plus utility costs incurred by the tenant such as electricity, gas, water and sewer, and trash removal services. Telephone and other communications services are not included. If the owner pays for all utilities, then gross rent equals the rent paid to the owner.

Chapter 40B Inventory

The state goal for affordable housing under Chapter 40B requires 10 percent of a community's year-round housing stock to be affordable. According to the Massachusetts Department of Housing and Community Development (DHCD) Subsidized Housing Inventory (SHI), as of April 30, 2013, 1,010 units (6.5% of the Town's housing stock) are on the inventory. The DHCD inventory is based on 15,521 year-round dwelling units, meaning that the shortfall for Watertown is 542 units. With the adoption of its Housing Production Plan, the Town is considering a variety of options to close this gap.

Of Watertown's 1,010 affordable units, 80% of units are affordable in perpetuity or for at least the next 30 years. However, 156 units could expire in 2013 (Arsenal Apartments), dropping the Town's SHI to 5.5%. For Watertown to make progress toward the 10% SHI threshold, it is important to work with the owner of these expiring units in order to recertify the units, while continuing to work to add more units to the inventory. Projects in the permitting pipeline will create new units for the inventory, although more will be needed to reach the 10%.



*Affordable Housing Units
at Arsenal Apartments*

GOALS

The Comprehensive Plan acknowledges the recently adopted Housing Production Plan with its emphasis on affordable housing, given that there is a significant affordability gap in Watertown for most housing types. The Comprehensive Plan seeks to strengthen Watertown’s housing diversity, and facilitate housing development that is affordable for all household types, including families with children, couples and single people. The Housing section of the Comprehensive Plan meshes with other sections to ensure that Watertown continues to maintain a quality living environment with adequate open space and opportunities for recreation, education, local shopping and commerce.

Goal 1

Promote and maintain a diverse housing stock with increased funding for housing creation and more opportunities for lower- and middle-income households.

Goal 2

Ensure zoning allows housing production for all income levels and household types.

Goal 3

Provide seniors and persons with disabilities with greater housing options.

RECOMMENDATIONS

Goal 1. Promote and maintain a diverse housing stock with increased funding for housing creation and more opportunities for lower- and middle-income households.

- A.** The HPP indicates that there is a significant housing affordability gap in Watertown. To help address this gap, the HPP sets a goal of producing 78 SHI units per year to help the Town meet the State's 10% target within seven years. The Town should review its progress annually and adjust as needed.
- B.** Ensure that expiring subsidized units are recertified so that they remain on the SHI.
- C.** Identify site(s) for mixed-use developments to provide housing units in amenity rich environments to meet the preferences of households. As described in Chapter 1 - Land Use, this could include parcels along high ridership bus routes, surface parking lots along Arsenal Street, and other I-3 zoned land where multi-family housing is allowed by special permit. Identifying nodes for mixed-use in the Pleasant Street Corridor zoning district could also be a possibility.
- D.** Hold discussions with developers to better understand local, regional and statewide housing market development trends.
- E.** Continue to invest in acquisition/rehab projects to increase the supply of affordable housing. Continuing to invest resources through partner organizations, including the use of HOME funds, will enable the Town to further increase its affordable housing stock. Consider options to purchase existing two-families throughout the community for rehabilitation to use as affordable and middle income units.
- F.** Ensure that setbacks and other dimensional regulations are met for proposed teardowns. Review existing dimensional requirements and consider design guidelines to maintain existing neighborhood character and promote greater symmetry between the old and new structures.
- G.** Consider the adoption of the Community Preservation Act (CPA). The CPA allows communities to create a local Community Preservation Fund for affordable housing, open space protection and historic preservation. Community preservation funds are raised through a tax surcharge up to 3% of the tax levy against real property, which can only be adopted through a town or citywide ballot referendum. Of monies raised, at least 10% must go to affordable housing initiatives.

Goal 2. Ensure zoning allows for housing production for all income levels and household types.

- A.** Multi-family development requires a special permit for 3-4 units, or a special permit with site-plan review for projects with four units or more. Allowing multi-family structures by right for up to four units with site plan review would provide opportunities for more affordable condominium or rental units. For larger projects, a special permit would still be required with site plan review. As an incentive, consider allowing more units by right with site plan review if a certain number of affordable units are provided as part of the project.
- B.** Analyze existing Industrial and the Pleasant Street Corridor zoning districts to identify areas more appropriate for mixed-use and/or multifamily development, and potentially rezone. See the recommendations for Pleasant Street in Chapter 1 - Land Use regarding land use and design standards to be considered.
- C.** Explore opportunities to allow for greater densities in the Cluster Residential zoning district. Consider allowing for greater densities, or providing a density bonus for projects with smaller unit sizes (e.g. cottage developments), to provide an opportunity to create more affordable housing options. Consider allowing for higher density if affordable housing is provided. Cottage style development, especially as an option for elderly housing, is an example of a newer style of clustered housing. See <http://www.lvpc.org/pdf/cottageHousingDev.pdf> and §185-221 of the Barrington, RI Zoning Ordinance (<http://www.ci.barrington.ri.us/>).
- D.** Amend the parking requirements for multi-family developments. Consider lowered minimum parking standards or tandem parking, particularly where transit is available.
- E.** To increase the amount of new housing units available to families with children, couples and single people with lower incomes, consider amending the inclusionary zoning requirements to increase the percentage of affordable units to be provided from 10% to 12.5%. Also, consider lowering the threshold for providing affordable housing units from 15 to six. Reducing the minimum size of dwelling units is another method to encourage greater housing choices.
- F.** Consider options for reincorporating an accessory housing ordinance where appropriate, which could provide for additional opportunities for alternative housing opportunities for families. Consider ways to allow accessory units for family members, or, if rented to others, for affordable housing. Currently they are not allowed.
- G.** Amend the zoning ordinance to require a minimum number of new housing units have three bedrooms or more, including affordable units created by Watertown's inclusionary zoning.

Goal 3. Provide seniors and persons with disabilities with greater housing options.

- A.** Work to address senior needs through supportive housing policies. The Housing Needs analysis identified a significant number of senior households in need of potential housing assistance due to cost burdens and related issues with maintaining their homes. The Town of Watertown should continue to support developing new housing that is handicapped-adaptable or fully accessible to people with disabilities, including seniors, and integrate or connect community supportive housing services into new development. Consider incorporating accessibility standards for new housing construction. See <http://concretechange.org/construction/construction-guidelines/>. The Watertown Housing Partnership should coordinate with the Watertown Commission on Disability and other senior advocates to help households in need get the support they deserve. See “Aging in Place – A Toolkit for Local Governments”, M. Scott Ball, Atlanta Regional Council and Community Housing Resource Center.
- B.** Explore mechanisms to allow Watertown’s seniors to age within the community and to better serve persons with disabilities, through housing rehabilitation/modification programs. Watertown should promote existing programs, including the Home Modification Loan Program, and match these funds with local HOME funds for additional home improvements.
- C.** Support emergency repairs programs designed to provide assistance to income-eligible Watertown residents to make repairs and alterations to their homes for safety and health reasons. Senior and disabled households should receive priority assistance.



ECONOMIC DEVELOPMENT

5

Introduction

This chapter identifies the community's economic development goals as expressed through other planning documents, presents baseline information regarding the state of the local economy, and suggests potential implementation strategies that could be undertaken by the Town to help advance its economic development goals.

In the 19th century the mills and factories of Watertown produced numerous innovations, from the "duck" cotton sail cloth used on the U.S.S. Constitution to the once-popular Stanley Steam Engine automobile. During the 1800s the 93-acre Watertown Arsenal on the Charles River was the site of a major storage complex that, in the 20th century, became an armaments manufacturer and military scientific complex. In 1968 the Army sold approximately half of the complex to the Watertown Redevelopment Authority. The Arsenal Mall, a

225,000 square foot redevelopment, opened on this site in 1983. The remainder of these historic buildings were converted to civilian uses in 1995, and the site is known today as the Arsenal on the Charles, a commercial and office complex.

Much of the Town's economic activity is still concentrated on Arsenal Street, in Watertown Square, and along a few other commercial corridors. Two formerly industrial areas, Pleasant Street and Coolidge Hill, have transformed over time. Pleasant Street now has a mix of industrial, wholesale, office, research and development, and multifamily housing developments along its corridor. Coolidge Hill is primarily a residential and neighborhood retail area, with some manufacturing still located there. Likewise, the Charles River is no longer an industrial asset, but a natural one.

Watertown's economy is closely tied to that of Greater Boston and the surrounding towns to the west of Boston and Cambridge. Watertown is part of a suburban commercial corridor that also includes Waltham and Newton. Watertown also benefits from good access to the key economic, medical, and elite educational institutions in Boston and Cambridge.

Watertown managed to be minimally impacted by the Great Recession, compared to the rest of the country. By 2012, 82 percent of jobs lost in Boston had been recovered, a rate almost twice that of the nation's¹³. That growth has been driven by high-tech and life sciences, which are among the state's growth industries. Watertown has several strengths in these sectors, including life sciences, design and engineering, information and media, and advanced manufacturing industry. The strength of the regional economy and Watertown's economic, social, and physical assets put it in a strong position to be economically sustainable over the long term.

However, Watertown's success in capturing this market depends on its success in leveraging the untapped potential in its commercial corridors. As discussed in the 2011 Strategic Framework for Economic Development, Watertown lacks a clear and cohesive image. In contrast, other area communities have been able to brand themselves as the type of vibrant live-work-play centers in demand by the knowledge economy. Though it is one of the region's densest communities, the Town has a substantial area dedicated to car-centric development and urban form that diminishes the sense of place found within Watertown's squares. With the historic road network, there have been limited options for expanding the bicycle network, creating walking connections, or expanding the multi-person transit network. Watertown Square and major roadway corridors such as Arsenal Street are being improved for pedestrians but options for the narrow corridors are limited. Likewise, while the first

phase of the recently completed Watertown Greenway provides an additional non-automotive option to get around, dedicated bicycle options in Watertown are limited. There are also opportunities that the Town is pursuing to improve the connectivity and visibility of the Charles River Reservation along its entire length within Watertown.

Watertown can continue to provide an affordable alternative to Cambridge and Boston for start-ups and smaller companies that are seeking to start or grow within the Boston region. Several commercial corridors in town have the potential to stand out as prime business locations for new and growing companies in the region. According to real estate experts, the commercial real estate market in Watertown can offer rents up to 30 percent lower than rates in Cambridge and Boston¹⁴. Improvements to the design character of the streetscape could also help create a sense of place along the commercial corridors. The Town is actively supporting the development of an urban form that attracts workers in the creative economy, including compact residential development and amenities such as restaurants, retail, and parks.

Goals and Strategies from the 2011 Strategic Framework

The strategy presented in the 2011 Strategic Framework for Economic Development identifies potential growth industries for Watertown that would provide the greatest economic benefit. The plan was developed over a 15-month period that involved coordination and engagement with the public, the Town and its elected officials, and local businesses, as well as state and regional economic development entities such as the Mass Office of Business Development, and the Mass Biotech Council.

¹³ Jones Lang LaSalle, High-technology Office Outlook, United States, 2013
¹⁴ Strategic Framework for Economic Development, Town of Watertown, 2011

*Cover of the
Strategic Framework for
Economic Development study*



The plan identified the need for a balance between the Town's unique historical and environmental context, the needs of larger and smaller firms, the benefits of supportive retail and restaurant establishments, and quality of life factors for its diverse resident and employee populations. The vision statement below shows a strong orientation towards the innovation economy that has driven economic recovery in Cambridge and Boston over the past five years. The Strategic Framework envisions a Watertown with better infrastructure and clear communication channels between public agencies and private businesses.

Closely aligned with the beautiful Charles River, Watertown can become a vital location for innovative businesses that grow out of the strong regional economy emanating from the universities and medical centers in Boston and Cambridge. Ongoing investment in infrastructure will create benefits for residents and employees, enhancing the Town's identity with convenient transit, pedestrian friendly streets, and a network of trails and parks. Strong communication among Town leaders, business leaders, residents, and civic interests will lead to a setting where private investment is encouraged for the role it can play in creating jobs, strengthening the tax base, and building the future of the Town.

The goals outlined in the 2011 plan are as follows:

- ▶ Capitalize on key industry clusters.
- ▶ Strengthen the identity of the Town.
- ▶ Promote investment in under-utilized areas.
- ▶ Shape the character of new development.
- ▶ Link jobs and infrastructure.

The implementation strategies described in the 2011 Strategic Framework call for making the Town more attractive to high-technology companies that have outgrown or want a more affordable alternative to Cambridge and Boston. High-tech workers have indicated a preference for urban amenities such as restaurants, retail, and walkable places. As such, the Strategic Framework encourages the development of destination retail and restaurants and a mixed-use, walkable urban environment along key commercial corridors to reflect the environment these companies would be leaving behind. The implementation strategies include establishing a point-person in town to help businesses with location decisions, making improvements to infrastructure, streetscapes, and access, and developing public/private partnerships to facilitate these investments.

This Comprehensive Plan builds upon the 2011 Strategic Framework. The specific strategies recommended in this Comprehensive Plan are adopted from the Strategic Actions recommended in the 2011 Strategic Framework and include development policies, infrastructure investment, marketing and outreach, and public/private partnerships. Likewise, the five redevelopment areas identified in the strategy align with the focus areas identified in this Comprehensive Plan. These include the West End / Pleasant Street Corridor, South Square, Union Market, Arsenal North, and Coolidge Hill.

Baseline Assessment

The following economic profile inventories key indicators related to the performance of the local economy, including information on the labor force, local and regional economic development efforts, local business establishments and commercial space in Watertown, and target industries identified in the 2011 Strategic Framework. While these measures can enhance understanding of the economic situation, there are other less tangible elements such as quality of life and business climate perceptions that can also influence local conditions.

Labor Force Characteristics

Watertown has a population of 32,863 as of 2012 and a labor force that averaged 20,006 workers based on a 2007-2011 ACS estimate. Like much of the surrounding communities, Watertown’s workers are highly educated. In the same 5-Year ACS Estimate, fifty-five percent of the Watertown labor force held a Bachelor’s degree or higher, and another 17 percent had a college or an associate’s degree. In 2000, 47 percent of the workforce held a Bachelor’s degree or higher.

The median household income was \$76,718 according to the 2011 American Community Survey (ACS) 5-year estimates, significantly higher than the median income of \$59,764 in 2000. Median income has climbed steadily in spite of the recession from \$71,377 in 2009 to \$74,081 in 2010. Incomes in Watertown are higher than Cambridge (\$69,017), Boston (\$51,739), and Waltham (\$60,632). The suburban communities of Newton and Brookline have significantly higher median incomes, \$109,724 and \$97,250, respectively. Belmont, at \$70,400, also falls in the middle of the range.

Watertown consistently has a lower unemployment rate than the state. Watertown’s unemployment rate, at 4.9 percent in 2011, was generally around one percentage point lower than the Massachusetts unemployment rate. The most current reported unemployment rate was 3.4 percent as of December 2014, while the Massachusetts state unemployment rate was 4.8 percent¹⁵.

The median age of the community speaks to community character and can be an indicator of Watertown’s suitability as a potential live-work-play hub for workers migrating out from Cambridge and Boston. Watertown has aged slightly over the past decade. In 2010, the median age in Watertown was 38.3 years, compared to a median age of 36.7 in 2000. In comparison to its neighbors, Watertown’s population is younger than Belmont (41.5 years) and Newton (40.5 years) and older than Waltham (33.9) and Brookline (34.0). The median age in the urban center is significantly lower—30.2 in Cambridge and 30.8 in Boston.

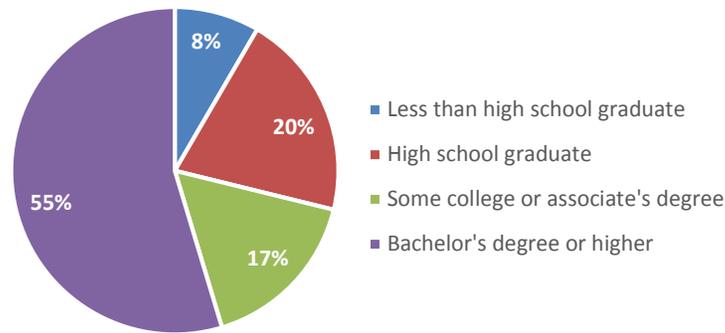
Population	31,915
Median Age	38.3 years
Education (above H.S.)	91.50%
Labor Force (16+ years)	20,006 workers
Travel Time to Work, mean	25.7 minutes
Housing Units	15,348
Household Income, median	\$ 76,718

Table 5-1 Watertown Facts (see footnotes below for data sources)

Sources: 2010 Demographic Profile, 2007-2011 American Community Survey 5-Year Estimates.

¹⁵ Massachusetts Executive Office of Labor and Workforce Development, 2014

Figure 5-1 Educational Attainment of Watertown Residents



Sources: 2007-2011 American Community Survey 5-Year Estimates.

Language skills can be an important factor in obtaining employment. In 2011, thirteen percent of Watertown’s population had limited English-speaking skills. (2007-2011 American Community Survey). In recent years, the foreign-born population in Watertown increased from 20.3% in 2000 to 25.9% in 2011. Close to half of the foreign-born population in Watertown were identified as Asian (47%), just under a third were European (27%), and about one out of five was from Latin America. Workforce development programs at the local level should consider whether there is a need for programs for non-native English speakers.

Institutions Supporting Local and Regional Economic Development

Watertown-Belmont Chamber of Commerce

The Watertown-Belmont Chamber of Commerce is a nonprofit organization supporting local business in Watertown and Belmont. As of November 2013 the member directory listed 154 Watertown businesses that include international corporations, smaller businesses, nonprofit organizations, and local

institutions. The Chamber hosts events and networking opportunities that “develop, encourage, promote, protect, and advance Watertown and Belmont businesses” and “promote the civic interests and general welfare of the community.” In addition, the Chamber provides small business services such as SCORE counseling and group health insurance.

Metro North Workforce Investment Area

The Town is part of the Metro North Workforce Investment Area, which serves twenty communities located northwest of Boston, from Cambridge and Watertown north to Burlington, Wilmington, and North Reading. Although Watertown participates in this collaborative, it has not defined Watertown’s economic development efforts.

The Metro North Regional Employment Board (REB) is a public-private partnership that sets local workforce policy, determines how state and federal funds are best used for workforce development, aligns the needs of employers to the needs of area residents, and oversees the Metro North One-Stop Career Centers where both job search and employer services are provided.

The Metro North REB’s FY 2013 – FY 2016 Strategic Plan presents goals that are in line with the 2011 Strategic Framework for Watertown. Its primary goal is to close the skills gap for the region’s target industries by connecting directly with businesses to develop training and educational programs for youth, unemployed adults, and the incumbent workforce. The plan identifies five target industries that match or are closely tied to the five industries identified in the 2011 Strategic Framework. These include Advanced Manufacturing, Healthcare, Information Technology, Life Sciences, and cross-cutting STEM (Science, Technology, Engineering, and Math) Occupations. The Metro

North REB is focused on developing partnerships and funding resources in these target industries, identifying entry-level job opportunities, and aligning education and training programs to those opportunities on a regional level. The Metro North REB advances Watertown’s economic development goals by implementing training and education programs for the workforce, by marketing and filling local hiring needs, and by building capacity with strategies that complement and strengthen Watertown’s target industries.

Local Business in Watertown

The number of jobs in Watertown remained steady at around 19,000 from 2009 to 2012. There are slightly fewer retail trade establishments but more jobs, which may reflect the presence of large format retail at the Arsenal Mall. The most consistent wage

gains were observed in the knowledge industries—Professional and Technical Services (9%), Information (23%), and Finance and Insurance (7%). The number of jobs in Information and Manufacturing has held steady in spite of one out of five firms in the Information industry and one out of ten firms in Manufacturing having left Watertown between 2009 and 2012.

Regional job growth in the Metro North Workforce Investment Area grew from 399,819 jobs in 2010 to 446,232 jobs in 2012, according to previous state job numbers. Watertown should have job growth in its established industry clusters in healthcare-related, engineering and design, and educational industries, as well as retail and food service industries. The regional center located on Arsenal Street continues to provide larger destination retail opportunities, including Home Depot, the Arsenal Mall, Best Buy, and Target.

Table 5-2 Watertown Employment by Sectors, 2009 compared to 2012

NAICS Code - Industry	Avg. Employment	% chg 2009 to 2012	# of Establishments	% chg	Avg. Weekly Wage	% chg
44-45 - Retail Trade	3,000	13%	144	-4%	\$641	4%
54 - Professional and Technical Services	2,171	-17%	150	-1%	\$1,918	9%
51 - Information	1,980	-2%	47	-20%	\$2,263	23%
52 - Finance and Insurance	1,940	5%	41	3%	\$1,491	7%
62 - Health Care and Social Assistance	1,610	7%	88	-1%	\$726	0%
61 - Educational Services	1,508	0%	28	0%	\$968	7%
31-33 - Manufacturing	1,121	1%	38	-10%	\$1,463	12%
23 - Construction	1,018	-1%	105	-1%	\$1,465	2%
72 - Accommodation and Food Services	1,058	17%	81	1%	\$370	4%
Other	3,332	0%	373	16%	\$1,010	13%
Total, All Industries	19,038	1%	1119	3%	\$1,232	6%

Source: Massachusetts Executive Office of Labor and Workforce Development (MA EOLWD) ES-202, 2012

Table 5-3 Watertown's Top Employers

Tufts Health Plan
athenahealth
Perkins School For the Blind
Vanasse Hangen Brustlin Inc.
Doble Engineering Co.
Harvard Business Review
Harvard Business School Publishing Corp.
Home Depot
J C Cannistraro LLC
Sasaki Associates Inc.
Super Stop & Shop
Target

Source: MA EOLWD, 2012

Targeted Industry Clusters Identified in the 2011 Strategic Framework

The 2011 Strategic Framework identified four industry clusters that would complement Watertown's strengths in the regional economy. These four industries, defined below, would help diversify Watertown's economy by capitalizing on its existing building stock and development potential, transportation connections, and proximity to the Boston-Cambridge markets. This section introduces the four target industries.

Key industry clusters¹⁶:

- ▶ Life Sciences are the basis for a diverse industry that includes pharmaceuticals, medical devices, diagnostics, and biotechnology.
- ▶ Information and Media includes software development, computer systems design, digital media, telecommunications, and internet services

- ▶ Design includes firms engaged in architecture, landscape architecture, structural and systems engineering, environmental consulting, and interior design.
- ▶ Advanced Manufacturing involves the application of science and innovative technology to improve the design, control, fabrication, and assembly of products, including instrumentation and precision components.

Life Sciences

The Boston-Cambridge area is one of the nation's epicenters for the life sciences industry, which includes pharmaceuticals, medical devices, diagnostics, and biotechnology. As firms have grown from research into production and distribution, some have moved into parts of Greater Boston, like the Route 128 corridor, for larger and lower-cost facilities.

Watertown's employment in the life sciences has more than doubled since 2001. The five neighboring communities have experienced slightly greater growth in scientific research and development, indicating this is a growth opportunity for Watertown. Between 2001 and 2008, industry employment in the five adjacent towns increased by over 5,000 jobs (40 percent), with most of the growth in neighboring Cambridge. The Town's largest research and development (R&D) employers is New England Research Institute, which conducts a variety of contract research for biomedical firms and institutions. Additionally, Watertown hosts a number of smaller pharmaceutical and medical device manufacturing firms.

The 2011 Strategic Framework also identified a growth opportunity in pharmaceutical manufacturing.

¹⁶ Strategic Framework for Economic Development, Town of Watertown, 2011

Information and Media

Over the past decade, the evolution of digital technologies has had an enormous impact on how business is done and how people interact. The research institutions and research-oriented business environment in Boston/Cambridge primed it to become a leader in this industry, which includes software development, computer systems design, digital media, telecommunications, internet services, and related consulting services.

As in the life sciences, firms have migrated outward as they have grown. In Watertown, the Arsenal on the Charles has become a hotspot for digital technology. The 2013 announcement that athenahealth acquired the Arsenal on the Charles is expected to augment the tech sector presence along Arsenal Street. Athenahealth, is an electronic medical records company that is Watertown's largest software firm and Watertown's largest and fastest-growing employer. Between 2010 and 2013, Athenahealth grew from 500 to 1,100 employees. The company



The Arsenal on the Charles

recently accepted \$9.5 million in state tax credits on the promise of growing the firm to 3,000 jobs by 2023, the state's biggest incentives package in recent history. Athenahealth has also described plans for the complex that include space to accommodate startups that are associated within the tech industry.

The New England Sports Network (NESN) is also located along Arsenal Street. NESN was launched in 1984 and is one of the country's first regional sports networks. It is owned by the Boston Red Sox and Boston Bruins and delivered to over 4 million homes throughout the six-state New England region and nationally.

Design

Architecture and engineering is the largest and strongest segment of Watertown's professional and technical industry. The industry took a hit as construction dropped during the recession, but is expected to recover at a modest national growth rate of 1.6 percent through 2018.

Watertown employs a combined 600 workers at the headquarters for two large planning, design, and engineering services firms—Vanasse Hangen Brustlin and Sasaki Associates. J.C. Cannistraro, a mechanical systems company, employs over 300 employees. Altogether there are 20 firms in architecture and engineering, most of which employ 25 or fewer workers.

Advanced Manufacturing

Advanced manufacturing is the rapid development and production of new products from emerging technologies. Watertown's location and building stock make it a suitable competitor for similar types of businesses that emerge from the area research institutions.

Watertown's building stock and proximity to Boston and Cambridge positions it to capture a fair share of growth in advanced manufacturing. Watertown has long been home to engineering and manufacturing firms like Doble Engineering, Radiation Monitoring Devices, and United Electric Controls.

In recent years, the Town has also proven itself as a competitive location for the headquarters of firms that are innovating in the life sciences and engineering. WiTricity graduated from a startup location on Coolidge Hill Road to a larger location on Grove Street. Other advanced manufacturing companies in Watertown include Exergen Corporation, creator of the first temporal artery thermometer, and Seven Cycles, a manufacturer of high-end bicycles. In 2012 FORMA Therapeutics opened its new headquarters with support from the Massachusetts Life Sciences Center. The headquarters supports FORMA's high-throughput screening, computational and medicinal chemistry, and biology teams.

Commercial Space in Watertown

Watertown has approximately 10 million square feet of commercial and industrial floor area sited on a little over 500 acres. This commercial inventory includes office/flex space in historic and newer buildings, lab/R&D buildings, flexible incubator space for start-ups, manufacturing buildings, warehouse structures, and vacant structures. Strategic investments from local businesses over the past few years have rehabilitated the historic buildings along the Arsenal Street corridor into some of the Town's most in-demand retail and business locations. The redevelopment of the Watertown Arsenal has transformed the Town into a regional center for large format retail, with the Arsenal Mall, a 225,000 square foot mall with shops like Forever 21, Sports Authority, Marshall's, and Golfsmith which is adjacent to a separate Home Depot. Target and Best Buy

occupy space across Arsenal Street in the Watertown Mall. Further east on Arsenal Street, the Arsenal on the Charles campus houses 760,000 square feet of office and retail.

Watertown has also attracted new business expansion. Watertown's location in close proximity to the Harvard expansion project in Allston (including a \$1 billion science center) could play a possible role in terms of related research and start-ups, as well as retail and restaurant demand.

The Riverworks complex (the renovated Aetna/Bemis Mills buildings at 480 Pleasant Street) signed new tenants in 2012 to replace the former Boston Scientific headquarters. Companies include the Alzheimer's Association Massachusetts/New Hampshire Chapter, Sabre Hospitality Solutions, Education Resource Strategies (ERS), and Mimecast, among others.

Two significant redevelopments on Arsenal Street have the potential to improve the attractiveness of Watertown as a location for businesses in its target industries. The first is reconfiguring the Arsenal Mall into the "Arsenal Project", which is still in its conceptual stages.

To the west of the Arsenal Project, at the 29-acre Arsenal on the Charles, athenahealth announced, in September 2013, a vision for 150,000 square feet of new office space, accelerator space for health information startups, and related amenities such as a theater, restaurants, beer garden, museum, parks, paths and other civic spaces. Athenahealth envisions a transformation of the complex into a "permeable" office complex that is "not a closed corporate park, but an open place – a community center where lots of thinking people want to be." Its approach will be to "plan in ways that are delightful each year, so that something new happens to bring us all together."

GOALS

Looking forward, Watertown will need to compete with other suburbs in the Inner Core area to capture its share of the growth of its target industries. This section identifies opportunities to make Watertown a more attractive place to do business and to promote its many existing assets.

The strategies presented in this plan will improve the development and marketing of a live-work-play lifestyle in Watertown along Arsenal Street, as well as improvements to the neighborhood retail districts in Coolidge Square and Watertown Square. It also presents tools to facilitate new growth and development in underutilized corridors such as Galen Street, Main Street and Pleasant Street. The economic development strategy focuses on supporting job growth and creating identity by building upon the Town's strengths in the life sciences, advanced manufacturing, information and media, and design and engineering industries.

Goal 1

Promote and maintain conditions that support the growth of the Town's key industry clusters in the life sciences, advanced manufacturing, information and media, and design and engineering industries.

Goal 2

Retain and support the growth of existing businesses in Watertown.

Goal 3

Unlock development potential in existing commercial corridors and centers.

Goal 4

Align education and training opportunities with careers in the region's growth industries.

Goal 5

Strengthen the identity of the Town as a vibrant, livable community.

Goal 6

Build capacity for implementing economic development projects in Watertown.

RECOMMENDATIONS

Growth and change are already underway in Watertown's mixed-use and commercial corridors. The strategies detailed in this section build on the recommendations in the 2011 Strategic Framework for Economic Development to help shape the evolving identity of the Town and support Watertown as a more vibrant and attractive place for business.

Goal 1. Promote and maintain conditions that support the growth of the Town's key industry clusters in the life sciences, advanced manufacturing, information and media, and design and engineering industries.

- A.** Promote Watertown as a favorable municipal environment for firms in the key industry clusters of Life Sciences, Information and Media, Design, and Advanced Manufacturing, as identified in the Strategic Framework for Economic Development.
 1. Seek a platinum rating from the Mass Biotech Council. Watertown currently has a second-level gold rating, while the competing communities of Boston, Cambridge, Lexington, and Waltham have achieved the platinum rating.
 2. Support the key anchors of the industry clusters by ensuring the appropriate zoning is in place and areas are identified for successful business development and expansion.
- B.** Encourage the provision of flexible, affordable, and right-sized office space for small, growing and mid-sized firms.
 1. Provide expedited permitting incentives that encourage the inclusion of small-scale, flexible incubator space as a potential amenity.
 2. Coordinate the development of business and other innovative incubators, through support of nearby universities and/or organizations by considering options like providing space and services in existing Watertown facilities.
- C.** Facilitate the development of a continuum of housing options that supports the live-work-play lifestyle preferred by workers in the Town's target industries especially along the major corridors, such as Pleasant and Arsenal Street
 1. Consider options for providing financial incentives to encourage mixed employment and residential uses in redevelopment proposals.

Goal 2. Retain and support the growth of existing businesses in Watertown.

- A.** Encourage investment in the roadway and utility infrastructure.
 - 1. Seek MassWorks infrastructure funding for roadway and utility improvements, such as along Arsenal Street and the potential reconfiguration of the intersection with Arlington Street and Coolidge Avenue.
- B.** Strengthen networking opportunities for local businesses.
 - 1. Continue to coordinate with the Chamber of Commerce and other local business groups/initiatives in providing small business outreach and services. Consider options for local business campaigns and shop local initiatives.
 - 2. Convene a regular CEO Roundtable to focus on issues of particular concern to medium and larger employers.
- C.** Promote Watertown as a great place to do business.
 - 1. Coordinate with state and regional agencies, including the Mass Office of Business Development, and relevant industry councils such as the Massachusetts Biotech Council, Massachusetts Medical Device Industry Council (Mass MEDIC), and the Massachusetts Technology Leadership Council to create informative messaging materials to market available commercial real estate in Watertown. The Town can provide more information on specific sites regarding zoning, real estate taxes, etc.
 - 2. Maintain an appropriate mix of industrial and commercial properties to ensure a successful and strong non-residential tax base.

Goal 3. Unlock development potential in existing commercial corridors and centers.

- A.** Promote investment in vacant or underutilized properties on the Pleasant Street, Arsenal Street, Main Street and Galen Street Corridors in order to maintain an appropriate mix of land use types in the property tax base.
 - 1. Develop materials to promote development-ready sites where the property owners are interested in redevelopment opportunities and there are minimal impediments to redevelopment such as site remediation.
- B.** Identify and designate potential development sites for the M.G.L. c. 43D Expedited Permitting Program. Sites that meet certain criteria including the capacity to develop at least 50,000 square feet of gross floor area can be considered. The Town would revise its permitting process to ensure that permits can be obtained within 180 days. Two sites on Pleasant Street were designated in 2008 and others could be contemplated.

- C.** Set in motion the remediation of the 25 properties identified by the Massachusetts Department of Environmental Protection as needing or potentially needing environmental remediation.
 1. Set up meetings with MassDEP to verify the inventory and develop partnerships with property owners and/or potential developers interested in the properties, including any brownfield funding opportunities.
- D.** Build institutional capacity to improve existing business districts by unifying businesses and helping them connect to the community.
 1. Convene key stakeholders to gauge interest in Business Improvement Districts (BIDs) or other mechanisms in Watertown Square and/or Coolidge Square and key corridors to improve the visual quality of the public realm through measures such as undergrounding of utilities, street cleaning, façade improvement grants, street furniture, signage improvements, etc.
 2. Support the development of a local perks or discount program for participating retail and restaurant businesses to encourage residents to shop local.
- E.** Implement zoning and other policies that link commercial development with contributions to community benefits.
 1. Consider use of incentive zoning techniques to facilitate mixed-use development and other sustainability enhancements such as energy efficient construction.
 2. Establish expedited permitting procedures for installation of energy conservation devices on residential or commercial buildings (e.g., green permit program).
 3. Consider use of District Improvement Financing (DIF) as a tool to support roadway and streetscape infrastructure improvements for large-scale private sector development that achieves significant civic goals such as the proposed Arsenal Street redevelopment projects. Specific infrastructure needs will need to be identified, especially as they relate to potential development opportunities.
 4. Improve the supply of and options for public transportation and other transit service in Watertown
 5. Consider flexible live-work and other innovative zoning language for alternative work spaces and innovative economic development

Goal 4. Align education and training opportunities with careers in the region's growth industries.

- A.** Enhance the School District curriculum and facilities to ensure children and young adults are prepared to participate in the region's employment opportunities.
 1. Encourage School Department collaboration with local businesses and universities to introduce Science, Technology, Engineering, and Math (STEM) careers to K-12 students in Watertown's public schools.
- B.** Connect the workforce to training and continuing education opportunities that are tied to the strengths of the local business community.
 1. Partner with the Metro North Regional Employment

Board or other similar groups to develop training programs that directly link to employment opportunities in the Town's growth and target industries.

2. Identify opportunities such as continuing education programs, technical and vocational schools, colleges,

and universities to support the community's residents and employment base.

3. Ensure that Watertown's schools are part of a highly regarded school system that continues to attract families who live and work within the community.

Goal 5. Strengthen the identity of the Town as a vibrant, livable community.

A. Develop marketing strategies that celebrate recreational opportunities and facilitate recreation-oriented concessions.

1. Encourage special events programming to celebrate Town's history and heritage in areas such as Watertown Square, Coolidge Square, Mount Auburn Cemetery and Arsenal Street.
2. Celebrate recreational opportunities at the Gore Estate, along the Riverfront, and on any completed sections of the Watertown Community Path and Greenway.
3. In collaboration with DCR, encourage local river-focused businesses and activities to locate along the river corridor. A key component of this is identifying key access points and preferred uses along the river such as boat rentals, food kiosks, events, and other exciting opportunities that would support and fit with new business creation on adjacent private property.

B. Improve the quality of street life and sidewalk culture on primary commercial corridors.

1. Increase the number of liquor licenses available in Watertown to allow for more dining choices, through legislative action or other identified options.

2. Ensure that zoning allows for opportunities for sidewalk and riverfront cafes.
3. Develop design solutions that address traffic noise, air quality, and safety concerns in Watertown Square.
4. Work with the MBTA and State officials to advocate for improved service on the #70/70A, 71, and express routes and for transit station improvements in Watertown Square and Yard.
5. Coordinate with private businesses on expanded, shared shuttle services open to the public between primary residential and employment hubs and transit hubs. Consider the creation of a Transportation Management Association as a method of implementing it.
6. Revise and update the sign regulations to reflect current sign technology and to allow for site appropriate signage in evolving mixed use districts such as along the Arsenal Street corridor.

C. Promote neighborhood retail in areas such as Watertown Square, Arsenal Street, Pleasant Street (through mixed use in targeted areas), Main Street and Coolidge Square.

1. Advance design guidelines and commercial facade improvement programs that will make retail spaces in Watertown Square and Coolidge Square more appealing.
 2. Modify regulations that inhibit development of restaurants and entertainment uses that help to enliven and extend activity in commercial districts. Reassess parking requirements that limit options for new restaurants and outdoor dining as part of restaurant expansions.
 3. Develop streetscape guidelines for features such as street trees, lighting, public artwork, street furniture, bicycle, pedestrian and transit accommodations, and wayfinding signage as part of redevelopment in identified areas such as squares and along corridors.
 4. See Land Use and Transportation Elements for recommendations to improve parking, urban design, and pedestrian safety and traffic calming.
- D.** Provide and promote the arts to enhance the sense of place and quality of life for all residents.
1. Consider establishing a cultural district(s) in an area of Watertown, like at the Arsenal Center for the Arts. Cultural districts have been created in other communities as a way to assist the local arts community to improve the quality and range of their public programs. They can help to attract artists, cultural organizations, and entrepreneurs of all kinds, thereby enhancing property values and making Watertown more attractive.
 2. Consider options to require public art to be incorporated into development projects and public spaces and a maintenance/conservation plan be developed for each installation.
 3. Continue the collaboration and support of local arts and cultural institutions such as the Arsenal Center for the Arts and its various programs.
 4. Consider options for creating a Public Art and Culture Committee to distribute funds for the Arts, facilitate placement of public art, and to advocate for public art, particularly as it is considered as part of new development projects.

Goal 6. Build capacity for implementing economic development projects in Watertown.

- A.** Consider creating “one-stop shop” type capacity in Town Hall to support businesses interested in locating in Watertown, including marketing of development-ready sites and guidance for permitting and other business needs. The Town could consider developing an Economic Development Commission or could create/assign responsibilities to a staff position responsible for facilitating economic development initiatives by the Town and its partners.
- B.** Strengthen partnerships with the Chamber of Commerce and industry councils to improve business retention and attraction.
- C.** Maximize relationships with state and regional agencies for infrastructure, training, education, and networking. e.g., Metro North Regional Employment Board for training/ education opportunities and MassWorks for infrastructure.



Ball Field at Arsenal Park

OPEN SPACE AND RECREATION

6

Introduction

During the public input process, Watertown residents spoke often about the value they place in the Town's open space and recreation facilities. The Commonwealth recognizes this importance as well and encourages each community in the state to have an Open Space and Recreation Plan (OSRP), which is to be updated every seven years. When an OSRP is completed and approved by the Division of Conservation Services (DCS), the community is eligible for grant programs administered by DCS to fund open space acquisition or enhance recreational facilities.

Watertown's latest Open Space and Recreation Plan was completed in 2005. It represented a strong collaborative effort led by a municipal Task Force and included various stakeholders in the community with a concerted and thorough public outreach component.

The OSRP was approved by DCS and the plan was modified in 2008. This extended the DCS approval through October 2013. The key points from the OSRP are summarized and updated in this element of the Town of Watertown Comprehensive Plan. Open space resources, passive, and active recreation are discussed in this chapter, and natural resources, such as water and wildlife, are discussed in more detail in the Natural and Cultural Resources chapter.

What is Open Space?

According to the Massachusetts' Executive Office of Energy and Environmental Affairs, open space is:

"conservation land, recreation land, agricultural land, corridor parks and amenities such as small parks, green buffers along roadways or any open area that is owned by an agency or organization dedicated to conservation."

Passive Recreation refers to things such as walking, picnicking, relaxing on a park bench, hiking, bird watching, etc.

Baseline Assessment

The Town of Watertown has a wide variety of open space resources within its four square miles. The 2008 OSRP included a detailed inventory of Watertown's open spaces and recreational facilities. There are several important issues to consider regarding open space resources in Watertown. First, much of the Town's open space is privately held and a high percentage of that land is not accessible to the public. Second, with the exception of the Charles River Reservation land that is managed by the Department of Conservation and Recreation (DCR), the Town's public spaces are all small and heavily used – mostly as parks providing active recreation opportunities, rather than for passive use. Lastly, Watertown falls below the accepted standard for the amount of open space available on a per capita basis, and there is little available land to expand its inventory.

As described in the OSRP, there are approximately 115 acres of publicly owned and publicly accessible open space distributed

across the town. That is approximately 3.48 acres per 1000 persons, significantly less than what the traditional standard of 10 acres per 1000 persons (National Recreation and Park Association). NRPA recently established a new set of guidelines based on level of service rather than applying the 10 acres per 1,000 people to all communities. Using the newer approach, each community must be considered individually to tailor the most appropriate range, quantity and quality of recreational facilities based on local demographics and the community's fiscal limits. From this perspective, the Town offers extensive and diverse programming through its parks and recreation programs but resources are limited and the options for expanding public open spaces is very limited¹⁷.

The OSRP included a detailed description of many of the specific open spaces and parks and made recommendations for enhancement. The following is a summary of the key sites, along with updates on recent upgrades and improvements proposed for implementation in the next several years.

Private Open Space Resources

Within Watertown's boundaries are three privately owned but regionally recognized landscapes; the Mount Auburn Cemetery, portions of the Gore Estate, and the Oakley Country Club. Altogether, approximately 281 acres of open space is privately held, but only half is publicly accessible. Together, these areas play an important role in Watertown's open space system by providing relatively large expanses of scenic open landscape, as well as the ecological benefits of permeable surface, local habitat, sunlight, and air circulation.

¹⁷ Interview with Peter Centola, September 24, 2013



Mt. Auburn Cemetery in May

The largest contiguous open space is the Watertown portion of Mt. Auburn Cemetery, which consists of 151.1 acres of well-manicured grounds with numerous species of both indigenous and exotic tree and shrub species. The cemetery extends into Cambridge to the east. It is on the National Register of Historic Places and was recently designated a Great Place in America by the American Planning Association. Founded in 1831, it was the first large-scale designed landscape in the United States open to the public. It is credited as the beginning of the American public parks and gardens movement and set the style for other suburban American cemeteries. The cemetery is important for both its historical aspects and its role as an arboretum. Mount Auburn has a massive and renowned collection of over 5,500 trees and includes nearly 700 species and varieties. Thousands of maintained shrubs and herbaceous plants thrive among the cemetery's hills, ponds, woodlands, and clearings. The cemetery contains more than 10 miles (17 km) of roads and many paths.

The Gore Estate, with approximately 30 acres of land in Watertown, is located along the Town's western border with Waltham. The property was the 19th century estate of Massachusetts Governor Christopher Gore. It includes a small farm and an elegantly furnished mansion considered by architectural historians to be the most significant Federal period mansion in New England. The grounds were developed with respect to the contemporary ideas of Sir Humphrey Repton, one of the last great English Landscape Architects, in an informal fashion with broad lawns, open fields, ponds, clumps of trees, and inconspicuous gardens. The Watertown portion is currently used for limited agriculture. The home, located in Waltham, is set atop a hillside towards the northern edge of the site. Several small ponds and a stream are present on the property. Development is restricted by these wetland areas as well as the historic nature of the estate itself.

This area of Town does offer some opportunity for expanded open space. Adjacent to the Gore Place property are large swaths of land that once served manufacturing and industrial purposes, are visually blighted, and have served as large parking areas. Although some of these parcels, mostly to the south, have been redeveloped, there is still potential to connect the northwest part of Watertown to the Charles River both visually and programmatically.

Oakley Country Club is another significant tract of private open space situated at the northern boundary of the Town that provides both a well maintained private golf course and limited wildlife habitat. The Oakley Country Club was founded in 1898 on the grounds of the Otis Family Estate; Harrison Otis was the Mayor of Boston for three consecutive terms. The estate received its name from the abundance of local oak trees in the vicinity, some estimated to be nearly 800 years old. The Oakley was one

of the first golf courses in the country. Currently the site consists of several individual parcels zoned as CR (Cluster Residential). The site is surrounded on three sides by residential development and has Belmont Street as its northern boundary¹⁸.

Watertown Park and Recreation Facilities and Programs

Park and Recreation Facilities

Watertown maintains 13 multi-purpose parks and playgrounds. The size of these parks range from one acre at the Cunniff Elementary School to 14 acres at Filippello Park.

There are 16 tennis courts and 15 basketball courts with approximately half of those facilities having lights for seasonal evening use. The Town also has two street hockey courts and one skate park for all skill levels. There are nine little league sized baseball / softball fields, two major league sized baseball fields, and one football field with stands that can accommodate 1,500 spectators.



*Aerial view of Victory Field
Image source: Town of Watertown*

Figure 6-1 Victory Field Improvements



Source: Town of Watertown, MA

One of the more significant recreational facilities in Watertown is Victory Field, which was mentioned frequently by residents during the public outreach process. Adjacent to Victory Field is the town's most important municipal passive open space known as Whitney Hill. Victory Field was originally dedicated in May of 1922 to those who served and died in World War I. The field is heavily used by the School Department, Recreation Department programs and leagues, and local youth organizations. Victory Field also includes a 400-meter rubberized track that is also used year-round by residents for walking and running and there is a multi-use field within the track. The varsity field has a baseball field and was entirely updated with artificial turf through a recent renovation. The lighting system was also upgraded with energy efficiency included. The baseball field includes seating and baseball related amenities (bullpen, batting cages, scoreboards and dugouts). Victory Field is the home for Watertown High School sports (See Figure 6-1).

18 2008 Watertown Open Space and Recreation Plan, pp. 38 - 40

For younger children, the Town manages 15 tot-lots (many of which are located within the Town's park and recreation facilities) that have a rubberized safety surface and modern equipment. In addition, the amenities at Filippello Park include a 400-yard walking path where children can ride bicycles.



*O'Connell Playground
Image source: Town of Watertown*

The John A. Ryan Skating Arena is a NHL-size skating rink owned and operated by the Town of Watertown. This important venue serves as the home to a number of youth and adult hockey leagues, as well as high school and collegiate school teams. The arena has a seating capacity for 1,250 spectators. It is typically open from August until April and can be rented out for events such as birthday parties.

The Town is also the location for Dealtry Pool, an outdoor facility owned and operated by DCR near Watertown Square. The pool is equipped to allow adult lap swimming and also has a wading pool for younger swimmers.

The Recreation Department has instituted a permit policy for the use of fields, picnic areas, ice time at the Ryan Arena, and other

facilities due to the heavy demand for park and field use. Permits are typically issued on a first-come first-served basis.

All indoor recreational facilities are maintained by the School Department and can be rented to the Recreation Department for non-school programming. The Department of Public Works is charged with maintaining the outdoor recreational facilities, although there is also some outside assistance provided by the adult youth and adult leagues, as well as private organizations that provide stewardship to specific parks.

In addition to the recent improvements to Victory Field, other scheduled facility upgrades include tennis court enhancements and a multi-purpose court in Casey Park, energy efficiency measures at several locations, playground renovations behind the police station, landscaping at the Grove Street entrance at Filippello Park, and upgrades at Moxley Park. The Town is also committed to creating dog parks within the community to allow for off leash recreation.

Park and Recreation Programs

The Watertown Recreation Department has a robust recreation program for residents of all ages. Over 2,000 residents are served through these programs annually. The highest demand occurs in the summer, when the Town hires over 90 seasonal employees to run the programs, supplementing the 15 – 20 year-round part-time and three full-time employees.

The recreation schedule includes after-school programs at each elementary school, seasonal sports for youth and adults, lessons and clinics, crafts, and theater programs. Watertown Recreation collaborates with Belmont Recreation to service Special Persons Organized for Recreation Time (SPORT), a special needs program.

Funding is provided by the Towns of Belmont and Watertown as well as user fees and private donations.

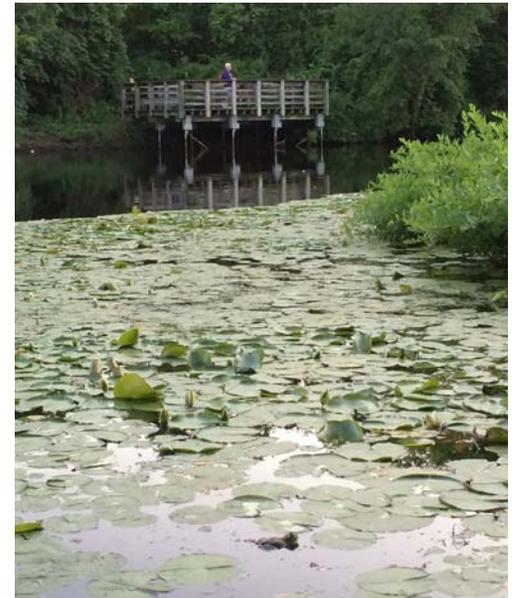
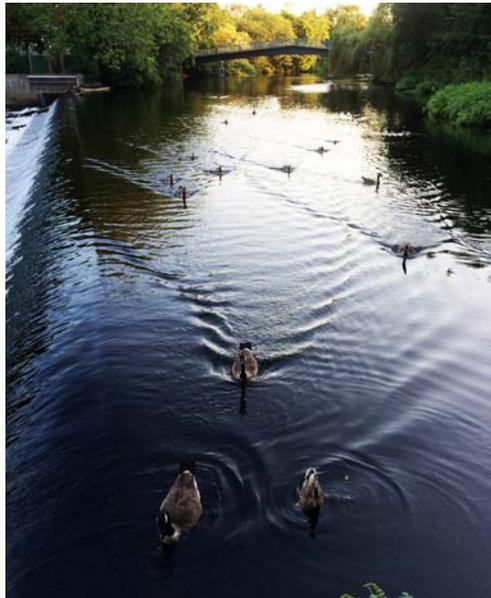
Commander's Mansion

The OSRP also lists several other categories of public land including town buildings and town-owned spaces along roadways. The most significant of those properties is the historic Commander's Mansion, a seven acre parcel including both building and grounds. The Commanding Officer's Quarters is considered to be one of the highlights of the Watertown Arsenal site. It remains virtually unaltered after over 100 years' residence by Watertown Arsenal commanders. The three-story brick Bracketed style mansion, approached by way of the tree-lined Talcott Avenue (originally known as Main Avenue) overlooks the Charles River. It is now used for a variety of events including weddings, bar mitzvahs, holiday parties, etc. The building is in the National Registry of Historic Places and provides a significant

scenic presence to the adjacent Arsenal Park and local area, with a manicured landscape with contributions and design elements by the Olmsted Brothers Firm.

Charles River

The Charles River is a regional historic, environmental, and recreation resource. The water quality has been steadily improving and the presence of a regional waterway through Watertown offers a significant number of scenic and historic landscapes. These are considered to be of paramount importance to area residents, including views to and from the river. The Charles River Bikeway, which extends into Boston, provides relatively untouched areas of riverbank as it passes through Watertown. There are many areas east of the Watertown Dam where pedestrians and bike riders enjoy river ecosystems that have been enhanced and protected.



Natural views of the Charles River

DCR's Charles River Reservation is a linear park stretching from Boston Harbor up the river for 20 miles, four of which are within Watertown, encompassing approximately 53 acres of land. The lower half of the Reservation, from downtown Boston to the Watertown Dam, is called the Charles River Basin and includes the Boston Esplanade. The basin abuts the campuses of MIT, Boston University and Harvard University. The Upper Charles River section of the Reservation begins at Watertown Square and meanders to Riverdale Park in West Roxbury. The Reservation includes the heavily used Dr. Paul Dudley White Bike Path, an approximately 18 mile loop from Science Park in Boston to Watertown Square.

The Reservation offers many passive recreational opportunities. Whether one is interested in walking, birdwatching, canoeing or in-line skating, the Charles River is a wonderful resource¹⁹.

There have been several planning efforts aimed at addressing access and connectivity issues along the Charles, as well as identifying ways in which the scenic and recreational assets of the river could be enhanced. In 2002, the Charles River Basin Master Plan was prepared which looked at (as it relates to Watertown) extension of access improvements eastward into the Charles River Basin, improving the landing at Watertown Square, and improving visual access from the area.

Currently, DCR and the MA Department of Transportation (MassDOT) are collaborating on a Pedestrian and Bicycle Connectivity Study for the Charles River Basin. Recognizing that the existing trail system on both sides of the river are heavily used by walkers, runners, and bicyclists, the study seeks to identify ways in which the varying needs of these user groups

can be accommodated. It also examines other existing and currently fragmented trail networks that feed into the Charles River Basin to see how they all can be better connected to those along the Charles. The study identifies barriers that discourage non-motorized transportation such as adjacent parkways, the Massachusetts Turnpike, rail yards and a variety of automotive dependent land uses.

The draft study identifies uncontrolled and unmarked access points for pedestrians and bicyclists, including the area between the Arsenal Mall and the river. Given the proposed redevelopment of the Mall and the Master Planning of the Arsenal on the Charles by athenahealth, there are opportunities to enhance these connections.

A number of preliminary recommendations are being considered as the study moves toward completion. They include:

- ▶ Creation of wider paved and parallel soft-surface trails along the river wherever possible.
- ▶ Establishing traffic signals that are exclusive to pedestrians where feasible.
- ▶ Streetscape enhancements in Watertown and Newton along roadways that connect to the Reservation.
- ▶ Several new on-street connections from North Beacon, Arsenal, Mt. Auburn and Galen Streets
- ▶ New pedestrian and bicycle bridge on Maple Street

The plan describes the enhancements in greater detail, including the locations of crosswalks, multi-use paths, bicycle lanes, etc.

¹⁹ <http://www.mass.gov/eea/agencies/dcr/massparks/region-boston/charles-river-reservation.html>

Watertown-Cambridge Greenway

The Watertown-Cambridge Greenway is designed to provide an alternative route for cyclists and commuters utilizing sustainable modes of transportation that are traveling between the west and urban centers in Arlington, Cambridge, and Boston. It also serves as a recreational greenway and passive park with abundant native plantings and wildlife. Phase 1, an almost one mile segment completed and opened to the public in 2011, runs from School Street to the intersection of Arlington, Nichols, and Coolidge Streets and connects the Watertown Mall and local businesses to residential areas of Watertown and Filippello Park. In June 2013, the Commonwealth acquired a 4.2 acre corridor from B&M Railroad for \$1.3 million (\$829,000 of DCR's Land Acquisition funds and \$470,000 of federal funds for green transportation). The corridor is located between Grove Street in Watertown and Huron Avenue in Cambridge. The new acquisition will link the Charles River corridor, Fresh Pond Reservation, Fresh Pond Shopping Center, Alewife Greenway and MBTA station, the Minuteman Bike Path, and the Mystic River Reservation.

In a separate but equally critical transaction, the City of Cambridge acquired from B&M Railroad, a section of former railroad corridor to the north, between Huron Avenue and Concord Avenue with Community Preservation Act funds. Cambridge reserved for DCR a 14-foot-wide trail easement over the 2,000 linear feet above Huron Ave. These two acquisitions have more than doubled the length of the original greenway; expanding the greenway from 4,600 feet to 10,200 feet in length, and connecting it with many more miles of trail²⁰.

An additional connection will be established by the Watertown Community Path, which is a multi-use path that will provide pedestrians and bicyclists with a safe and easily accessible route



Trailhead of the Watertown-Cambridge Greenway at Nichols Avenue

through much of Watertown. A project spearheaded by the Town of Watertown, Watertown Bicycle and Pedestrian Committee and Watertown Citizens for Environmental Safety, the path is expected to run from the intersection of School and Arsenal streets in East Watertown, through Watertown Square and to the intersection of Pleasant and Howard streets near the Charles River. It will provide a link between the Minuteman Bikeway and the Charles River Reservation Path. Approximately 1.75 miles in length, the preferred route roughly follows a former railroad right-of-way (ROW). It suggests a minimum 8-foot-wide two-way cycle track along Arsenal Street – a bicycle path separated from traffic by a physical barrier – and a 10-foot-wide shared-use path when not adjacent to sidewalk²¹.

Open Space and Recreation Needs

The OSRP identified a number of specific resource and community needs, many of which are still valid. They include improving the health and quantity of town-owned trees; proper delineation, mapping, and documentation of the Town's wetland

²⁰ <http://www.cambridgema.gov/citynewsandpublications/news/2013/06/majorgreenwayslinkforwatertowncambridgegreenwayacquired.aspx>
²¹ <http://www.ci.watertown.ma.us/index.aspx?nid=602>

resources; care and maintenance of ponds (recognizing that many of them are located on private property; working with DCR to ensure that the condition of the Charles River and its environs continue to improve; addressing land use, zoning, and development issues that impact open spaces; and issues related to the Town's park and recreation facilities, including maintenance and upgrades necessary to meet the requirements of the Americans with Disabilities Act (ADA).

The OSRP noted that walking and bicycling were among the most frequently cited recreational activities among Watertown residents. Meeting their needs was an important consideration in that plan and continues to be a commonly mentioned issue during this planning process. In response to the need to meet ADA standards, the Town undertook a comprehensive assessment of its facilities in an effort to achieve ADA compliance. Establishing a tree inventory, improving communication with DCR, and providing the Department of Public Works (DPW) with the staff and resources for park maintenance were among the key management issues raised in the OSRP.

Given the land use and development history of Watertown, additional acquisition of substantial new open space parcels is unlikely. Therefore, the Town's efforts are focused on maintaining and enhancing its existing open space and recreation inventory. Town residents recognize that parks, open spaces and trees create a high quality of life in Watertown and place a high value on these resources. In an effort to extend the availability of fields and courts in the Town's parks, artificial turf was installed at Victory Field and an additional turf field was being considered. Artificial turf is more expensive to install, but it can reduce maintenance needs and expenses in the long run. It also can lengthen the amount of available playing time because artificial turf stands up to heavy use and requires no irrigation or trimming. An additional four fields are lighted, as are numerous basketball and tennis

courts, to extend the number of hours of available playing time. Continuing to maintain and enhance these services represent a challenge to the Town's Recreation Department and DPW.

There is a solid relationship with the Parks Department within the DPW for field grooming, repairs and striping, equipment repairs, and the upgrading of picnic facilities. The Recreation Department has programmed some improvement projects for the next couple of years. In the longer term, the Department plans to address the following issues:

- ▶ Coordinate more with the senior center on programs for the elderly
- ▶ Partner with clubs and other private groups such as the Boston Ski and Sports Club on programming
- ▶ Establish a Park Ranger program to welcome visitors, assist with parking, check field permits, etc.
- ▶ Work with sports leagues on maintenance sites recognizing that some fields are overused because demand outstrips the supply of fields (a problem that is exacerbated when inclement weather forces cancellations). Fees for field use and recreation programs cover much, but not all, of the maintenance required.
- ▶ Coordinate on health and wellness with the School Department to coordinate programs for youth. Recreation wants to continue to integrate programs with the schools, particularly to promote public health.
- ▶ Offer a more diverse range of programming
- ▶ Work with the Bicycle and Pedestrian Committee
- ▶ Establish and monitor several dog parks within town and adjust regulations as necessary.

GOALS

Goal 1

Identify opportunities to create new parks in underserved neighborhoods, while improving accessibility and the overall condition of Watertown's recreational resources.

Goal 2

Preserve, protect, and enhance publicly owned conservation, passive, and active open space.

Goal 3

Encourage private land owners to permanently preserve open space on their parcels.

Goal 4

Create new opportunities for recreational access along the Charles River, such as boating, trail networks, bicycling, and appropriate related amenities.

Goal 5

Promote active and healthy lifestyles.

RECOMMENDATIONS

As noted, the Town's Open Space and Recreation Plan "expired" in October 2013. Therefore, one overarching recommendation relating to open space and recreation is to update it in order to maintain eligibility for Massachusetts Local Acquisitions for Natural Diversity (LAND) and Parkland Acquisitions and Renovations for Communities (PARC) grants. Since much of the background information will not change, and this public process will inform an update in meeting some of the necessary outreach aspects, updating the plan will focus on a re-examination of resources, community and management needs, and the preparation of a new seven-year action plan. That seven-year action plan can build and expand upon the recommendations in this Plan.

Another general recommendation is to reconsider adoption of the Community Preservation Act. Given the value people have placed in open space and recreation during the public outreach process, it is important to continue to maintain and improve the Town's open space and recreational resources. Although the only attempt to adopt CPA in Watertown failed in 2005, the Town should reconsider adoption in order to provide needed funds to meet the growing demand on the Town's parks, playgrounds, playing fields, and open spaces. Such an effort could be a grass roots or citizen led effort, or be initiated by the Town Council.

Community Preservation Act

The Community Preservation Act (CPA) is a state-wide legislation which allows communities to adopt a property tax surcharge, with revenues from this surcharge to be used for open space preservation, the creation of affordable housing, preservation of historic buildings and landscape, and the creation of recreational opportunities. Dependent on the total number of communities in Massachusetts participating in the CPA and the number of deed transactions that generate fees for the fund, the state matches the town's surcharge revenues.

At least 10 percent of the Town's revenue generated annually by the CPA must be spent or reserved specifically for historic preservation, open space, and community housing. No more than 5 percent is utilized for administrative costs. The remainder of the revenue can be spent or reserved for recreation projects, in addition to historic preservation, open space, and community housing.

Additional recommendations are as follows:

Goal 1. Identify opportunities to create new parks in underserved neighborhoods, while improving accessibility and the overall condition of Watertown’s recreational resources.

- A.** In an effort to provide better access to park and recreational facilities, the Town should identify potential locations for small parks, pocket parks, playgrounds and tot lots, especially in conjunction with large new commercial or residential developments.
- B.** Establish Level of Service (LOS) standards for park and recreation programs and fields. Based upon the existing demand for and usage of the playing fields, the number of fields available, the hours of availability (lighted vs. non-lighted fields), and the number of permits applied for, the Town can establish some baseline LOS standards that at a minimum should be maintained over time. The LOS standard can then be used as a basis for planning new playing fields or playgrounds if demand increases over time and outstrips the supply of available park facilities.
- C.** Continue efforts to upgrade park and recreation facilities for all users and to meet applicable ADA standards as improvements are made.

Goal 2: Preserve, protect, and enhance publicly owned conservation, passive, and active open space.

- A.** Encourage the creation of “friends of” groups to provide stewardship of other parks. These groups can help to sponsor cleanups and similar activities, as well as recognize issues that the Town may need to address but has not yet flagged.
- B.** Management plans should be developed for each major town-owned facility. Expand maintenance management planning for park and recreation facilities. In addition to planning for the routine maintenance of the facility and grounds, long-term capital needs and repairs can be identified and scheduled. This should be a joint effort between the DPW and the School Department. The OSRP has identified the condition, key issues and ADA minimum compliance recommendations for each of the major parks. This maintenance planning effort will build on that assessment and help to prioritize park upkeep needs.
- C.** Maintenance plans should establish standards designed to achieve specific results considering the following:

 - 1. The condition of each facility after satisfactory completion of routine maintenance work
 - 2. The tasks required to achieve that result
 - 3. The procedures for completion of those tasks
 - 4. The time necessary to complete a particular task, as well as frequency
 - 5. The number of people required to meet the standard
 - 6. The equipment needed to complete the task
 - 7. The materials and supplies needed to complete the task
- D.** Seek better coordination with outside groups to leverage park and field maintenance and stewardship. A cooperative arrangement between the Town and the various leagues and sports associations will enhance this effort. This would create a shared understanding of what it takes to accomplish certain tasks, how to ascertain staffing needs, how to identify specific needs, and how to rectify any deficiencies. It would also be useful to track the costs involved with the various items in the maintenance plan so that long-range projections could be made for allocating staff and fiscal resources.
- E.** Continue to inventory playground equipment on a regular basis. Playground equipment generally has a life expectancy of fifteen years under normal conditions. If playgrounds are heavily used or if the equipment is routinely used by children older than those for which it was designed, that lifetime may be shorter. The Town should inventory playground equipment and the dates of installation to develop a replacement schedule.

Goal 3: Encourage private land owners to permanently preserve open space on their parcels.

- A.** Consider options to require open space to be set aside for new or redeveloped residential and commercial land. As redevelopment occurs, especially along the Arsenal and Pleasant Street corridors, look for opportunities to establish new public open spaces to serve those developments and the Town.
- B.** Consider properties acquired through tax default for open space before resale or redevelopment.
- C.** Pursue remediation, acquisition and/or public access to Walker Pond, as well as Sawins and Williams Ponds. Each of these wetland areas need various levels of remediation and should be restored and integrated into the town's open space network, in near or long term.

Goal 4: Create new opportunities for recreational access along the Charles River, such as boating, trail networks, bicycling, and appropriate related amenities.

- A.** Work with DCR to finalize and implement recommendations for the Charles River Basin Pedestrian and Bicycle Connectivity Study.
- B.** Work with developers to create or enhance multi-use connections between development projects (including the Arsenal Mall and athenahealth redevelopment projects) to increase physical and visual access to the Charles River.

Goal 5: Promote active and healthy lifestyles.

- A.** Consider development of a multi-use, multi-generational community center, including a swimming pool, to provide a variety of activities throughout the year.
- B.** Look for ways to better integrate services and programming with the Senior Center and the public schools and facilities, as well as ways to incorporate public health and physical fitness programs.
- C.** Continue developing safe walking paths that connect existing open spaces and parks. New paths should be handicap-accessible and multi-use, serving walkers, runners, bicyclists and wheelchairs.
- D.** Complete the Community Path and support other linear path/park development.
- E.** Install bicycle racks at all park facilities.
- F.** Consider canoe and kayak rentals as well as other river-focused activities to enhance outdoor recreation opportunities.
- G.** Develop publicly available dog parks within Town to allow off leash recreation options.



Watertown Dam on the Charles River

NATURAL RESOURCES

7

Introduction

Watertown's natural environment has been substantially altered as changes in land use occurred. Because of urbanization and past industrial development, it is important to focus on the preservation and enhancement of the remaining natural resources and maximize the opportunities for residents and visitors to enjoy them. Watertown's natural resources play a critical role in supporting the environmental health and social viability of the community.

This section of the Comprehensive Plan provides an assessment of the existing natural resources in Watertown, the environmental challenges facing the Town, and the steps that can be taken to pursue a more sustainable future.

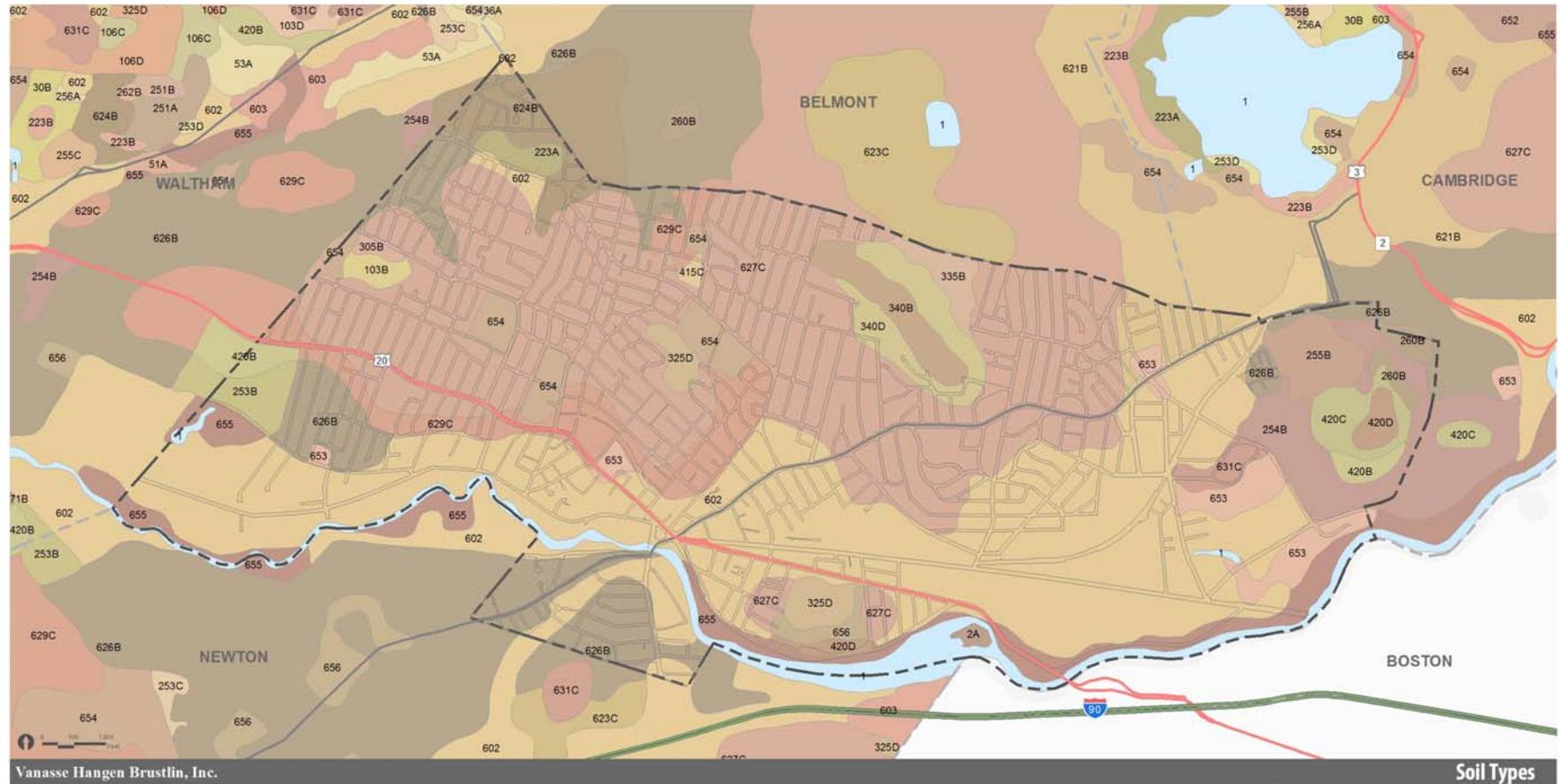
Baseline Assessment

Geology, Soils and Topography

Typical of most communities in the Boston Metropolitan Region, Watertown is located in an area known geologically as the "Boston Basin", which extends south to Weymouth, north to Medford and west to Weston. With a faulted and folded terrain that extends northeasterly in Massachusetts Bay, the basin is characterized by the Cambrian Age rock formations, Cambridge Argillite and Roxbury Conglomerate. Most of Watertown is underlain by the Cambridge Argillite, which has been intruded by igneous dikes and interbedded with volcanic ash from the Brighton Volcanic Complex and Lynn Volcanics.

Topographically, Watertown's elevations range from less than ten feet along the banks of the Charles River to 220 feet near the Oakley Country Club. Prominent hills such as Whitney Hill,

Figure 7-1 Soils Types Map



Legend

- | | | | |
|--|--|---|---|
| 1 Water | 325D Newport channery fine sandy loam, 8 to 25% slopes | 420D Canton fine sandy loam, 15 to 25% slopes | 627C Newport-Urban Land Complex, 3 - 15% Slopes |
| 223A Scio Silt Loam, 0 - 3% Slopes | 335B Rainbow silt loam, 3 to 8% slopes | 602 Urban Land | 629C Canton-Charlton-Urban land complex, 3 to 15% slopes |
| 253B Hinckley loamy sand, 3 to 8% slopes | 340B Broadbrook very fine sandy loam, 3 to 8% slopes | 621B Scio-Urban Land Complex, 0 - 8% Slopes | 631C Charlton-Urban land-Hollis complex, 3 to 15% slopes, rocky |
| 254B Merrimac Fine Sandy Loam, 3 - 8% Slopes | 340D Broadbrook very fine sandy loam, 8 to 25% slopes | 623C Woodbridge-Urban land complex, 3 to 15% slopes | 653 Udorthents, Sandy |
| 260B Sudbury Fine Sandy Loam, 3 - 8% Slopes | 415C Narragansett silt loam, 8 to 15% slopes | 624B Haven-Urban land complex, 0 to 8% slopes | 654 Udorthents, Loamy |
| 305B Paxton fine sandy loam, 3 to 8% slopes | 420B Canton fine sandy loam, 3 to 8% slopes | 626B Merrimac-Urban Land Complex, 0 - 8% Slopes | 655 Udorthents, Wet, Substratum |
| | | | 656 Udorthents-Urban land complex |

Strawberry Hill (Meeting House Hill), and Coolidge Hill dot the landscape and provide excellent views of the Charles River basin and the Boston skyline to the east. These hills are drumlins composed of large mounds of glacial till (i.e., clay and rock) formed when the glaciers reshaped the landscape 10,000 to 12,000 years ago. Much land in coastal areas was pushed below sea level by the glacier's massive weight as they moved across New England. The bedrock below the glacial till is the result of the erosion of a high mountain range that existed 350 million years ago to the west of the Boston Basin.

The general topography of Watertown has remained stable since the glaciers and subsequent sea level changes occurred several thousand years ago. Human activities have had considerable impact on the post-glacial landscape. For example, damming of the Charles River to harness water-power for the burgeoning Industrial Revolution of the mid to late 19th century changed the river's course and altered its character so that it is no longer the swift-moving waterway of yesteryear. Large wetlands that used to provide natural flood buffers or filtration of surface runoff are not present anymore. Human modifications to the land include paving, filling, and grading for dense residential and commercial development and transportation networks. The only areas that have not been altered from the original post-glacial topography are those in which the slope is too steep to grade or the substrate too difficult to manipulate, such as Whitney Hill.

Watertown's surficial geology is composed mainly of deposits left behind by the glaciers of the last ice age, sedimentation from upland areas, and post-glacial sea level changes. Today, the majority of the Town can be classified as "urban land complex" (bituminous or concrete pavement) and loamy sand. The once well-established agricultural community supported by the alluvial soils along the banks of the Charles River now only exist at the Gore Estate located at the west end of town. From the

general soils map completed with the assistance of the Soil Conservation Services (SCS), it is evident that Watertown has been highly urbanized²². Much of the wetland soil along the Charles River has been filled and built upon during the late part of the 19th century, although a significant band of wetlands remain along the river on the Department of Conservation and Recreation (DCR) property.

Landscape Character

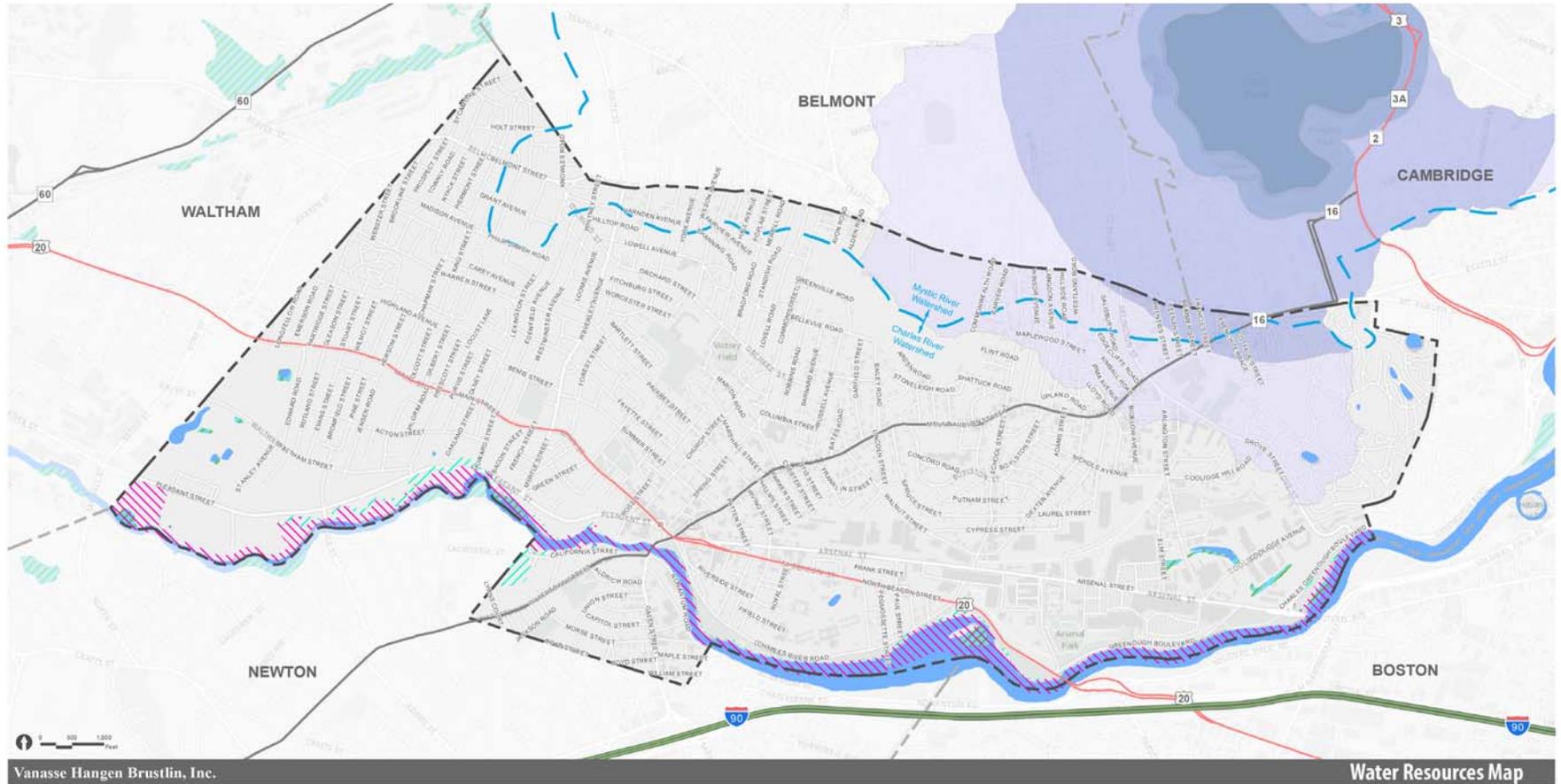
Watertown's landscape is characterized by its dense suburban and urban setting. However, there are a number of scenic features among the developed neighborhoods. The most notable resource in town is the Charles River that winds along the town's southern boundary along with the DCR walkway along the river that provides scenic vistas and access to valuable natural resources for pedestrians and bicyclists.



Charles River at Watertown

22 Town of Watertown Open Space and Recreation Plan, 2008

Figure 7-2 Water Resources Map



Vanasse Hangen Brustlin, Inc.

Water Resources Map

Legend

- Interstate
- U.S. Highway
- State Route
- Watertown Townline
- Townline (other)
- Surface Water
- Watershed Boundary
- DEP Wetlands
- 1% Annual Chance of Flooding, with Base Flood Elevation
- 0.2% Annual Chance of Flooding

Surface Water Supply Protection Areas

- Reservoir
- SWP Zone A
- SWP Zone B
- SWP Zone C

Source: Watertown Assessor's Database
 May 2013
 Comprehensive Plan
 Watertown, MA



Several prominent hills provide vistas of the Boston skyline, such as from the hill and tower (136 feet) at Mt. Auburn Cemetery and along Coolidge Hill Road. In addition, Palfrey Street at its peak offers semi-urban vistas of the hills and valleys to the west towards Waltham, while the Oakley Country Club also provides excellent views.

Water Resources

Most of Watertown is located within the Charles River Watershed. The river, which forms the majority of the Town's southern boundary, not only is considered a major part of the Town's quality open space, but also connects to Watertown's rich waterfront industrial history. Improved water quality in recent years has spurred an increase in water-based recreational uses along the river including rowing, sailing, fishing, and canoeing, although this section of the river is not yet clean enough for swimming. Further downriver, the Charles River Watershed Association (CRWA) conducts an annual swim event to demonstrate that the water quality is improving. Since stormwater runoff from urban activity has been identified as a major source of pollution affecting the water quality of the river, it is critical to continue reinforcing stormwater management along the river corridor to achieve the long term vitality of the Charles River. The Town employs stormwater management best management practices for current and proposed municipal infrastructure projects and private development.

Groundwater use to be plentiful in Watertown and supported both drinking water and irrigation for agricultural ventures. For example, Artesian springs near Whitney Hill were historically used for irrigation of pear groves along Orchard Street. Today, Watertown relies on the Massachusetts Water Resource Authority (MWRA) for its potable water supply rather than depending on

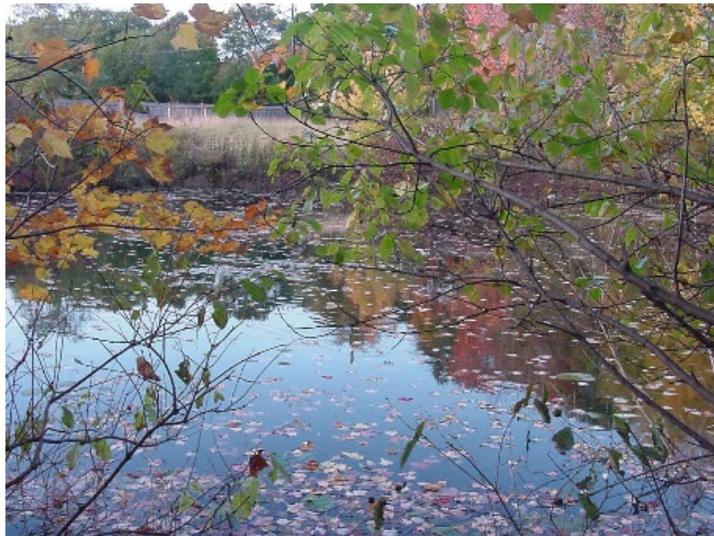
groundwater. It is not fully known how and to what extent groundwater has been affected by land use changes and associated pollution over the years, but significant contamination was identified at the Arsenal campus, leading to its designation (now lifted) as a federal Superfund site.

In terms of surface water resources, most of the Town's natural springs were incorporated long ago into the municipal storm drains. Currently there are nine small ponds located in Watertown. All of the ponds are privately owned, three of which are located in Mt. Auburn Cemetery. Sawins Pond and Williams Pond, both considered to be contaminated, and the ponds at the Perkins School and the Gore Estate are not accessible to the public. The northern one-third of Walker Pond, across Waltham Street from Gore Estate, has had the shoreline restored and a community walking path was installed by the property owner as part of a residential redevelopment.

Most of the Town's documented 100-year flood plain is located near the southern town boundary along the Charles River, primarily west of the Watertown Dam, and includes several development sites between Bacon Street and Paramount Place. For example, the 11-acre site of the Stop & Shop at the western end of Pleasant Street is entirely within the 100-year floodplain. The eastern section of the Charles River is contained within its banks except the open space along Greenough Boulevard north of Arsenal Street.

Watertown also has several areas of wetland associated with its surface water resources, that include Walker Pond and another unnamed Pond on the western edge of town between Waltham Street and Pleasant Street, and Sawins Pond in east Watertown between Arlington Street and Coolidge Road. Two isolated and small areas of wetland connected with the Charles River have

been identified on Sunrise Island at Charles River Road and North Beacon Street, and on the border of Watertown and Boston at the North Beacon Street Bridge.



*Wetlands at Walker Pond
Image source: Town of Watertown*

In addition to state legislation and regulations that protect wetland resources, the Town adopted a revised Watertown Wetland Ordinance in October 2010 to reinforce the protection of wetlands, water bodies, adjoining land areas and related resources. Virtually any activity – with rare exceptions – that occurs in a wetland resource area, including any removal, filling, dredging or alteration of the wetlands, is subject to state and town wetlands protection requirements. Activities outside of the resource area, such as within a Buffer Zone (100 feet under state requirements and 150 feet under the Watertown Wetland Ordinance), are subject to regulations if they propose to alter the resource area²³.

Vegetation

The majority of Watertown’s surface is paved, lacking large tracts of woodlands and species associated with forested areas. Most original forests were cleared long ago for agriculture or pastures. With the exception of isolated areas such as the Oakley Country Club where several oak trees are thought to date back to America’s colonial era, the trees seen today in Watertown’s yards, streets, and parks are the result of plantings or natural pollination of species over time. There are 100 heritage trees located in Mount Auburn Cemetery. There are also a few stands of native trees located in some neighborhoods, including a group of large Silver Maples in the vicinity of Harrington and Sycamore Streets.

The Town’s contiguous woodland vegetation is primarily limited to the Charles River basin within the DCR’s network of open space, and the only large remnant of forested land is the 10-acre Whitney Hill Park near Victory Field. Nonetheless, Watertown has a variety of native and non-native plant species (listed below*), with no species listed by the Natural Heritage & Endangered Species Program (NHESP) as rare, threatened or endangered:

- ▶ Common hardwoods: red maple, white oak, beech, hickory, birch, and black oak.
- ▶ Common softwoods: white pine and hemlock.
- ▶ Common herbaceous plants: vervain, goldenrod, asters and joe pye weed.
- ▶ Common invasive species: Norway maple, buckthorn, garlic mustard, Japanese knotweed, oriental bittersweet, and euonymus.

²³ Watertown Wetland Ordinance. <http://www.watertown-ma.gov/DocumentCenter/Home/View/1414>

- ▶ Other: numerous fern species have been noted near the forest floor as well as large cattail stands towards the far western and eastern borders of the town.

* This is not an exhaustive list.

Of particular note is Mt. Auburn Cemetery, the largest contiguous and publicly accessible open space in Watertown that consists of 151.1 acres of well-manicured grounds with numerous species of both indigenous and exotic tree and shrub species. While the cemetery is a significant historic heritage site in Watertown as the nation's first garden-style cemetery, it also serves as an arboretum with a massive and renowned collection of over 5,500 trees and nearly 700 species and varieties thriving among its hills, ponds, woodlands, and clearings.



*Plant diversity in
Mt. Auburn Cemetery*

Street trees, an essential component of the Town's natural resource inventory, received a great deal of attention during the public outreach process of the Comprehensive Plan. Town residents who participated in public forums and online MindMixer discussions generally expressed strong support for

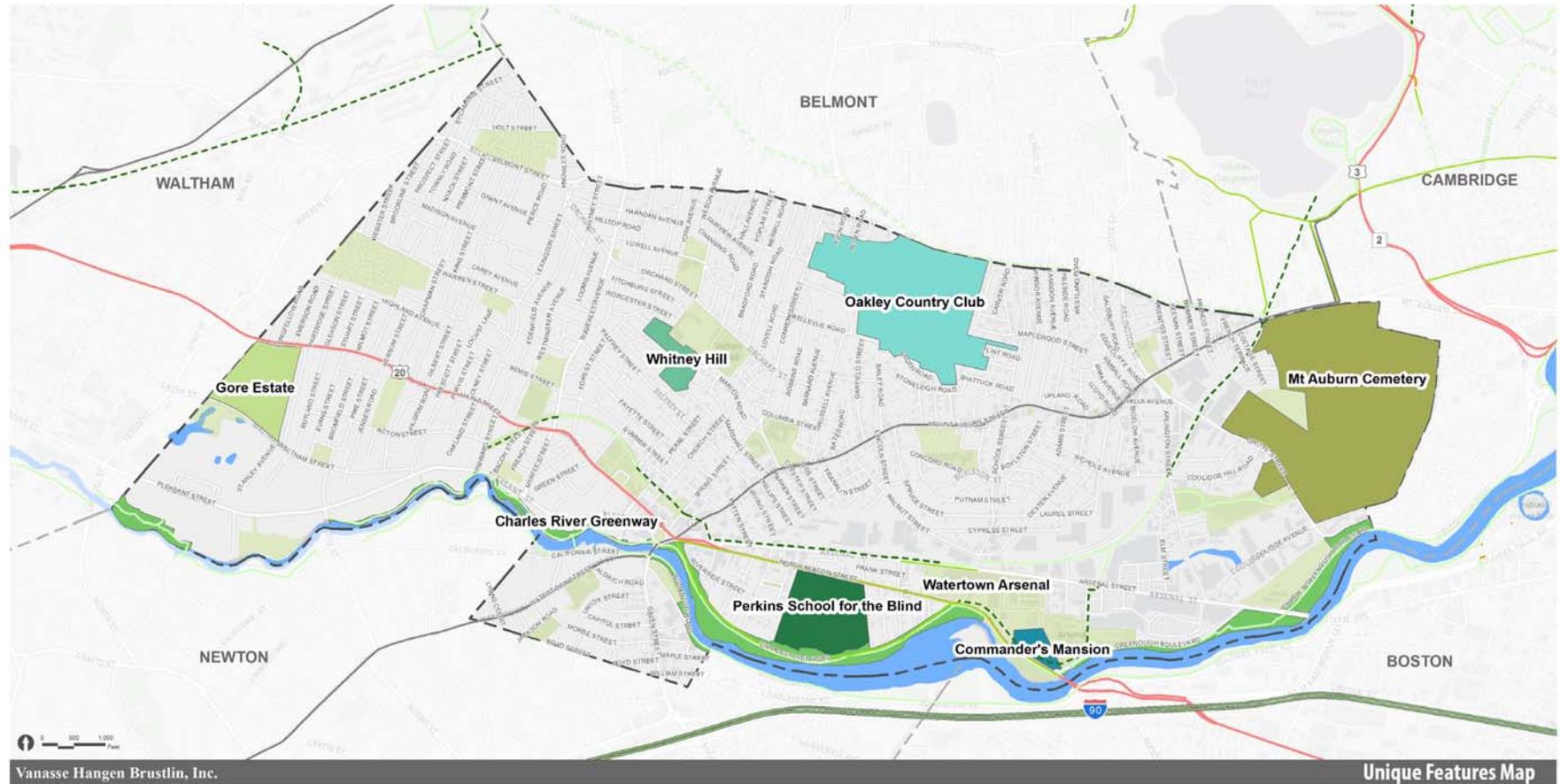
more tree plantings and better maintenance and protection of existing trees. Having recognized the social and environmental benefits of street trees, including the reduction of "heat island" impacts in a highly built-out community, the Town has identified improving the health and quantity of town-owned trees as a priority in its 2008 Open Space and Recreational Plan. The Watertown Tree Warden is responsible for the planting, protection and management of public shade trees in town and the Public Works Department provides routine maintenance. On average, nearly 120 trees are planted in the combined spring and fall seasons each year. The mix of tree species in Town has been modified over the years in response to the amount of salt used during winter. Overplantings of Bartlett Pear and the invasive Norway Maple have been replaced by a healthy variety of appropriate species.

In July 2008, the Town created the first street tree inventory for Watertown. This Geographic Information System (GIS) database of street trees has been subsequently updated by Watertown's Tree Warden when trees are planted or removed and is maintained by the Department of Community Development and Planning. The street tree inventory helps better forecast and coordinate tree replacement, requests and maintenance as well as assist in identifying issues that affect the long-term health of the Town's stock of urban forest.

Fisheries and Wildlife

The Town has limited habitat for wildlife. As of 2012, the Massachusetts Natural Heritage and Endangered Species Program had not identified any endangered or threatened species within Watertown, although the Town has at least one vernal pool at the Mt. Auburn Cemetery and potentially other undocumented vernal pools near the ponds in the west end of town. Vernal pools collect water from rain or seasonal flooding

Figure 7-3 Unique Features Map



Legend

Unique Features

- Charles River Greenway
- Commander's Mansion
- Gore Estate
- Mt Auburn Cemetery
- Oakley Country Club
- Perkins School for the Blind
- Whitney Hill

Bicycle Facilities

- Bike Lane
- Proposed Bike Lane
- Improved Path
- Proposed Path
- Unimproved Path

Major Routes, by Administrative Type

- Interstate
- U.S. Highway
- State Route

Source: Watertown Assessor's Database

May 2013

Comprehensive Plan
Watertown, MA



and dry up in the later spring and early summer. They provide essential habitat for several species including the spotted salamander, a state listed endangered species that has reportedly been seen in Watertown.

Species such as salmon once swam up the Charles River to spawn providing an integral component to the area's seasonal wildlife cycles. With the damming of the river, some of these indigenous aquatic species vanished and with them numerous related species. Today the river's fish populations above the Watertown Dam include (but are not limited to) Alewife, Herring, Yellow Perch, American Eel, and Banded Sunfish. The Watertown Dam which crosses the Charles River just west of the Galen Street crossing was built sometime in the mid-17th century and was used for industry that later developed along the river corridor. The dam is still intact and contains a recently renovated fish ladder that allows native Alewife, Herring and other fish (fish in the Charles River are stocked by the State) to cross and extend their habitat upstream²⁴.

Scenic Resources and Unique Environments

Although there are no DCR designated Scenic Landscapes in Watertown, the Town has a number of landscape features that offer scenic escapes from the built environment. Views of the Charles River Valley and the Boston skyline can be seen from drumlins in Mt. Auburn Cemetery, as well as other hills such as Strawberry Hill and Whitney Hill at the end of Marlboro Terrace.

The primary scenic resource in Watertown is the Charles River, a regional waterway and historic, environmental, and recreation resource. With over four miles of riparian corridor within Watertown, which is entirely within DCR's Charles River Reservation, the river not only offers unparalleled opportunities for recreational uses, but also connects to a number of iconic

cultural landmarks along its way, including the Watertown Arsenal, the Perkins School campus, Watertown Square landing, and the Aetna Mill complex. The Charles River Bikeway, which extends into Boston, passes through the relatively untouched areas of natural riverbank in Watertown. Many areas east of the Watertown Dam allow pedestrians and bicyclists to enjoy intermittent views to downtown and the river, while the river greenway to the west of the dam provides similar scenic quality with more variety.

In addition to the Charles River, there are three privately owned but regionally recognized landscapes that are all or partially within Watertown's boundaries. These are the Gore Estate, Oakley Country Club, and the Mount Auburn Cemetery (more details are discussed in Chapter 6 - Open Space and Recreation). Together these large tracts of open land help balance local environmental health in this relatively dense community by providing scenery and habitat, retaining the ecological benefits of open land, and stimulating air circulation.

Environmental Challenges

Typical of other communities within the Boston region, Watertown is faced with a number of environmental challenges associated with its industrial heritage, evolution of land use changes, and new development trends.

Hazardous Waste Sites

The General Services Administration's (GSA) site is located between Arsenal Street and Greenough Boulevard along the Charles River in the southern corner of town. Once used by the Army for equipment storage and burning uranium waste, this

²⁴ Town of Watertown Open Space and Recreation Plan, 2008

13-acre site is considered one of the more contaminated parcels in the area. Presently owned by the Federal Government, the site has been undergoing an extensive environmental remediation effort.

Once the cleanup is complete, the GSA property will be transferred from the federal government to DCR²⁵. The federal government is restoring the area as a wetland. The planned use is limited passive recreation for the enjoyment of nature. There will be walking trails and limited public access in order to protect the wetland plantings.

Additionally, the Department of Environmental Protection (DEP) lists over 200 sites in its registry of reported releases. This includes contamination at Sawins and Williams Ponds. Most of these sites are located in historically industrial and commercial corridors such as Pleasant Street, Mt. Auburn Street and Arsenal Street. They typically represent previous industrial uses or gas stations with underground storage tanks and they are in various stages of assessment and cleanup²⁶.



*GSA site under
environmental remediation
Image source: Charter Environmental*

Development Impact

As described in Chapter 2 - Land Use, Watertown is a community with significant redevelopment potential particularly along the Arsenal Street and Galen Street corridors. In recent years, Pleasant Street has seen considerable redevelopment of its former industrial and warehouse uses and underutilized or vacant parcels, and the entire corridor has transitioned to more mixed use and residential development, especially since the adoption of the Pleasant Street Overlay District.

Most of these new development opportunities are generally recognized as being important in strengthening the Town's tax base and advancing the Town's goal of becoming a more livable and attractive community. However, it is imperative to ensure that appropriate mitigation measures are implemented to reduce any negative environmental impacts. Efforts should also be made to ensure that new projects restore ecosystem functionality where feasible and incorporate publicly accessible open space.

²⁵ Information from Army Corps of Engineers, as quoted by The Charles River Parklands at <http://charlesriverconservancy.blogspot.com/2012/06/watertown-arsenal.html>
²⁶ See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx>, accessed February 2014

GOALS

The public outreach process of the Comprehensive Plan revealed strong consensus among residents and town officials on the benefits of restoring and preserving natural resources in Town. In an era where a community's strategic competitiveness relies more and more on its quality of life, Watertown is poised to create a more livable, playable, and workable community that preserves the integrity of its natural resources while maximizing their social and environmental potential. Building upon this vision, the following natural resources goals have been established.

Goal 1

Improve the environmental integrity of the Charles River while enhancing its recreational, cultural, and educational values for the community.

Goal 2

Protect and enhance Watertown's urban forest.

Goal 3

Promote public awareness and education on preserving the Town's valuable natural resources.

Goal 4

Take advantage of any opportunity sites for open space acquisition.

Goal 5

Carefully consider any opportunities to restore historical natural features of the Town.

RECOMMENDATIONS

Goal 1. Improve the environmental integrity of the Charles River while enhancing its recreational, cultural, and educational values for the community.

- A.** Enforce stormwater management best management practices to improve water quality of the river by reducing non-point source pollution.
- B.** The Town has a Stormwater Advisory Committee whose charge it is to review and make recommendations regarding ordinances and regulations, as well as public education and outreach, and program funding opportunities. This committees' work is an important part of compliance with our federal permit requirements and improving stormwater impacts to the ecosystem.
- C.** The Town should consider a Low Impact Development (LID) ordinance to further minimize the volume, as well as the pollutant level, of post-development stormwater runoff. Both the Town and private developers should take advantage of the most recent and effective approaches to LID.
- D.** Continue to work closely with DCR during the transition of the GSA site along the Charles River to ensure the restoration of wetlands and accessibility to the passive recreation areas from Watertown neighborhoods.
- E.** Implement new design guidelines (as recommended in the Land Use chapter) to ensure that the river is physically and visually accessible and promote it for passive and active uses.
- F.** Encourage cultural and educational activities that promote the river's rich history and abundant natural resources.
- G.** Continue to work with stakeholder groups to support stewardship, protection and access for the Charles River and ensure high water quality to benefit flora, fauna and good health.

Goal 2. Protect and enhance Watertown's urban forest.

- A.** Adopt policies that will result in better protection and maintenance of Watertown's public street trees.
 - 1.** Incorporate street tree planting and maintenance standards as part of the streetscape improvements proposed as part of the redevelopment of the Arsenal and Pleasant Street corridors as described in Chapter 2 - Land Use.
 - 2.** Minimize harm to street trees from road salt, construction activity, and deteriorated infrastructure.
 - 3.** Build or upgrade sidewalks and curbs in a manner that allows trees to thrive and to facilitate new tree plantings.

B. Encourage residents to protect existing and plant new shade trees on private property.

C. Collaborate with local groups to ensure the tree inventory is maintained.

Goal 3. Promote public awareness and education on preserving the Town's valuable natural resources.

A. Make information about Watertown's natural resource areas easily accessible on the Town's website.

B. Enhance public education about sustainable practices that can help reduce the environmental footprints of Watertown citizens.

1. Enhance educational efforts on proper and environmentally safe waste disposal, composting, gardening, pest control, and lawn care.

2. Educate and encourage homeowners and contractors to help address stormwater runoff on their property through reduction of impervious pavement and the use of rain barrels, rain gardens, pervious pavers, etc.

C. Create and coordinate educational signage at resource areas to facilitate learning while encouraging pride and self-identification with the Town's natural resources.

Goal 4. Take advantage of any opportunity sites for open space acquisition.

A. Work with developers to identify opportunities to incorporate publicly accessible open space into new projects.

B. Develop and formalize a policy to ensure that properties that the Town acquires through tax default are considered for open space before resale or redevelopment.

C. Establish a "pocket park" program to encourage public/private open space in neighborhoods.

Goal 5. Carefully consider any opportunities to restore historical natural features of the Town.

A. As mentioned in the Open Space and Recreation element, pursue remediation, acquisition and/or public access to all of Walker Pond in west Watertown, as well as Sawins and Williams Ponds in the eastern part of town.

B. Consider the historic value of landscape features of the historic Arsenal properties.



View Of
WATER TOWN, MASS.
 1879.

C. H. BAILEY & CO. PUBLISHERS, BOSTON.

<ul style="list-style-type: none"> 1 U. S. Jail Bldg. 2 Phillips' S. S. Academy 3 Warren, Church, Miss. Martin 4 Waterbury National Bank 5 Wareham & Parker, Dry G. 6 Hutchinsons & Phoenix, Paper Mill 7 Parker, Paper Mill 8 Spring Street, S. C. Johnson, Print 9 Upper Water Street Mill 	<ul style="list-style-type: none"> 10 Kelly's Block, E. of Ayles, Print 11 Public S. School 12 High School 13 Trustees' Church 14 Methodist Church 15 Episcopal Church 16 Baptist Church 17 First Church Congreg.
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*Birdeye's View of Watertown in 1879
 Image source: Digital Commonwealth*

HISTORIC AND CULTURAL RESOURCES

8

Introduction

Watertown's nearly 400 years of existence as a town and the diverse nature of its development and many residents and business owners has resulted in a rich array of historic and cultural resources. Many are well-recognized and celebrated, while others need more discovery, awareness, and promotion.

The following sections provide an overview of the historic resources, cultural attractions, and preservation goals and strategies in Watertown.

Baseline Assessment

The purpose of this assessment is to provide a summary of Watertown's historic and cultural resources and the current work of the Town's Historic District Commission and Historical

Commission and the major issues they face, as well recognizing our artistic resources and the contributions they make to our community.

Significance of Watertown's Historic and Cultural Resources

Early European Settlement and the Colonial Era

When the Massachusetts Bay Colony first sent English settlers to Watertown, its strategic location along the Charles River had already been attracting Native Americans to the area for thousands of years. First known as "Saltonstall Plantation" after leader Sir Richard Saltonstall, the early English settlers had the advantage of the falls near what is now Watertown Square (which was the furthest navigable point along the Charles River from the harbor,) as well as well-traveled paths into Cambridge and other surrounding strategic areas.



Watertown Town Seal

In May 1630, a party led by Roger Clap, landed on the steep banks of the Charles River at a point near the present site of Perkins School for the Blind. He tells of the first encounter with the Pequossette Indians when they approached Clap's landing party with a large bass for which they were given a biscuit by the settlers. This scene is commemorated on the official Town seal²⁷.

The town was officially established in 1630 and originally included Weston, Waltham, and Lincoln, which became separate towns prior to the Revolutionary War. Since then, Watertown's borders also shrank as some of its land became parts of Belmont and Cambridge. The early settlement along the river, however, was kept intact and became the industrial, municipal, and institutional heart of Watertown.



*Watertown Square, c. 1860s.
- South side of Main Street,
above Galen Street
Image source:
Digital Commonwealth*

Watertown is fortunate enough to have several reminders of the earliest days of European settlement. The c. 1698 Abraham Browne House at 562 Main Street was constructed by one of Watertown's earliest families. Acquired and restored by William Sumner Appleton as part of the organization now known as Historic New England, this house is an invaluable study property and is open to the public a few times each year.

The Old Burying Place at the corner of Mount Auburn Street and Arlington Street is the final resting place of Watertown's earliest settlers, dating as far back as 1642. In 1755, the decision to construct the town's third meeting house closer to the falls solidified the Watertown Square area as the municipal and institutional heart of the town. The site of this First Parish Church Meeting House is commemorated on an 1895 marker located within the Common Street Burial Ground at the corner of Mount Auburn Street, itself used by parishioners and later residents between 1785 and the mid-20th century.

Watertown residents played a significant role in the Revolutionary War. A 1632 protest in Watertown against taxation for the construction of a fort is touted as the first "taxation without representation" protest in the colonies. The Massachusetts Provincial Congress (1774-1780), which served as the interim government for the rebels until a new Massachusetts constitution was adopted, met at the 1772 Meeting House located in a portion of what now is the Common Street Cemetery. The Edmund Fowle House, which was moved from Mount Auburn Street to its current location at 26 Marshall Street and is now the headquarters and museum of the Historical Society of Watertown. The Massachusetts General Court met here between 1775 and 1778, and during the siege of Boston, its town meetings were also held in Watertown. A 1914 marker notes the former location of the Coolidge Tavern on Galen Street.

²⁷ <http://www.ci.watertown.ma.us/index.aspx?NID=199>



*Coolidge Tavern
Image source:
Digital Commonwealth*

Growth of Industry

During the 19th century, the early grist and lumber mills at Watertown Square and in the Bemis neighborhood blossomed into major industrial hubs, leading to a steady growth in population. William May's paper mill was established at Watertown Square in 1839, which became the site of the c. 1867 Hollingsworth and Whitney Mill (and later the Union Bag and Paper Company) at 36 Pleasant Street. The site of a Colonial Era grist mill along the river at Bridge Street in West Watertown became the location of the Bemis Mills in the early 19th century. Transitioning the business from raw cotton processing to fine combed cotton, owner Seth Bemis made Watertown a popular source for sail cloth. In 1862, the mills were purchased by wool manufacturer Aetna Mills, which stayed in business and continued to add buildings to the mill complex well into the 20th century.

The Watertown Arsenal was established in 1816 as a munitions storage facility, and its earliest buildings were designed by

Boston architect Alexander Parris. Later in the century it changed over to arms manufacturing and continued to expand into the 20th century, serving as an important facility during WWI and WWII. Later, a portion of the Arsenal would serve as the Army Materials Technology Laboratory, and in 1982 the American Society of Civil Engineers designated the complex as a Historic Civil Engineering Landmark. The Arsenal underwent a major redevelopment project in the 1990s and early 21st century into the office and retail space that occupies it today. In the mid-19th century, the arrival of the Fitchburg Railroad's Watertown Branch opened up even more transportation possibilities for Watertown's industries, which already had the advantage of the river. Several spurs were constructed right into the manufacturing complexes, giving direct access to Boston and railroad points beyond. Passenger service ended on the Watertown Branch in 1938, and the abandonment of part of the rail line in the 1960s effectively ended freight service. However, the former railroad corridor (portions of which have been renovated to create the Watertown Greenway) is still characterized by large industrial buildings and warehouses, both from the days of the railroad operation and more recent years.



*1874 Pleasant Street buildings
Image source: Digital Commonwealth*



*Hood Rubber Company, c. 1900
Image source:
Digital Commonwealth*

As the industrial profile of Watertown was rising, so was its popularity as a residential center. The area around Watertown Square still retains the c. 1820 Federal style Reverend Convers Francis House at 6 Riverside Street, also known as the Lydia Maria Francis Childs House, who after growing up in Medford, moved into the house with her brother, Reverend Converse Francis when she was a young woman. She became a known author and abolitionist. A number of surviving Greek Revival style houses from the 1830s-1860s are concentrated around Fayette Street and Summer Street, north of Watertown Square. Near the Bemis/Aetna Mills, Swetts Court is a good example of the workers' housing that grew up around the manufacturing areas. Watertown's location approximately seven miles outside of Boston also gave it a rural character, attracting farmers and agricultural uses. The area around Mount Auburn Street was interspersed with farmsteads such as the Jonathan Bemis/Deacon Arad Bailey House at 10 Bailey Road, constructed c. 1795, and the 1863 Miles Pratt House on Mount Auburn Street. At the highest end of the spectrum, wealthy Boston merchants established "gentleman farmer" estates in Watertown. These larger country homes were also used as working farms, where the owners could channel their interest in horticulture into crop

experiments and greenhouses for exotic plants and fruits. Once found throughout the northwest section of Watertown on both sides of Lexington Street, an example of these estates can still be found at Gore Place, boasting a large 1806 Federal Era mansion and grounds. Today the estate is operated as a museum and recreational and event space by the Gore Place Society, although much of the estate is located in Waltham. The large expanse of the former Oakley Estate is also apparent at the Oakley Country Club at Common Street and Belmont Street, where renowned Scottish golf course designer Donald Ross began his career in the United States, and the George N. March House on Palfrey Street is a fine example of an Italianate gentleman's estate house. The Abijah White House/Orchard House at 917 Belmont Street is a large c. 1840 Greek Revival style estate farmhouse, which was later used as the Orchard School for Girls.



Civil War Soldier's Monument. Image source: Digital Commonwealth

Institutions to serve the growing residential population were developed throughout Watertown. In 1830, Mount Auburn Cemetery became the first "rural cemetery" in the country, setting an example that would be imitated throughout the United States, and becoming a major impetus and archetype for

the growing urban park movement. Unlike nearly all of the rural cemeteries that followed its model, Mount Auburn Cemetery still serves as both an ongoing burial ground and an educational and recreational destination. The adjacent Catholic Mount Auburn Cemetery (also known as Sand Banks Cemetery or Auburn Cemetery) off Cottage Avenue served the town's Catholic population from the 1850s to the 1880s. Noted Transcendentalist and abolitionist Theodore Parker established a school on Galen Street in 1832; although the original school is now gone, he is honored by the Colonial Revival Theodore Parker School at 124 Watertown Street, constructed in 1914. Further west, Saint Patrick's Roman Catholic Church School was established on Church Hill Street in 1888, to serve the growing Irish population who settled near the mills. The Soldier's Monument in Saltonstall Park was erected in 1889 to honor those who served in the Civil War. The statue was originally erected at the site of the Town Hall in Watertown's first public park, and when the new municipal building was constructed the memorial became the centerpiece of a tree-lined mall.

Growth of the "Streetcar Suburb"

Streetcar suburbs developed between the late 19th and early 20th century, as the growing use of horse-drawn and electric streetcars along major arteries allowed white collar city workers to commute into their city jobs from the greener suburban outskirts. Unlike factory workers who lived in smaller, often multiple-family, dwellings near their places of employment, these city workers preferred to live in a "country" area without sacrificing the conveniences of the city. Taking the idea of the gentleman's estate down a notch, streetcar suburbs are characterized by larger, detached homes on moderately-sized lots that allowed a "garden" or yard, within easy distance of a streetcar or train route. Not only were streetcar suburbs a descendent of the country estate philosophy, but they were



*Mount Auburn Street
at Palfrey Street.
Image source:
Digital Commonwealth*

often developed by subdivision of former estate properties. Neighborhoods in Watertown and the surrounding communities are textbook examples of this phenomenon, with finely-detailed homes in Queen Anne, Stick, Colonial Revival, and Shingle Styles. These homes were often architect-designed, with notable examples by Boston architect Charles Brigham and Watertown architect Alberto F. Haynes. Between the continuing popularity of the mills and Watertown's attraction as a garden suburb, the population skyrocketed from approximately 6,000 people in 1878 to 10,000 in 1900, and tripled to more than 35,000 residents by 1935.

Mount Auburn Street and Arsenal Street were both popular streetcar routes, and some of Watertown's finest streetscapes reflect the middle class suburban development that grew up around them. The Mount Auburn Street Historic District is one of



*Belmont Street.
Image source:
Digital Commonwealth*

the most visible, having developed adjacent to this major corridor. Not only does this district retain large, well-preserved examples of Queen Anne houses, but it is also home to high-style Tudor Revival style apartment complexes, reflecting its attraction to those seeking suburban living in slightly more affordable accommodations. When the Russell family estate was subdivided in the late 19th century, the garden suburb that developed on the slope of Meetinghouse Hill was designed with long, tree-lined lots oriented toward the street. Although a few earlier farmsteads are interspersed throughout this neighborhood, nearly 100 single-family homes were constructed between 1887 and 1930. This well-preserved neighborhood owes much of its character to the designs of Brigham and Haynes. Towered Queen Anne and wide Colonial Revival houses take advantage of the generously-sized lots, and most of the houses enjoy a setback from the street often shaded by large trees. A more modest example of suburban subdivision development can be found in the Laddville neighborhood. Tucked between Arsenal Street and the Charles River, this neighborhood developed in two stages. The earlier development, taking advantage of the central square created by

South Irving Park, is similar to the suburban house forms in the neighborhoods along Mount Auburn Street. Like Meetinghouse Hill, the subdivision still retains an earlier farmstead building, the c. 1806 house at 77 Riverside Street. Later development in Laddville during the 1910s and 1920s would be more restrained in style and was often constructed for multiple families, which is reflective of much of post-1900 residential development in Watertown.

The growing use of the streetcars and the influx of new residents affected non-residential development as well. Streetcar and railroad stops also provided a catalyst for nodes of commercial development along their routes. These locations gave rise to small, concentrated areas of retail and commercial establishments located around major intersections, such as the corner-oriented commercial Kelly and Hampson Commercial Blocks at Arlington Street and Mount Auburn Street, which had a



Mount Auburn Street, c. 1930's. Image source: Digital Commonwealth

streetcar station. At Watertown Square, now a transportation hub as well as a center for institutional and municipal buildings, the Otis Building is an impressive Romanesque Revival style commercial block in the heart of the square. Further west on Main Street, the 1884 Watertown Free Public Library was constructed in a similar style while the Brigham-designed Watertown Savings Bank adopted a Classical Revival style. In 1918, the Boston Elevated Railway Company reconfigured its tracks in this area, and in 1934 a new Carman's Lobby, used for waiting and dispatch by the railway company, was constructed south of a Nonantum Road extension.

Residential and Industrial Development into the Modern Era

Concurrently with the streetcar suburb phenomenon, Watertown continued to grow as a strategic industrial center, with well-developed river, road, and rail access. Along the Fitchburg Railroad across the street from the Arsenal, the Harvard Carpet Mills, the Walker Pratt Manufacturing Company and the Boston Union Stock Market were prominent features, and the area remains largely industrial and commercial today. The Aetna Mills continued to grow into the 1920s, and the Lewando Dying and Cleaning facility occupied the 1904 brick industrial building (designed by Alberto Haynes) at Galen Street and Pleasant Street. The 1925 Western Electrical building (now owned by Tufts Healthcare) south of Mount Auburn Street at Arlington Street is an example of a more high-styled Moderne industrial design. Meanwhile, the majority of housing developed during the early 20th century was largely created for the growing population of industrial workers, which included large numbers of Irish and Armenians among other immigrant populations. Subdivisions with smaller properties for two-family homes became the dominant form throughout West Watertown and the subdivision on both sides of School Street, and the later development of Laddville.



View of Main Street, opposite Galen Street. Image source: Digital Commonwealth

During the years before and after World War II, the character of residential housing changed once again, filling in the last of the former country estates in the northwest section of Watertown. As with other towns, the rise in the use of private automobiles, such as Watertown's own Stanley Steamer, led to the decline of streetcars and the railroad and opened up development options further away from major arteries. The Charles River Parkway, one of several designed parkways in the Boston region, combined quick connections for traffic with tree-lined avenues. Modest Colonial Revival and Foursquare houses, with later mid-20th century Minimal Traditional examples, created denser neighborhoods that still afforded enough land for yards. This area, representing some of the latest periods of development, is concentrated around the large Ridgelawn Cemetery, anchoring the west boundary of the town.

Watertown Square continued to develop and change, with the 1932 Town Hall off Thaxter Street, featuring a two-story Greek temple front. To serve the growing population, several schools



*First Baptist Church,
Mt. Auburn and Common Streets
Image source:
Digital Commonwealth*

and churches were developed throughout the town, reflecting the same styles that were popular for Watertown's houses. The 1915 Coolidge School on Arlington Street and the 1935 St. Joseph Hall on Rosary Lane were constructed in the Classical Revival Style, while the 1921 West Junior High School on Waverly Avenue and 1913 Old Watertown High School on Mount Auburn Street have distinctive Tudor Revival style elements, echoing the apartment buildings at the west end of the Mount Auburn Street District. The Perkins School for the Blind, which is internationally renowned for its educational program, the Perkins Braille, and the Braille and Talking Books library, moved to Watertown in 1912. Students have come from around the world to study at Perkins, and the tall, elegant Gothic Revival bell tower atop the Howe Building is recognizable from both sides of the Charles River. Serving the streetcar suburb populations were Neo Gothic Revival style churches along Mount Auburn Street, including the 1899 First Baptist Church at Common Street, and the 1938 Saint Theresa of the Child Jesus Catholic Church at School Street which includes an earlier Shingle Style house by the prominent

architectural firm of Hartwell, Richardson & Driver as its Rectory. Among the several churches that were developed in Watertown at the very end of the 19th century and into the 20th century, these two churches are notable for their recent conversion into residential condominiums. Across the street, the Saint James Armenian Church complex is important as a symbol of Watertown's prominent Armenian community, having been funded by a grassroots fundraising effort beginning in 1926. The rising 20th century Greek community founded the Taxiarchoe Greek Orthodox Church on Bigelow Avenue in 1949, which today is accompanied by the Hellenic Cultural Center.

Industry and manufacturing continued to flourish until the 1930s and 1940s, and several industrial complexes were developed into commercial space during the late 20th century. The Hood Rubber Company was founded in 1896 and was a major local employer for nearly 75 years, using as many as 10,000 laborers in its heyday. The Raytheon Company, established in Cambridge in 1922, had a testing facility on Waltham Street and employed a large number of Watertown residents. The Aetna Mills were sold in 1937 but still operated as a wool reprocessing plant into the 1960s. The Lewando Dying and Cleaning facility closed in 1965, and the Arsenal was completely redeveloped into commercial and retail space after being sold by the United States Army. The Union Bag and Paper Company moved out of their facilities a little earlier, relocating to Maine in 1911. The conversion of these buildings into commercial space has helped to preserve the character and heritage of the areas around them.

Designated Historic Resources

Several properties in Watertown have been designated as historically significant. Both Gore Place (house constructed in 1806) and Mount Auburn Cemetery (established 1830) are

recognized as among the country's most highly significant properties, as National Historic Landmarks.

There are two historic districts listed in the National Register of Historic Places ("National Register"), the 1816 Watertown Arsenal Historic District and the Charles River Reservation Parkways district, which runs partially through Watertown along the river. In addition, the Watertown Arsenal Urban Renewal Parcel, which covers much of the eastern half of the Arsenal complex, has been formally determined eligible for listing in the National Register by the Keeper of the Register.

These districts are joined by seven additional properties that are individually listed in the National Register. The oldest of these is the c. 1698 Abraham Browne House on Main Street. The 18th century is represented by the 1772 Edmund Fowle Jr. House on Marshall Street, home of the Historical Society of Watertown. The list also includes two Italianate residences, the 1863 Miles Pratt House on Mount Auburn Street and the Commander's Mansion (also known as the Rodman Mansion or the Commanding Officer's Quarters) in the Watertown Arsenal complex, completed in 1865. Two early 20th century schools are individually listed in the National Register, the 1913 Old Watertown High School on Mount Auburn Street, and the 1915 Coolidge School on Arlington Street. Rounding out the individually listed resources is the Deluxe Town Diner at the corner of Mount Auburn Street and Bigelow Avenue, which sports a sleek Art Deco design from 1947.

The Mount Auburn Street Historic District is Watertown's only Local Historic District, which is subject to design review by the Historic District Commission. It extends along Mount Auburn Street between Summer Street and Lincoln Street, including dozens of properties on both sides of the road as well as portions

of Marshall Street and Palfrey Street. There are some properties that are listed in the National Register or that have a Preservation Restriction that are included within the Local Historic District for protection at the local level. Watertown has also designated two Local Landmarks, including the c. 1806 Tyler Bigelow House on Riverside Street, which is the early extant farmhouse in Laddville, and the 1840 Orchard House on Belmont Street, also known as the Abijah White House.

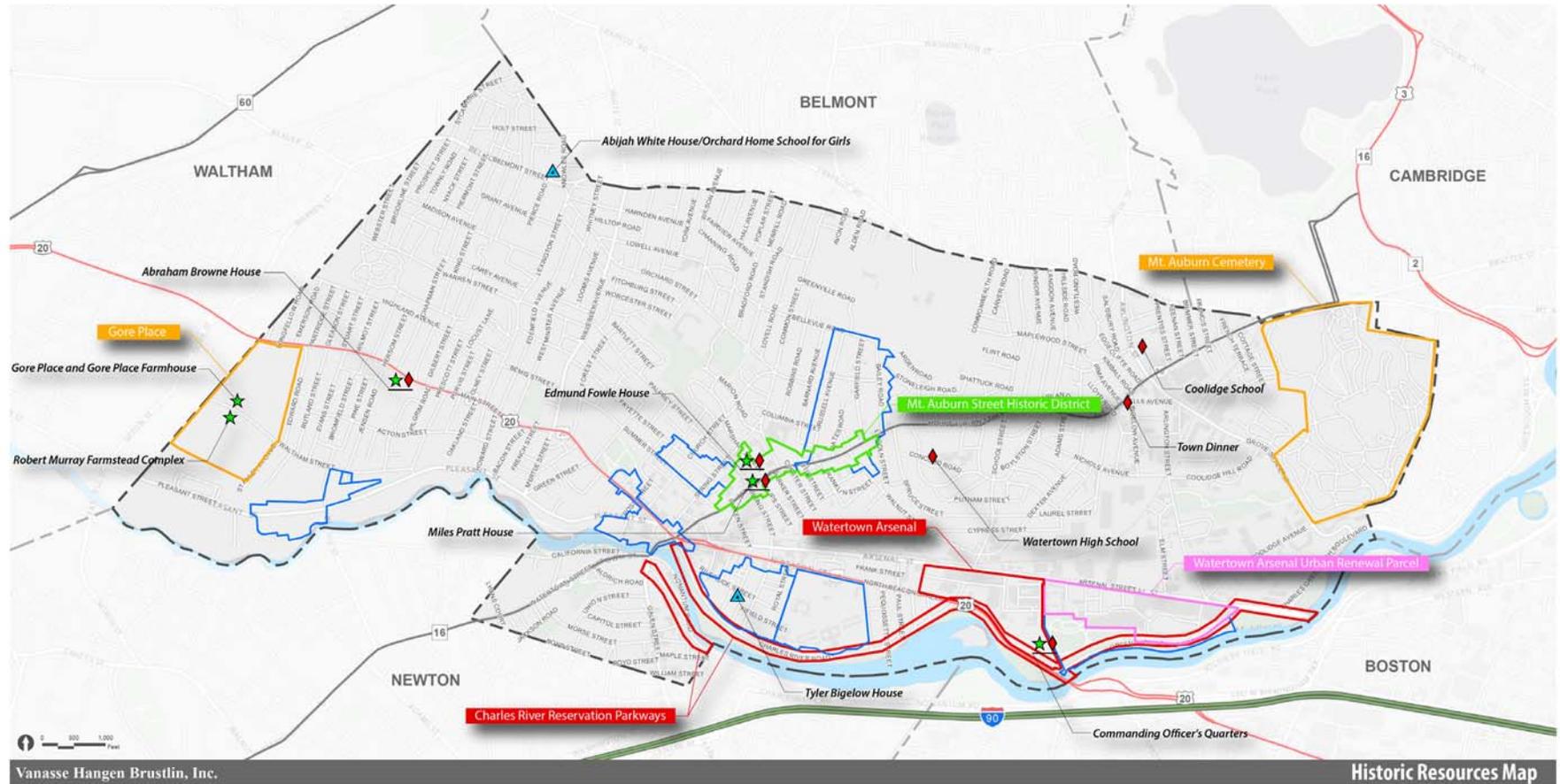
Preservation Restrictions are held on the aforementioned Gore Place, including the 1835 Theodore Lyman Jr. Farmhouse and the Robert Murray Farmstead on the property; the Commander's Mansion at the Watertown Arsenal; the Abraham Browne House; the Edmund Fowle Jr. House; and the Miles Pratt House.

Inventoried Resources

There are a number of properties in Watertown that have been recorded in the Historical and Archaeological Assets of the Commonwealth, an inventory of buildings, districts, structures, objects, and burial grounds maintained by the Massachusetts Historical Commission. These properties have not received an official designation, but further study of inventoried properties often identifies promising candidates for designation, and serves as a useful study tool and resource guide for the historical development of the town and its communities.

Watertown has eight inventoried areas that have not been recognized with an official designation, as in the previous section. An area may be inventoried for a variety of reasons; in Watertown they are generally easily recognizable neighborhoods, characterized by cohesive streetscapes and similar buildings sizes, uses, and or architectural styles. Examples include the Meeting House Hill area, and the Laddville area near

Figure 8-1 Historic Resources Map



Legend

- | | | | |
|----------------------|----------------|---|---|
| — Watertown Townline | — Interstate | — National Historic Landmark | ◆ Individual Property, National Register of Historic Places |
| — Townline (other) | — U.S. Highway | — Historic District, National Register of Historic Places | ★ Property with a Preservation Restriction |
| — River | — State Route | — Formal National Register Determination of Eligibility | ▲ Local Landmark |
| | | — Local Historic District | |
| | | — Inventoried Area | |

Source: MassGIS MHC Historic Inventory
 Jan 2014
 Comprehensive Plan
 Watertown, MA



Ladd Street. One of these inventoried areas includes a portion of the Watertown Arsenal that does not appear to have been included in either the National Register listed historic district, or the Urban Renewal Parcel that was determined eligible for listing by the Keeper. Altogether Watertown has 504 individually inventoried properties that have not received a designation. However, it appears that the vast majority of these properties have been included in the previously mentioned inventoried areas. Approximately 100 individually inventoried properties do not fall into any of the designation categories or within inventoried areas. These are interspersed throughout the town, with the least representation in the newest neighborhoods at the south end of School Street and the neighborhood around Ridgelawn Cemetery.

Watertown's strategic location along the Charles River has made it popular for both Native American occupation and European settlement, which is reflected in the town's archaeological sites. Watertown has 11 recorded prehistoric sites dating before European contact, and five historic post-contact sites²⁸.

Cultural Assets

Like historic resources, cultural assets contribute to and sustain a community's character and sense of place. They may include arts and cultural organizations, institutions (e.g., museums, libraries), creative businesses and spaces (e.g., performance venues, theaters, and art galleries), ethnic heritage sites (e.g., neighborhoods, cultural centers), historic properties, and festivals or other special events. Cultural assets are shared, and enhance the quality of life for residents as well as create unique environments that visitors want to experience. The Town of Watertown has an eclectic inventory of cultural assets that help to develop and evolve its cultural heritage. Some of the major cultural assets in the Town include:

Arts and Cultural Organizations

Watertown Cultural Council (WCC): The WCC connects, promotes, and provides financial support to individuals, schools, and cultural organizations in the arts, humanities, and sciences. In an effort to increase student exposure to these fields, the WCC also subsidizes cultural field trips to performances, educational tours, and exhibits. They are also working with the Town and private groups on the creation and preservation of art in public places. The WCC obtains the majority of its funding from the Massachusetts Cultural Council²⁹.

Watertown Art Association: Founded in 1952, the Watertown Art Association supports the development of art and artists in the Town of Watertown. The Watertown Art Association holds monthly demonstrations, annual exhibitions of members' work, and provides an annual scholarship to a graduating Watertown High School student pursuing a degree in fine arts³⁰.

The Historical Society of Watertown: The Historical Society of Watertown protects the history of the Town through the collection and preservation of the Town's historical artifacts and documents. It also encourages residents and visitors alike to discover the Town's history through the exhibition of these materials as well as through relevant special events (e.g., discussions). The Historical Society of Watertown resides in the Edward Fowle House, an NRHP-listed property, and offers tours of the building³¹.

²⁸ The locations of known archaeological sites and archaeologically sensitive areas are generally kept confidential for protection of these resources.

²⁹ Watertown Cultural Council. n.d. Watertown Cultural Council. <http://watertowncultural.org/>. Accessed February 4, 2014.

³⁰ Watertown Art Association. 2014. Watertown Art Association. <http://watertownart.org/>. Accessed February 4, 2014.

³¹ The Historical Society of Watertown. n.d. The Historical Society of Watertown: Home. <http://historicalsocietyofwatertownma.org/HSW/>. Accessed February 4, 2014.

Friends of Mount Auburn Cemetery: The Friends of Mount Auburn Cemetery was established in 1986 to protect and promote the natural, historic, and cultural significance of Mount Auburn Cemetery³². As noted above, Mount Auburn Cemetery is NRHP-listed and is a National Historic Landmark.

Amaras Art Alliance: The Amaras Art Alliance is a promoter of performance and visual art with a focus on the Armenian and American people. In addition, this organization offers educational programs that include seminars, camps, and public presentations. The activities and programs sponsored by the Amaras Art Alliance primarily encourage youth participation in the arts³³.

Institutions

Armenian Museum: The Armenian Museum of America, Inc. was created to locate, collect, preserve, and present the culture, history, art, and contributions of the Armenian people during the past 3,000 years.



Watertown Free Public Library

Watertown Free Public Library (WFPL): In addition to providing traditional library services, the WFPL is a community gathering space, an art gallery, and a protector and promoter of the Town's

history. The WFPL avails three rooms to the community for meeting and establishing connections. Art is displayed throughout property as well as in the dedicated T. Ross Kelly Family Gallery. Local history is provided its own dedicated room that includes maps, photographs, historic records, databases and websites, newspapers, special collections, ancestral records, and yearbooks³⁴.

Perkins Braille and Talking Book Library: Through its Braille and Talking Book Library (BTBL), the Perkins School for the Blind offers free library services to those residents of Massachusetts who are not fully capable of reading print materials or have physical or learning disabilities. Services at BTBL include braille and audio books; Newslines, an on-demand audio news service that includes job classifieds; and audio described DVDs (movies). Although the BTBL currently serves more than 24,000 people, the library has noted difficulty marketing its services to the 150,000 individuals and agencies within the Commonwealth that are known to be eligible³⁵. There is also a Perkins Museum on site that traces the history of educating blind students and the school's history.

Plumbing Museum: The Plumbing Museum is a unique space that provides visitors with an educational experience that explores the history of plumbing through displays of traditional and modern plumbing equipment. The Plumbing Museum's collection includes five exhibits: the History of Plumbing,

32 Mount Auburn Cemetery. 2014. The Friends of Mount Auburn Cemetery. <http://mountauburn.org/2012/the-friends-of-mount-auburn-cemetery/>. Accessed February 4, 2014.

33 Amaras Art Alliance. 2014. Amaras Art Alliance: About Us. <http://amarasonline.com/amaras/index.html>. Accessed February 4, 2014.

34 Watertown Free Public Library. n.d. Watertown Free Public Library. <http://www.watertownlib.org/>. Accessed February 4, 2014.

35 Perkins School for the Blind. n.d. Braille and Talking Book Library. <http://www.perkins.org/news-events/eNewsletters/insight/inside-story/btbl.html>. Accessed February 4, 2014.

Plumbing Systems, Technology, Machine Shop, and a Museum Library³⁶.

Aetna Mills: Aetna Mills was one of a series of paper mills established along the Charles River. It was built in 1919, and has since been restored and is located on the corner of Bridge Street and Pleasant Street. Formerly the home of Boston Scientific, it was recently redeveloped as the Riverworks Complex, where some historic artifacts are displayed.

Arsenal on the Charles: As part of its redevelopment plan, the developer of the Arsenal on the Charles property is considering the creation of a museum to display the history of the U.S. Army Arsenal operations.

Creative Businesses and Spaces

Arsenal Center for the Arts: The Arsenal Center for the Arts was the result of a community grassroots effort to see the development of an arts center in the Town of Watertown. The facility is a collection of multidisciplinary spaces that includes two theaters, classrooms and workshops, rehearsal spaces, artist studios, exhibition areas, and meeting spaces. The two theaters include the New Repertory Theater and the Watertown Children's Theater. The Quilters' Connection, a group of quilters and quilt aficionados, also operates out of the building. In addition to providing the space that supports creativity, the Arsenal Center for the Arts sponsors art exhibits, educational programs, and staged events³⁷.

In addition to the Arsenal Center for the Arts, the Town of Watertown has several smaller creative businesses and spaces that include theatre companies such as The Revels, Delvena Theater Company, and Flat Earth Theatre Company; and art

galleries such as The Gallery at Sasaki, Drive-By Projects, and Turtle Studios.

Ethnic Heritage Sites

The Town of Watertown has a diverse population, including large Armenian-American and Greek-American communities. The concentration of these ethnic groups in the Town provides for unique cultural districts enriched with their own traditions, history, art, and cuisine.

The Town of Watertown is one of the oldest and most concentrated Armenian communities in the United States³⁸. The Town is home to several prominent Armenian institutions, including the Armenian Museum of America and the Armenian



Armenian Museum of America at Watertown Square

³⁶ The Plumbing Museum. 2008. The Plumbing Museum. <http://www.theplumbingmuseum.org/index.html>. Accessed February 4, 2014.

³⁷ Arsenal Center for the Arts. 2013. About Us. <http://arsenalarts.org/about/>. Accessed February 4, 2014.

³⁸ Hayk, The Ubiquitous Armenian. 2013. Armenians in Watertown, MA. <http://www.hayk.net/destinations/watertown-ma/>. Accessed February 4, 2014.

Cultural and Educational Center. The Armenian Museum of America, formerly known as the Armenian Library and Museum of America, presents the history and culture of Armenia and its people through the display of artifacts, art exhibits, and records³⁹. The Armenian Cultural and Educational Center strengthens the sense of community among Armenian-Americans in greater Boston by offering gathering and reception spaces, recreational facilities, and classrooms for education and training activities⁴⁰.

In addition to institutions described above, Watertown has many food-related Armenian businesses, predominantly centered on the Coolidge Square area, such as Sevan Bakery, Massis Bakery and Specialty Foodstore, Arax Market, and Armenian Market & Bakery. Together, they help define the Town as a specialized culinary destination.

The Greek-American community is distributed throughout the Town, but is predominantly concentrated near the Taxiarchae/Archangels Greek Orthodox Church. The Taxiarchae/Archangels Greek Orthodox Church is a foundation of the local Greek-American population, hosting a number of community events, supporting youth groups, and sponsoring the Greek School, among other endeavors. The Greek School emboldens Greek culture by providing lessons on its history, traditions, and language. The school is available to children between the ages of 3 and 12. The Taxiarchae/Archangels Greek Orthodox Church owns and operates the Hellenic Cultural Center, which provides the community with space for gathering and connecting⁴¹.

Although Watertown is widely recognized as having large concentrations of Armenian-American and Greek-American populations, there are no official designations in terms of recognized neighborhood boundaries or cultural districts. As such, the Town has not fully realized the potential to create

cultural destinations that strengthen community identity as well as increase tourism.

Historic Properties Open to the Public

The Town of Watertown boasts a number of historic properties. Several of these properties are privately owned and operated, and are open to the public for tours and/or displays of historical materials. These properties are identified below and discussed in detail in previous sections of this chapter.

- ▶ Browne House;
- ▶ Edmund Fowle House and Museum;
- ▶ Gore Place Federal Period House Museum; and
- ▶ Mount Auburn Cemetery.

Special Events

Faire on the Square: The Town of Watertown, along with corporate entities, sponsors the Faire on the Square. This daylong event occurs annually in September, and offers musical entertainment, dance performances, children's rides and activities, food, and craft sales to residents and visitors alike⁴².

Watertown Open Studios: Watertown Open Studios is a creative celebration focused on the art of people who live and/or work in the Town of Watertown. The free, self-guided event takes place annually over the course of a weekend in November. During the

39 Armenian Museum of America. 2013. Armenian Museum of America: Welcome. <http://www.almainc.org/>. Accessed February 4, 2014.

40 Armenian Cultural and Education Center. 2014. Armenian Cultural and Educational Center: Our Facilities. <http://acecwatertown.org/>. Accessed February 4, 2014.

41 Taxiarchae/Archangels Greek Orthodox Church . Taxiarchae/Archangels Greek Orthodox Church. <http://www.goarchangels.org/>. Accessed February 4, 2014.

42 Faire on the Square. 2013. About the Faire. <http://faireonthesquare.org/about.htm>. Accessed February 4, 2014.

event, businesses and artists open their galleries, studios, and homes to the community⁴³. This event has a public art component that includes the Watertown Linear Path Mural. The Watertown Linear Path Mural, which was painted by student artists along with lead artist Gregg Bernstein, is a rare example of art in public spaces within the Town⁴⁴. Watertown Open Studios is funded in part by the Watertown Cultural Council⁴⁵.

Armenian Independence Day Festival: The Armenian Cultural and Educational Center sponsors the Armenian Independence Day Festival, an annual commemoration of when Armenia asserted its sovereignty from the Soviet Union. The daylong event celebrates Armenia and its people with native cuisine, music, games, and special performances.

Grecian Festival: The Taxiarchae/Archangels Greek Orthodox Church supports the annual Grecian Festival, which takes place at the Hellenic Cultural Center over three days in June. The Grecian Festival celebrates the culture of Greece with the presentation of authentic Greek cuisine along with live music and performances⁴⁶.

Preservation Programs

Watertown has several effective programs in place which assist in the preservation of historic properties. These programs are administered by the Watertown Historic District Commission and the Watertown Historical Commission, both voluntary regulatory commissions whose members are appointed by the Town manager. These programs are described briefly below.

Local Historic Districts and Landmarks

Local Historic Districts (LHD) can protect the appearance of historic properties and encourage new construction to be

designed to complement the district's historic setting. The designation of a LHD imposes a review and approval process by the Historic District Commission for proposed exterior changes to properties. The primary strength of a LHD is that it can be tailored to specific community needs while providing greater protection for local resources. Designation as a LHD is one of the most effective ways to protect the historic character of buildings, streetscapes, neighborhoods, and special landmarks from inappropriate alterations, new construction, and demolition. In addition to protecting historic resources, locally designated districts across the country consistently produce stable property values and greatly add to the attractiveness of neighborhoods.

Watertown has one local historic district, which is located along Mt. Auburn Street between Summer Street and Lincoln Street and includes sections of Palfrey and Marshall Streets which intersect with Mt. Auburn Street. Exterior changes visible from a public way to properties in this district, which include alterations to existing buildings, demolition, and new construction, are subject to approval by the Watertown Historic District Commission which reviews proposed changes with a detailed set of design review guidelines that cover such elements as windows, entrances, siding, chimneys, light fixtures, and walkways. The Town also has two recently-designated local individual landmarks at 77 Riverside Street and 917 Belmont Street, as a result of the 2010 historic landmark ordinance that is overseen by the Watertown Historical Commission.

43 Watertown Open Studios. 2013. About Watertown Open Studios. <http://www.watertown-open-studios.org/about.html>. Accessed February 4, 2014.

44 The Boston Globe. Watertown Kids Paint Mural on Bike Trail Head. <http://www.bostonglobe.com/metro/regionals/west/2013/08/07/watertown-kids-paint-mural-bike-trail-head/1iOS1AxK5shFF6tH0Uf68N/story.html>. Accessed February 5, 2014.

45 Watertown Open Studios. 2013. About Watertown Open Studios. <http://www.watertown-open-studios.org/about.html>. Accessed February 4, 2014.

46 Boston.com. 2009. Watertown Grecian Festival. http://calendar.boston.com/watertown_ma/events/show/87179110-watertown-grecian-festival. Accessed February 6, 2014.

Demolition Delay Ordinance

The objective of a demolition delay ordinance, which has been instituted in many Massachusetts communities, is to encourage owners of historic buildings to seek and consider alternatives to demolition and encourage preservation or relocation of significant buildings. Watertown's demolition delay ordinance, established in 1997, adds an extra level of protection to historically significant buildings by requiring demolition permit applications for all buildings over 50 years old to be reviewed by the Watertown Historical Commission. If a property is determined to be preferably preserved, it is then subject to a delay period in which alternatives to demolition should be explored.

Buildings that are at least 50 years old, and/or listed in the National Register of Historic Places (NRHP), inventoried by the Commission or within 150 feet of a federal, state, or local district must be reviewed before a demolition permit can be granted. The Historical Commission first determines if a structure is Preferably Preserved. If so, they can still approve the demolition or place a delay on the demolition up to one year. If demolition cannot be avoided, this period also allows more time for the owner and the WHC to work to ensure that every alternative can be pursued to reuse the building, or to preserve or document any historically significant aspects of the property. A daily fine and a two-year prohibition from obtaining a building permit for the property are the penalties for demolishing a building without proceeding with the review process.

In recent years, the Watertown Historical Commission has been confronted with the proposed demolition of a number of older single family homes for redevelopment into two-family residences, the result of their location within the T-zone, a two-family home zone. The Historical Commission recognizes

the relationship of this zoning to these demolitions and would like further consideration of reducing these areas where mostly older single family houses currently exist to preserve these single family home neighborhoods.

Designation and Inventory Programs

Two major programs have been employed to document and recognize some of the town's historic resources. These programs are described briefly in this section.

National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's official list of significant historic properties. Properties listed in the NRHP include sites, buildings, structures, districts, and objects that are significant in American history, architecture, archaeology, engineering, and culture. Contrary to popular perception, listing in the NRHP does not limit a property owner's right to alter, manage, or sell the property when using private funds. Instead, the designation acts as a key to access preservation programs and incentives at the federal, state and local level.

Some of the key benefits to NRHP listing include eligibility for federal and state rehabilitation tax credits, access to income tax deductions for the donation of historic preservation restrictions, and matching grant funds for preservation related projects. NRHP listing also requires consideration in federal, state, and some local planning projects.

Properties considered for National Register listing must be at least fifty years old (unless they demonstrate exceptional significance) and must possess physical integrity by retaining enough of its original materials to exhibit its historic appearance during the time period of its historic significance. The NRHP

recognizes properties associated with famous figures and events, but also acknowledges places that are associated with the history of important themes and trends in American history and pre-history. NRHP listing is accomplished through a nomination process initiated by an individual, or a private or public entity. Property owners may object to the listing through a certified letter to the State Historic Preservation Office. If 51% of the property owners within a district object to the listing through the certified letter objection process, the district will not be officially listed in the National Register. The number of properties owned by a single owner is immaterial; each property owner has one “vote”. The nomination addresses the significance and integrity of the resource through a thorough report documenting its appearance and history. The report is reviewed by the MHC staff, the Massachusetts Historical Commission’s state review board, and the National Park Service before final designation.

State Register of Historic Places

The Massachusetts State Register of Historic Places was established in 1982 as a comprehensive listing of the buildings, structures, objects, and sites that have received local, state, or national designations (local historic districts and landmarks and National Register-listed properties) based on their historical or archaeological significance. The Massachusetts State Register of Historic Places is not a designation program per se and does not have a separate nomination process. Properties which have preservation restrictions or have been formally determined eligible for the National Register in the Section 106 review process are also included in the State Register. Every property that is listed in the State Register is also part of the Inventory of Historic and Archaeological Assets of the Commonwealth.

Inventory Programs

As noted above under Inventoried Resources, Watertown has

many individual properties and areas that have been documented on Massachusetts Historical Commission inventory forms. The acceptance of the MHC of submitted forms places the properties in the Inventory of Historic and Archaeological Assets of the Commonwealth. The form is only a record of the historic and architectural nature of a property and is not a formal designation of the property’s importance. An evaluation of the property’s significance is only undertaken if a project under review by the Massachusetts Historical Commission and a federal or state agency affects the property.

Survey efforts in Watertown were conducted in 1982 and more recently by the Watertown Historical Commission in 2011.

Federal and State Preservation Laws and Regulations

Significant legislation exists to provide a review and consultation process to consider impacts from projects with state or federal involvement on historic properties. The Watertown Historical Commission is the local entity involved with these state and local historic preservation review processes.

Section 106 of the National Historic Preservation Act

Section 106 of the 1966 National Historic Preservation Act (NHPA), as amended, was originally enacted to address the widespread loss of historic properties during federally-sponsored urban renewal initiatives and highway construction projects during the 1960s. The law requires that any project that receives federal funds or is required to obtain permits or licenses from a federal agency is required to be reviewed for its effects on historic properties. Section 106 review is required for properties that are both listed or determined eligible for the National Register. This determination is part of the review process if the property has not been previously assessed for its eligibility.

Typical examples of federal undertakings that can require Section 106 review are the use of Community Development Block Grants (CDBG) for housing rehabilitation, U.S. Army Corps of Engineers' permits, and Federal Highway Administration (FHWA) supported road improvement projects. If a property is determined eligible for the National Register, then the impact of the proposed federal project on the resource must be determined by the federal agency or its assignee and concurred upon by the Massachusetts Historical Commission. If the project is determined to have an adverse effect on the resource, the lead federal agency must consult with the Massachusetts Historical Commission (MHC) in order to determine mitigation options.

National Environmental Policy Act (NEPA)

The National Environmental Policy Act (NEPA) requires all federal agencies to consider the environmental effects of their proposed actions and investigate alternatives and mitigation options that minimize any adverse impacts to the social, economic, and physical environment. Cultural and historic resources are included in the many categories considered in the NEPA process, and are addressed in an Environmental Assessment (EA) or Environmental Impact Statement (EIS). Often this review is coordinated with the Section 106 review to avoid duplication of efforts. Like the Section 106 process, the lead federal agency is responsible for identifying effects and proposing mitigation alternatives.

M.G.L. Chapter 254

Chapter 254 of the Massachusetts General Laws (M.G.L., Chapter 9, Sec. 26-27C, as amended by Chapter 254 of the Acts of 1988), like Section 106 at the federal level, requires that any undertaking involving state funds or licenses be reviewed to

determine whether the proposed project will have an adverse effect on a property listed in the State Register of Historic Places. If it is determined that the project will have an adverse effect on a listed property, the state agency and/or the project proponent must consult with MHC to determine mitigation measures. Unlike Section 106, which considers NRHP listed and eligible properties, Chapter 254 considers properties or districts listed in the State Register of Historic Places, as well as inventoried resources that they believe are eligible for the National Register of Historic places.

Massachusetts Environmental Policy Act (MEPA)

The Massachusetts Environmental Policy Act (MEPA) is a comprehensive review process that requires state agencies to account for the potential environmental impacts of projects involving state licenses, permits or financial support. This public process requires a thorough study of potential environmental impacts and the development of feasible mitigation options designed to avoid or minimize those impacts. Historic resources, both above and below ground, are included in the list of environmental factors that must be considered in the MEPA process.

If the project has a connection to state funds, permits, or licenses, certain thresholds must be met in order to initiate MEPA review. For historic resources, the threshold is met if the project involves the demolition of any part of a structure listed in the State Register of Historic Places, or (as of 1998) the property is listed in the Inventory of Historic and Archaeological Assets of the Commonwealth. A detailed project information statement, known as an Environmental Notification Form, must then be prepared to assess the impact of the project on the resource.

Historic Tax Credit Programs

Since 1976, a federal tax credit has been available for rehabilitating buildings listed in the National Register of Historic Places that are used for an income-producing use. This program offers a 20 percent tax credit for the qualified costs of a substantial rehabilitation of historic buildings when the work meets the Secretary of the Interior's Standards for Rehabilitation⁴⁷. A similar tax credit program at the state level in Massachusetts provides a state tax credit up to 20 percent of qualified costs. The programs have made an important contribution not only to the continued use and preservation of many historic buildings in Massachusetts, but have also resulted in the creation of additional jobs, revenue for municipalities, and housing units, among a number of proven benefits.

To date, owners of three buildings in Watertown have successfully taken advantage of either the federal or state historic tax credit programs, or both, as they can be combined. Two former school buildings, the former Watertown High School at 341 Mt. Auburn Street and the former Coolidge School have been rehabilitated using these programs, for assisted living and active senior housing, respectively.

Many other distinctive historic properties in Watertown have been rehabilitated for new uses in recent years, including the conversion of two church buildings on Mt. Auburn Street for residential condominiums and the re-use of older industrial buildings for office and commercial use. These projects, however, did not have historic tax credit involvement. Condominium conversion is not considered an income-producing use, unless every condominium unit is rented for at least five years. The

requirements that the building be listed in the National Register of Historic Places⁴⁸ and the rehabilitation must meet the Secretary of the Interior's Standards for Rehabilitation may be a deterrent to building owners and developers considering the use of these tax credits.

Other Preservation Programs and Activities

In addition to its role in project review and demolition delay, the Watertown Historical Commission is also active in their recognition of noteworthy preservation activities in the town through their annual Preservation Awards program. Recent awardees include Historic New England's restoration of the Browne House on Main Street; Carole Katz and Watertown Savings Bank for their work in carefully relocating the bank's Samuel Emrys Evan's murals; and Bill McEvoy, Jr. for his efforts to preserve the Sand Bank Cemetery. The Historical Commission recently participated in an endangered properties advocacy program offered by Preservation Massachusetts, the statewide non-profit preservation organization. As a result of the Watertown Historical Commission's nomination, the Abijah White property at 917 Belmont Street was successfully listed in the Ten Most Endangered list for 2012. The program calls attention to threatened properties so that solutions can be found to preserve them.

⁴⁷ A federal 10 percent tax credit for rehabilitating buildings that were built before 1936 and are not historic (that is, not listed in the National Register of Historic Places) is also available. The rehabilitation requirements are minimal and do not require approval.

⁴⁸ The Massachusetts Historic Tax Credit does not require the building to be listed in the National Register of Historic places, although the building must be documented on a Massachusetts Historical Commission (MHC) inventory form and be determined to be eligible for the National Register by the MHC.

Six properties in Watertown have Preservation Restrictions, most of which are held by the Massachusetts Historical Commission. A preservation restriction is a legal contract by which the property owner agrees the property will not be changed in a way that would compromise its historic and architectural integrity. Any proposed changes to the property are reviewed by the organization to which the preservation restriction is donated or sold. The preservation restriction runs in perpetuity with the land and is binding on both the owner who grants it as well as on all subsequent owners. A preservation restriction allows the owner of a historic property to retain title and use of a property and, at the same time, ensure its long-term preservation. The owner retains the major interest in the property and can sell or will it to whomever he or she wishes.

Preservation restrictions are specifically tailored to the individual building and the elements being sought to be preserved. Some agreements only protect a building's façade, while some include stipulations to protect elements of the interior, significant architectural details, or significant landscapes. The terms of the agreement are negotiated between the qualified organization and the property owner. The owner of the property subject to a preservation restriction must secure approval before undertaking significant changes to the property, such as altering the building's historic elements, constructing an addition or changing its use. The owner also agrees to repair and maintain the property to an agreed-upon level of maintenance.

Significant federal income tax benefits result from the donation of a preservation restriction. If the property is listed in the National Register of Historic Places, the value of the development restrictions imposed by the preservation restriction is normally considered a charitable donation. Often a

preservation restriction-holding organization will require a fee or endowment to provide adequate resources to monitor the preservation restriction in the future. According to Massachusetts General Law Chapter 184, Section 31-33, all historic preservation restrictions must be reviewed and approved by the Massachusetts Historical Commission. If the preservation restriction-holding organization is a private non-profit, the preservation restriction must also be reviewed and approved by the local municipality.

Other preservation-related programs that can offer assistance to preservation efforts in Watertown, but which are not currently in place include the following:

Design Guidelines

Design guidelines provide a set of standards to owners and tenants of historic buildings to guide them in the maintenance and preservation of their properties in a manner consistent with a neighborhood's overall architectural character. By providing a consistent set of standards, a neighborhood can maintain its historic integrity and cohesiveness. Usually design guidelines cover such architectural elements as windows, exterior materials, new construction, and rooftop additions.

Although generally associated with local historic districts and their standard for review processes, design guidelines are often employed in areas outside of local historic districts as a set of voluntary standards.

Neighborhood Conservation Districts

Similar to a local historic district, a Neighborhood Conservation District (NCD; also called Neighborhood Preservation Districts or Architectural Conservation Districts) protects architecturally and

historically significant resources through a review and approval process at the local level. While NCDs typically regulate a more limited set of design elements than a local historic district, they provide more protection than a demolition delay ordinance alone. NCDs are appropriate in areas where substantial alterations have been made to individual buildings, but the general setting, design, and overall character remains. NCDs have been used effectively in Cambridge, MA and in communities across the country because they provide a flexible but effective tool for protecting the special historical and architectural character of an area.

NCD guidelines are drafted with the input of local officials and property owners and seek to maintain consistency in architectural types, materials, massing, setback, and streetscape. These guidelines are not intended to dictate specific construction or alterations, but instead help to ensure the protection of the basic elements that contribute to the neighborhood's architectural significance.

Because NCDs are initiated and administered with the support of neighborhood residents, they tend to receive broad support from citizens and public officials. Review can be completed by the Historical or Historic District Commission, but more often is governed by a dedicated NCD Commission which includes neighborhood residents.

Demolition by Neglect Ordinance

Demolition by neglect, defined as the deterioration of a building through abandonment and/or inadequate maintenance is a serious threat to many communities. Such neglect can result in the deterioration of a building's structural systems and its

external and internal appearance. In addition to being dangerous, deteriorating buildings are an eyesore and discourage investment and damages neighborhood pride.

A Demolition by Neglect Ordinance protects individual derelict buildings as well as the physical integrity of an entire neighborhood by specifying a set of minimum maintenance requirements for all buildings. While historic buildings and neighborhoods are by no means the only structures to suffer from owner neglect, concerns about the high costs and hassles involved in rehabilitation of older buildings tend to make older structures more susceptible to abandonment.

Only a few communities in Massachusetts have Demolition by Neglect Ordinances, but many cities and towns across the nation have adopted some version of this legislation. Many communities incorporate Demolition by Neglect regulations into their definition of demolition under a Demolition Delay ordinance.

Certified Local Government Program

The Certified Local Government (CLG) program is designed to help recognize communities that value historic preservation as a community asset. The federal program is administered by the Massachusetts Historical Commission and establishes a set of basic requirements for local historic preservation programs, including the operation of a preservation commission or board and the maintenance of a survey of historic resources. In return, CLG status gives participating cities and towns exclusive access to at least 10% of Massachusetts' annual Historic Preservation Fund.

The funds are awarded to CLGs through a competitive survey and planning grant program on a percentage matching fund basis and can be used for preservation plans, comprehensive surveys, and National Register nominations. In addition to grant funds, the Massachusetts Historical Commission offers technical assistance to participating municipalities.

Community Preservation Act

The Community Preservation Act (CPA) is a program instituted in 155 communities across Massachusetts since its inception in 2001. Used for projects that help develop or acquire open space, increase the number of affordable housing units, and support historic preservation efforts, the CPA is funded through a property tax surcharge of no more than 3%. If adopted, 10% of the funds must go toward open space, 10% toward affordable housing, and 10% toward historic preservation. The remaining 70% can be divided as the city or town determines among these three categories. The CPA ensures that funds will always be available for preservation activities.

Properties receiving CPA funding for historic preservation projects must be listed in or eligible for the State Register of Historic Places, or deemed historic by the local historic commission. Funded projects can be owned publicly, privately, or by a non-profit organization, as long as they provide a significant public benefit.

Watertown has not adopted the CPA. If Watertown were to adopt the CPA, associated funds could be used for a variety of projects such as the purchase of preservation restrictions, preparation of NRHP nominations, inventory efforts, and the installation of historic area signage.

GOALS

The Historic and Cultural Resources Element addresses the future direction for these resources through more effective preservation of important historic resources and support and development of cultural activities in Watertown. Based on input received during the public outreach process and the baseline assessment, the following goals for historic and cultural resources have been established.

Goal 1

Maintain and protect the unique character of existing residential neighborhoods.

Goal 2

Promote the preservation of historic resources and encourage rehabilitation projects.

Goal 3

Support artistic and cultural events and place-making activities.

RECOMMENDATIONS

Goal 1. Maintain and protect the unique character of existing residential neighborhoods.

- A.** A. Consider design guidelines for new construction and proposed improvements to existing buildings to protect and maintain the local historical character (prevailing streetscape and traditional building styles found in the neighborhoods).
 1. Analyze existing character of selected neighborhoods in order to describe the significant features that should be preserved and maintained.
 2. Prepare design guidelines, based on features that are desired to be retained and preserved.
 3. Educate residents and tenants in these neighborhoods about the guidelines through a publication and educational programs.

Goal 2. Promote the preservation of historic and cultural resources and encourage rehabilitation projects.

- A.** Maintain asset mapping for historic and cultural resources.
- B.** Develop a marketing strategy to promote heritage awareness and preservation.
- C.** Provide incentives to encourage redevelopment of historic buildings.
 1. Publicize the existing federal and state historic tax credit programs through brochures or seminars with interested owners and developers that help them understand the benefits, process, and good examples.
 2. Determine if the Town can provide incentives, such as technical or personnel assistance if funding cannot be provided.
 3. Consider providing zoning relief for projects that preserve historic resources.

Goal 3. Support artistic and cultural assets and place-making activities.

- A.** Develop a marketing strategy to expand awareness of Watertown's cultural assets.
 - 1. Brand the Town's neighborhood concentrations of Armenian-American and Greek-American populations as cultural destinations, as well as other ethnic groups in Watertown.
 - 2. Install permanent signage to identify and direct residents and visitors to the Town's cultural assets as part of a signage program.
 - 3. Provide a descriptive list of the Town's cultural assets on the Town's official website.
- B.** Support the institutions and special events programming that celebrate the Town's multi cultural and artistic identity.
 - 1. Use social media to communicate information on the Town's cultural assets and special events.
- C.** Develop a public arts program to foster lively and attractive streetscapes.
 - 1. Establish a public art trust for funding purposes.
 - 2. With neighborhood input, identify sites for permanent art installations, such public buildings, parks, public spaces, and transit structures.
 - 3. Collaborate with owners of vacant parcels, parks, empty storefronts and buildings to erect temporary art installations.
 - 4. Install public art as a required part of significant new public and private development.
 - 5. Develop and fund a conservation plan for public art in civic spaces.
 - 6. Consider creating a Public Art and Culture Committee to participate in review of public art projects, distribute public funds for the arts, facilitate the placement of public art, and to advocate for public art.



Town Hall

PUBLIC SERVICES AND FACILITIES

9

Introduction

Public buildings, infrastructure, utilities, and the services offered by the Town of Watertown and its partner organizations provide a critical foundation for the well-being and function of the community. Of primary concern is the adequacy of municipal and school facilities – which affects the ability of municipal government to serve the community. There are several factors that contribute to the success of community services and facilities:

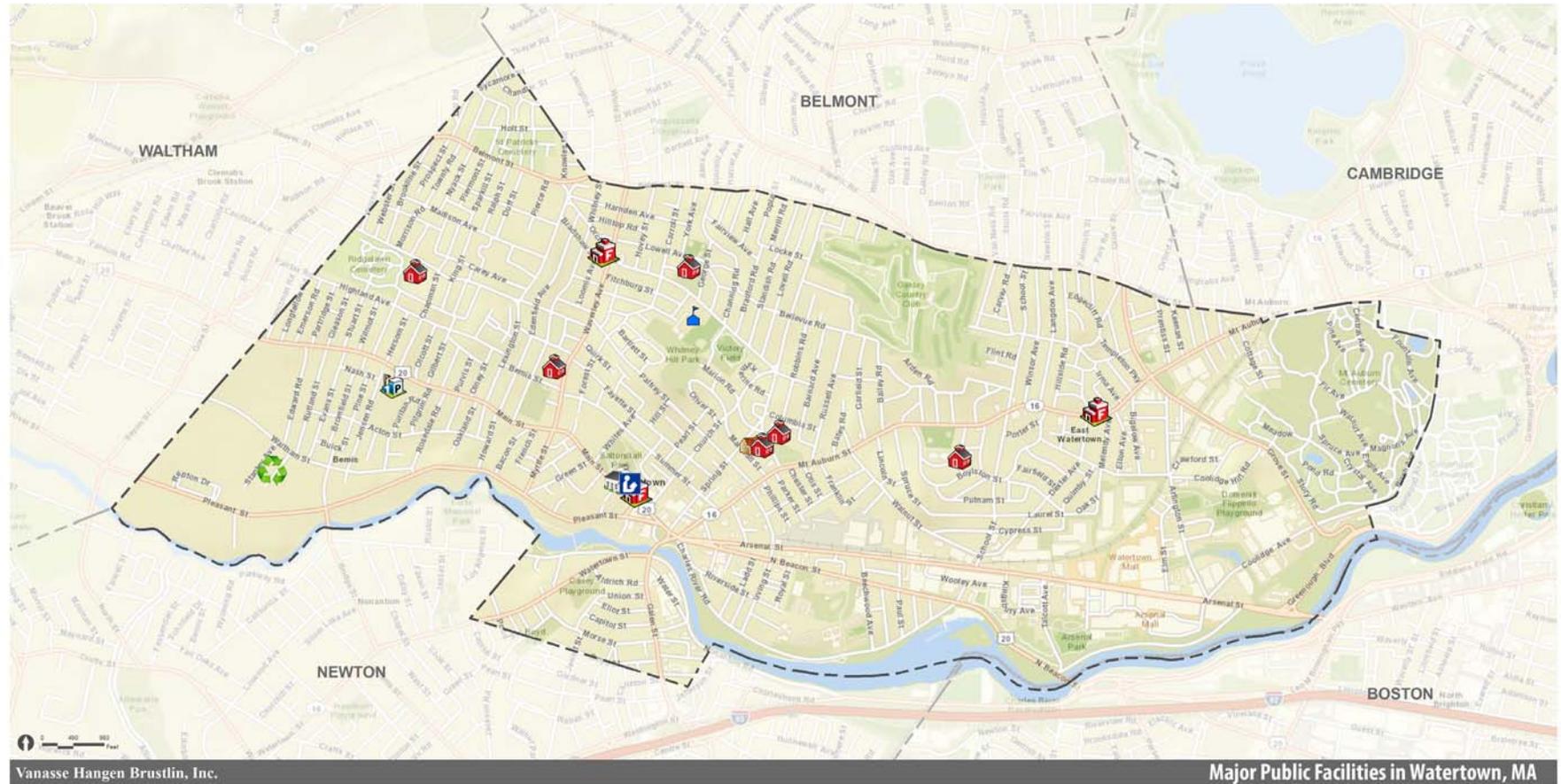
- ▶ The form, size and organization of the local government;
- ▶ Projected population and economic growth;
- ▶ The community's land use pattern;
- ▶ The needs and expectations of residents and businesses for the types and levels of services

- ▶ The financial and physical ability of the Town and partner organizations to meet expectations.

A Town's ability to provide adequate services to the community requires both short- and long-term planning. Effective capital planning and asset management policies are often challenged by limited revenue for government operations, which can put long-term investment at risk. Prioritizing and setting goals for short- and long-term investment needs can help a Town ensure that it meets the community's expectations for municipal services.

The Town has also created partnerships and relies on regional efforts to provide some services. Other important services are provided through contracts or through local non-governmental organizations. Watertown receives some funding from non-local

Figure 9-1 Major Public Facilities in Watertown



Vanasse Hangen Brustlin, Inc.

Major Public Facilities in Watertown, MA

Public Facilities

-  School
-  Police Station
-  Council on Aging
-  Town Hall
-  Fire Station
-  Recycling Center
-  DPW
-  Library

Basemap: ESRI World Street Map
 May 2013
 Comprehensive Plan
 Watertown, MA



What are Public Facilities and Services?

A public facility is any municipal property improved for public purposes, such as a town hall, library, police or fire station, parks and playgrounds, and schools. Some partner organizations also use public facilities.

Services include municipal services and utilities such as water or sewer service, solid waste facilities such as a transfer station or recycling center, and partner organization and contracted services such as public health, mental health, housing assistance, recreation, etc.

sources but relies almost entirely on its residents, property owners, and businesses for financial support. Some of Watertown's facilities are inadequate to meet current and future demand for personnel, equipment, technology and records storage needed to run efficiently and effectively. Some departments are also under-staffed, yet it has been a challenge for the Town to balance demands for excellent schools, public safety, and its many other municipal needs.

One of the key issues facing the Town is how to prioritize and pay for its many capital needs. Given the growing demands on public services and facilities, the Town is challenged in how it can meet and balance those needs. Economic development opportunities, such as those discussed in the Land Use and Economic Development chapters of this Plan, can provide the major source of funds to help to increase the Town's tax base to support improvements.

This chapter includes an analysis of the adequacy of the following public services and facilities in Watertown. The services and facilities listed below are among the key issues that were

identified by Town officials and residents through interviews, input from the public forums and MindMixer. (Figure 9-1 identifies the major public facilities in town.)

- ▶ Public safety
- ▶ Public Works
- ▶ Water, wastewater, and roads
- ▶ Solid waste and recycling
- ▶ Health
- ▶ Education
- ▶ Library
- ▶ Senior services

Note that the Parks and Recreation Department is addressed in the Open Space and Recreation element of this Plan.

Baseline Assessment

The municipal services that Watertown provides are fairly typical of Massachusetts towns. Like most communities, Watertown does more for its population than it is required to do by law. Many local government services qualify as "essential" regardless of whether the state mandates them. For example, municipalities do not have to provide solid waste disposal services, recreation programs, a senior center or a public library, but the towns that provide these services often consider them important to the quality of life and an indispensable part of what it means to be a community.

The list below summarizes the essential municipal services provided by the Town.

Administration and Finance

- ▶ Town Manager
- ▶ Town Clerk
- ▶ Assessor
- ▶ Audition
- ▶ Purchasing
- ▶ Personnel
- ▶ Town Treasurer/Collector
- ▶ Information Technology

Public Safety

- ▶ Police
- ▶ Animal Control
- ▶ Fire and Rescue
- ▶ Health
- ▶ Parking enforcement

Public Works

- ▶ Highway
- ▶ Central Motors
- ▶ Water and Sewer
- ▶ Snow and Ice
- ▶ Solid Waste/Recycling
- ▶ Cemetery
- ▶ Properties and Buildings
- ▶ Forestry
- ▶ Parks

Community Development and Planning

- ▶ Building, Plumbing, Electrical
- ▶ Planning

- ▶ Conservation
- ▶ Tree Warden
- ▶ Zoning Enforcement

Human Services

- ▶ Council on Aging/Senior Center
- ▶ Commission on Disability
- ▶ Schools
- ▶ Veteran Services

Culture and Recreation

- ▶ Watertown Free Public Library
- ▶ Parks and Recreation Department

Capital Improvement Plan

The Town has an established capital improvement planning process in place. The Watertown Capital Improvement Plan (CIP) is a five-year plan that includes all known capital needs for each department (including schools), regardless of whether a funding source has been identified for the project funding. The Town Council annually establishes guidelines for capital project budgeting. For many years, the Council has adopted a budget policy guideline that the CIP should be funded at an approximate level equal to 7.5-8.5% of the Town budget. The key components of the CIP are as follows:

- ▶ Status of existing capital funds and projects
- ▶ Details on new projects
- ▶ Coordination issues related to public works projects
- ▶ Protection of investments

Equipment, vehicle replacement and street and sidewalk repairs are included in the CIP each year. Recommendations from the 2008 Facilities Assessment Study have been incorporated into

What is a Capital Improvements Plan?

A capital improvements plan (CIP) is a road map for planning and funding public facilities and infrastructure. It typically incorporates both the construction of new facilities and the rehabilitation or replacement of existing capital. Typically, a CIP covers a period of three to six years (Watertown's is a five year plan) and serves as a declaration of intent by a locality to make capital expenditures on the schedule indicated. A CIP may or may not consider multiple forms of funding (Watertown includes numerous potential funding sources).

the CIP as well. These will continue to be considered along with recreation facility upgrades, records storage (an issue mentioned by several department heads) and town parking needs outside of Watertown Square.

There is also a proposal from the School Administration to evaluate all of their facilities and begin the process to make any necessary upgrades in the future, which could impact future CIP's.

Watertown Services and Facilities

Department of Public Works

The Department of Public Works operates with 53 staff members and is headquartered at 124 Orchard Street.

There are currently nine divisions under the DPW umbrella, including Administration, Central Motors, Highway, Snow & Ice, Cemetery, Property & Buildings, Forestry, Parks, Water, and Sewer,

and Weights & Measures. In addition, the Department supervises a number of contracted services, including Solid Waste, Street Lighting, and Recycle Center.

The Administration Division is responsible for the overall management of the Department. It is responsible for accounting, record keeping, water and sewer billing, permitting, and responding to service requests. The Department continues its effort to modernize and computerize these administrative functions

The Central Motors Division is responsible for the maintenance, repair and inspection of all DPW motorized equipment inspectional services vehicles, the Senior Center bus, snow and ice equipment and the skating arena vehicle.

The Highway Division handles all aspects of road construction and maintenance including installing appropriate traffic calming and management measures, and ensuring that the roads, crosswalks and sidewalks are in compliance with the Americans with Disabilities Act. Additional responsibilities include loaming and seeding planting strips, street sweeping, and parking lot maintenance. The Division is also responsible for street opening permit and sidewalk crossing permit review, issuance and inspection.

The Town has undertaken a survey of all of the Town's streets and assigned a Road Surface Rating to each. A newly paved road would receive a rating of 100. The composite rating for Watertown's streets is 59. It is estimated that in order to bring the Town's 73.68 miles of roadways to the 100 rating, the Town will need to invest almost \$94 million. Money from the Annual Town Budget is used for minor road repairs and the current CIP proposes loan orders for \$10 million over the next four years for



*Watertown DPW
Image source:
DPW Photo Gallery,
picture taken by MHaley*

major street and road improvements. This money is augmented by money from the Mass DOT through the Chapter 90 program.

The Snow and Ice Division evaluates the appropriate response for winter weather events and performs deicing operations, snow plowing and removal, and sidewalk and bus stop clearing, with the help of subcontractors as needed

The Water Division maintains over 80 miles of underground water mains. It provides water services to residential and commercial buildings including meter reading. In addition, the Water Division maintains approximately 995 fire hydrants in town and is responsible for the annual flushing of the water system through fire hydrants. The Sewer and Drain Division is responsible for the operation and maintenance of approximately 78 miles of sewer line and 8,000 residential sewer connections in Watertown. It also maintains and operates approximately 80 miles of storm drain lines and 3,200 storm drains. Both of these Divisions work closely with the DEP, EPA, and the MWRA in various aspects of regulatory compliance and system monitoring.

The major responsibilities of the Property and Buildings Division include installing and maintaining signage and parking meter poles, and maintaining the Town's fire alarm system. The Division is also responsible for general building maintenance and electrical work. The Town Council has been considering the potential benefit of consolidating facilities maintenance with the School Department.

The Forestry Division is responsible for the pruning, maintenance and removal of street trees. The Division is also responsible for perennial and annual planting and maintenance at the Town Hall, Watertown Square, Knowles Delta, Public Works yard, and plant containers throughout the Town. The Parks Division maintains 88 acres of athletic and recreational facilities in Watertown. With a Certified Playground Safety Inspector on staff, the Division works with Recreation and the school Athletic staff to ensure that all fields are properly marked and groomed.

The Cemetery Division is responsible for the daily operation of one active cemetery and two non-active cemeteries in Town, which in total comprise 30 acres of land. Each year the Division handles approximately 120 internments.

Through a contractor, trash is collected weekly and recyclable items (single-stream) every other week. Large items and yard waste are also collected on a less frequent basis. There is a new recycling center located between Green River Way and Stanley Avenue off of Waltham Street. The contractor also operates a commercial collection system, although there are other private contractors that individual businesses use.

In August 2013, the Edward J. Collins, Jr. Center for Public Management at UMass Boston conducted an organizational study of DPW. It noted recent accomplishments including being honored with awards for water quality from the State and MWRA

and the American Public Works Association. An LED street and Christmas light replacement program has been implemented and cemetery information has been made accessible online. Motorists praise the effective snow removal operations and DPW successfully launched the single-stream recycling program and automated trash collection program.

The Collins Center noted areas that could be improved, including long-range planning, preventive maintenance, customer service and better use of technology to enhance operations and provide public information. These concerns are being addressed by the Department with Town Council and administration support.

Police Department

The Watertown Police Department is headquartered at 552 Main Street, which was built in 2010. As of the summer of 2014, there are 65 sworn officers, 13 civilian staff and 23 part-time crossing guards. There are four divisions within the Police Department



*Watertown Police Department
Image source:
Watertown Police Department*

– Community and Staff Development, Detective, Patrol and Traffic. The Community and Staff Development Division oversees safety programs, training, and compliance with standards set by the Massachusetts Police Accreditation Commission. The Boston Marathon terrorist attack had a significant impact on the Police Department in 2013, and its long-term impact will be felt for years to come. The reality of the situation has ramifications on the Department’s equipment, training, and emergency response protocol.

The Department has thirty response vehicles under its jurisdiction including cruisers, motorcycles and SUV’s. They are maintained and repaired internally by the Department with the exception of major repairs. The Town’s CIP routinely allocates money for the replacement of the Department’s vehicle fleet.

In March of 2012 the Matrix Group performed an analysis of the Police Department, and generally found the force to be an exceptional department. Many of the report’s recommendations are being implemented by the Department, while others are still being evaluated.

Fire Department

The Fire Department maintains three stations:

- ▶ Station 1 on 99 Main Street serves as the Department’s headquarters. It was built in 1991.
- ▶ Station 2 on 564 Mt. Auburn Street was built in 1912 and renovated in 1989.
- ▶ Station 3 on 270 Orchard Street was built in 1959 and renovated in 2002.

As of the summer of 2014, Department has 83 uniformed and two civilian full-time staff. It operates three engines, one tower

ladder truck, one aerial ladder truck, one ambulance and one command vehicle. In reserve, there is an additional engine and ambulance. The Department also has five administrative vehicles. As is the case with the Police Department, vehicle replacement is scheduled in the CIP.



Watertown Fire Department
Headquarters

Overall, the Fire Department is concerned about its future level of service. Staffing is at its lowest level and recent development places even more strain on the staff as service calls are expected to continue to rise. The Department recently received a grant from the American Recovery and Reinvestment Act to hire, rehire or retain two additional firefighters. The Department has identified enhancing the current EMS system as a priority.

In April of 2012 the Matrix Group performed an analysis of the Fire Department, and generally found the department well run and addressing the many needs of the community. Many of the recommendations from the study are being implemented by the Department, while others are still being evaluated.

Watertown Free Public Library

The Watertown Free Public Library is located on Main Street outside of Watertown Square between the Town Hall and the Fire Station. It was originally constructed in 1884. A new wing was added in 1956 (which has since been demolished), and the library was renovated and expanded in 2006, effectively doubling the available space. In addition to the area occupied by the lending area and computer stations, the library has community meeting rooms and a café.

Its mission statement reads:

“Watertown Free Public Library fulfills the informational, cultural, and recreational needs of the community by providing access to a wide variety of popular and reference materials, resources, services, and programs that extend their personal and intellectual development and that reflect the town’s cultural and ethnic diversity. The staff works to create an environment which welcomes and satisfies the needs of users of all ages and abilities, and works actively to attract new users to the library.”

According to its 2011 Annual Report, the library has a total circulation of over 632,000 items. In 2011, the library logged over 350,000 total visits. Technological upgrades include a new computer system and the purchase of e-readers, which expands the variety of items it can make available to visitors.

The library’s long-range plan for FY 2012 – 2016 focuses on the types of services to be offered over the upcoming years and how those services are to be delivered. Goals include expanding services for the children’s, teen and adult libraries; becoming the primary source for local history materials; expanding the variety of formats in which reading material is provided; developing and



Watertown Free Library

implementing a technology plan; providing for the training and professional development of staff; reaching out to non-native English speaking populations; creating and implementing a maintenance plan for its building and grounds; expanding its hours of service when possible; and reaching out to the community about the services provided, including initiation of a "Maker Space" currently being developed off-site.

Council on Aging

The Senior Center is located at 31 Marshall Street and is housed in a 3,600 square foot building constructed in 1993 that is attached to the back of the Phillips School. Exercise classes and parties take advantage of the Phillips School gym.

The Senior Center is open Monday through Friday and provides a wide range of social, health, educational, recreational, advocacy and support programs to assist older Watertown residents to remain a vital part of the community. Senior citizens come to the

Center to socialize, get information, and attend classes and recreational programs. Additionally, services are provided for legal assistance, income tax help, fuel assistance, health insurance counseling, and health screenings. There is a case worker available as well to see clients either at the Center or at home. The Town provides local medical transportation through a private vendor and a shopping bus is available to provide rides to grocery stores and nearby shopping malls.

In total, approximately 1,000 people utilize the Center each month for activities and twice as many people seek services.

School District

Good schools benefit a community's families and help to preserve high property values for everyone. In addition, many people come into contact with school buildings, not only parents and children, but also residents participating in community or recreational activities that take place inside school facilities. At several points during the public outreach residents mentioned the quality of the schools as a significant asset in Watertown.

A total of 2,708 students were enrolled in Watertown's three elementary schools (PK-5), one middle school (6-8), one high school (9-12), and one alternative high school in the 2013-2014 academic year, which put the overall school system near capacity. During the previous academic year, there were 2,688 students enrolled. School enrollment in the Watertown School District provides additional insight into recent population and economic trends within the Town. Total enrollment increased by approximately ten percent between 2002 and 2014, which indicates continued growth in the younger aged population living in Watertown. However, it is important to note that the recent student population growth is not unprecedented. In fact,

it brings total enrollment back to pre-1995 levels, when there were 2,686 students enrolled⁴⁹.

The School District operates six school buildings:

- ▶ Watertown High School – built in 1930; last renovation 2004
- ▶ Watertown Middle School – built in 1922; last renovation 1998
- ▶ Lowell School – built in 1927; last renovation in 1996
- ▶ Cuniff School – built in 1954; last renovation in 1997
- ▶ Hosmer School – built in 1967; last renovation in 2002
- ▶ Phillips School – built in 1937; last renovation in 2001



Watertown High School

In March 2014, a Schools Facilities Assessment was prepared for the School Department by Oudens Ello Architecture, LLC. The report addressed the physical condition of each of the schools in Watertown and how each school performed “its mission as a contemporary school”.⁵⁰ The following is a summary of the assessment:

- ▶ Based on current education best practices, the schools look and feel tired internally based on the school’s age, maintenance, design and construction quality
- ▶ Classroom sizes are insufficient for contemporary needs
- ▶ Laboratory space is inadequate in terms of numbers and size
- ▶ There is a lack of smaller teaching spaces and separate counseling spaces
- ▶ Spaces for teacher support are lacking
- ▶ Parking is inadequate
- ▶ The cafeterias, auditoriums and gymnasiums are generally adequate or better.

The report identifies several scenarios for improvements ranging from minimal renovations to a high cost solution that involves replacement of the High School and major renovations to the other schools designed to modernize the facilities and address capacity shortfalls. Implementation of the high cost options would take many years to implement because students would be relocated to other schools while renovations take place. Given the release of the report, the Town will need to consider the options and undertake additional studies to design the improvements and obtain firm estimates of the costs.

⁴⁹ Department of Elementary and Secondary Education, <http://profiles.doe.mass.edu/profiles/student.aspx?orgcode=03140000&orgtypecode=5&>

⁵⁰ Schools Facilities Assessment, prepared for the Watertown School Department, Oudens Ello Architecture, LLC, March 2014, p. 10.

Human services

The Town of Watertown has numerous service agencies that provide a variety of services to the public within a number of different programs centered around the concept of human services. The following is a sample of these programs, as there are many more than can be effectively covered here.

Veterans Services

The Watertown Veterans' Services Department offers assistance to veterans and their dependents in all State and Federal benefits and services. Programs include financial and medical assistance, dependents and survivors benefits, and application of disability and compensation claims. Information is available regarding tax exemptions, education programs, bonuses and annuities, employment opportunities, and housing options. Applications are accessible for VA programs such as Home Loans, Vocational Rehabilitation and Employment, and Life Insurance.

Commission on Disabilities

The Commission is an appointed group of Town residents with a varied charge, including the following:

- ▶ Research local concerns experienced by people with disabilities and their families,
- ▶ Advise / assist municipal officials and employees in ensuring compliance with state and federal laws affecting people with disabilities,
- ▶ Coordinate / carryout programs designed to meet the needs of people with disabilities and their families,
- ▶ Assist with the development of policies, procedures, and services affecting people with disabilities and their families,

- ▶ Provide information, referrals, guidance, and technical assistance in all matters pertaining to disability, and
- ▶ Help coordinate activities of other local groups organized for similar purposes.

Wayside Multi-Service Center

Wayside is dedicated to achieving the highest standards in providing leading edge counseling, family support, residential and educational services for residents in need, including services for youth, families and communities.

Social Service Resource Specialist

Watertown has created a temporary Social Service Resource Specialist position to help residents find the social services they require, such as resources for the family such as obtaining assistance with fuel, food and rental expenses. This staff person can also help to connect people with a variety of support and counseling services. The position is currently funded by the Town and other private local businesses, hospitals, and non-profit human service organizations. The Wayside Youth & Family Support Network provides the staff person.

Project Literacy

Project Literacy is a department of the Watertown Free Public Library that provides free literacy services to the community in the form of classes, one-on-one tutoring, and conversation groups. In addition to English classes, participants can attend computer classes, citizenship classes and other classes of interest to English language learners. Funding for the program is a combination of town funding, grants and donations.

Health Department

The Watertown Health Department runs a number of programs that focus on protecting and promoting health, preventing diseases, and improving the health status of the community.

- ▶ Programs for protecting health include developing and enforcing regulations for conducting inspections at food establishment, public swimming pools, tanning establishments, tattoo and body piercing establishments, and at residential properties. Enforcing regulations ensures the safety and wellness of the public in the community.
- ▶ The promotion of public health includes providing public health education lectures and collaborating with other Watertown agencies to increase awareness of healthy lifestyles.
- ▶ Disease prevention and disability includes providing vaccines to the public for preventable disease, offering free public influenza clinics, tuberculosis screening, providing blood pressure clinics, and referrals to clinicians.
- ▶ Programs for improving the health status of the community include the Live Well Watertown Task Force, the Watertown Housing Task Force and collaboration between Watertown agencies that focus on assessing the local needs and developing long term plans that will provide access to a safe environment.

Future anticipated Health Department needs include storage space for emergency preparedness supplies, and a place to keep impounded or quarantined animals.

The Health Department collaborated with the Community Development and Planning Department to implement a Community Transformation Grant which has been used to establish the Live Well Watertown project. This program is designed to encourage families to adopt an active and healthy lifestyle. Furthermore, Mt. Auburn Hospital conducted a Community Health Needs Assessment in 2012.

Health indicator data generated thus far have shown high rates of hospitalization for obesity, heart disease, and stroke in Watertown relative to neighboring communities. Health priorities that were identified include safety, reduction of obesity, and improving mental health among young adults⁵¹.

Community leader and service providers identified problems confronting the following specific at-risk populations:

- ▶ Immigrants
 - ▶ Health care access
 - ▶ Mental health issues
 - ▶ Parenting support
- ▶ Older adults
 - ▶ Isolation
 - ▶ Medication management
 - ▶ Mental health issues
- ▶ Youth
 - ▶ Lack of mental health services
 - ▶ Obesity
 - ▶ Substance abuse, especially alcohol use

51 Mt. Auburn Hospital 2012 Community Health Needs Assessment, July 2012

Additional areas of concern included asthma, childhood diabetes, the lack of bicycle infrastructure, and smoking. Some of these issues are reflected in the discussion below regarding the public health and land use connection.

Public Health and Land Use Connection

There is a strong connection between public health issues and land use planning, as many planning goals and initiatives can be directly correlated with the public health of a community. For example, increasing access to local and healthy food sources can result in decreased diabetes and obesity rates. Development of bike lanes, sidewalks, rail trails, and other pedestrian amenities decreases automobile use which results in improved air quality and contributes to lower asthma rates. Development of these amenities also increases opportunities for active exercise, assisting with multiple public health concerns already mentioned. Improvements to pedestrian crossings and roadway networks increases public health and safety overall, as this can decrease the number of pedestrians/bicyclists collisions.

Encouraging active transportation, enhancing local and healthy food access, addressing health issues such as substance abuse, tobacco use, mental health, and pediatric asthma are pressing issues that should be addressed to improve the Town's overall public health. In addition, providing and maintaining safe living environments for seniors to age in place are key concerns for the Town. Active transportation is synonymous with sustainable transportation, as it emphasizes "self-propelled transit modes, such as walking and bicycling,"⁵² as opposed to single occupancy travel by automobile. This physical activity reduces obesity rates. "In a 2009 report, Samimi found that a one percent decrease in automobile use is correlated with 0.4 percent reduction in obesity."⁵³ Even increasing public transportation contributes to positive health benefits, as it has been found that light rail usage

contributes to a 1.18 decrease in Body Mass Index (BMI) and reduces one's chance of obesity by 81 percent⁵⁴. Increasing active transportation and public transportation are positive ways to decrease obesity and other health issues, through development of sidewalks and trails, increasing the amount of public transit, and educating the general public of the benefits of decreasing automobile use and instead turning to more active options.

Conventional food systems today rely heavily on large format retail corporations to provide food and household needs in one spot. The issues surrounding this system relate to the fact that these primary stakeholders span great distances from each other, requiring most residents/shoppers to drive to these locations. Food deserts are defined as low-income census tracts where a substantial number or percentage of residents has low access to a supermarket or large grocery store. Low-access to a healthy food retail outlet is defined as households that are more than one mile from a supermarket or large grocery store in urban areas⁵⁵. While the Town of Watertown does not have food deserts following this definition, the Town can avoid these issues in the future and develop a healthier food system by increasing access to local and healthy food options, encouraging convenience stores to switch to healthier and more affordable food products, and educating the public of the importance of choosing healthier diets.

See Appendix A to this Plan for a set of principles for healthy community design.

⁵² Tufts University and VHB. Community Planning Guide for Public Health. May 2013.

⁵³ Ibid.

⁵⁴ MacDonald, John M., Robert J. Stokes, Deborah A. Cohen, Aaron Kofner, and Greg K. Ridgeway. 2010. The effect of light rail transit on body mass index and physical activity. *American journal of preventive medicine* 39: 105-112.

⁵⁵ United States Department of Agriculture, Economic Research Service, http://www.ers.usda.gov/data-products/food-access-research-atlas/documentation.aspx#.Ut_z9Nlo69l. Accessed January 29, 2014.

GOALS

Watertown faces a number of challenges in meeting its short- and long-term facility and service needs, especially as demand is expected to increase. The following goals were developed based on the information provided by various town departments and public input.

Goal 1

Quality, efficiency and cost-effectiveness should be the goal of all public service delivery.

Goal 2

Engage in long-range planning to ensure that the Town is well prepared for future needs as demand increases.

Goal 3

Establish priorities for building and facility preservation, upgrades and replacement.

Goal 4

Monitor the availability of adequate public health and social services to meet the needs of all citizens and particularly those of an aging population.

Goal 5

Promote sustainability in municipal operations and facilities.

Goal 6

Maintain, upgrade or replace school infrastructure as needed to accommodate the changing educational needs of the community.

RECOMMENDATIONS

Goal 1. Quality, efficiency and cost-effectiveness should be the goal of all public service delivery.

- A. Make better use of technology to increase efficiency in all town departments.
- B. Improve resident services by revising the website and making it easier to navigate. Centralize the website updating to free up Departmental staff for more department-specific tasks and to have consistency in the presentation of town information.
- C. Consider an “ombudsman-like” person to centralize consumer questions and resolve complaints.
- D. Continue to assess the Town organization to ensure that all departments are adequately staffed to get the job done well.

Goal 2. Engage in long-range planning to ensure that the Town is well prepared for future needs as demand increases.

- A. Make road and sidewalk improvements, and improve the overall Road Surface Rating for the Town’s roadways, while incorporating a Complete Streets concept, and encouraging multi-modal travel.
- B. Continue to investigate the feasibility of consolidating DPW facilities maintenance with the School District’s facilities management staff.
- C. Continue collaboration with the MAPC to keep abreast of regional trends.
- D. Establish record-keeping procedures that are adequate and sustainable.

Goal 3. Establish priorities for building and facility preservation, upgrades and replacement.

- A. Consider establishing a Building Committee, which would include representatives from Town departments, to comprehensively review short- and long-term needs of municipal buildings and to make recommendations for prioritizing facility improvements. Such a Committee would provide input into the CIP process, but its focus will be on building needs for all departments.
- B. Implement the five-year Capital Improvement Program and reassess annually the priority projects, keeping to the Town Council goal of dedicating a set percentage of the town budget to capital expenditures.
- C. Review, update and implement the recommendations of the 2008 Facilities Assessment Study as appropriate.
- D. Continue to look at all avenues for the financing of the Town's CIP.

Goal 4. Monitor the availability of adequate public health and social services to meet the needs of all citizens and particularly those of an aging population.

- A. In planning, make connections between public health, land use, and transportation
- B. Seek opportunities to educate residents on nutrition, exercise and the risks of alcohol, tobacco and recreational drug use.
- C. Consider implementing wellness programs for town employees.
- D. Ensure that the needs of the elderly population (that is expected to grow larger), youth and recent immigrants are addressed through town and community services.
- E. Consider options to permanently fund the Social Services Resource Specialist (SSRS) position.
- F. Nurture cooperative relationships with established and new community agencies so that they are involved and effective members of the community.
- G. Support permanent locations for community gardens.

Goal 5: Promote sustainability in municipal operations and facilities.

- A. Incorporate cost-effective Green Infrastructure strategies into all municipal projects for stormwater management, drainage.
- B. Retrofit and prepare Watertown's essential infrastructure to maintain critical functions through weather and energy related disturbances.
- C. Seek ways to increase recycling and reduce solid waste disposal.
- D. Educate Town residents about stormwater issues and proper management.

Goal 6: Maintain, upgrade or replace school infrastructure as needed to accommodate the changing educational needs of the community.

- A. Maintenance is essential to providing a healthy, safe learning environment for students. Perform needed maintenance on a regular basis, and approach it as an opportunity to upgrade facilities to become safer, healthier, more sustainable, energy efficient, and enriching.
- B. Ensure that all communication systems, such as computers, telephones and wireless Internet access, are current, accessible and meet state and federal regulations. The School District should plan to adapt to the evolution of technology to make it an asset to student learning, more efficient coordination between schools, and connection with central school administration and with the Town government as a whole.
- C. Review the recent Schools Facilities Assessment and evaluate the alternatives for renovating and/or replacing school facilities.
- D. Assess and prioritize school facilities to identify priority projects and seek funding assistance through state or federal programs.



Sustainable solar energy

ENERGY 10

Introduction

Energy is an essential component of municipal operations in Watertown. The Town uses energy for buildings, street lighting, municipal vehicles and equipment. Energy requires a tremendous amount of infrastructure for both supply and distribution, which affects the region, state and globe. Traditional sources of energy and existing rates of consumption are not sustainable for the environment or for the economy. Burning fossil fuels has harmful impacts on the environment and the decreasing supply is increasing costs. Communities are responding by modifying operations, with an emphasis on energy conservation and efficiency, renewable energy sources, and fuel-efficient vehicles, lowering the cost of municipal services while also reducing environmental impacts. This benefits the Town, state and planet.

It is important to keep the local, regional and global perspective in mind when outlining the energy roadmap for Watertown. Energy planning is relevant to the Town's operations but also to residents and businesses living and operating within Watertown. The roadmap considers strategies to reduce consumption and also the sources of energy, generation and distribution within the Town, security and reliability, and the impact on the local and regional economy.

Energy issues are closely linked to several chapters of the Comprehensive Plan, including land use, housing, economic development, transportation, and Facilities and Services. It is important to view this section as a subset of all of these chapters since energy strategies will help to ensure sustainable

development practices are used, housing is energy efficient, businesses can reduce energy costs and operate efficiently, and efficient transportation options are available. This section of the Comprehensive Plan summarizes the progress what Watertown has made to date and identifies goals and recommendations to help the Town continue to use and promote more sustainable practices.

Baseline Assessment

Municipal Energy Projects and Programs

Watertown implemented a number of measures to reduce energy costs, diversify energy generation, and reduce greenhouse gas emissions related to municipal operations. This section provides an overview of municipal energy projects and programs currently being employed by the Town.

Green Communities Designation

In December 2010, Watertown was designated a Green Community by the Green Communities Division of the Massachusetts Department of Energy Resources (DOER). Once a community has been designated as a Green Community the Division provides technical assistance and financial support to improve energy efficiency and increase the use of renewable energy in public buildings, vehicles, facilities and schools.

In order for Watertown to be designated a Green Community, five criteria were met:

- ▶ Criterion 1: as-of-right siting in designated locations for renewable/alternative energy generation, research and development, or manufacturing facilities.

- ▶ Criterion 2: expedited application and permit process for as-of-right energy facilities.
- ▶ Criterion 3: energy use baseline and plan to reduce energy use by twenty percent (20%) within five (5) years.
- ▶ Criterion 4: purchasing only fuel-efficient vehicles.
- ▶ Criterion 5: adopt the Board of Building Regulations and Standards Stretch Code for new construction

Municipal Energy Audit

In 2012, the Town conducted an energy audit of municipal buildings, including schools, to determine the energy consumption of its operations and assess opportunities to increase efficiency measures. After reviewing the audit, in October 2012, the Town Council approved a \$7.4 million bond to contract with Johnson Controls, an energy services company (ESCO), to implement a total of 97 energy infrastructure upgrade projects in 14 Town and School buildings. The projects include⁵⁶:

- ▶ Lighting fixture retrofits, including occupancy sensors, in all of the schools and most municipal buildings
- ▶ Weatherization of building envelopes for all 14 buildings
- ▶ Boiler replacements at Lowell Elementary, Cunniff Elementary and Phillips School Buildings; Town Hall; Main and East Fire Stations; the Ryan Ice Rink; and the Senior Center
- ▶ Digital data controls



⁵⁶ Energy Saving Performance Contracting Program Review and Update Presentation to Town Council on October 2, 2012.

- ▶ Water Conservation measures including low-flow toilets in eight buildings, including Watertown High and Middle Schools; Lowell Elementary and Cunniff Elementary Schools; Town Hall; and the Ryan Ice Rink

The result of this 20-year contract with Johnson Controls will be at least \$1.8 million in energy savings⁵⁷. Johnson Control has estimated that the simple payback from the initial investment will be complete in 15 years. A complete list of the measures proposed for all 14 municipal buildings, can be found in the Energy Saving Performance Contracting Program Review and Update Presentation to Town Council from October 2, 2012.



*Solar on DPW Facility on Orchard Street
Image source:
Town of Watertown*

Renewable Energy Efficiency Projects

In June, 2005, the Town Council passed a Resolution requesting the Town Manager to purchase the most fuel-efficient vehicle for the designated municipal purpose. The Town Manager's car and Inspectional Services Department vehicles are all hybrid vehicles. The Town also provided education for its employees on smart driving techniques that saves the Town money on fuel and reduce harmful emissions.

Watertown installed solar arrays on three Town buildings, including:

Police Station Building – In 2010, a 30 kW solar photovoltaic (PV) system was installed on the new police station on Main Street. The new station also has a community meeting space and a state-of-the-art geothermal heat pump, and is adjacent to a community park being redeveloped on the former Browne School site.

Watertown High School – In October 2010, Watertown High School celebrated the installation of a 6 kW solar PV system which will be used for educational purposes while saving an estimated \$1,000 per year in energy costs. A community fund-raising effort helped leverage additional funds for this project.

Department of Public Works (Orchard Street) – In 2010, the Town installed a 50 kW photovoltaic array on the roof of the Department of Public Works building on Orchard Street. The funding came entirely from a grant through the American Recovery and Reinvestment Act. This system will create up to 52,000 kWh and save an estimated \$7,000 in energy costs annually.

LED Street Lighting - In 2012, the Town secured state and local funding to replace 1,269 sodium street lights with high-efficiency light emitting diode (LED) lighting. Anticipated energy cost savings from these new LED lights is estimated at \$29,806 per year with an annual energy savings of 203,363 kilowatt hours (kWh).

Energy Manager – In 2014 the Town developed through a grant award an energy manager position to better manage the energy

⁵⁷ <http://www.wickedlocal.com/x21084999/Watertown-to-spend-7-million-on-energy-efficiency>

efficiency efforts of the municipal facilities as well as being a resource for broader community-wide energy issues and projects.

Community Energy Programs and Projects

Watertown Environment and Energy Efficiency Committee (WE3C.org) was formed in 2005 to advise the Town on a variety of environmental and energy related issues. This is an appointed group of nine members who serve staggered three year terms. The WE3C Committee has a website with information such as how to weatherize a home, the benefits of installing energy efficient lighting, and how to responsibly dispose of compact florescent bulbs that have expired. It links to publications in both English and Spanish. In addition, the WE3C is responsible for or is involved with most of the other programs listed in this section.

Watertown Initiative to Save Energy (WISE): This program offered through Next Step Living, with facilitated Mass Save® energy assessments. In this voluntary program, to begin, residents or landlords sign up for a no-obligation energy assessment, followed by energy-saving recommendations and gifts of light bulbs, shower heads, faucet aerators; and up to \$2,000 in utility incentives for adding insulation.

Solarize Watertown Program: Solarize Massachusetts is a partnership between the Massachusetts Clean Energy Center (MassCEC), the Green Communities Division of the Massachusetts Department of Energy Resources (DOER) which began in 2010. It works with local governments to promote small-scale solar projects through a competitive tiered pricing structure that increases the savings as more home and business owners sign contracts.

Community Energy Strategies Pilot Program: The Community Energy Strategies Program (CESP) is a pilot initiative developed by the (MassCEC) in collaboration with the Green Communities Division of DOER. The program's purpose is to provide financial and technical assistance to local governments to identify and enable a mix of relevant clean energy strategies and incentives best suited to address local interests, needs, and opportunities.

Clean Energy Roadmap: In September 2013 and January 2014, the WE3C (with assistance from MassCEC, DOER, and the Town) organized two Energy Forums to begin crafting a Clean Energy Roadmap for Watertown. Ultimately, this program will provides a forum for local residents and businesses to work with municipal leaders to identify, assess, and enable new energy efficiency, renewable energy, and renewable heating and cooling projects and programs that serve the Watertown community⁵⁸.

Private Large Scale Energy Installations: Several private locations in Watertown have implemented solar projects, including examples like:

- ▶ Thomson Family Adventures - 19 kW
- ▶ Perkins School for the Blind - 27 kW installed on the roof of the new lower school building
- ▶ Arsenal on the Charles development - 450 kW. This array, installed on Building 311 is one of the largest rooftop installations in Massachusetts.

⁵⁸ <http://www.masscec.com/solicitations/cesp-watertown>

Promoting Energy Efficiency in Watertown

Watertown faces some challenges to increase efficiency in privately owned buildings. There are challenges around successful adoption of energy efficiency measures that need to be considered. Several issues include:

- ▶ There is a limited supply of large blocks of open space that could be used for renewable energy projects.
- ▶ There is predominantly older housing stock that was not built to today's standards of efficiency.
- ▶ Many residential buildings are renter occupied which makes it difficult to coordinate and convince building owners to do upgrades such as installing solar panels or retrofitting buildings for increased efficiency.
- ▶ With the continued growth of sustainable efforts in the community, important facilitation of the process should be considered by the Town and partner organizations. Some specific areas of concern to include are:
 - ▶ Responsible recycling – To ensure that materials are properly disposed of, multiple disposal opportunities for materials such as discarded batteries, florescent light bulbs, and other hazardous substances should be easily available and widely advertised.
 - ▶ Community outreach – In order to ensure that the public is aware of energy efficiency options, educational materials should be easily available on the municipal website and in key locations such as the Town Administration Building and the Library.

Zoning for Energy Efficiency

As part of the application process for a Green Communities designation Watertown updated the municipal zoning ordinance to remove regulatory barriers to installing alternative energy systems. Watertown addressed both of these requirements in the Light Industry, Wholesale, Laboratory section, stating that projects (new and conversions) up to 4,000 square feet are allowed by-right in the Industrial Zones (I-1, I-2, and I-3), the Pleasant Street Corridor District (PSCD) and the Open Space and Conservancy District (OSC). If the project is greater over 4,000 square feet, the project is permitted as of right subject to the procedures and standards of Site Plan Review by the Planning Board.

The ordinance should continue to be reviewed for ways to ensure energy efficiency is supported. Areas of particular concern include the assurance that:

- ▶ rooftop and canopy installations can be installed by right.
- ▶ height and coverage restrictions do not preclude future development of solar installations
- ▶ energy retrofits do not count against setback requirements.

GOALS

Using the baseline assessment as a foundation, along with public input at various workshops, the following goals were developed to ensure a more sustainable future through energy efficiency measures and renewable energy development at the municipal and town-wide level.

Goal 1

Encourage energy efficiency, conservation, and sustainability in Watertown to reduce energy consumption and cost, and to reduce carbon emissions.

Goal 2

Establish incentives and programs for energy efficiency and renewable energy in new development and existing structures.

Goal 3

Establish and follow best management practices using materials and technology to expand energy efficiency, renewable energy, and environmental stewardship in construction, renovation and maintenance of all public buildings and facilities.

Goal 4

Increase the fuel efficiency of the Town's municipal fleet.

RECOMMENDATIONS

Goal 1. Encourage energy efficiency, conservation, and sustainability in Watertown to reduce energy consumption and cost, and to reduce carbon emissions.

- A.** Consider developing a Climate Action or Energy Master Plan and adopt it as an addendum to the Watertown Comprehensive Plan.
 - 1. Include attainable, measurable and meaningful goals for energy reduction and greenhouse gas emissions reduction with intermediate milestones and method for measuring progress over time. For example, consider a specific goal such as reducing emissions by 20% by 2020 and 80% by 2050 and share progress with an annual report.
 - 2. Develop an energy usage and greenhouse gas emissions inventory of municipal operations and the entire community and communicate the results
 - 3. Encourage net zero developments.
- B.** Reach out to the community as a whole, including developers, residents, and non-resident property owners, to inform and educate them regarding energy conservation opportunities and sustainability principles.
 - 1. Expand public outreach and engagement programs
 - ▶ Keep the websites relevant with up-to-date information on ways to be more energy efficient. Use other web-based tools like social media, as well.
 - ▶ Consider recruiting neighborhood champions (similar to the Low Carbon Diet program) to increase exposure to and adoption of energy conservation and efficiency techniques.
- C.** Consider creating a green business and a residential certification program or encourage existing certification programs such as:
 - 1. Sustainable Business Leaders Program (see <http://sustainablebusinessleader.org/>)
 - 2. Westchester County Green Business Certification Program (see <http://climatechange.westchestergov.com/wgb-certified>)

Goal 2. Establish incentives and programs for energy efficiency and renewable energy in new development and existing structures.

- A. Give special consideration to incentivize and promote energy efficiency especially in rental properties. The outreach and success of this would involve landlords and tenants since programs often require commitments from both parties.
- B. Support efforts for local businesses to become more 'green' during remodeling or redevelopment. Continue to encourage green businesses to locate in Watertown.
- C. Consider incentives and requirements to facilitate and encourage energy efficiency within the zoning or other municipal regulations.
- D. Consider programs such as LEED or a locally crafted program to facilitate energy efficient construction/development.

Goal 3. Establish and follow best management practices using materials and technology to expand energy efficiency, renewable energy, and environmental stewardship in construction, renovation and maintenance of all public buildings and facilities.

- A. Ensure case studies that track and report the progress of retrofitting municipal buildings through the ESCO are developed and well-advertised. Work with the Town Energy Manager to document the project's progress
- B. Learn about best practices (conferences, networking, and other government examples) and incorporate ideas into Watertown's decision-making and facility management.
- C. Adopt new codes and guidelines, when available, that encourage energy efficiency and clean technologies. Specifically, consider options for adopting a more Sustainable Building Code that goes beyond the Stretch Code, for example, net zero buildings, LEED (or LEED inspired) guidelines.
- D. Consider options for planning for unexpected emergencies related to power and communications with clean technologies. For example, consider district energy options with multiple power sources for the municipal complex as one specific action to be considered.
- E. Ensure that water and wastewater efficiency are considered in new construction and renovation projects, as reductions in water use will also reduce the demand for energy.
- F. Inventory materials purchasing program and develop a plan to increase post-consumer recycling content, for example in office paper.

Goal 4. Increase the fuel efficiency of the Town's municipal fleet.

- A.** Consider a fuel efficiency goal such as setting a percent decrease or setting an average fuel efficiency across the fleet within a specific number of years, and develop a plan to attain that goal with intermediate milestones.
- B.** Continue to implement the Green Fleets policy that outlines specific recommendations for purchasing only fuel-efficient vehicles for municipal use when they are available and practical.
- C.** Create and adopt a policy to “right-size” the municipal fleet.
- D.** Consider “idle-right installation” devices for Police and other relevant vehicles to increase fuel efficiency.
- E.** Adopt policies for purchasing Electric Vehicles when feasible, and consider building Electric Vehicle charging station(s). The charging stations could also be available as an incentive at municipal buildings for public consumption.
- F.** Continue to adopt best practices, when available, such as programs to reduce idling and minimizing the use of low-efficiency vehicles.

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WATERTOWN

IMPLEMENTATION

11

Introduction

This chapter is arguably the most important in the Comprehensive Plan. The implementation recommendations are based on the goals and objectives from each chapter. To ensure that this Plan is used and implemented, we recommend that the Town of Watertown create a working group comprised of representatives from Town staff and existing boards and commissions and other key stakeholders. This group would be responsible not only for coordinating overall implementation but also ensure that public outreach and education efforts are achieved. We suggest a Town Council-appointed Comprehensive Plan Implementation Committee that would operate under the auspices of the Planning Board, which is already charged with official adoption of the Plan pursuant to M.G.L. c. 41 §81D.

It is important to note that planning is a dynamic process and priorities can shift over time. A consistent review process allows

for these issues to be acknowledged while keeping each specific recommendation on the table unless a situation dictates that it is no longer relevant. In addition to implementing the plan, we recommend that the Town consider some mechanism for reporting on progress and on barriers to implementation, on a regular basis. Some communities provide this information in annual reports to the Town Council. Others have developed a follow-up evaluation form that specifically lists each action item and asks for updates.

Table 11-1 below summarizes the specific recommendations found at the end of each of the plan's chapters. The timing for implementation of the recommendations are assigned for short terms, medium terms, and long terms, to assist in suggesting a timeframe for each item to be considered. Some recommendations are ongoing in nature. The responsible parties

are also listed. If more than one entity could be charged with implementing a particular strategy or recommendation, the lead agencies listed first in bold. Table 11-2 sorts the recommendations by lead agency.

The following list identifies the acronyms used for responsible parties in the table:

- ▶ B&P – Bicycle and Pedestrian Committee
- ▶ CDP – Community Development and Planning
- ▶ ConComm – Conservation Commission
- ▶ CoA – Council on Aging
- ▶ Cul – Cultural Council
- ▶ DCR – Department of Conservation and Recreation
- ▶ DPW – Department of Public Works
- ▶ FD – Fire Department
- ▶ H – Health Department
- ▶ HA – Housing Authority
- ▶ HC – Historical Commission
- ▶ HDC – Historic District Commission
- ▶ HP – Housing Partnership
- ▶ Lib – Library
- ▶ MBTA
- ▶ MWCD – Metro West Collaborative Development
- ▶ PB – Planning Board
- ▶ PD – Police Department
- ▶ Purch – Purchasing Department
- ▶ Rec – Recreation Department
- ▶ SAC – Stormwater Advisory Committee
- ▶ SD – School District
- ▶ TC – Town Council
- ▶ TM – Town Manager
- ▶ Traf – Traffic Commission
- ▶ TW – Tree Warden
- ▶ WBCC – Watertown – Belmont Chamber of Commerce
- ▶ WCOD – Watertown Commission on Disability
- ▶ WE3C – Watertown Environment and Energy Efficiency Committee

Implementation Matrix

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Land Use Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
1A	Enhance building, parking, and streetscape aesthetics by adding design and landscaping standards to the Limited and Central Commercial district regulations, including provisions for public art.	✓				CDP, PB, DPW, TW, Traf
1B	Incorporate 'green' building practices to encourage energy efficiency and that projects are planned, designed, constructed, and managed to maximize positive environmental benefits.	✓				CDP, WE3C, WBCC, PB
1C	Update the Watertown Square Design Handbook and relevant sections of the zoning ordinance to include signage and street façades and extend to other business districts. Design should consider a project's relation to the Square, its streetscapes, and those projects that enhance the Square should be encouraged.		✓			CDP, PB
1D	Encourage uses that will bring interest and vitality to Watertown Square, attract foot traffic and increase street life. Utilize cultural assets and uses to seed this process.				✓	CDP, PB, Cul, WBCC
1E	Reinforce Watertown Square as a Town Center.				✓	CDP, PB, Cul, WBCC
1F	Make the streets in Watertown Square more connected through advancing Complete Streets strategies.		✓			DPW, CDP, B&P, Traf
1G	Study Watertown Square to identify transportation enhancements that are possible to enhance traffic, safety, operations and parking.		✓			DPW, CDP
1H	Consider options for a Conceptual Master Plan for the Arsenal Street Corridor, to guide the revision of zoning, transportation planning, investments in public spaces and amenities, infrastructure planning, promotion of economic development, design standards, and integration with adjacent neighborhoods.	✓				CDP, PB, DPW, Traf, new Economic Development Commission

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Land Use Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
2A	Within the squares, consider strategies to create a diverse retail mix with shopping and dining choices to encourage foot traffic and browsing of restaurants, cafes, retail boutiques, and bookstores. Consider incentives such as expedited permitting to encourage mixed-use development where appropriate and allow for increased density in Watertown Square.	✓				CDP, PB, new Economic Development Commission
2B	Support infill and redevelopment of vacant/underutilized sites.				✓	CDP, PB
3A	Develop an inventory of and strategy for reusing vacant or abandoned properties, and provide incentives for those properties to be redeveloped.		✓			CDP, PB
3B	Establish design guidelines appropriate to proactively plan for redevelopment within Watertown's squares and corridors.. The guidelines should focus on the building massing, setbacks and streetscape/landscaping improvements to ensure an attractive and healthy connection with the street. Parking should be removed to the rear of the buildings.	✓				CDP, PB
3C	Develop zoning changes described earlier in the Arsenal Street Corridor subsection of this element. The objective is to ensure that future land use along the corridor emphasizes commercial, office and retail development and protects and enhances a transition between Arsenal Street and the abutting residential neighborhoods. Any mixed use development should consider a minimum required percentage of commercial space, and purely residential development should not be allowed. Other changes could include allowing multi-family residential, retail and structured parking; reducing the setbacks to allow buildings to be built to the street line; revising the required open space set aside to be used as a civic amenity; and updating the parking standards.	✓				CDP, PB

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Land Use Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
3D	Consider design guidelines for new construction and proposed improvements to existing buildings to protect and retain the local historical context (prevailing streetscape and the traditional building styles found in the neighborhoods), and to enhance landscaping (6/18/14 Forum).	✓				CDP, PB, HC
3E	Consider transit-oriented mixed use development around the site currently occupied by the MBTA yard. A number of buses go through this yard on a daily basis and there may be opportunities to redevelop some of the land utilized by the MBTA. When that land becomes available, it should be zoned for higher density mixed use development with retail uses that cater to the needs of commuters and have reduced parking standards in light of the onsite mass transit connections.			✓		CDP, PB
3F	To enhance the vibrancy of Watertown Square, consider options to make connections and streetscape improvements on the south side of the river, and explore opportunities for the MBTA yard for TOD and/or multi-modal enhancements.		✓			CDP, PB, DPW, MBTA
3G	Develop options to make Watertown Square more pedestrian friendly and safe.				✓	CDP, B&P, DPW, WCOD
3H	Identify and design Town gateways to clearly mark entrances into Watertown and to support the town identity.		✓			CDP
3I	Improve pedestrian links from Watertown Square to the River.				✓	B&P, CDP, DPW
3J	Enhance the vibrancy of Watertown Square by designing and building a multipurpose trail system, including enhancing the existing riverwalk and programming additional activities.			✓		B&P, CDP, Rec
4A	Consider options for differentiating uses that are By Right and By Special Permit.	✓				CDP, PB

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Land Use Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
4B	Consider revisions to height requirements to allow only the first several stories of a building be built to a build-to-line, and require additional stories to be stepped back a sufficient distance to improve sight lines. Also, consider options for increasing setbacks from the sidewalk.	✓				CDP, PB
4C	Consider options for allowing additional stories with further step backs if development enhancements are provided. Incentives for the additional height could include historic preservation renovations, providing public and/or visual access to the Charles River, developing a mixed use project, and including greater than the minimum affordable housing as part of the development, for example.	✓				CDP, PB
4D	Ensure projects are sensitive to the Charles River along Pleasant St. The step backs should apply along Pleasant St. and for any buildings on the Charles River side. Consider increases in the rear setbacks and landscaping requirements for buildings along the Charles River and in transitions zones abutting single and two-family residential neighborhoods.	✓				CDP, PB
4E	Consider options for refining the Pleasant St. Corridor District by identifying areas where mixed-use is mandatory and where only commercial development is incentivized. Also consider this for the Arsenal Street Corridor.	✓				CDP, PB
4F	Provide development incentives to encourage preservation and restoration of historic buildings in addition to the other incentives provided in the district.	✓				CDP, PB, HC
4G	Provide for public access, as well as visual corridors, to the Charles River where practicable.				✓	CDP, PB, DCR, B&P
4H	Seek opportunities to bury utility lines where possible.		✓			CDP, DPW

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Land Use Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
5A	Consider revising zoning requirements for conversions of single- to two-family homes in the CR, SC, T, R.75 and R1.2 districts to determine whether the locations of such conversions should be specified within those districts. Restrictions similar to those in the T-zone could be considered in other districts in order to avoid conversions that are out-of-scale when compared to the neighborhood in which the home is located.	✓				CDP, PB
5B	Reconsider allowing accessory units, including in separate structures (such as carriage house conversions), as these would be opportunities to provide additional units without tearing down or substantially adding on to an existing single family.				✓	CDP, PB
5C	Enhance streetscape amenities, crosswalks and traffic calming measures (see Chapter 2 - Transportation, Circulation and Parking).	✓				CDP, PB, HP
5D	Continue to require new development to include sidewalks, and to connect to municipal sidewalks where feasible (see Chapter 2 - Transportation, Circulation and Parking).				✓	DPW, B&P, Traf
5E	Develop basic design criteria for roof types, dormers, street façade, and encroachments into setbacks (overhangs, open porches, etc.).	✓				PB, DPW, B&P

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Transportation Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
1A	Consider Traffic Calming Measures: 1. Curb extensions, bump outs, and/or neckdowns along with on-street parking. 2. Narrowed travel lanes and widened shoulders with potential for bike lanes. 3. Raised crosswalks or table top intersections. 4. Roundabouts.				✓	DPW, Traf
2A	Encourage the enhancement of bus stops and expanding of bus routes to reduce the use of the single occupancy vehicle should be explored.		✓			TM, TC, MBTA, Traf
2B	Consider the creation of a transit sub-committee or a liaison that can work with the MBTA and others to expand mass transit service, particularly along the #70/70A, 71 routes and 73 routes, and Pleasant Street (this is currently being considered by the Town).	✓				TM, TC, MBTA
2C	Work with the MBTA to install more bus shelters and benches at bus stops, as well as fare vending machines, to encourage more people to utilize the service.		✓			TM, TC, MBTA
2D	Coordinate with private businesses and residential complexes, especially along Arsenal and Pleasant Streets, to provide expanded, shared shuttle bus services to accommodate demand between business locations and key transit stops such as Harvard Square, Alewife, etc.				✓	CDP, PB, TM
2E	Consider options for developing a bus rapid transit route along the Arsenal Street corridor to accommodate anticipated future growth. Also consider options to make connected bus routes north-south to Belmont, and Brighton transit centers and nodes			✓		MBTA

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Transportation Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
2F	Coordinate with the MBTA to install Charlie Card machines at strategic locations in Watertown.		✓			MBTA, TM
2G	Consider other modes of transit, such as via water (Charles River) and light rail to reduce congestion on Watertown's major arterials.			✓		MBTA, TM
2H	Evaluate future development in terms of its relationship to public transportation. Include a design criterion for future development that promotes alternate modes of transportation.		✓			PB, CDP
3A	<u>Pedestrian Improvements</u> 1. Design ADA compliant sidewalks that include a landscaping buffer, where feasible, between the sidewalk and roadway.				✓	DPW, CDP, B&P, WCOD
	2. Where appropriate, replace the existing faded crosswalks with imprinted/textured crosswalks at intersections and mid-block locations along major redevelopment corridors such as Arsenal Street and in Watertown Square.				✓	DPW
	3. Construct crosswalks that enhance the awareness of drivers to pedestrians such as raised crosswalks, textured treatments or table top at intersections and other common pedestrian crossing points (especially on wide streets) and other current techniques.				✓	DPW
	4. Enhance the areas in and around public open spaces (parks, schools, athletic fields) so that children and parents won't have the perception that walking is not a safe option. This should consider enhancing the street tree inventory to provide protection and shade to pedestrians.				✓	Rec, SD, CDP, DPW, B&P

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Transportation Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
3A	5. Continue to look for ways to expand the Safe Routes to School Program and encourage the use of tools like the “walking school bus” programs at the elementary and middle schools.				✓	SD, B&P
	6. Install crosswalk signage to reinforce vehicle and pedestrian awareness. Consider illumination of signage and crosswalks.				✓	DPW
	7. Install countdown pedestrian signal heads at signalized crossings that do not currently have them.		✓			DPW
	8. Educate pedestrians to "Stop- Look- and Wave" at crosswalks.				✓	PD
	9. Investigate locations for installation of future walking trails and connections with existing trails in addition to the “Community Path” such as along Pleasant Street and the Charles River Reservation. Existing and future streetscape enhancements along roadways should connect directly to the Reservation.		✓			CDP, B&P, DCR
	10. Where there is a suitable ROW, encourage wider sidewalks to better accommodate pedestrians and to allow for outdoor dining in places like Watertown Square and other business districts.				✓	CDP, PB
3B	<u>Bicycle Improvements</u> 1. Update the 2002 Bicycle Transportation Plan including reviewing routes identified and update as needed to reflect current land use/ bicycle demands, including bicycle counts, and an implementation/ prioritization plan should be developed.		✓			B&P, CDP

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Transportation Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
3B	2. Develop and sign/stripe on-road bicycle routes, considering the latest technology, in accordance with the updated recommendations in the Bicycle Transportation Plan.	✓				DPW, B&P, Traf
	3. As Arsenal Street, Mount Auburn Street, and others as appropriate, is redeveloped ensure that Complete Streets techniques are used that include the option to provide bicycle lanes/features along the entire corridor.	✓				DPW, B&P, Traf
	4. Bicycle racks should continue to be installed and maintained at all public and private activity centers.				✓	DPW, PB, B&P
	5. Improve bicycle mobility on roads through the implementation of roadway markings (sharrows) and strategic signage.				✓	DPW
	6. Educate the public about existing bicycling opportunities through wayfinding signage, maps and information on the Town website.		✓			B&P
	7. Continue to identify potential opportunities for on and off-road bicycle connections between corridors and traffic destinations.				✓	B&P
	8. Investigate the feasibility of a bike share program, perhaps through the expansion of the Hubway program.	✓				B&P
	4A	Encourage the incorporation of multimodal designs into roadway projects to ensure that streets are shared by all users and not dominated by cars.				✓

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Transportation Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
4B	An emphasis on green design elements that promote an environmentally sensitive, sustainable use of the public right-of-way should be a priority. Greener designs could consider incorporating ideas like 'parklets' in place of parking spaces (public green spaces), street trees, rain gardens, bio-swales, paving materials and permeable surfaces, with plants and soils collecting rain water to reduce flooding and pollution.				✓	DPW, CDP, B&P, SAC
4C	Encourage the use of smarter technology-assisted design elements that incorporate intelligent signals, electric vehicle sharing, car and bicycle-sharing, way-finding and social networks for greater system efficiencies and user convenience.				✓	DPW, CDP, B&P, Traf
4D	The Town should consider developing a "Complete Streets" policy and checklist or toolbox that is appropriate for the community goals. Elements should be respectful of the specialized needs and any environmental resources within the Town. These should be balanced with the overarching goal of providing for all modes of transportation.	✓				DPW, CDP, B&P, SAC, Traf
4E	Consider expanding streetscape and hardscape elements along Arsenal Street and in Watertown Square and Coolidge Square, creating key gateways or nodes at specified locations. Include a landscaping buffer between the sidewalk and roadways were feasible.		✓			DPW, CDP

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Transportation Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
4F	Develop access management and traffic impact study guidelines and incorporate them into the zoning ordinance. Minimizing curb cuts and greater separation between driveways improve safety, appearance, and the viability of roadways. An access management approach could benefit many corridors where vehicle conflicts are present or there is an opportunity for future redevelopment; Arsenal Street, Pleasant Street, etc.	✓				CDP, PB, DPW, Traf
4G	Review the zoning ordinance and consider amendments that would encourage mixed-use (residential, office, retail) and compact/clustered development in areas already served by transit.	✓				CDP, PB,
4H	The Town should address signage clusters on town roadways, and develop a wayfinding signage program that enhances the "Watertown Experience", taking any design guidelines into account.		✓			DPW, CDP, Traf
5A	Consider developing a Town-wide traffic counting/monitoring program to help determine overall vehicular, pedestrian and bicycle travel patterns and volumes to help identify demands and opportunities to expand multi-modal options for improving congestion. Some of this data could likely be generated/reported as part of the permitting process.		✓			DPW, B&P, Traf
5B	Locate new residential, commercial and other services in transit-oriented locations (i.e., Arsenal, Galen, and North Beacon Streets, Watertown Square) to reduce the need for cars and enable people living near transit and services to reduce auto trips. Other areas should be promoted as viable locations for transit.				✓	CDP

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Transportation Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
5C	Any higher density/mixed use housing and commercial infill development that is consistent with this Plan and zoning standards should only be in areas approximate to existing public transportation services. Encourage child-care facilities and other high volume traffic generator services in residential or commercial facilities/developments to reduce traffic impacts associated with child-care drop-off and pick-up.	✓				CDP
5D	Establish multi-modal levels of service (LOS) standards that consider all modes of transportation, including transit, bicycles, and pedestrians in addition to automobiles.		✓			CDP, DPW, B&P, Traf
5E	Where appropriate, install timed signals along Arsenal Street and other major streets to allow traffic to move at a steady rate to minimize air quality impacts from "stop and go" traffic. Also consider signal prioritization for transit, in coordination with the MBTA.		✓			DPW, Traf
5F	Work with the State to apply for funding through the State Transportation Improvement Program (TIP) and address intersection congestion under the Highway Safety Improvement Program (HSIP) through the Healthy Transportation Policy established by MassDOT. Traffic flow, character, and safety should be reviewed and improved. MassDOT has identified several intersections eligible for HSIP funding; which should be investigated by the Town for improvement and to understand operational deficiencies. Road Safety Audits (RSA) should be conducted (with key public officials input) to determine issues and opportunities for these areas.		✓			DPW, CDP, Traf

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Transportation Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
5G	Develop corridor improvement strategies for major roadways in Town, including but not limited to Main Street, Arsenal Street, North Beacon Street, Pleasant Street, Galen Street, Mt Auburn Street, etc. Incorporate improvements that focus on roadway/intersection operations, pedestrian/bicycle accommodations, and traffic calming strategies, as described above.		✓			DPW, CDP, Traf
6A	Create a parking plan that focuses exclusively on the current and future needs of Watertown Square. Addressing parking options in the Square should be done in order to focus on meeting economic development goals for the Square and should consider the conditions under which the parking requirements could be reduced, including shared parking.		✓			TC, TM, CDP, Traf
6B	Evaluate future development proposals with an eye towards increasing the publically available parking supply, particularly in Watertown Square.				✓	CDP, PB
6C	Revise zoning to provide incentives to (re)development projects that develop creative ways to reduce or share parking needs.	✓				CDP, PB
6D	Reduced parking requirements should be considered for certain projects when located within a five minute walk radius from an existing or planned and funded bus stop/route.	✓				CDP, PB
6E	Encourage reduced parking for local development/employers that implement: 1. Trip reduction incentives; 2. Flexible work hours and telecommuting to reduce peak-hour commute congestion; 3. Publicly available shuttle bus service to area MBTA stations and points of interest.	✓				CDP, PB

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Transportation Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
6F	Encourage shared parking agreements, which would make the most efficient use of existing and new parking.	✓				CDP, PB
6G	Encourage consolidation of surface parking lots into structured parking facilities and redevelopment of surface lots with residential or commercial development where allowed by zoning, or to create more open space.			✓		CDP, DPW
6H	Re-evaluate parking policies for on-street parking, signage, meters, hours, lots, administration, and signage, etc. to help make Watertown more user-friendly and welcoming.	✓				TC, TM, CDP

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Housing Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
1A	The HPP indicates that there is a significant housing affordability gap in Watertown. To help address this gap, the HPP sets a goal of producing 78 SHI units per year to help the Town meet the State's 10% target within seven years. The Town should review its progress annually and adjust as needed.				✓	HP, CDP
1B	Ensure that expiring subsidized units are recertified so that they remain on the SHI.				✓	HP, CDP
1C	Identify site(s) for mixed-use developments to provide housing units in amenity rich environments to meet the preferences of households. As described in Chapter 1 - Land Use, this could include parcels along high ridership bus routes, surface parking lots along Arsenal Street, and other I-3 zoned land where multi-family housing is allowed by special permit. Identifying nodes for mixed-use in the Pleasant Street Corridor zoning district could also be a possibility.	✓				PB, CDP, HP, HA
1D	Hold discussions with developers to better understand local, regional and statewide housing market development trends.		✓			HP, CDP
1E	Continue to invest in acquisition/rehab projects to increase the supply of affordable housing. Continuing to invest resources through partner organizations, including the use of HOME funds, will enable the Town to further increase its affordable housing stock. Consider options to purchase existing two-families throughout the community for rehabilitation to use as affordable and middle income units.				✓	HP, MWCD

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Housing Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
1F	Ensure that setbacks and other dimensional regulations are met for proposed teardowns. Review existing dimensional requirements and consider design guidelines to maintain existing neighborhood character and promote greater symmetry between the old and new structures.				✓	CDP, PB
1G	Consider the adoption of the Community Preservation Act (CPA). The CPA allows communities to create a local Community Preservation Fund for affordable housing, open space protection and historic preservation. Community preservation funds are raised through a tax surcharge up to 3% of the tax levy against real property, which can only be adopted through a town or citywide ballot referendum. Of monies raised, at least 10% must go to affordable housing initiatives.		✓			HP, CDP
2A	Multi-family development requires a special permit for 3-4 units, or a special permit with site-plan review for projects with four units or more. Allowing multi-family structures by right for up to four units with site plan review would provide opportunities for more affordable condominium or rental units. For larger projects, a special permit would still be required with site plan review. As an incentive, consider allowing more units by right with site plan review if a certain number of affordable units are provided as part of the project.	✓				TC, PB, CDP
2B	Analyze existing Industrial and the Pleasant Street Corridor zoning districts to identify areas more appropriate for mixed-use and/or multifamily development, and potentially rezone. See the recommendations for Pleasant Street in Chapter 1 - Land Use regarding land use and design standards to be considered.	✓				PB, CDP, HP, HA

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Housing Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
2C	Explore opportunities to allow for greater densities in the Cluster Residential zoning district. Consider allowing for greater densities, or providing a density bonus for projects with smaller unit sizes (e.g. cottage developments), to provide an opportunity to create more affordable housing options. Consider allowing for higher density if affordable housing is provided. Cottage style development, especially as an option for elderly housing, is an example of a newer style of clustered housing.		✓			TC, PB, CDP
2D	Amend the parking requirements for multi-family developments. Consider lowered minimum parking standards or tandem parking, particularly where transit is available.	✓				TC, PB, CDP
2E	To increase the amount of new housing units available to families with children, couples and single people with lower incomes, consider amending the inclusionary zoning requirements to increase the percentage of affordable units to be provided from 10% to 12.5%. Also, consider lowering the threshold for providing affordable housing units from 15 to six. Reducing the minimum size of dwelling units is another method to encourage greater housing choices.	✓				TC, PB, CDP
2F	Consider options for reincorporating an accessory housing ordinance where appropriate, which could provide for additional opportunities for alternative housing opportunities for families. Consider ways to allow accessory units for family members, or, if rented to others, for affordable housing. Currently they are not allowed.		✓			TC, PB, CDP

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Housing Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
2G	Amend the zoning ordinance to require a minimum number of new housing units have three bedrooms or more, including affordable units created by Watertown's inclusionary zoning.	✓				PB, CDP, HP
3A	Work to address senior needs through supportive housing policies.				✓	HP, WCOD, CDP, MWCD
3B	Explore mechanisms to allow Watertown's seniors to age within the community and to better serve persons with disabilities, through housing rehabilitation/modification programs. Watertown should promote existing programs, including the Home Modification Loan Program, and match these funds with local HOME funds for additional home improvements.				✓	HP, WCOD, MWCD
3C	Support emergency repairs programs designed to provide assistance to income-eligible Watertown residents to make repairs and alterations to their homes for safety and health reasons. Senior and disabled households should receive priority assistance.		✓			CDP, HP, MWCD

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Economic Development Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
1A	Promote Watertown as a favorable municipal environment for firms in the key industry clusters of Life Sciences, Information and Media, Design, and Advanced Manufacturing, as identified in the Strategic Framework for Economic Development.				✓	WBCC, new Economic Development Commission
1B	Encourage the provision of flexible, affordable, and right-sized office space for small, growing and mid-sized firms.	✓				CDP, PB, WBCC
1C	Facilitate the development of a continuum of housing options that supports the live-work-play lifestyle preferred by workers in the Town's target industries especially along the major corridors, such as Pleasant and Arsenal Street.				✓	CDP, PB
2A	Encourage investment in the roadway and utility infrastructure.				✓	DPW, CDP
2B	Strengthen networking opportunities for local businesses.				✓	WBCC, new Economic Development Commission
2C	Promote Watertown as a great place to do business.				✓	WBCC, TC, new Economic Development Commission
3A	Promote investment in vacant or underutilized properties on the Pleasant Street, Arsenal Street, Main Street and Galen Street Corridors in order to maintain an appropriate mix of land use types in the property tax base.	✓				WBCC, MWCD, new Economic Development Commission
3B	Identify and designate potential development sites for the M.G.L. c. 43D Expedited Permitting Program.				✓	CDP, MWCD, new Economic Development Commission

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Economic Development Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
3C	Set in motion the remediation of the 25 properties identified by the Massachusetts Department of Environmental Protection as needing or potentially needing environmental remediation.				✓	CDP
3D	Build institutional capacity to improve existing business districts by unifying businesses and helping them connect to the community.				✓	WBCC, CDP, MWCD, new Economic Development Commission
3E	Implement zoning and other policies that link commercial development with contributions to community benefits.		✓			CDP, PB
4A	Enhance the School District curriculum and facilities to ensure children and young adults are prepared to participate in the region’s employment opportunities.				✓	WBCC, new Economic Development Commission
4B	Connect the workforce to training and continuing education opportunities that are tied to the strengths of the local business community.				✓	WBCC, new Economic Development Commission
5A	Develop marketing strategies that celebrate recreational opportunities and facilitate recreation-oriented concessions.				✓	WBCC, B&P, CDP, HC, new Economic Development Commission
5B	Improve the quality of street life and sidewalk culture on primary commercial corridors.		✓			CDP, TM, Traf
5C	Promote neighborhood retail in areas such as Watertown Square, Arsenal Street, Pleasant Street (through mixed use in targeted areas), Main Street and Coolidge Square.		✓			CDP, new Economic Development Commission, PB, Traf

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Economic Development Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
5D	Provide and promote the arts to enhance the sense of place and quality of life for all residents.				✓	CDP, Cul, new Cultural Department
6A	Consider creating “one-stop shop” type capacity in Town Hall to support businesses interested in locating in Watertown, including marketing of development-ready sites and guidance for permitting and other business needs.		✓			TC, TM, new Economic Development Commission
6B	Strengthen partnerships with the Chamber of Commerce and industry councils to improve business retention and attraction.				✓	TC, TM, new Economic Development Commission
6C	Maximize relationships with state and regional agencies for infrastructure, training, education, and networking. e.g., Metro North Regional Employment Board for training/education opportunities and MassWorks for infrastructure.		✓			TC, TM

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Open Space and Recreation Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
1A	In an effort to provide better access to park and recreational facilities, the Town should identify potential locations for small parks, pocket parks, playgrounds and tot lots, especially in conjunction with large new commercial or residential developments.				✓	Rec, CDP, PB
1B	Establish Level of Service (LOS) standards for park and recreation programs and fields.		✓			Rec, SD
1C	Continue efforts to upgrade park and recreation facilities for all users and to meet applicable ADA standards as improvements are made.				✓	Rec, SD
2A	Encourage the creation of “friends of” groups to provide stewardship of other parks. These groups can help to sponsor cleanups and similar activities, as well as recognize issues that the Town may need to address but has not yet flagged.		✓			Rec
2B	Management plans should be developed for each major town-owned facility. Expand maintenance management planning for park and recreation facilities. In addition to planning for the routine maintenance of the facility and grounds, long-term capital needs and repairs can be identified and scheduled.	✓				Rec, DPW
2C	Maintenance plans should establish standards designed to achieve specific results				✓	DPW, Rec
2D	Seek better coordination with outside groups to leverage park and field maintenance and stewardship.				✓	Rec, DPW, SD
2E	Continue to inventory playground equipment on a regular basis.				✓	Rec, SD

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Open Space and Recreation Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
3A	Consider options to require open space to be set aside for new or redeveloped residential and commercial land. As redevelopment occurs, especially along the Arsenal and Pleasant Street corridors, look for opportunities to establish new public open spaces to serve those developments and the Town.	✓				CDP, PB
3B	Consider properties acquired through tax default for open space before resale or redevelopment.				✓	TM, TC
3C	Pursue remediation, acquisition and/or public access to Walker Pond, as well as Sawins and Williams Ponds. Each of these wetland areas need various levels of remediation and should be restored and integrated into the town's open space network, in near or long term.		✓			ConComm, TC, Rec
4A	Work with DCR to finalize and implement recommendations for the Charles River Basin Pedestrian and Bicycle Connectivity Study.				✓	CDP, B&P, DCR
4B	Work with developers to create or enhance multi-use connections between development projects (including the Arsenal Mall and athenahealth redevelopment projects) to increase physical and visual access to the Charles River.				✓	CDP, PB
5A	Consider development of a multi-use, multi-generational community center, including a swimming pool, to provide a variety of activities throughout the year.			✓		Rec
5B	Look for ways to better integrate services and programming with the Senior Center and the public schools and facilities, as well as ways to incorporate public health and physical fitness programs.				✓	Rec, H, CoA, B&P, SD

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Open Space and Recreation Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
5C	Continue developing safe walking paths that connect existing open spaces and parks. New paths should be handicap-accessible and multi-use, serving walkers, runners, bicyclists and wheelchairs.					DPW, Rec, B&P
5D	Complete the Community Path and support other linear path/park development.			✓		CDP
5E	Install bicycle racks at all park facilities.	✓				Rec
5F	Consider canoe and kayak rentals as well as other river-focused activities to enhance outdoor recreation opportunities.		✓			Rec
5G	Develop publicly available dog parks within Town to allow off leash recreation options.	✓				DPW, CDP

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Natural Resources Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
1A	Enforce stormwater management best management practices to improve water quality of the river by reducing non-point source pollution.				✓	CDP, DPW, SAC
1B	The Town has a Stormwater Advisory Committee whose charge it is to review and make recommendations regarding ordinances and regulations, as well as public education and outreach, and program funding opportunities. This committees' work is an important part of compliance with our federal permit requirements and improving stormwater impacts to the ecosystem.				✓	SAC
1C	The Town should consider a Low Impact Development (LID) ordinance to further minimize the volume, as well as the pollutant level, of post-development stormwater runoff. Both the Town and private developers should take advantage of the most recent and effective approaches to LID.	✓				CDP, DPW, PB, SAC
1D	Continue to work closely with DCR during the transition of the GSA site along the Charles River to ensure the restoration of wetlands and accessibility to the passive recreation areas from Watertown neighborhoods.		✓			ConComm, Rec, DCR
1E	Implement new design guidelines (as recommended in the Land Use chapter) to ensure that the river is physically and visually accessible and promote it for passive and active uses.	✓				CDP, PB
1F	Encourage cultural and educational activities that promote the river's rich history and abundant natural resources.				✓	DCR, HC, Cul
1G	Continue to work with stakeholder groups to support stewardship, protection and access for the Charles River and ensure high water quality to benefit flora, fauna and good health.				✓	ConComm, DCR
2A	Adopt policies that will result in better protection and maintenance of Watertown's public street trees.		✓			TW

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Natural Resources Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
2B	Encourage residents to protect existing and plant new shade trees on private property.		✓			TW
2C	Collaborate with local groups to ensure the tree inventory is maintained.				✓	TW
3A	Make information about Watertown's natural resource areas easily accessible on the Town's website.				✓	TM, ConComm
3B	Enhance public education about sustainable practices that can help reduce the environmental footprints of Watertown citizens.				✓	WE3C, SAC
3C	Create and coordinate educational signage at resource areas to facilitate learning while encouraging pride and self-identification with the Town's natural resources.		✓			ConComm
4A	Work with developers to identify opportunities to incorporate publicly accessible open space into new projects.				✓	CDP
4B	Develop and formalize a policy to ensure that properties that the Town acquires through tax default are considered for open space before resale or redevelopment.				✓	CDP, Rec, ConComm
4C	Establish a "pocket park" program to encourage public/private open space in neighborhoods.		✓			Rec
5A	As mentioned in the Open Space and Recreation element, pursue remediation, acquisition and/or public access to all of Walker Pond in west Watertown , as well as Sawins and Williams Ponds in the eastern part of town.		✓			CDP
5B	Consider the historic value of landscape features of the historic Arsenal properties.				✓	HC, CDP

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Historic and Cultural Resources Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
1A	Consider design guidelines for new construction and proposed improvements to existing buildings to protect and maintain the local historical character (prevailing streetscape and traditional building styles found in the neighborhoods).	✓				HC, HDC, CDP, TC
2A	Maintain asset mapping for historic and cultural resources.				✓	HC, new Cultural Department
2B	Develop a marketing strategy to promote heritage awareness and preservation.		✓			CDP, HC, HDC, new Cultural Department
2C	Provide incentives to encourage redevelopment of historic buildings.		✓			HC, HDC, CDP, TM, TC
3A	Develop a marketing strategy to expand awareness of Watertown's cultural assets.		✓			CDP, Cul, WBCC, new Cultural Department
3B	Support the institutions and special events programming that celebrate the Town's multi-cultural and artistic identity.				✓	CDP, Lib, PB, Cul, TC, TM, WBCC, new Cultural Department
3C	Develop a public arts program to foster lively and attractive streetscapes.	✓				CDP, Cul, PB, DPW, new Cultural Department

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Public Facilities and Services Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
1A	Make better use of technology to increase efficiency in all town departments.				✓	TM, TC
1B	Improve resident services by revising the website and making it easier to navigate. Centralize the website updating to free up Departmental staff for more department-specific tasks and to have consistency in the presentation of town information.				✓	TM, TC
1C	Consider an “ombudsman-like” person to centralize consumer questions and resolve complaints.		✓			TM, TC
1D	Continue to assess the Town organization to ensure that all departments are adequately staffed to get the job done well.				✓	TM, TC
2A	Make road and sidewalk improvements, and improve the overall Road Surface Rating for the Town’s roadways, while incorporating a Complete Streets concept, and encouraging multi-modal travel.				✓	DPW
2B	Continue to investigate the feasibility of consolidating DPW facilities maintenance with the School District’s facilities management staff.		✓			TM, DPW, SD
2C	Continue collaboration with the MAPC to keep abreast of regional trends.				✓	CDP
2D	Establish record-keeping procedures that are adequate and sustainable.				✓	TM, TC
3A	Consider establishing a Building Committee, which would include representatives from Town departments, to comprehensively review short- and long-term needs of municipal buildings and to make recommendations for prioritizing facility improvements. Such a Committee would provide input into the CIP process, but its focus will be on building needs for all departments.	✓				TM, TC

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Public Facilities and Services Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
3B	Implement the five-year Capital Improvement Program and reassess annually the priority projects, keeping to the Town Council goal of dedicating a set percentage of the town budget to capital expenditures.	✓				TM, TC
3C	Review, update and implement the recommendations of the 2008 Facilities Assessment Study as appropriate.				✓	TM, new Building Commission
3D	Continue to look at all avenues for the financing of the Town's CIP.				✓	TM, TC, CDP
4A	In planning, make connections between public health, land use, and transportation				✓	H, CDP, DPW, B&P
4B	Seek opportunities to educate residents on nutrition, exercise and the risks of alcohol, tobacco and recreational drug use.				✓	H, SD
4C	Consider implementing wellness programs for town employees.	✓				H, SD
4D	Ensure that the needs of the elderly population (that is expected to grow larger), youth and recent immigrants are addressed through town and community services.				✓	TM, TC, H, COA, HA
4E	Consider options to permanently fund the Social Services Resource Specialist (SSRS) position.	✓				TM, TC
4F	Nurture cooperative relationships with established and new community agencies so that they are involved and effective members of the community.				✓	TM
4G	Support permanent locations for community gardens.				✓	TC
5A	Incorporate cost-effective Green Infrastructure strategies into all municipal projects for stormwater management, drainage.		✓			DPW, SAC

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Public Facilities and Services Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
5B	Retrofit and prepare Watertown's essential infrastructure to maintain critical functions through weather and energy related disturbances.		✓			TM, DPW
5C	Seek ways to increase recycling and reduce solid waste disposal.				✓	DPW
5D	Educate Town residents about stormwater issues and proper management.				✓	DPW, SAC
6A	Maintenance is essential to providing a healthy, safe learning environment for students. Perform needed maintenance on a regular basis, and approach it as an opportunity to upgrade facilities to become safer, healthier, more sustainable, energy efficient, and enriching.				✓	SD
6B	Ensure that all communication systems, such as computers, telephones and wireless Internet access, are current, accessible and meet state and federal regulations. The School District should plan to adapt to the evolution of technology to make it an asset to student learning, more efficient coordination between schools, and connection with central school administration and with the Town government as a whole.				✓	SD
6C	Review the recent Schools Facilities Assessment and evaluate the alternatives for renovating and/or replacing school facilities.	✓				SD
6D	Assess and prioritize school facilities to identify priority projects and seek funding assistance through state or federal programs.				✓	SD

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Energy Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
1A	Consider developing a Climate Action or Energy Master Plan and adopt it as an addendum to the Watertown Comprehensive Plan.	✓				WE3C, Purch, Town Departments including Schools
1B	Reach out to the community as a whole, including developers, residents, and non-resident property owners, to inform and educate them regarding energy conservation opportunities and sustainability principles.	✓				WE3C
1C	Consider creating a green business and a residential certification program or encourage existing certification programs		✓			WE3C, CDP, WBCC
2A	Give special consideration to incentivize and promote energy efficiency especially in rental properties. The outreach and success of this would involve landlords and tenants since programs often require commitments from both parties.				✓	WE3C
2B	Support efforts for local businesses to become more 'green' during remodeling or redevelopment. Continue to encourage green businesses to locate in Watertown.				✓	WE3C, CDP, WBCC
2C	Consider incentives and requirements to facilitate and encourage energy efficiency within the zoning or other municipal regulations.				✓	WE3C, TM, Town Departments including Schools
2D	Consider programs such as LEED or a locally crafted program to facilitate energy efficient construction/development.	✓				CDP, WE3C
3A	Ensure case studies that track and report the progress of retrofitting municipal buildings through the ESCO are developed and well-advertised. Work with the Town Energy Manager to document the project's progress	✓				WE3C, Town Departments including Schools

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Energy Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
3B	Learn about best practices (conferences, networking, and other government examples) and incorporate ideas into Watertown's decision-making and facility management.				✓	All Town Departments
3C	Adopt new codes and guidelines, when available, that encourage energy efficiency and clean technologies. Specifically, consider options for adopting a more Sustainable Building Code that goes beyond the Stretch Code, for example, net zero buildings, LEED (or LEED inspired) guidelines.				✓	PB, TC, CDP WE3C
3D	Consider options for planning for unexpected emergencies related to power and communications with clean technologies. For example, consider district energy options with multiple power sources for the municipal complex as one specific action to be considered.				✓	WE3C
3E	Ensure that water and wastewater efficiency are considered in new construction and renovation projects, as reductions in water use will also reduce the demand for energy.				✓	DPW
3F	Inventory materials purchasing program and develop a plan to increase post-consumer recycling content, for example in office paper.				✓	Purch
4A	Consider a fuel efficiency goal such as setting a percent decrease or setting an average fuel efficiency across the fleet within a specific number of years, and develop a plan to attain that goal with intermediate milestones.		✓			TM, WE3C
4B	Continue to implement the Green Fleets policy that outlines specific recommendations for purchasing only fuel-efficient vehicles for municipal use when they are available and practical.	✓				DPW, WE3C, Purch, CDP

Table 11-1 Plan Recommendations – Priority and Responsible Party

#	Energy Recommendations	Time Period for Implementation				Responsible Party
		Short Term	Medium Term	Long Term	Ongoing	
4C	Create and adopt a policy to “right-size” the municipal fleet.	✓				DPW, WE3C, Purch
4D	Consider “idle-right installation” devices for Police and other relevant vehicles to increase fuel efficiency.		✓			PD, WE3C, Purch
4E	Adopt policies for purchasing Electric Vehicles when feasible, and consider building Electric Vehicle charging station(s). The charging stations could also be available as an incentive at municipal buildings for public consumption.		✓			TM, WE3C, Purch
4F	Continue to adopt best practices, when available, such as programs to reduce idling and minimizing the use of low-efficiency vehicles.				✓	All Town Departments using town vehicles

Table 11-2 Plan Recommendations – “Lead Agency”

Action Lead By	Time Period			
	Short Term	Medium Term	Long Term	Ongoing
Bicycle and Pedestrian Committee	T-3B-1, T-3B-8		LU-3J	LU-3I, T-3B-6, T-3B-7, E-3B
Community Development and Planning	LU-1A, LU-1B, LU-1H, LU-2A, LU-3A, LU-3B, LU-3C, LU-3D, LU-4A, LU-4B, LU-4C, LU-4D, LU-4E, LU-4F, LU-5A, LU-5C, T-4G, T-5C, T-6C, T-6D, T-6E, T-6F, ED-1B, ED-3B, ED-3C, ED-3E, OSR-3A, NR-1C, NR-1E, NR-5A	LU-1C, T-3A-9, T-4F, T-5D, H-3C, ED-5B, ED-5C, OSR-4A, OSR-4B, HCR-2B, HCR-3A, HCR-3C, E-2D	LU-3E, LU-3F, LU-3H, LU-4H, T-6G, OSR-5D	LU-1D, LU-1E, LU-2B, LU-3G, LU-4G, LU-5B, T-2D, T-3A-10, T-5B, T-6B, H-1F, ED-1C, ED-5D, NR-1A, NR-4A, NR-4B, HCR-3B, PFS-2C, E-3B, E-4F
Conservation Commission		OSR-3C, NR-1D, NR-3C		NR-1G, E-3B, E-4F
Department of Conservation and Recreation				NR-1F
Department of Public Works	T-3B-2, T-4D, OSR-5G, PFS-5D, E-4B, E-4C	LU-1F, LU-1G, LU-5D, T-3A-1, T-3A-2, T-3A-3, T-3A-7, T-3B-3, T-4E, T-4H, T-5A, T-5E, T-5F, T-5G, PFS-5A	T-1A	T-3A-6, T-3B-4, T-3B-5, T-4A, T-4B, T-4C, ED-2A, OSR-2C, OSR-5C, PFS-2A, PFS-5C, E-3B, E-3E, E-4F
Health	PFS-4C			PFS-4A, PFS-4B, E-3B
Historic Commission		HCR-1A, HCR-2C		NR-5B, HCR-2A, E-3B
Housing Partnership		H-1D, H-1G		H-1A, H-1B, H-1E, H-3A, H-3B, E-3B
MBTA		T-2F	T-2E, T-2G	

Table 11-2 Plan Recommendations – “Lead Agency”

Action Lead By	Time Period			
	Short Term	Medium Term	Long Term	Ongoing
Planning Board	T-2H, H-1C, H-2B, H-2G			LU-5E, T-3A-8, E-3B, E-3C
Police Department		E-4D		E-3B, E-4F
Purchasing	E-1A			E-3B, E-3F, E-4F
Recreation	OSR-1B, OSR-2B	OSR-5E, OSR-5F	OSR-5A	T-3A-4, OSR-1A, OSR-1C, OSR-2A, OSR-2D, OSR-2E, OSR-5B, NR-4C, E-3B, E-4F
School District	PFS-6C			T-3A-5, PFS-6A, PFS-6B, PFS-6D, E-3B, E-4F
Stowmwater Advisory Committee				NR-1B, E-3B
Town Council	H-2A, ED-6A	T-6A, H-2C, H-2D, H-2E, H-2F, ED-6C,		ED-6B, PFS-4G, E-3B
Town Manager	T-2B, PFS-3A, PFS-3B, PFS-4E	T-2A, T-2C, T-6H, PFS-1C, PFS-2B, PFS-5B, E-4A		OSR-3B, NR-3A, PFS-1A, PFS-1B, PFS-1D, PFS-2D, PFS-3C, PFS-3D, PFS-4D, PFS-4F, E-3B, E-4E
Tree Warden				NR-2A, NR-2B, NR-2C, E-3A
Watertown Belmont Chamber of Commerce	ED-3A			ED-1A, ED-2B, ED-2C, ED-3D, ED-4A, ED-4B, ED-5A, E-3B
Watertown Environment and Energy Efficiency Committee	E-1A, E-1B, E-3A	E-1C		NR-3B, E-2A, E-2B, E-2C, E-3B, E-3D

