



WATERTOWN BASELINE ASSESSMENT

July 14, 2022

July 14, 2022

Prepared for:
City of Watertown

Prepared by:
Stantec Urban Places
with Streetsense and Horsley Witten Group

Project:
Comprehensive Plan Update

Table of Contents

INTRODUCTION	7
ACRONYMS / ABBREVIATIONS.....	9
1 DEMOGRAPHIC PROFILE.....	11
1.1 Introduction and Key Figures	11
1.2 Trends.....	14
1.3 Comparison to the Region and State	14
2 LAND USE.....	18
2.1 Existing Land Use.....	18
2.2 Existing Zoning	20
2.3 Recent Development	25
2.4 Watertown's Neighborhoods, Squares, and Corridors	27
3 TRANSPORTATION.....	33
3.1 Introduction	33
3.2 Background and Planning Context.....	33
3.3 Existing Transportation Conditions.....	37
3.4 Travel Patterns	56
4 HOUSING	62
4.1 Recent Housing Trends	62
4.2 Goals of the 2021-2025 Housing Plan	63
4.3 Watertown's Housing Characteristics.....	64
4.4 Housing Affordability in Watertown	64
4.5 Housing Plan and MBTA Communities Implementation	66
5 ECONOMIC DEVELOPMENT	68
5.1 Employment Base	68
5.2 Market Scan	71
5.3 Physical Assessment.....	77
5.4 Business Organizations.....	82
6 OPEN SPACE AND RECREATION.....	85
6.1 Inventory of Resources.....	85
6.2 Community Preservation Act.....	94
7 SUSTAINABILITY AND RESILIENCY.....	97
7.1 Sustainability, Resilience, and Energy	97

7.2	Natural Resources	98
8	HISTORIC AND CULTURAL RESOURCES.....	104
8.1	Historic Preservation	104
8.2	Public Art	105
9	PUBLIC SERVICES AND FACILITIES	107
9.1	Public Services	107
9.2	Public Facilities	108
9.3	Watertown Schools.....	109
10	COMMUNITY ENGAGEMENT.....	112
10.1	Project Website	112
10.2	Planning Advisory Committee	113
10.3	Visioning Forum.....	114
10.4	Walk and Ride Series	115
10.5	Community Input Summary	116
11	VISION.....	120

LIST OF TABLES

Table 1 Key Demographic Data (Census and ACS 2020).....	12
Table 2 Comparison Demographic Figures (Census and ACS 2020).....	15
Table 3 Existing Land Use	18
Table 4 Key Roadways in Watertown	40
Table 5 MBTA Bus Service in Watertown	50
Table 6 Top Trip Origins for Trips that End in Watertown, Weekday, Fall 2019	56
Table 7 Location of Employment for Watertown Residents.....	59
Table 8 Location of Residence for Watertown Employees	59
Table 9 Watertown Residents Mode Share (2016 and 2020).....	60
Table 10 Nexus Study Respondents' Primary Mode of Transportation (2022)	60
Table 11 Employment Trends: Regional Trends and Local Assessment.....	70
Table 12 Market Scan by District	72
Table 13 Supportable Retail Square Footage by Category	74
Table 14 Change in Consumer Preferences.....	76
Table 15 Public Realm Physical Assessment Summary	78
Table 16 Private Realm Physical Assessment Summary	80
Table 17 Ownership of Open Space and Recreation Resources	85
Table 18 City Owned Open Space and Recreation Resources.....	86
Table 19 Other Publicly Owned Open Space and Recreation Resources	93
Table 20 Private Open Space and Recreation Resources	93

LIST OF FIGURES

Figure 1 Population Trend and Projections	11
Figure 2 Demographic Profile Figures (Census and ACS 2020)	13
Figure 3 Existing Land Use	19
Figure 4 Existing Zoning	24
Figure 5 Recent and Planned Development	26
Figure 6 Roadway Network	38
Figure 7 Roadway Functional Class	39
Figure 8 Roadway Jurisdiction	43
Figure 9 Roadway AADT Volumes (2016)	45
Figure 10 Watertown Traffic Count Trends	46
Figure 11 Watertown Traffic Count Program Locations	46
Figure 12 Top 5 Bicycle and Pedestrian Crash Clusters (MassDOT Crash Cluster Viewer)	47
Figure 13 MBTA Bus Routes and Ridership by Stops	49
Figure 14 Bicycle Facilities	53
Figure 15 Sidewalks in Watertown	55
Figure 16 Estimated Mode Share for All Trips, 2019	56
Figure 17 Origins of Trips to Watertown (Daily, 2019)	57
Figure 18 Vehicle Registrations v. Watertown Residents	58
Figure 19 Percentage growth of housing units since 2000 for Watertown and surrounding communities (Census and Esri forecast)	63
Figure 20 Commuter inflow and outflow	71
Figure 21 Facilities	95
Figure 22 Resilient Watertown Plan Elements	97
Figure 23 School enrollment (DOE) and trend of enrollment as percentage of total population	110

Introduction

This Baseline Assessment Report presents the data and trends necessary to understand the ways in which Watertown has changed since the 2015 Comprehensive Plan and help identify the key issues to be addressed as the plan update continues. The Final Report expected in spring 2023 will establish a comprehensive set of goals and implementation strategies. The Baseline Assessment Report covers topics in the comprehensive plan with a focus on land use; economic development; transportation, circulation, and parking; and open space and recreation. It also includes initial findings from the community engagement process which invited residents and other stakeholders to share their perspectives on Watertown today and opportunities for the future. This feedback helped revise the vision for this comprehensive plan update, which is the guiding statement describing where the community wants to head. During summer 2022, the project team will also prepare a separate Open Space and Recreation Plan that will be submitted to the state for approval.

Watertown is experiencing a period of growth and change that is projected to continue in coming years. The growing population is increasingly diverse. By 2031, Watertown is expected to add more than 6,000 jobs, mostly in the research and development sectors. A positive impact of this economic development growth is that it will increase the tax base. However, it will also increase the demand for housing of all types, including affordable housing, and will influence transportation patterns.

Land use changes since 2015 have continued a trend of repositioning former industrial or commercial properties into bioscience labs or mixed-use development. This has changed the

character of large parts of the Arsenal and Pleasant Street Corridors in particular. Future redevelopment projects for the aging commercial and industrial properties that remain will present new opportunities to address housing diversity, create publicly accessible open spaces, influence transportation habits, and contribute to the local commercial tax base.

Watertown has been successful in attracting innovative economic development projects, mostly in the lab sector. These life science projects along with several mixed-use developments have increased the local tax base which in turn has allowed for significant public investment in new schools and other improvements. While life sciences is a strong growth sector in the Boston area, recent market pressures are leading some to ask how much more should be built. At the same time, COVID-19 significantly impacted local small businesses in the traditional commercial areas like Watertown and Coolidge Squares. The strength and vitality of these squares is important to the Watertown community, but a number of factors have limited the ability of some businesses to adapt to trends like increased online shopping, a changing customer base, or competition from new

Recent Plans/Reports

- Commercial Development/Housing Nexus Study (2022)
- Resilient Watertown Climate and Energy Plan (2022 draft)
- Capital Improvement Plan (2022-2026)
- Bicycle and Pedestrian Plan (2021)
- Community Preservation Act Five-Year Plan (2021)
- Housing Plan (2021)
- Municipal Vulnerability Preparedness Program (2020)
- Public Arts Master Plan (2020)
- Watertown Annual Report (2020)
- Complete Streets Prioritization Plan (2018)

businesses. Physical constraints like limited space for outdoor dining or sidewalk displays, parking proximity, or building age/condition also affect business performance.

The transportation network continues its evolution to accommodate all users along more streets. Pedestrian and bicycle improvement projects, or “Complete Streets,” encourage non-vehicular trips for short distances. Despite the impacts of COVID-19 on bus ridership and corresponding service cuts, there is significant bus ridership in Watertown and the MBTA has recently released plans to expand transit service through the city by 25%. Meanwhile, traffic congestion is a concern at peak times along major corridors and some neighborhood streets used as cut-throughs, especially as new development projects open.

Privately-owned, publicly accessible open spaces have been integrated into many recent redevelopment projects like Arsenal Yards, adding to the variety and locations of these amenities. Along the Pleasant Street corridor, new connections to the Charles River through formerly industrial property expand access to the Greenway. Still, there is demand for more open space and recreation options, especially passive recreation, due in part to changing needs of an increasingly diverse population and recreational trends. The

Community Preservation Act (CPA), passed by local voters in 2016, provides funding opportunities to help address some of these needs.

Watertown has also committed to reducing contributions to climate change and to enhancing local resiliency to climate change impacts. Pursuing these goals will influence decisions about land use and urban design, transportation choices, open space and parks, and more. Initial steps included adopting an ordinance in 2018 mandating “LEED Silver Certifiable” standards for new development requiring site plan review in commercial, industrial, and mixed-use districts; becoming the first New England city to require solar panels for 50% of roof coverage on new or redeveloped buildings over 10,000 square feet or more than 10 housing units; and adding new requirements to the Stormwater Management ordinance that support green infrastructure and substantial infiltration of large storms to help reduce flooding.

These trends and recent changes illustrate both the opportunities to harness growth to shape the type of community Watertown wants to be and the challenges that should be addressed to mitigate negative impacts, whether in affordability, transportation, access to open space, climate change, or other areas.

Community Preservation Act

Watertown residents approved the Community Preservation Act (CPA) in 2016 to help the City meet open space, recreation, historic preservation, and community housing needs. CPA funds can be used to acquire, create, and preserve assets in these categories, and to rehabilitate open space, natural resources, or community housing if acquired or created through CPA. They typically cannot be used for operations, maintenance, or programming.

The CPA surcharge is presently generating \$2,000,000+ annually for the community’s CPA fund which has a balance of \$13.5 million in 2022. A minimum of 10% of Watertown’s annual CPA revenue must be spent or allocated to each of the three categories: open space and recreation, historic preservation, and community housing. More information on the CPA is provided in the housing, open space and recreation, and historic resources sections of the baseline assessment.

Acronyms / Abbreviations

40B	Massachusetts General Law Chapter 40B
ACS	American Community Survey
AMI	Area Median Income
CPA	Community Preservation Act
CPC	Community Preservation Committee
CRWA	Charles River Watershed Association
DCR	Department of Conservation and Recreation
DEP	Department of Environmental Protection
DHCD	Department of Housing and Community Development
GIS	Geographic Information System
GSA	General Services Administration
MWRA	Massachusetts Water Resource Authority
NHESP	Natural Heritage & Endangered Species Program
SHI	Subsidized Housing Inventory
WEC	Watertown Electricity Choice

A blue-tinted photograph of a wooden truss bridge spanning a river. The bridge features a series of vertical and diagonal wooden beams forming a truss structure. The river below is calm, reflecting the bridge and the surrounding trees. In the foreground, there are some rocks and ferns on the riverbank. A white rectangular text box is centered over the middle of the image.

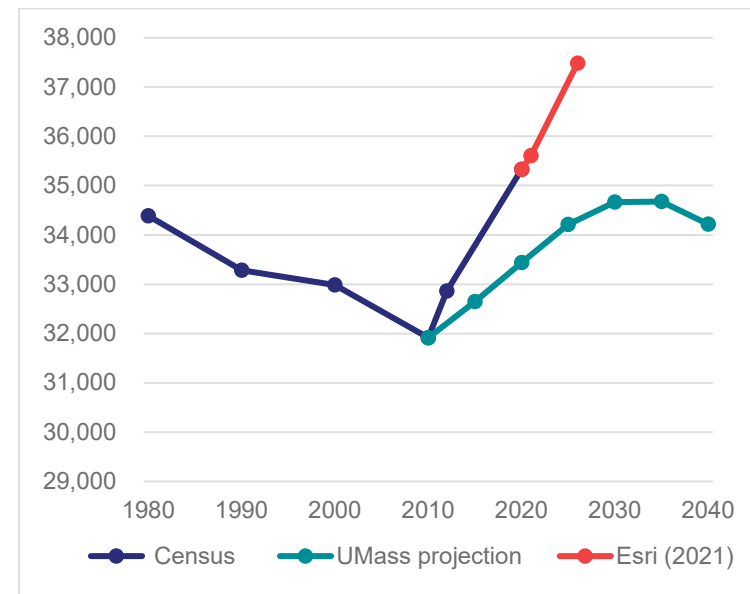
DEMOGRAPHIC PROFILE

1 Demographic Profile

1.1 Introduction and Key Figures

At the time of writing, the most current data for Watertown's demographic profile is the [American Community Survey \(ACS\) 5-Year Data 2020](#) and [available Census 2020 data](#). These ACS data will be the basis for the comprehensive plan update, and include population, incomes, education, employment, housing, family arrangement, and race and ethnicity profiles. Population forecast data to 2040 comes from the [UMass Donahue Institute projection](#) in collaboration with MassDOT. ESRI, a private data services company, provides forecasts to 2026. The plan may incorporate additional data sources to fill any gaps in understanding the context.

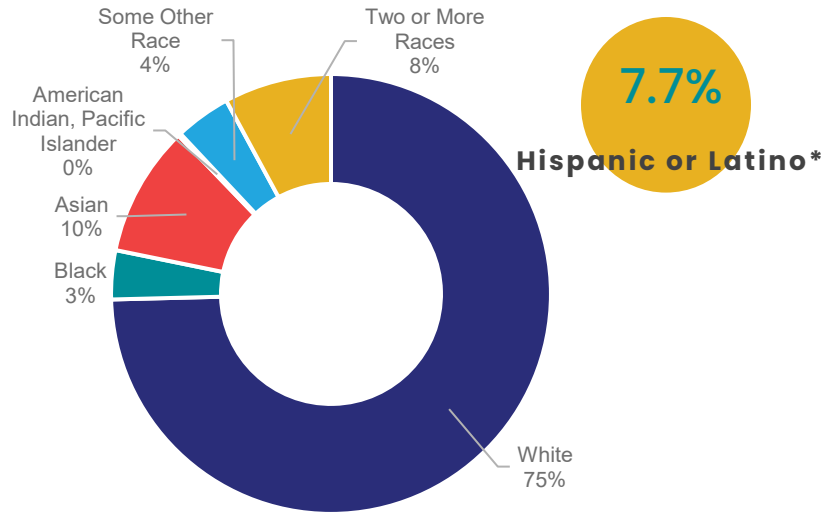
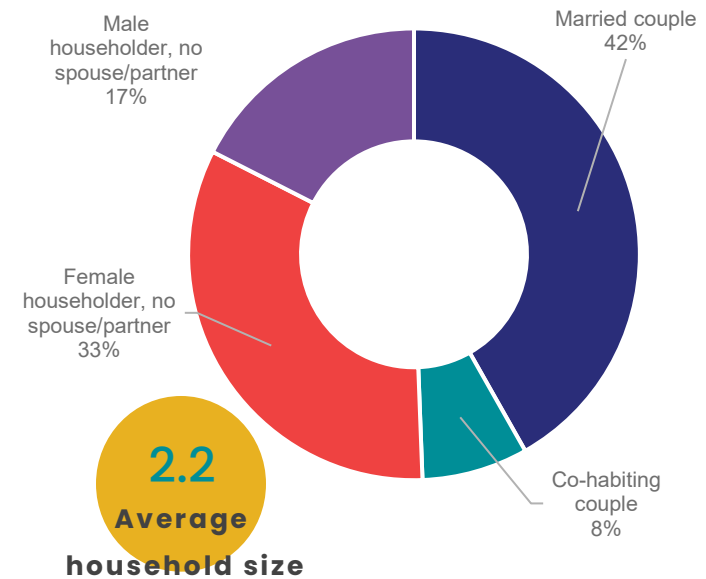
Figure 1 Population Trend and Projections



When the Comprehensive Plan was last updated, Watertown had a population of 32,863 according to 2012 data. In subsequent years, Watertown has grown to **35,329 total population**. That is an additional 2,466 inhabitants, an 8% total increase and about a 1% annual increase. From 2015-2020, 1,249 new housing units were built.

Table 1 Key Demographic Data (Census and ACS 2020)

Total Population	35,329
Total Households	16,142
Median Household Income	\$100,434
Bachelor's Degree or Higher	66.0%
Employment Rate	70.0%
Total Housing Units	17,010
Without Health Care Coverage	2.3%

Figure 2 Demographic Profile Figures (Census and ACS 2020)**Population by Race (2020)****Households by Type (2020 est)**

66%
**Bachelor's
 Degree or
 Higher**

10.2%
**Zero Vehicle
 Households**

\$100,434
**Median
 Household
 Income**

23.2%
**Foreign-born
 Population**

12.4%
**Population with
 1+ Disability**

* Hispanic or Latino is considered an ethnicity by the US Census Bureau and is classified separately from races (White, Black, Asian, etc.). Respondents select both their race and ethnicity when responding to the Census and American Community Survey.

1.2 Trends

Watertown's population peaked in 1960 at about 40,000 residents but then declined to around 32,000 in 2010. Since then, it has rebounded to more than 35,000. Watertown has grown more than 2018 projections anticipated, as shown in Figure 1.

The 2018 population projection from UMass/MassDOT expected a modest growth trending from the 2010 population. Esri, a private company that calculates its own five-year forecasts (2021-2026), predicts that Watertown's population will continue to grow at the current rate of roughly 1% per year.

Meanwhile, the Commercial Development/Housing Nexus Study projects that Watertown will add 6,213 new jobs between 2022 and 2031, including the 2.6 million square feet of development that is under construction or has been approved. The report states that these jobs will require 360 additional housing units and an associated population growth of 831, which lines up with the Esri forecast of a 1% annual growth rate.

1.3 Comparison to the Region and State

To understand Watertown, it is helpful to consider how it compares to other communities in the region as Watertown is closely tied to Greater Boston and surrounding municipalities. Watertown is part of a suburban commercial corridor that includes Waltham and Newton. Watertown also benefits from good access to the key economic, medical, and elite educational institutions in Boston and Cambridge.

Notable differences between Watertown, its neighbors and the region include:

- While Watertown is less diverse than the surrounding region, it saw an increase in non-white population in the 2020 census
- Watertown has the highest percentage of residents in the labor force and the most employed in the labor force

- Watertown has the highest percentage of residents with a Bachelor's degree (but not higher levels of education)
- Watertown has the lowest family size for renters

In relation to the Commonwealth of Massachusetts, some other facts about Watertown stand out:

- Higher than average household income and education
- Smaller household and family sizes overall
- More renter-occupied housing
- Median age is almost exactly the State average

Table 2 Comparison Demographic Figures (Census and ACS 2020)

	Watertown	Boston	Waltham	Cambridge	Belmont	Newton	Metro region	MA
Race								
White	74.6%	52.1%	70.5%	64.3%	76.8%	76.0%	74.7%	76.6%
Black or African American	3.6%	24.2%	7.6%	10.4%	1.1%	3.0%	8.1%	7.5%
American Indian and Alaska Native	0.2%	0.3%	0.5%	0.3%	0.3%	0.1%	0.2%	0.2%
Asian	9.6%	9.8%	11.8%	17.5%	17.1%	15.2%	8.1%	6.8%
Native Hawaiian, Other Pacific Islander	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Some other race alone	4.1%	6.3%	5.3%	1.8%	0.6%	1.8%	4.2%	4.2%
Two or more races	7.9%	7.2%	4.3%	5.6%	4.0%	4.0%	4.7%	4.8%
Ethnicity*								
Hispanic or Latino	7.7%	19.5%	14.3%	9.3%	4.2%	4.5%	11.4%	12.0%
Not Hispanic or Latino	92.3%	80.5%	85.7%	90.7%	95.8%	95.5%	88.6%	88.0%
Educational Attainment for the Population 25 Years and Over								
High school or less	28.3%	44.1%	40.4%	18.9%	19.2%	17.6%	44.2%	47.8%
Associate's degree	5.7%	4.6%	7.1%	2.0%	4.3%	3.7%	7.1%	7.7%
Bachelor's degree	31.3%	27.8%	28.2%	29.5%	26.5%	29.4%	26.6%	24.5%
Master's degree or above	34.7%	23.5%	24.3%	49.6%	50.0%	49.3%	22.1%	20.0%
Master's degree	24.5%	15.1%	18.8%	28.0%	28.2%	26.7%	15.4%	14.0%
Median Household Income in the Past 12 Months (In 2020 Inflation-adjusted Dollars)								
Median household income	\$ 100,434	\$ 76,298	\$ 95,851	\$ 107,490	\$ 140,500	\$ 154,398	\$ 94,468	\$ 84,385

(continued on next page)

* Hispanic or Latino is considered an ethnicity by the US Census Bureau and is classified separately from races (White, Black, Asian, etc.). Respondents select both their race and ethnicity when responding to the Census and American Community Survey.

Employment Status for the Population 16 Years and Over								
In labor force:	73.9%	69.8%	69.3%	69.5%	68.2%	65.2%	69.3%	67.2%
Civilian labor force:	73.9%	69.7%	69.2%	69.4%	68.2%	65.2%	69.2%	67.1%
Employed	70.0%	64.9%	67.4%	66.6%	65.2%	63.0%	65.8%	63.7%
Unemployed	3.8%	4.8%	1.8%	2.7%	3.0%	2.1%	3.4%	3.4%
Armed Forces	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%
Not in labor force	26.1%	30.2%	30.7%	30.5%	31.8%	34.8%	30.7%	32.8%
Average Household Size of Occupied Housing Units by Tenure								
Owner occupied	2.30	2.5	2.41	2.22	2.77	2.79	2.74	2.68
Renter occupied	2.09	2.27	2.18	2.08	2.37	2.21	2.23	2.21
Tenure								
Owner occupied	51%	35%	50%	35%	64%	71%	62%	63%
Renter occupied	49%	65%	50%	65%	36%	29%	38%	37%
Median Age by Sex								
Male	38.8	32.0	33.8	30.3	40.8	40.2	37.5	38.0
Female	39.9	32.8	35	31	41.9	41.9	40.1	40.9

An aerial photograph of a city, likely Austin, Texas, showing a mix of urban development, green spaces, and a river. The image is overlaid with a semi-transparent blue filter. A white rectangular box with a thin orange border is positioned in the center, containing the text "LAND USE".

LAND USE

2 Land Use

2.1 Existing Land Use

The types of land uses allowed in specific locations influence a community's economic, environmental, and social characteristics. Watertown uses several tools to manage land development. The zoning ordinance regulates where a particular use can happen, including its placement within a parcel and performance standards to meet community objectives around environmental quality and social impacts. Site Plan Regulations regulate the laying out and construction of developable sites.

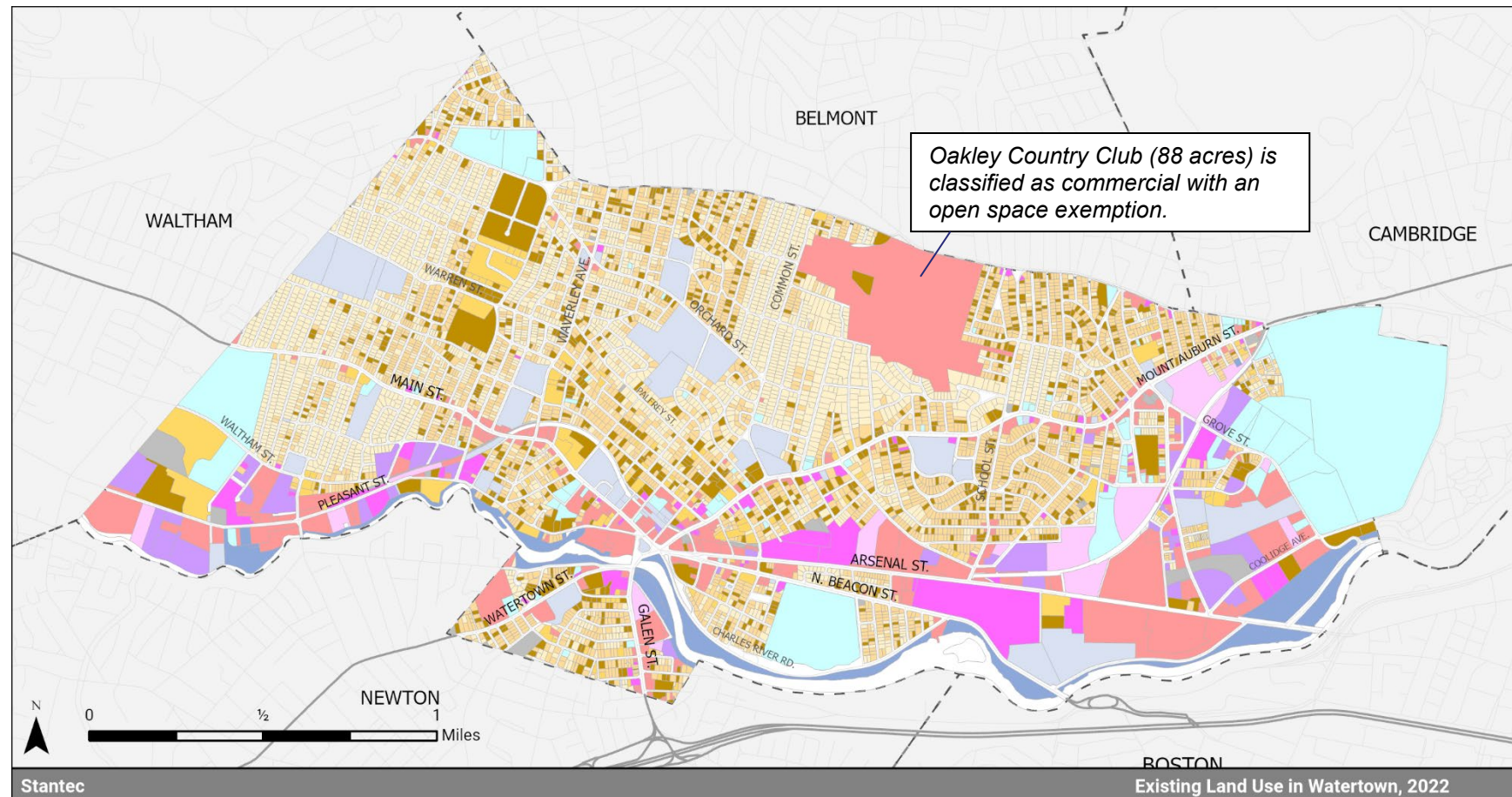
Historically, the changes in Watertown land use in the second half of the 20th century were characterized by a steady transition from industrial and agricultural land to residential and predominantly commercial spaces. Large industrial properties such as Raytheon, the Arsenal, and Hood Rubber created train and truck traffic and employed tens of thousands of people, but many lived in nearby worker housing.

Land use in 2022 is derived from the City Assessor records using the [Mass GIS's land use code](#) as set by Department of Revenue. Public rights-of-way (streets) and water bodies account for almost 20 percent of Watertown's total area. After subtracting those areas, residential uses make up half of the land use in Watertown. The second largest land use includes cemeteries, charitable organizations, and religious institutions, all of which are typically tax-exempt. Of the 293 acres in this category, 187 acres (64%) are in three active cemeteries (Mount Auburn, Ridgelawn, and St.

Patrick's). Mixed-use and commercial are the next largest at 8.4 and 8.1 percent respectively. Retail trade (such as shopping centers, supermarkets, retail stores less than 10,000 square feet, and eating and drinking establishments) accounts for just over one-third of the commercial land use category while auto-related uses like car sales, gas stations, repair shops, and commercial parking lots account for almost one-quarter.

Table 3 Existing Land Use

Land Use	Acres	% of total*
Residential: single family	417	19.7%
Residential: 2-3 units	392	18.6%
Residential: 4+ units	74	3.4%
Condominium	177	8.4
Mixed Use	180	8.4%
Commercial^	174	8.1%
Research and Development	60	2.8%
Industrial, Warehouse, Distribution	94	4.4%
Commonwealth + DCR	76	3.5%
Municipal	155	7.2%
Cemeteries, Charitable Orgs, Religious	293	13.9%
Vacant Land	20	0.9%
* excluding ROW and water areas (approx. 527 acres)		
^ Oakley Country Club (88 acres, or 50% of total commercial land area) is classified as commercial with an open space exemption.		

Figure 3 Existing Land Use

Source: MassGIS
April 2022
Existing Conditions Report
Watertown, MA



2.2 Existing Zoning

Land use in Watertown is regulated by the City's Zoning Ordinance and Zoning Map. Many uses and structures either predate Watertown's first zoning in 1937 or existed when zoning was later changed. These "pre-existing, non-conforming" uses and structures create anomalies within districts.

There are currently 21 zoning districts, including seven residential districts, three business districts, three industrial districts, and eight special zoning districts including overlays. The following is a summary of the 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 (58% of zoned land)

- The two Single Family zoning districts (S-6 and S-10) allow single-family dwellings as the only residential use. 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.
- The Two-Family district (T) includes over half of the land area zoned for residential, and almost one-third of the total land area in the city. Both single- and two-family homes are allowed, with a minimum lot size of 5,000 square feet or 7,500 for new lots. Only single-family homes are allowed on existing lots under 5,000 square feet.
- The Single Family Conversion district (SC) allows single-family development by right and two-family dwellings by special permit. Conversions of existing single-family to

two-family dwellings is also allowed by 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 new three-family (including row houses/townhouses) and conversion of existing dwellings into three-family dwellings by special permit, and multifamily dwellings and four- to eight-unit row houses/townhouses by special permit with site plan review. Single- and two-family dwellings are allowed by right. Most of the land zoned for multi-family housing falls within the R.75 district, much of which is located around Watertown Square.
 - 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.
- The Cluster Residential district (CR) can be found in two locations – the Oakley Country Club along the border with Belmont and a small area in the western part of

Floor area ratio (FAR)

Gross floor area of all buildings on the Lot measured in square feet, divided by the total square footage of the Lot. § 2.29

Watertown. Single-, two-, and three-family dwellings 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 (4.6% of zoned land)

- The Neighborhood Business district (NB) allows a variety of business, retail, and consumer service uses. Three-family dwellings are allowed by special permit. Multi-family housing and mixed-use with more than three dwelling units are allowed by special permit with site plan review. 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 located in several residential neighborhoods and tend to be relatively small areas.
- The Limited Business district (LB) is similar to the NB in the Table of District Regulations. It 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 major corridors such as Mt. Auburn Street around Coolidge Square, Galen Street, and Main Street in the vicinity of and heading away from Watertown Square.
- The Central Business district (CB) is located in the general vicinity of Watertown Square. Most business, retail and consumer service uses are allowed, along with offices. CB zoning was amended in 2021 to allow

conversion of pre-1937 structures for research and development. 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. New three-family dwellings are allowed by special permit and multi-family housing is allowed as part of a mixed-use project where at least the first floor is a retail or business use. There is no minimum lot size requirement, the maximum height is 55 feet or 5 stories, and the FAR is 4.0.

Industrial Districts (7.9% of zoned land)

- The three industrial districts (I-1, I-2, and I-3) are mostly located in East Watertown along Arsenal Street, Coolidge Avenue, and Grove Street, and on a portion of Galen Street. The uses allowed are, for the most part, the same in each of these districts. All three allow industrial, laboratories, and commercial uses, including retail stores and restaurants up to 4,000 square feet. New labs or conversions greater than 4,000 square feet require a special permit with site plan review. 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 55 feet or 5 stories. The FAR is 2.0 for the I-1 and I-2 districts by special permit, 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, with an increase in open space based on the increased FAR in the I-2 district.

Special Zoning Districts (PSCD, RMUD, OSC: 29.5% of zoned land)

- The Pleasant Street Corridor District (PSCD) was established to encourage the best physical, economic, environmental, and social use of the corridor and has three sub-categories. PSCD-3 allows a mix of retail, commercial, and light industrial uses and does not allow residential. PSCD-2 requires projects with a residential component to also include at least 15% commercial uses based on gross floor area. PSCD-1 is any area in the PSCD not classified as PSCD-2 or -3 and allows all residential only projects, mixed-use, as well as all uses allowed in PSCD-3. The objectives of the overall district are to define the character of the corridor, facilitate a mix of uses, improve quality of life, develop at an appropriate scale and size, enhance the tax base, promote accessibility to and within the district, calm Pleasant Street traffic and manage traffic impacts, improve access to the Charles River, and encourage environmentally sustainable development via Smart Growth and Low Impact Development (LID).

In areas where it is allowed, mixed-use development with more than three housing units is allowed by special permit with site plan review, or by site plan review approval for projects up to 33 feet in height. Other uses are generally similar to those allowed in the Central Business district except that many light industrial uses are allowed by special permit with or without site plan review, including new laboratories. 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 up to 1.5). The minimum height is 24 feet and the maximum height is 55 feet or 5 stories. Height can be increased to 66 feet or six stories by special permit if certain benefits (open space, connections to the Charles River, structured or underground parking, and alternative transportation) are provided and a 15' façade setback is incorporated into the design. Parking reductions can be granted by special permit as well. The district regulations include design and environmental sustainability guidelines.

- The Regional Mixed Use District (RMUD) includes Arsenal Yards, Watertown Mall, and other parcels on the eastern end of the Arsenal Street corridor. RMUD recognizes this area as the City's primary commercial corridor and a regional attraction. Its objectives include to facilitate transformative mixed-use development, allow greater density and height appropriate for a major gateway, enhance quality of life including a high-quality public realm and publicly available open space networks, respect historic assets that help define the character of the community, incentivize investment that diversifies and adds value to the City's tax base, use "green" building practices, encourage development that promotes multi-modal transportation, and facilitate development of a continuum of housing options.

Housing is only allowed in mixed-use development that is part of a Master Plan on sites of two acres or more, with more than three units and requires a master plan special permit with site plan review. Other uses are generally similar to those allowed in the Pleasant Street

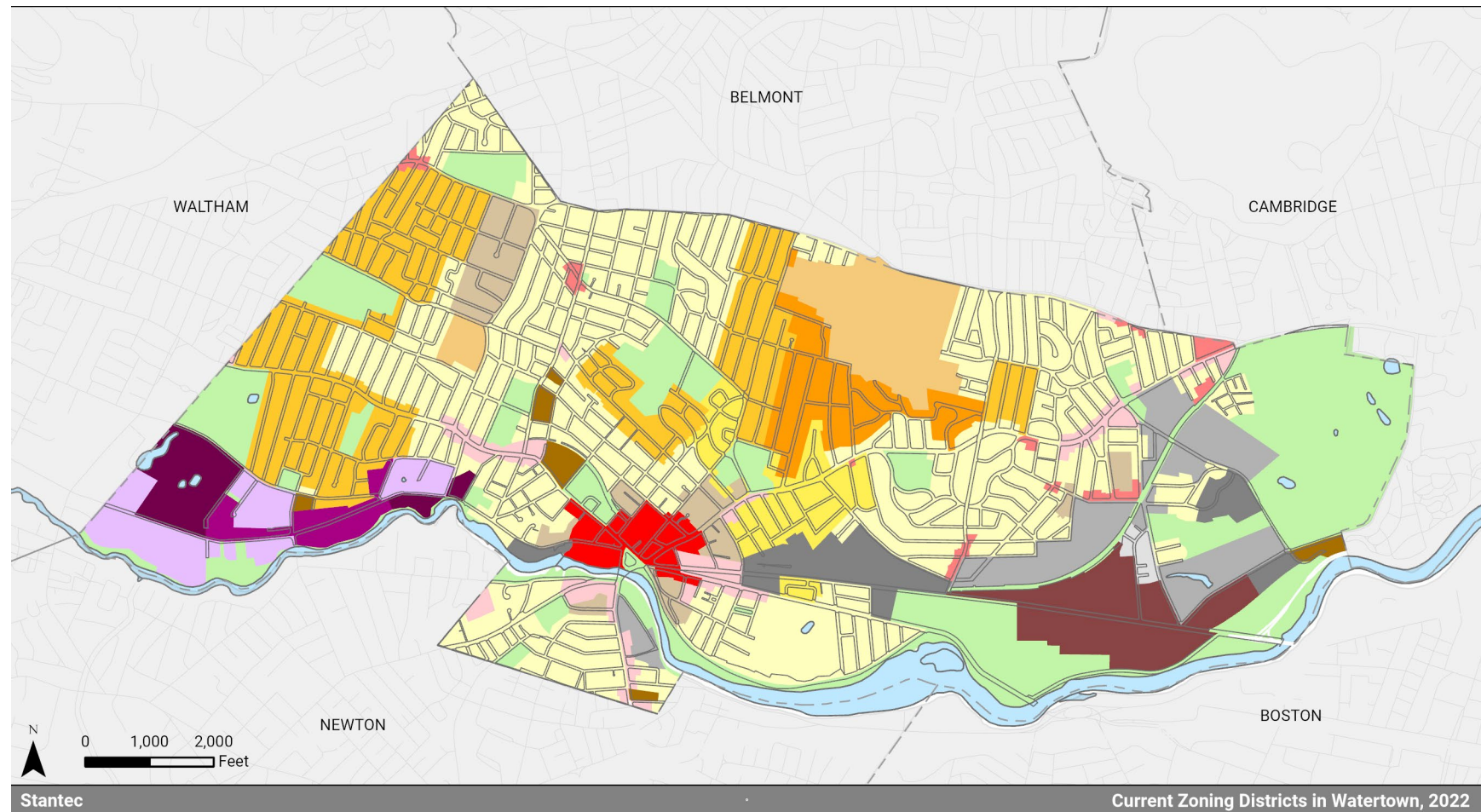
Corridor District. The maximum FAR in this district is 1.0 as of right and up to 2.0 by special permit. The maximum height is 55 feet or 5 stories as of right, 79 feet by Master Plan Special Permit, or 130 feet by Master Plan Special Permit within a defined mixed-use project using adopted Design Guidelines. At least 20 percent of the total site area must be open space, which can include required setbacks, and at least 50 percent of the open space must be publicly accessible.

- The Open Space and Conservancy District (OSC) covers municipal sites with buildings, schools, open spaces and parks, as well as private cemeteries, Gore Estate, and state-owned properties. About 20% of the land in Watertown is zoned OSC.
- The Arsenal Overlay Development District (AODD) establishes the standards for the orderly conversion and redevelopment of the former US Army Materials Technology Laboratory, now known as the Arsenal on the Charles.
- 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 Street.
- The Revitalization Overlay District (RO) can be designated by the City Council to encourage redevelopment of parcels within the overlay zone. The only area designated at this point is along Galen Street south of Watertown Square and encompasses a portion

of the MBTA bus yard. Specific standards including a minimum lot size of 10,000 square feet, maximum height of 43 feet with a step back of the fourth floor, FAR of 2.0, and increased density encourage redevelopment into mixed-use and housing.

- The Limited Redevelopment Overlay District (RD) allows more flexibility in the retail uses allowed in the designated RD district to encourage revitalization of a property. The only area zoned RD is on Pleasant Street 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 Street and Mt. Auburn Street has been redeveloped into a condominium building and the Apartments at Coolidge School have been built pursuant to this provision. The campus of Saint Patrick's is also within this overlay.
- The Watertown Square Design Overlay District governs façade alterations and signs in most of the Central Business district. The Watertown Square Design Handbook establishes the applicable standards and guidelines with a focus on compatible façade improvements.

Other important zoning regulations are reviewed in the appropriate sections of this report, including affordable housing requirements and regulations pertaining to sustainable design and solar energy systems.

Figure 4 Existing Zoning**Zoning Districts**

■ CENTRAL BUSINESS	■ INDUSTRIAL - 3	■ OPEN SPACE/ CONSERVANCY	■ RESIDENTIAL .75	■ SINGLE FAMILY (S-6)
■ CLUSTER RESIDENTIAL	■ LIMITED BUSINESS	■ PSCD-1	■ RESIDENTIAL 1.2	■ SINGLE FAMILY CONVERSION
■ INDUSTRIAL - 1	■ NEIGHBORHOOD BUSINESS	■ PSCD-2	■ RMUD	■ TWO FAMILY
■ INDUSTRIAL - 2		■ PSCD-3	■ SINGLE FAMILY (S-10)	

Source: MassGIS
April 2022
Existing Conditions Report
Watertown, MA



2.3 Recent Development

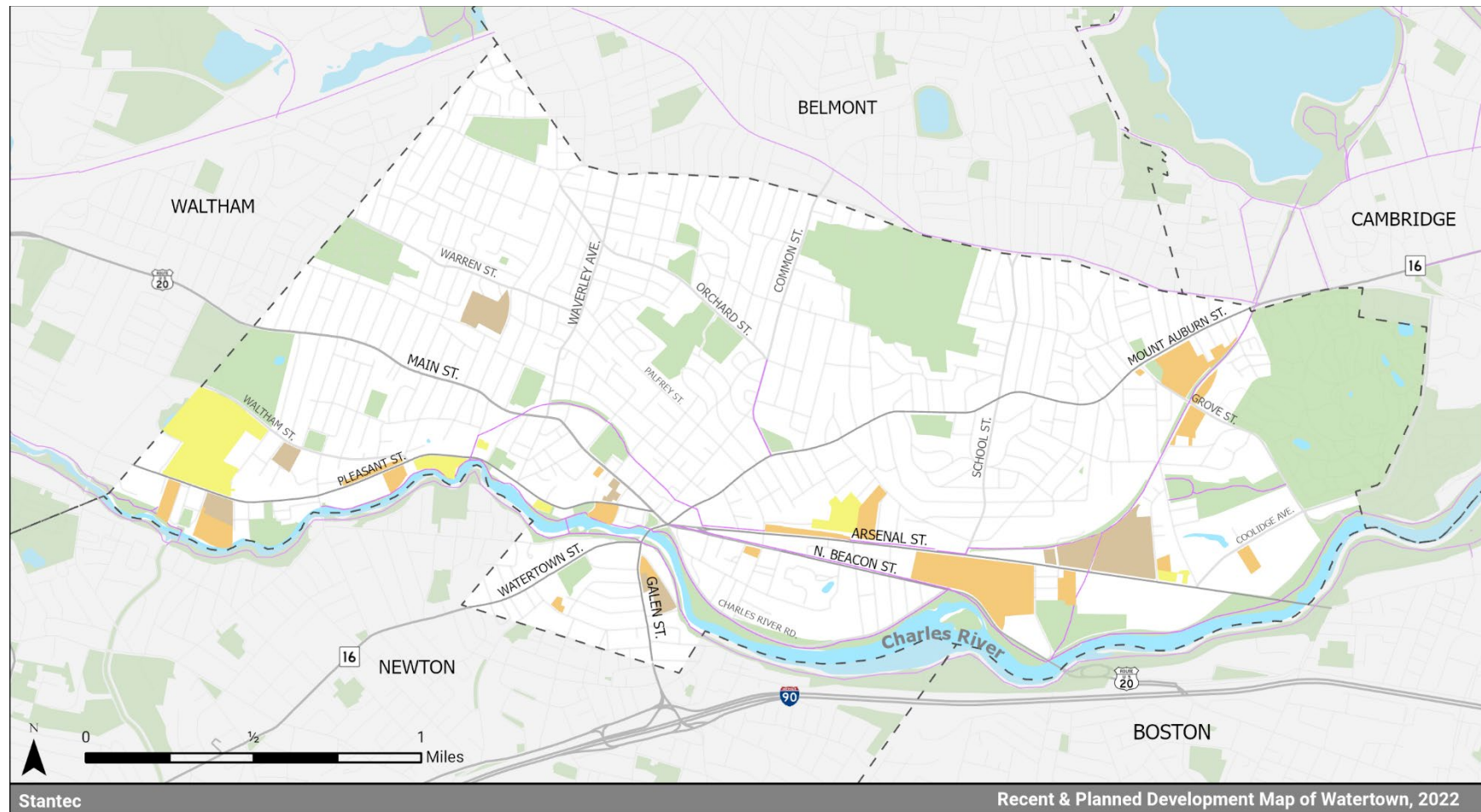
Watertown has experienced significant growth in the past two decades along the Arsenal and Pleasant Street corridors. From 2015 to 2021, there were 20 major projects approved with a total of 839 housing units and almost 2.9 million square feet of new commercial space (lab, office, retail). Almost three-quarters of the new housing units and over 60 percent of the new commercial space are located along the Arsenal Street corridor. Arsenal Yards and Arsenal on the Charles are the two major mixed-use redevelopments in this area. The Pleasant Street corridor has approximately 18 percent of the housing and 11 percent of the commercial space. Other locations like Galen Street, Mt Auburn Street, and Main Street contain the remaining 8 percent of housing and 27 percent of commercial space.

This development pattern is consistent with the 2015 Plan, which identified the Arsenal Street and Pleasant Street corridors as areas to “transform,” Watertown Square, Coolidge Square, Main Street and Galen Street as areas to “enhance,” and the city’s mainly residential neighborhoods as areas to “preserve.”

In recent years, development has shifted from mainly residential to more commercial and mixed-use redevelopments. From 2004 to 2014 there were eight major projects approved with a total of 1,172 housing units and only 122,500 square feet of commercial space. Three-quarters of those housing units were located along the Pleasant Street corridor. Since this period, demand for life science space has significantly increased the amount of commercial development, including the conversion of outdated office buildings into life science space.

According to LA13 Tax Base Levy Growth records, tax levy growth from residential uses (which include primarily residential mixed-use) averaged around \$960,000 annually from FY2017 to FY2022, ranging from \$564,000 in FY2022 to \$1.5 million in FY2019, pre-COVID. Commercial, industrial, and personal property tax levy growth averaged \$3-\$3.65 million annually during that same period, ranging from \$1.5 million in FY2017 up to \$4.3 million in FY2019 (FY2022 had tax levy growth of \$7.3 million but over half was due to the sale of two tax-exempt properties to a taxable entity). This tax levy growth helped to fund new school construction within the constraints of Proposition 2 ½.

Additional development is in the pipeline, with lab/office projects totaling 2 million square feet under construction and another 157,700 square feet approved for development. As of mid-2022, there are six major projects (five lab/office) in some stage of the public review process. These proposals currently represent over 1 million square feet of commercial development and almost 150 new housing units, although the amount of development proposed may change as these projects undergo review. The Boston/Cambridge area is one of the strongest life sciences/lab markets in the country and Watertown has established itself as growing submarket in recent years. However, there is a significant pipeline of planned or approved projects in the region that will increase supply over time which may in turn soften demand. Difficulty finding enough skilled workers means some companies may not be able to grow as fast as they want, also reducing absorption of new space.

Figure 5 Recent and Planned Development

- - - Town Boundaries
 — Major Streets
 — Secondary Streets
 — Minor Streets

— Highways
 — Multiuse Paths
 Surface Water

Open Spaces & Recreation Areas
 Development Approved (2004-2014)

Development Approved (2015-2021)
 Planned Development

Source: MassGIS
 April 2022
 Existing Conditions Report
 Watertown, MA



2.4 Watertown's Neighborhoods, Squares, and Corridors

Watertown has over 50 percent of its land dedicated to residential uses. The community's diverse fabric includes a mix of residential types that support single and two-family neighborhoods, higher-density residential complexes, and a variety of mixed-use districts. Because much of Watertown's development predates zoning and the separation of uses, residential development is spread throughout the city. The mixing of uses creates a complex urban form and vibrant neighborhoods where over 35,000 people live and more than 22,000 people work, all in a little over four square miles.

Watertown's commercial centers and connecting corridors have recently been experiencing a rejuvenation through an influx of new developments. These areas where growth has been channeled, and where it has the capacity to continue to evolve, include the Arsenal Street corridor from Watertown Square to the Boston city line; the Pleasant Street corridor; Watertown Square and the Main Street corridor traveling west toward Waltham; the Galen Street corridor that connects Watertown Square and the Massachusetts Turnpike; and Coolidge Square and the Mt. Auburn Street corridor that connects Watertown with Cambridge.

The following describes Watertown's key commercial squares and connecting corridors, recent developments, potential future opportunities, and how those opportunities can be accommodated to enhance Watertown's character as a place to live, work, and play.



2.4.1 WATERTOWN SQUARE AND THE MAIN STREET CORRIDOR

Watertown Square is considered the historic “town center” of Watertown. Located along the Charles River, it has a diverse mix of government, businesses, restaurant, and cultural amenities. It also serves as an MBTA bus transit hub and a gateway to the Charles River Greenway. The Administration Building (City Hall) and the Watertown Free Public Library are located adjacent to Saltonstall Park, a four-acre community greenspace and gathering location for events. At the main intersection in the Square, there is a public plaza and a prominent entry to the Charles River Reservation, including the historic Watertown Landing and dock. Businesses include banks, restaurants, a mix of large and small offices, pharmacies, and other small-scale retail. The Armenian Museum of America adds a cultural dimension to the mix.

Zoning is primarily Central Business (CB) and the Watertown Square Design Overlay District regulates façade alterations and signage. West of the Square, Main Street is a mix of Limited Business, Two-Family, and Single-Family zoning further from Watertown Square. Most of the buildings in Watertown Square are one to three stories tall with several four and five story buildings interspersed. Businesses in these buildings rely on limited on-street parking and a large municipal lot behind buildings north of Main Street, though several of the larger buildings have private parking in surface lots or garages. There is limited housing in the square itself, but residential development over the last decade has included a five-story condominium building and the five-story Residence at Watertown Square located on Summer Street, which offers 90 assisted living units. There are some residential units above commercial within the square and there are a series of 7-9 story buildings to the west of Saltonstall Park. Residents in nearby neighborhoods walk past surface parking lots or cross busy streets to get to the Main Street or Mt. Auburn Street commercial areas. Main Street further west has a series of one-story commercial buildings that transition to primarily residential areas with a few businesses interspersed.

Nine roads converge on the Square, including Galen Street which is one of four bridges across the Charles River in Watertown and leads directly to the Massachusetts Turnpike. MBTA bus service runs along the Main, Mt. Auburn, and Arsenal Street corridors from the Square and from the Watertown Yard located across the river, providing service to Boston, Newton, and Cambridge. As a result, it is a significant source of traffic congestion, given the volume of traffic that flows through the Square every day and the configuration of the roadways. This also impacts pedestrian and bicyclist flows as it is a challenging area to maneuver through safely. MBTA bus service runs along the Main, Mt. Auburn, and Arsenal Street corridors from

the Square and from the Watertown Yard located across the river, providing service to Boston, Newton, and Cambridge.



2.4.2 COOLIDGE SQUARE AND MT. AUBURN STREET CORRIDOR

Mt. Auburn Street is a major thoroughfare that connects Watertown Square to Cambridge. This corridor's land use is characterized by a mix of residential, commercial, and municipal uses. The west end is an extension of Watertown Square with small commercial uses, upper floor residential, local restaurants and retail services. Coolidge Square is the commercial area near the east end where Mt. Auburn Street meets Bigelow Avenue. This is a thriving and regionally popular Watertown neighborhood retail center known for its diverse retail and services, including ethnic and specialty food stores and restaurants, banking, small shops, and other services. Most of these commercial uses are in one or two-story buildings. The Coolidge Square area also includes significant commercial buildings, such as the former Western Electric/Tufts Health Plan building at 705 Mt

Auburn Street, 64 and 65 Grove Street, and a number of manufacturing facilities along Grove Street. Between the west and east ends, Mt. Auburn Street is lined by residential uses with small corner retail stores scattered along the corridor where historic trolley stops were located. Residential uses include single-family and two-family homes and with some multi-family buildings, and some mixed-use residential above businesses.

Coolidge Square is zoned Limited Business and a few small areas of Neighborhood or Limited Business are located along the corridor. Most other areas are zoned residential, although small businesses exist in these residential areas. Mt. Auburn Street between Summer and Lincoln Streets, along with several side streets, is the city's only designated Historic District. It is an eclectic mix of residential buildings with several religious institutions and a small area of one-story businesses located along Mt Auburn Street.

At the eastern end of the corridor is Mount Auburn Cemetery, the first "rural" landscaped cemetery in the United States which launched the rural cemetery and public park movements in the nineteenth century. The American Planning Association named this cemetery a Great Place in America in 2013. It is designated as a National Historic Landmark and is listed on the National Register of Historic Places as one of the country's "most significant designed landscapes."



2.4.3 ARSENAL STREET CORRIDOR

The Arsenal Street corridor has seen transformative change in the past several decades which is continuing today. It is a primary gateway to the city connecting directly to Boston. The street is named for the former United States Army arsenal, first established in 1816. By 1995, all Army activity ceased at that site, creating the opportunity for ongoing reuse, adaptation, and rejuvenation.

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. The complex is currently experiencing major redevelopment with two new four-story buildings containing about 200,000 square feet for life science research space. To the east, Arsenal Yards (formerly known as Arsenal Mall) and Watertown Mall across the street represent the primary commercial uses in east Watertown and serve a regional market. The Watertown Target and Home Depot are among the highest grossing stores in the region.

The transformation of the Arsenal Mall into Arsenal Yards, a smart growth, mixed-use development, has rejuvenated a struggling older mall and spurred investment in the whole corridor, which also is a gateway to Boston. Arsenal Yards retained significant portions of the original Arsenal buildings at the former Arsenal Mall site and developed the expansive parking lots into a dense gridded street layout. The redeveloped site includes 250,000 square feet of retail and restaurants; 200,000 square feet of office space; a 150-room Hampton Inn hotel; and over 300 residences. In 2022, a nine-story life science building is under construction. This will be the tallest building in Watertown and one of the first purpose-built lab buildings.

Recent growth has been in life sciences, retail, and multifamily residential. The Watertown-Cambridge Greenway has just opened and adds an off-street path connection from Arsenal Street northeast to Fresh Pond and other areas of Cambridge. Complete Street improvements are planned for Arsenal Street itself to improve bicycle and pedestrian connections. Zoning along the corridor is a mix of Limited Business near Watertown Square, industrial and residential, open space, and Regional Mixed Use (RMUD). The Arsenal Overlay Development District has guided the conversion of the former Watertown Arsenal and the RMUD provides a zoning framework for Arsenal Yards, the Watertown Mall, and several other parcels along the eastern half of the corridor.



2.4.4 PLEASANT STREET CORRIDOR

Pleasant Street, historically known for its mills, industry and factories along the riverfront and rail line, has seen significant new development in the life sciences and biotech sector as well as new residential developments. There are few neighborhood retail or service businesses along the corridor, meaning most employees and residents must drive to these destinations in Watertown Square, Arsenal Street, or other locations. The corridor is surrounded by several residential areas, most of which are single and two-family homes.

As explained in Section 2.2, there are three Pleasant Street Corridor zoning districts. Improving access from Pleasant Street south to the Charles River is one important goal of redevelopment. Another goal is managing scale transitions from larger new development to nearby residential areas north of Pleasant Street. Transportation is an issue here too as new growth has limited connections to the MBTA transit

system. Pedestrian and bicycle connections are limited north-south by the former rail corridor and the river.



2.4.5 GALEN STREET CORRIDOR

The Galen Street corridor serves as the primary crossing over the Charles River connecting Watertown to the Massachusetts Turnpike and Newton. Because it is a significant crossing, it experiences a heavy volume of through-traffic year-round. This section of the city is

populated with a higher density of residential uses alternating with commercial uses such as office, retail, and automotive sales/service. Construction is currently underway for the 66 Galen Street project that will bring 224,000 square feet of life science space to the neighborhood. This project will also improve the public realm and reinforce the visual and pedestrian connections into Watertown Square, the Charles River Greenway, and the river itself.

Zoning along this corridor is primarily Industrial-2, Limited Business, and residential districts. However, several businesses are located in residential zoning districts which limit adaptive reuse potential without a zoning amendment process. Near the river, the Revitalization Overlay District requires a Special Permit to guide redevelopment.

This area's location near multiple transit routes, Watertown Square, the Charles River, and the MassPike is an asset for continued redevelopment. The 2011 Strategic Framework for Economic Development identifies "South Square" as one of five development opportunities. The 2015 Comprehensive Plan identifies the area around the MBTA's Watertown Yard as an opportunity for transit-oriented development (TOD), multimodal improvements, and streetscape enhancements.



TRANSPORTATION



3 Transportation

3.1 Introduction

Watertown offers a relatively robust multimodal network. The roadway network offers good local access for drivers, although there are relatively few “through roads” that run continuously through the city which means there is high demand for those roadways. The Massachusetts Bay Transportation Authority (MBTA) provides bus service through Watertown, mostly focused on service that runs east-west and connects to Cambridge and the Red Line in Harvard and Central Squares. Sidewalks are continuous, although the

Massachusetts Department of Transportation (MassDOT) has identified “pedestrian crash clusters” where design improvements are needed to keep people walking and rolling safely. The Watertown bicycle network includes the off-road multi-use path along the Charles River and the recently extended Watertown-Cambridge Greenway. The planned Watertown Community Path and Complete Streets improvements to Mt Auburn and Arsenal Streets will expand and help connect this network.

3.2 Background and Planning Context

3.2.1 REGIONAL PLANNING

For the development of this Comprehensive Plan update, it is important to acknowledge and understand past transportation planning and land use efforts in the city and region. The past studies/plans worth noting include:

MBTA Bus Network Redesign (2022). Released in 2022, this is the MBTA’s proposal for a fully reimagined bus network. In Watertown, this includes increasing the number of routes with frequent service (every 15 minutes or better) from two routes to three, and an overall service increase of 25%. The routes themselves are not changing significantly, but service levels will.

Destination 2040 (BRMPO Long-Range Transportation Plan, 2019). The Metropolitan Area Planning Council (MAPC) and the

Boston Region Metropolitan Planning Organization (BRMPO) work together to create regional guidance for an area including Watertown. This Plan provides a list of recommended projects for MPO funding. An Amendment to this Plan includes funding for Mt Auburn Street improvements through the local Transportation Improvement Program (TIP).

MassDOT Bicycle Transportation Plan (2019). In Massachusetts, 52% of all trips are three miles or fewer – a typical biking distance for many people (about 16 minutes) – and yet 80% of those trips are currently made in vehicles. To that end, this Plan envisions a Massachusetts in which biking is a safe, comfortable, and convenient option. The two primary goals of the plan are to eliminate bicyclist fatalities and serious injuries as well as increase the percentage of everyday trips made by bicycling. There are six initiatives in the

Action Plan; each initiative is associated with a set of actions and related performance measures. Those most relevant to Watertown include: (1) Provide local, regional, and state partners with the tools needed to integrate the safety, comfort, and convenience of people biking into their transportation and development projects and (4) Launch the development of a year-round maintenance and operations plan for MassDOT-owned bikeways and support municipalities to do the same.

MassDOT Pedestrian Transportation Plan (2019). This Plan defines a vision for Massachusetts in which all people have a safe and comfortable walking option for short trips. Walkability also encourages and supports other sustainable travel modes – transit and bicycling. This Plan presents an action-oriented strategy built around two key themes. First, the Plan establishes a comprehensive approach for MassDOT to lead by example to better operate and maintain the walking infrastructure under its jurisdiction and to make investments in new facilities. Second, the Plan outlines how MassDOT will support its municipal partners in their efforts to improve walkability, including through data collection and toolkits. The two primary goals of the plan are to eliminate pedestrian fatalities and serious injuries as well as increase the percentage of short trips made by walking.

3.2.2 LOCAL PLANNING

The City of Watertown has undertaken several recent transportation planning efforts described below:

Bicycle and Pedestrian Plan, March 2021: The Watertown Bicycle and Pedestrian Plan identifies new and improved bicycle and pedestrian connections in Watertown and to the region's larger active transportation network, to help people get where they want to go easily and safely, and car-free. The Plan helps in identifying and

prioritizing future improvements to the City's streets and walkways, making it easier for people of all ages and abilities to choose more active forms of transportation. Goals of the study included:

- Safety – develop a safe network for all user types, including reducing Bicycle Level of Traffic Stress (BLTS) and bicycle-pedestrian crashes and increasing ADA compliant infrastructure and Safe Routes to School participation
- Connectivity – expand regional connectivity by improving gateway corridors to neighboring communities; develop a connected network, focused on resident and worker mobility
- Culture – increase mode choice for walking and biking in Watertown, especially for shorter, local trips; change the car-oriented culture to a more multimodal culture.
- Vibrancy – enhance the city's vibrancy, both in public spaces and through new development by increasing site connectivity using non-auto travel modes and adding streetscape elements in private developments

Parking Management Plan, August 2019: Watertown developed a Parking Management Plan for Watertown Square and Coolidge Square. The Plan reviewed the existing parking supply, demand for parking, and creative ways to satisfy parking needs. Parking is an important tool in supporting Watertown's commercial centers. Recommendations of the study include upgrading technology, pricing parking to match demand, and adjusting parking and zoning standards to encourage and support investment in the Squares, and was intended to be a guide for high demand parking areas throughout the city. Since finishing the plan the City has installed

smart meters that take credit cards and mobile payment, and adjusted parking rates.

Mount Auburn Street Conceptual Design, November 2018: The Mount Auburn Street Project will transform the corridor into a "Complete Street," one that provides safe and accessible options for all travel modes - walking, biking, driving, and transit - for people of all ages and abilities. The design includes significant upgrades for people walking and biking, a road diet for vehicles while maintaining parking, and improvements that will help prioritize transit such as queue jumps and transit signal priority (TSP). This project is currently moving into the 75% design phase.¹

Complete Streets Prioritization Plan, May 2018: Watertown officially adopted a Complete Streets policy in May of 2018. This Plan details priority projects for the City to pursue for funding, including bicycle connections, sidewalk repairs, and locations for upgraded pedestrian safety. Most of these are focused in and around Watertown Square and creating key connections through neighborhoods to destinations and schools.

Arsenal Street Corridor Study, June 2017: Massachusetts Department of Transportation worked with Watertown officials, residents, and business owners to study ways to improve travel through the Arsenal Street Corridor. Arsenal Street directly connects Watertown with neighboring communities, including Cambridge, Newton, and Boston. This study developed and analyzed alternatives to improve multimodal transportation conditions on Arsenal Street, a regionally important link. The study focused on bus service along Arsenal Street and locations where the bus service ties

into other crossing bus routes. The study proposed improvements to vehicular, bicycle, and pedestrian uses of the corridor.

Watertown Square Planning (2017): A planning process to redesign Watertown Square with goals of improving traffic operations and safety. This included looking at new pavement, signage, and potential roadway reconfigurations. The study ultimately found that many projects underway in the City such as wayfinding signage and upgrades will enhance mobility in the Square.

3.2.3 RECENT AND UPCOMING PROJECTS

Capital Improvement Plan (2023-2027): The Watertown 2023-2027 Capital Improvement Plan (CIP) includes over \$114 million for sidewalk and street improvements. This specifically includes reconstruction of the Mt Auburn Street corridor from Irving Street to Coolidge Square, as well as funds for various other projects such as sidewalk repair, community path, and road reconstruction.

Road Program (2022): This annual program identifies roads to be reconstructed, which includes rehabilitation of the road, granite curb installation, new sidewalks and aprons, and ADA-compliant ramps. For 2022, this includes Chester Street, Locke Street, Boylston Street (Fairfield Street to Porter Street), and Chapman Street (Main Street to Grandview Avenue). These roads are residential.

Arsenal Street Corridor Improvements (2022-2024): Through a combination of private, local and state funding, the Arsenal Street Corridor from Louise Street to Greenough Boulevard will undergo major improvements over the next two years. While a portion of the project will begin in 2022, the largest segments (including the portion

¹ <https://mountauburnstreet.com/news>, accessed May 2022

covered by a state MassWorks grant) will see construction start in spring 2023.

Watertown Community Path:

- Section 1. Along the north side of Arsenal Street from DCR's Watertown-Cambridge Greenway at School Street to Arsenal Street at Irving Street, is fully constructed and in use.
- Section 2. Along Arsenal Street from Irving Street to Taylor Street, and Taylor Street to and across Mt. Auburn Street. Design is substantially complete and construction is anticipated to begin in spring 2023. The City received a \$250,000 state grant in 2021 to support construction of this section with the remaining funds from the City and development mitigation.
- Section 3. From Mt. Auburn Street along Baptist Walk (across from Taylor) through the municipal parking lots behind the commercial district and municipal buildings to Saltonstall and Linear Park. This section runs just north of Watertown Square and has a chosen preferred route with a contract in place to finalize the design. Funding has been identified for final design and construction in the Capital Improvement Plan (CIP). Construction could begin in 2024.

- Section 4. Saltonstall and Linear Park behind City Hall near Winter Street to Waverley Avenue is fully constructed and in use.
- Section 5. Just west of Waverley Avenue adjacent to Moxley Field, to Main Street and the Main Street crossing.
- Section 6. Main Street near Bacon Street through the former rail ROW is funded through developer contributions and City funds with construction planned for fall 2022.
- Section 7. From Howard Street at the former rail ROW to DCR's Charles River Greenway is constructed and in use.

3.2.4 WATERTOWN TRANSPORTATION MANAGEMENT ASSOCIATION

Watertown created a transportation management association (TMA), which is a non-profit focused on reducing congestion and greenhouse gas emissions by increasing transportation options that are open to area businesses and multi-family apartment buildings. The TMA works to administer multiple programs that support travel in and around Watertown, ranging from providing shuttle services (discussed in section 3.3.5.2) to providing multimodal information to its members. This organization represents an excellent platform for local businesses and residential property owners to work together, to create programs that are tailored for their constituents, and advocate at the City, regional, and state levels.

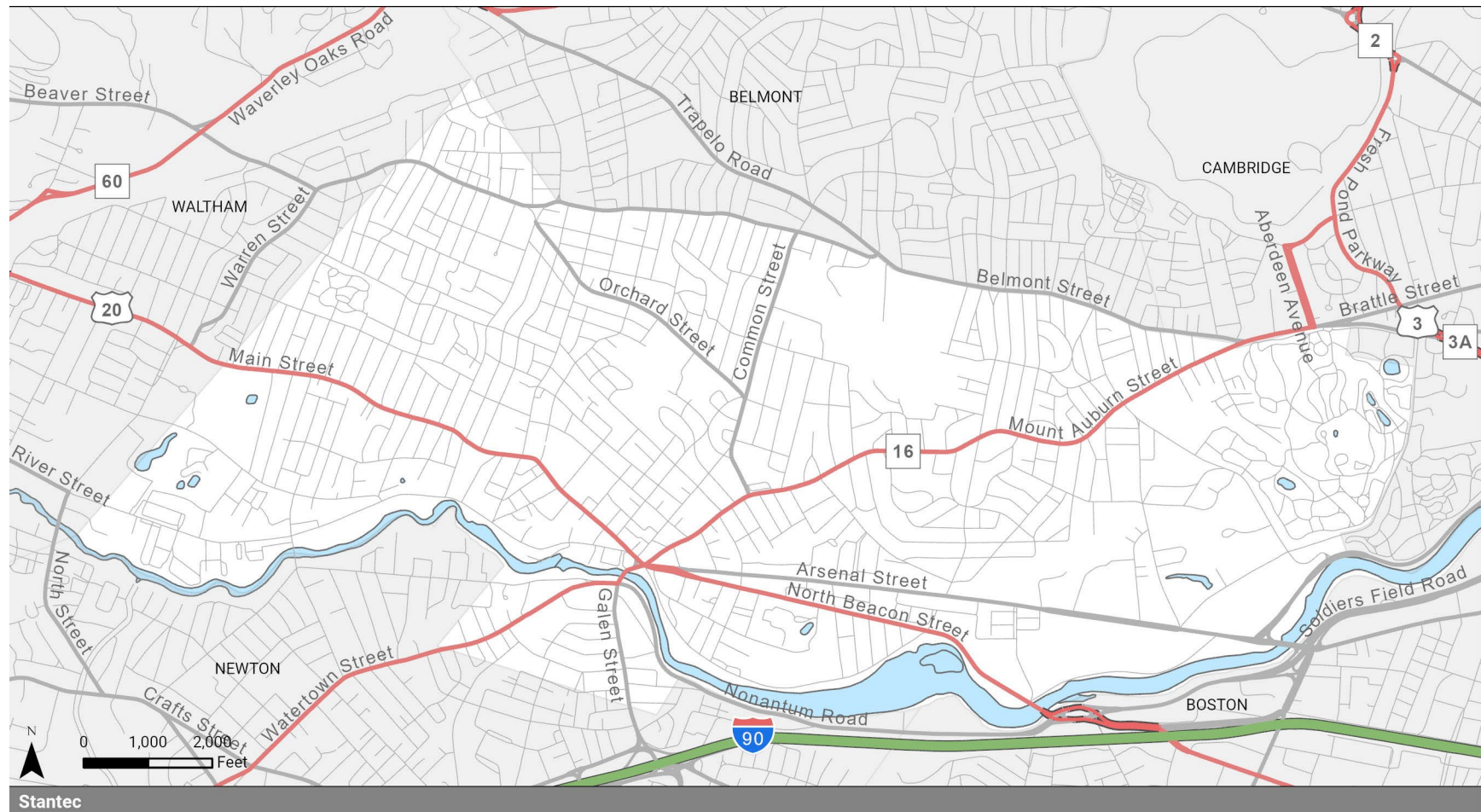
3.3 Existing Transportation Conditions

3.3.1 ROADWAY NETWORK

People driving, taking transit, making deliveries, and biking in Watertown have several key roadway options, with relatively few that provide continuous east-west or north-south access. Two regional roadways travel through the city: U.S. Route 20 from west to east (Main Street and North Beacon Street) and MA Route 16 from northeast to southwest. These roadways provide local access to Interstate 90 (Mass Pike) and Interstate 95. Arsenal Street is also a significant east-west link from Boston to Watertown Square, and Belmont Street traverses Watertown's northernmost border. There is no singular road that provides north-south access. Instead, travelers must use multiple links with Arlington Street, School Street, Common Street, Lexington Street and Orchard Street being the primary choices. The majority of streets in Watertown are smaller, more residential streets. This means that most of the traffic, particularly anyone driving through Watertown, is concentrated on these main arterials, and that travel around or through the city often may require circuitous or relatively complex routing.

The local or side street network is relatively dense except for the area around the Oakley Country Club to the north and Arsenal Street to the south. This means that there is additional traffic pressure on collector roads such as Arsenal, Common, and School Streets.

The functional classification of roadways in Watertown is depicted on **Figure 7**. A roadway's functional classification indicates its design function, or its place along a scale ranging from local access to through movement. While the majority of the roadways in Watertown are classified as "Local", about a quarter are either "Arterial" or "Collector" roads. This classification indicates that there are relatively few roads that should through movements for vehicles.

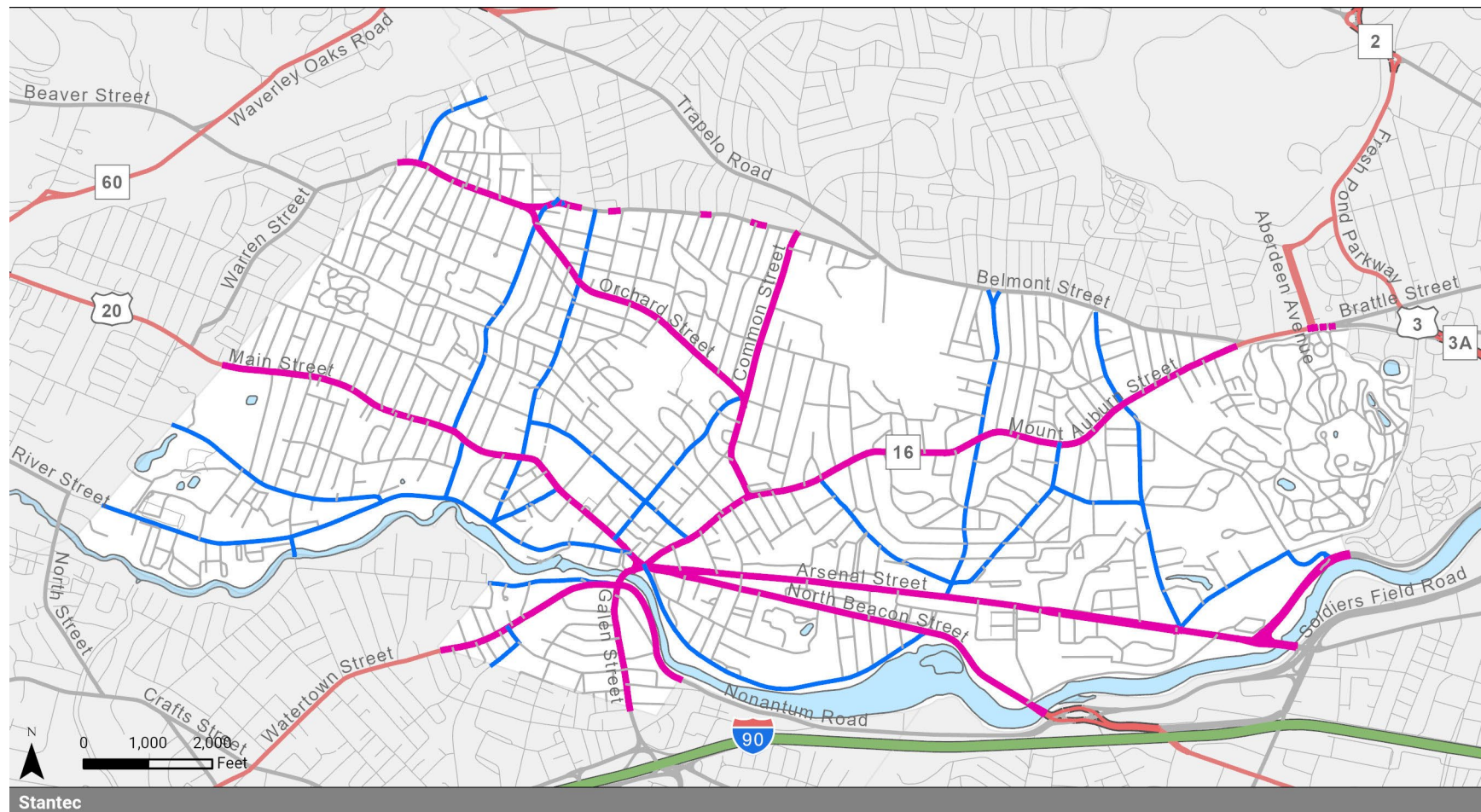
Figure 6 Roadway Network

Roadway Network

- | | | |
|------------------------------------|------------------------|------------|
| Limited Access Highway | Other Numbered Highway | Minor Road |
| Multi-lane Hwy, not limited access | Major Road | Ramp |

Source: MassGIS
April 2022
Existing Conditions Report
Watertown, MA



Figure 7 Roadway Functional Class

Roadway Functional Class

- Arterials
- Collectors
- Local Roadways

Source: MassGIS
April 2022
Existing Conditions Report
Watertown, MA



Table 4 gives an overview of the arterial roadways in Watertown based on functional classification (Figure 7). Roads that are part of the National Highway System (NHS) are considered to have strategic national importance.

Table 4 Key Roadways in Watertown

Street	Other Designations	Function	Roadway Characteristics	Context	Ownership
Main Street	Route 20 (NHS from Waltham city line to Watertown Square)	provides the primary east to west access between Watertown Square and the City of Waltham and beyond to Interstate 95	Two-lane roadway On-street parking on both sides Sidewalks on both sides	Varies from local retail and restaurants in the area of Watertown Square, to residential uses.	From Waltham to Myrtle Street: MassDOT From Myrtle Street to Watertown Square: City
North Beacon Street	Route 20	Primary east to west access between Watertown Square and the City of Boston	Two-lane roadway On-street parking on both sides Sidewalks on both sides Bicycle lanes	Varies: commercial, industrial, institutional, and residential type use	City
Mt. Auburn Street	Route 16 (NHS from Watertown Square to Cambridge)	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 City	Four-lane roadway On-street parking on at least one side, two sides in some places Sidewalks on both sides No bicycle facilities	Varies: commercial, industrial, institutional, and residential type use	City
Arsenal Street	n/a	Alternate east-west route between Watertown Square and the City of Boston, with indirect access to the City of Cambridge.	Two-lane roadway at west end Four-lane roadway west of School Street Some bicycle lanes on west end of street, sharrows on east end.	Commercial, retail and industrial uses.	City

Street	Other Designations	Function	Roadway Characteristics	Context	Ownership
Belmont Street/ Orchard Street	n/a	Connects Watertown with residential neighborhoods and community business centers in Watertown and Belmont	Two-lane roadway Sidewalks on both sides No bicycle facilities	Residential	City
Common Street	n/a	North-south access	Two-lane roadway Sidewalks on both sides Limited bicycle facilities	Residential	City
Nonantum Road	n/a	East-west along Charles River from Watertown to Newton	Two-lane, limited access roadway Shared use path on south side	Commercial/industrial uses inc. MBTA bus maintenance facility	DCR
Greenough Boulevard ("Big Greenough")	n/a	Access from Arsenal Street to Memorial Drive in Cambridge	two-lane, limited access roadway Shared use path	Park land	DCR
Lexington Street	n/a	North-south access	Two-lane roadway Sidewalk on both sides No bicycle facilities	Residential	City
Waverley Avenue	n/a	Primary north-south route between Route20 and Belmont Street, connecting Watertown Middle School	Two-lane roadway Sidewalk on both sides Parking on both sides No bicycle facilities	Middle School, residential and commercial	City
School Street	n/a	Primary north-south route between Arsenal Street and Belmont Street	Two-lane roadway Sidewalk on both sides Parking on both sides Sharrows for bicycles	Residential, Commercial at the southern end	City

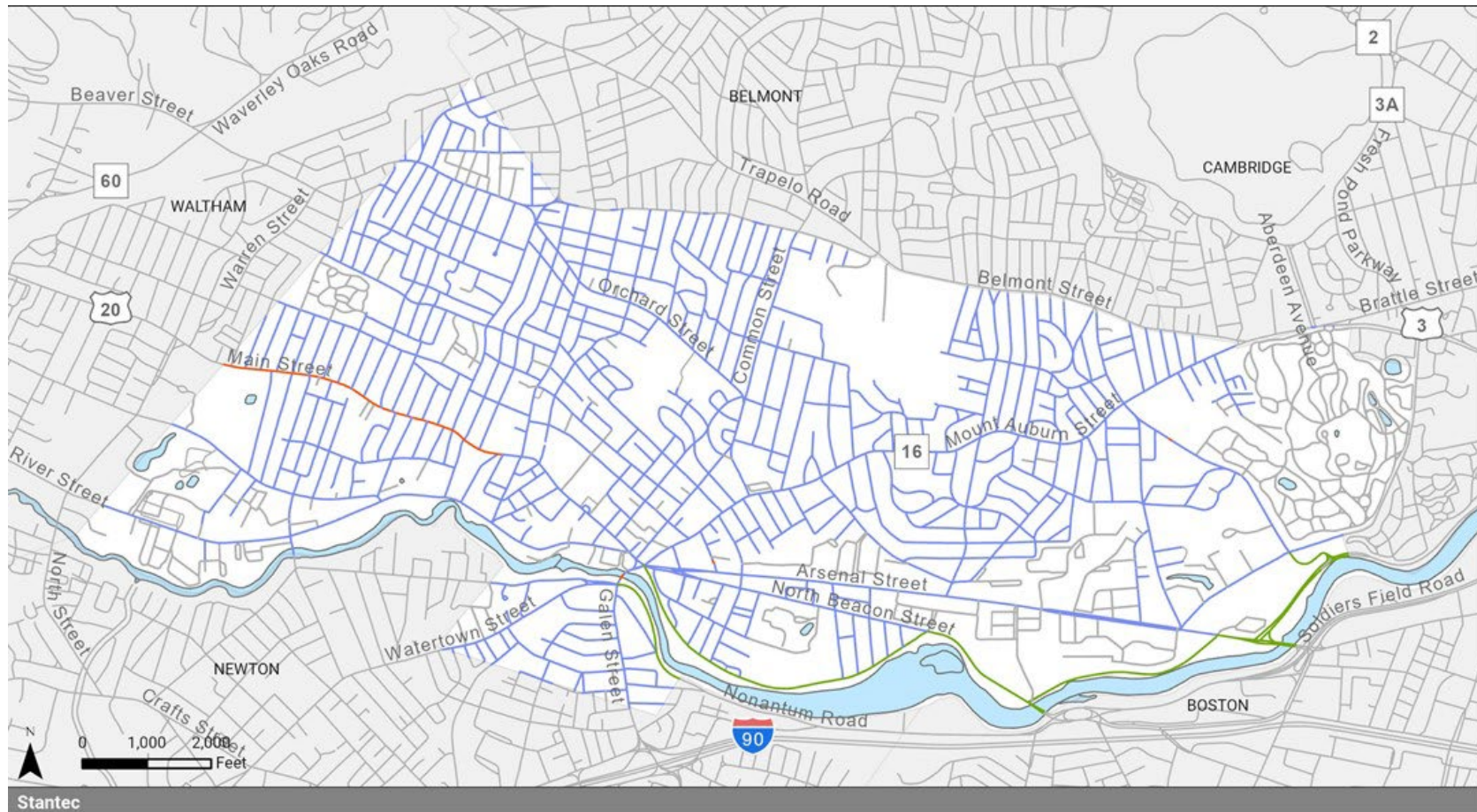
Street	Other Designations	Function	Roadway Characteristics	Context	Ownership
Arlington Street	n/a	North-south street on the eastern end of the City.	Two-lane roadway Sidewalk on both sides Parking on both sides Sharrows north of Clarendon Street Protected bicycle lane on east side, south of Clarendon Street	Commercial Community Path access	City
Grove Street	n/a	East-west access from Coolidge Ave to Mt. Auburn Street	Two-lane roadway Sidewalk on both sides	Parkland Commercial	City

3.3.2 ROADWAY JURISDICTION/FUNCTIONAL CLASSIFICATION

The jurisdiction of roadways in Watertown is depicted on Figure 8. The jurisdiction of a roadway indicates the ownership and responsibility for maintenance, enhancements, and repairs.

The majority of the roadway system falls under the jurisdiction of the City (74 miles, or 92.5 percent). The Department of Conservation

and Recreation (DCR) controls the next highest percentage of roadway (4 miles, or 5.0 percent) including 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 (approximately 1 mile).

Figure 8 Roadway Jurisdiction

Roadway Jurisdiction

- | | |
|---------------------|---------|
| — State | — DCR |
| — City of Watertown | — Other |

Source: MassGIS
April 2022
Existing Conditions Report
Watertown, MA



3.3.2.1 Electric Vehicle Access

There is currently a relatively limited electric vehicle (EV) charging network in Watertown. There are 19 total chargers, with a majority clustered on Arsenal Street, associated with new private developments there.² New development projects are required to install up to three charging stations and many of the recent developments have installed more than the minimum required in the Zoning Ordinance. A large portion of the new installations are

designed to be available to the public. Since the new development has been along Pleasant Street and Arsenal Street corridors, this has been where most stations have been installed. There are two public charging stations, with four charging heads, located behind the Library. These stations are open to the public 24 hours a day. Overnight charging is allowed.

3.3.3 VEHICULAR TRAFFIC PATTERNS

To gain an understanding of existing travel patterns, the following section reviews historic traffic data and transportation mode choice

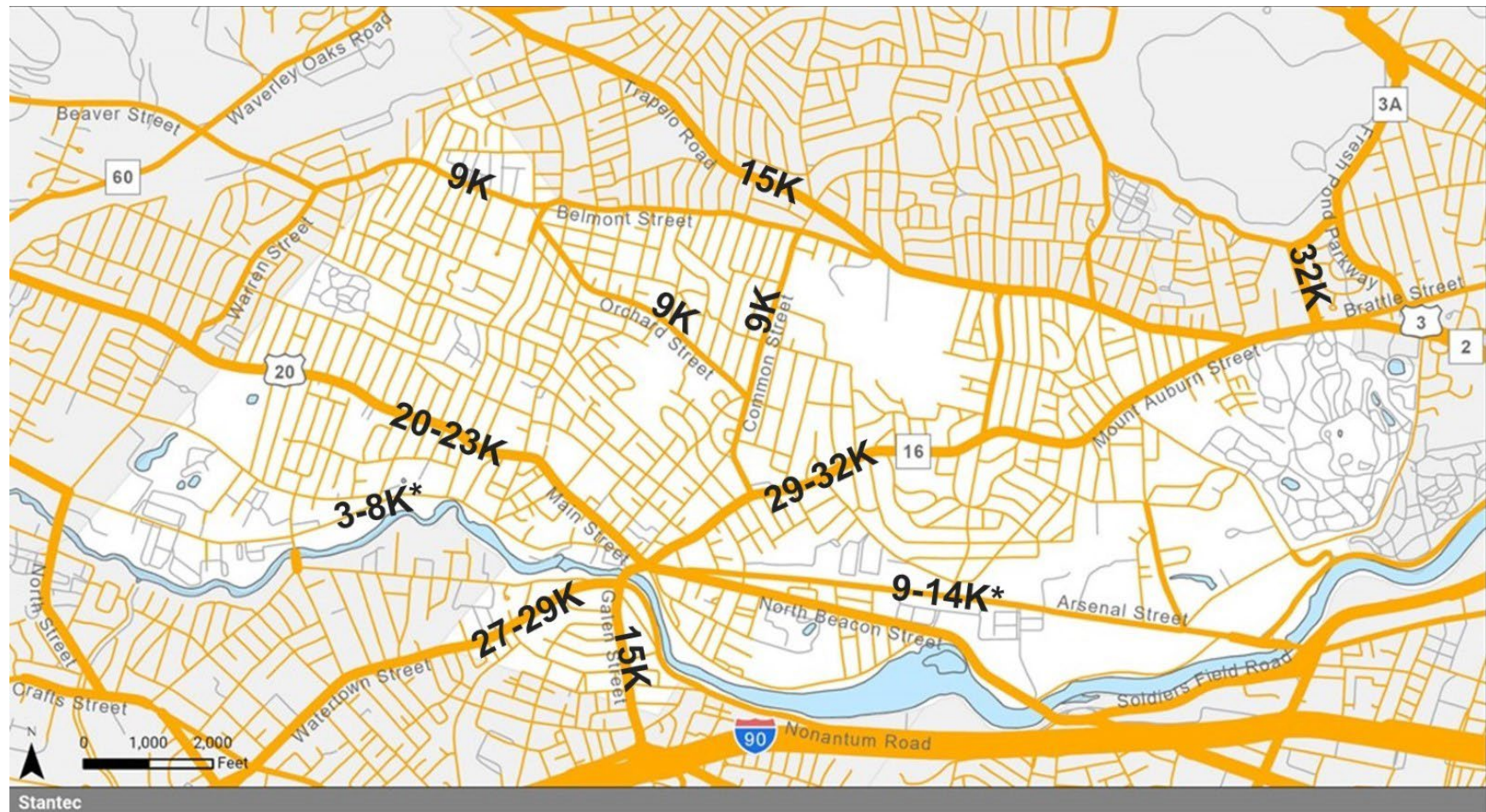
Traffic Volumes

Figure 9 visualizes annual average daily traffic (AADT) volumes on various roadways throughout Watertown using MassDOT historical traffic volume data from 2016. It is worth noting that on many of these roadways volumes have changed and further study is warranted to update this analysis. However, this map provides a baseline understanding of how people actually use the roadway network in Watertown. These patterns reveal heavy east-west demand along the main arterials as described above, with relatively fewer vehicles using the north-south links of Orchard and Common Streets.

data. This analysis reflects existing conditions and does not account for impacts from future development.

Watertown began a program of community-wide traffic counts in 2016, which show a general trend of decreasing traffic volume in recent years (Figure 10). Counts occur seasonally at key locations (Figure 11). The average change from 2016 across all locations shows an overall decrease in vehicle traffic, and then a significant decrease beginning in 2020 due to the COVID-19 pandemic. These numbers are a snapshot in time and likely warrant further study to understand the context.

² Per <https://chargehub.com/en/charging-stations-map.html> and <https://chargehub.com/en/countries/united-states/massachusetts/watertown.html>, accessed May 2022.

Figure 9 Roadway AADT Volumes (2016)

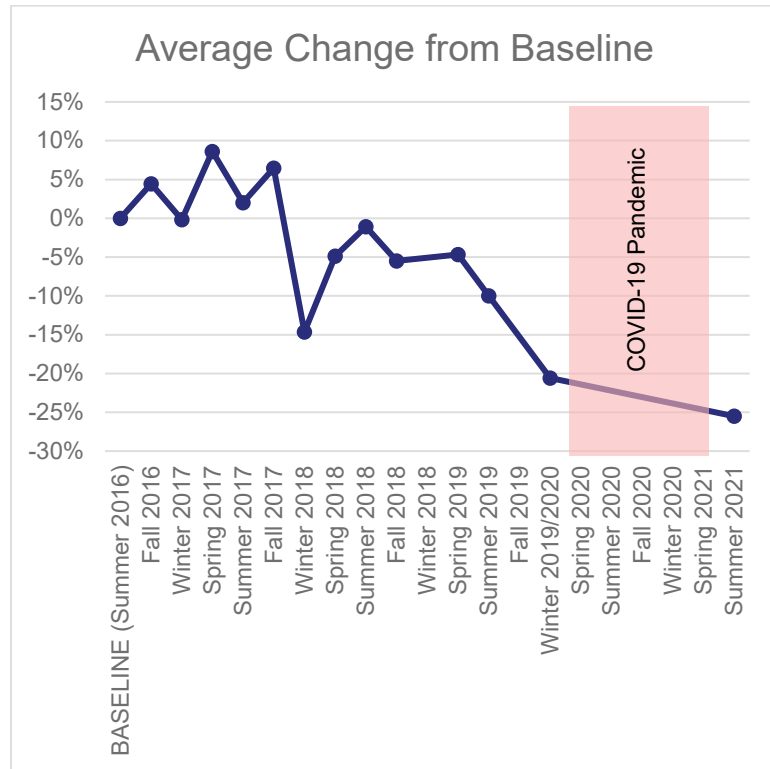
Roadway Volumes (2016)



Source: MassGIS
April 2022
Existing Conditions Report
Watertown, MA



*range includes updated counts from the City

Figure 10 Watertown Traffic Count Trends³**Figure 11 Watertown Traffic Count Program Locations**

Location
Belmont Street west of Pierce Road
Main Street east of Lexington Street
Lexington Street north of Main Street
Pleasant Street east of Howard Street
Howard Street north of Pleasant Street
Waverley Avenue south of Fayette Street
Common Street north of Bellevue Road
Common Street south of Spring Street
Mt. Auburn Street east of Common Street
Mt. Auburn Street west of Irma Avenue
Mt. Auburn Street east of Arlington Street
School Street north of Mt. Auburn Street
Arlington Street south of Belmont Street
Grove Street north of Coolidge Avenue
Irving Street north of Arsenal Street
Arsenal Street west of Beacon Park
Arsenal Street west of Elm Street
Galen Street south of Aldrich Road

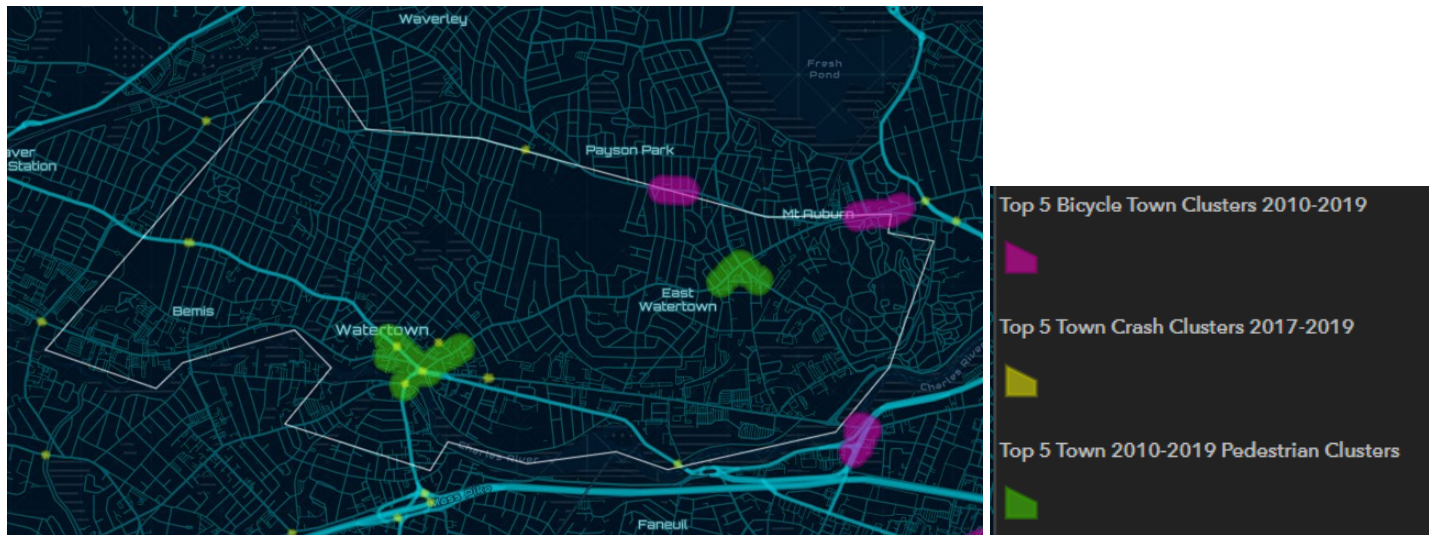
³ Source: Watertown Traffic Count Program

3.3.4 SAFETY

Potential transportation safety issues in the City of Watertown were identified through the MassDOT crash cluster database (data from 2010-present); which depicts locations in the city that could be considered for safety funding under the Highway Safety Improvement Program (HSIP).⁴ Figure 12 shows the top crash clusters in the City of Watertown⁵. The top five bicycle crash clusters are on Belmont Street and on Mt Auburn Street, at the intersection

with Belmont Street and just north of the Mt Auburn Cemetery, which are all primarily in Belmont or Newton jurisdiction. The top five pedestrian crash clusters are concentrated in and around Watertown Square, on Pleasant Street, Main Street, Mt Auburn Street, N Beacon Street, Charles River Road, and Galen Street. There is another cluster around the Mt Auburn Street and Arlington Street intersection.

Figure 12 Top 5 Bicycle and Pedestrian Crash Clusters (MassDOT Crash Cluster Viewer)



⁴ <https://gis.massdot.state.ma.us/topcrashlocations/> accessed May 2022

⁵ <https://apps.impact.dot.state.ma.us/cdp/dashboard-view/26> accessed May 2022

3.3.5 TRANSIT

Transit in Watertown consists of bus service provided by the MBTA and several local shuttles provided by the TMA or private owners. These services connect Watertown residents and workers to local destinations, downtown Boston, and subway stations in Cambridge.

3.3.5.1 MBTA Services

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 Water Street/Nonantum Road on the southerly side of the Charles River. Most routes, as shown in Figure 13, connect east-west, ultimately bringing travelers to the MBTA's Red Line at either Harvard or Central Squares. In addition, four routes connect south to Boston and Newton, mostly from Watertown Yard on the south side of the Charles River. A few of the routes connect to the MBTA commuter rail system at Waltham or Waverley, which are both on the Fitchburg Commuter Rail Line.

Although it is relatively close, there is currently no bus service from Watertown to the Boston Landing station on the Worcester Line.

Table 5 shows the average ridership of the bus routes on a typical weekday in Fall 2019 versus Spring 2022. Current activity is almost half of pre-pandemic ridership on most routes, except Route 70, where the ridership is almost back to 2019 levels. Ridership patterns show that Watertown Square is by far the busiest stop for bus riders in the city. Coolidge Square is also relatively busy. Several of the MBTA bus routes experience reliability issues. MBTA defines reliability as the percentage of stops the bus leaves within three minutes after the scheduled interval. Two routes serving Watertown meet their targets, Route 71 and Route 73, both being high frequency “key” bus routes. Most routes are below their reliability target set by MBTA, meaning that they are delayed and/or off-schedule which in turn makes them unreliable for riders.

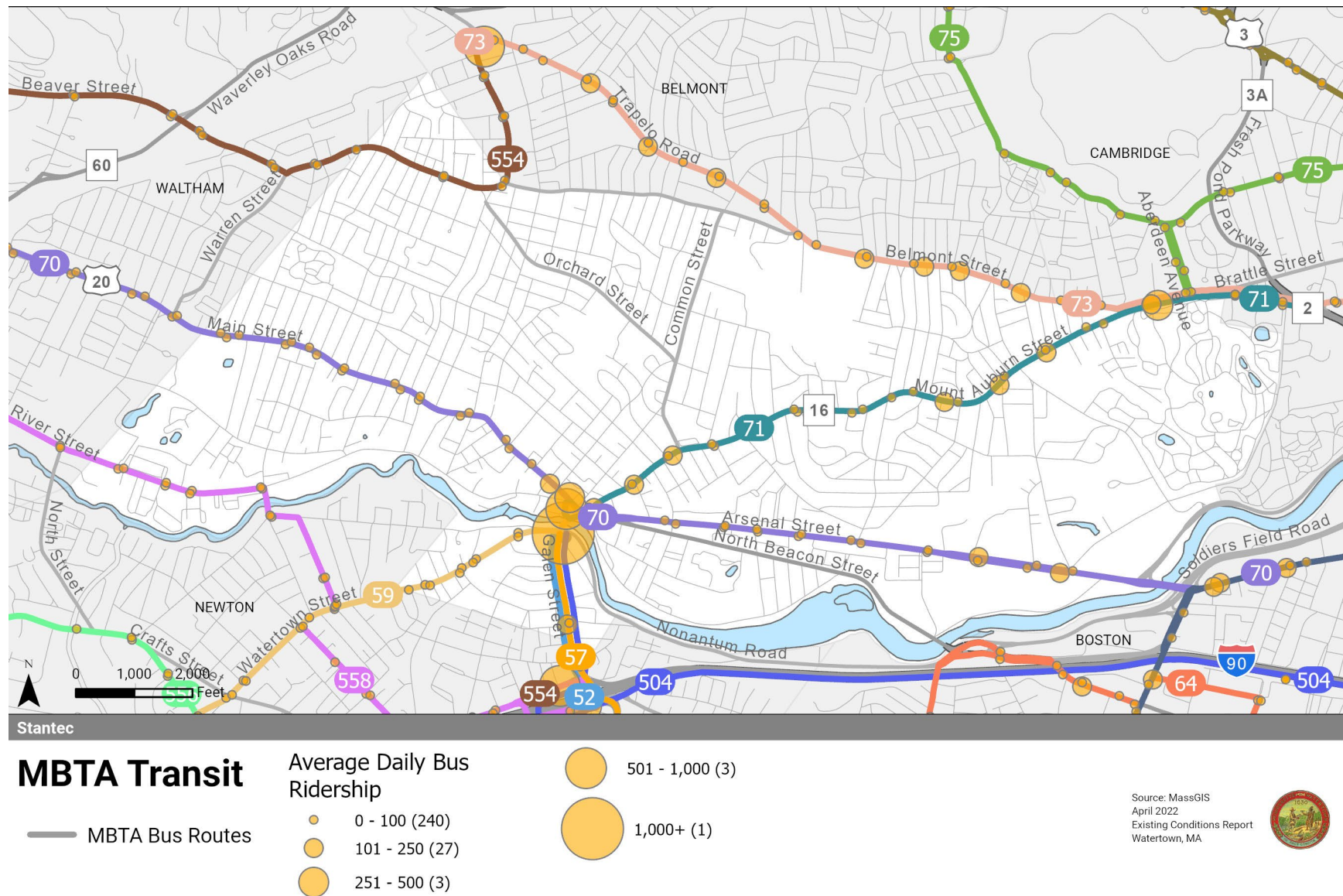
Figure 13 MBTA Bus Routes and Ridership by Stops

Table 5 MBTA Bus Service in Watertown⁶

Route	Route Description	Frequency (avg AM peak, 2022)	Average Weekday Passengers (Fall 2019)	Average Weekday Passengers (March-April 2022)	MBTA Reliability Assessment (March-April 2022)
504	Between the Watertown Transit Yard and Financial District in Downtown Boston, via Newtown Corner and Copley Square.	12 mins	1,445	0 (847)	66% reliable (below MBTA target)
52	Between the Watertown Transit Yard and the Dedham Mall or the Charles River Loop via Newton Centre	40-50 min	563	192	66% reliable (below MBTA target)
57	Between the Watertown Transit Yard and the Kenmore T Station in Boston, via Newton Corner and Brighton Center.	7 mins	10,493	6,707	75% reliable (below MBTA target)
59	Between Needham Junction, in Needham and Watertown Square, via Newtonville	35 mins	1,156	631	69% reliable (below MBTA target)
70	Between Market Place Drive or Waltham Center in Waltham and University Park in Cambridge, via Main Street, Watertown Square and Arsenal Street	15 mins	4,676	4,515	59% reliable (below MBTA target)
71	Between Watertown Square and the Harvard Red Line Station in Cambridge, via Mt. Auburn Street	7 mins	5,106	2,313	80% reliable (at MBTA target)
73	Between Waverley Square (commuter rail station) on Lexington Street in Belmont and the Harvard Red Line Station in Cambridge (along the northern edge of Watertown)	9 mins	5,554	2,656	80% reliable (at MBTA target)
554	Between Waverley Square in Belmont and Newtown Corner, via Belmont Street in Watertown, Central Square in Waltham, and the Massachusetts Turnpike	20-35 mins	635	93	74% reliable (below MBTA target)

⁶ Ridership Data from 2019: <https://mbta-massdot.opendata.arcgis.com/datasets/mbta-bus-ridership-by-trip-season-route-line-and-stop/explore>

Ridership Data from 2022: https://mobility-massdot.hub.arcgis.com/#transit_ridership

Reliability Data from 2022: <https://www.mbtackontrack.com/performance/index.html#/detail/reliability/2022-04-29/////peak>

558	Between Riverside Station on the Green Line's D Branch and Newton Corner via Waltham Center with some service continuing express to Downtown Boston	75 mins	388	80	60% reliable (below MBTA target)
-----	---	---------	-----	----	-------------------------------------

3.3.5.2 Commuter Shuttles

The Watertown TMA provides shuttles to complement MBTA services, with connections to Harvard and Watertown Square. There are currently two shuttle routes which are open to employees and residents of participating partners for free. One of the shuttles is open to the public for \$1 each way. All shuttles are equipped with bicycle racks so people using the shuttle can make connections to/from the shuttle or ride one way and take the shuttle back.

- **WATConnector – Arsenal Street:** Transports passengers to and from Harvard Square from LINX Watertown, Arsenal on the Charles, Arsenal Yards, The Gables, and Elan Union Market during the AM and PM peak commute times. This shuttle runs at 15-minute intervals. The shuttle launched in August 2020, during the COVID-19 Pandemic. During a six-month period between September 2021 and April 2022, roughly 4000 rides were taken on the shuttle. Average monthly rides were 661, with the highest month being March 2022 with 867 rides. The Linx has the highest ridership (46% of total), followed by Arsenal on the Charles with 29% of total ridership.
- **WATConnector – Pleasant Street:** Service along Pleasant Street connects to Watertown Square and Harvard Square. Hourly service runs in the AM and PM peak periods. This shuttle serves The Mews, Riverworks, Aver, and Watermills, and is also open to

the general public. The shuttle launched in September 2021, during a period when the COVID-19 Pandemic appeared to be waning but was still ongoing. Ridership in the first six months averaged 176, with a high monthly ridership in March 2022 of 239. The highest source of ridership was Riverworks (49%), followed by The Mews (29%) and the general public (22%).

3.3.5.3 Transportation for Senior Citizens

Watertown provides transportation for its seniors, including:

- **Watertown Senior Shuttle:** The Watertown Senior Shuttle provides door-to-door transportation for shopping to Watertown seniors 60 years of age and older. The bus travels twice a week to the Stop and Shop/CVS/Watertown Savings Bank on Watertown Street and to Market Basket, Marshalls, Target, Hannaford, and Roche Brothers. Currently, due to the pandemic, this service is run on an appointment basis only, travelling only to Shop & Shop on Watertown Street. Patrons can call ahead and schedule their appointments. The service is provided for free, but donations are welcome (\$2 round-trip).
- **Supplemental Transportation for Watertown Seniors:** This program is designed to provide transportation assistance via local taxi service for seniors in need of last-minute medical appointments, or emergency transportation to locations within the community. The

service is funded through the City and grants from the Marshall Home Fund. Patrons can schedule their appointments by calling the Senior Center. The service is provided for free, but donations are welcome.

These “community” shuttles represent an investment by the City in services for people with limited mobility and often serve as a lifeline for those who can no longer drive.

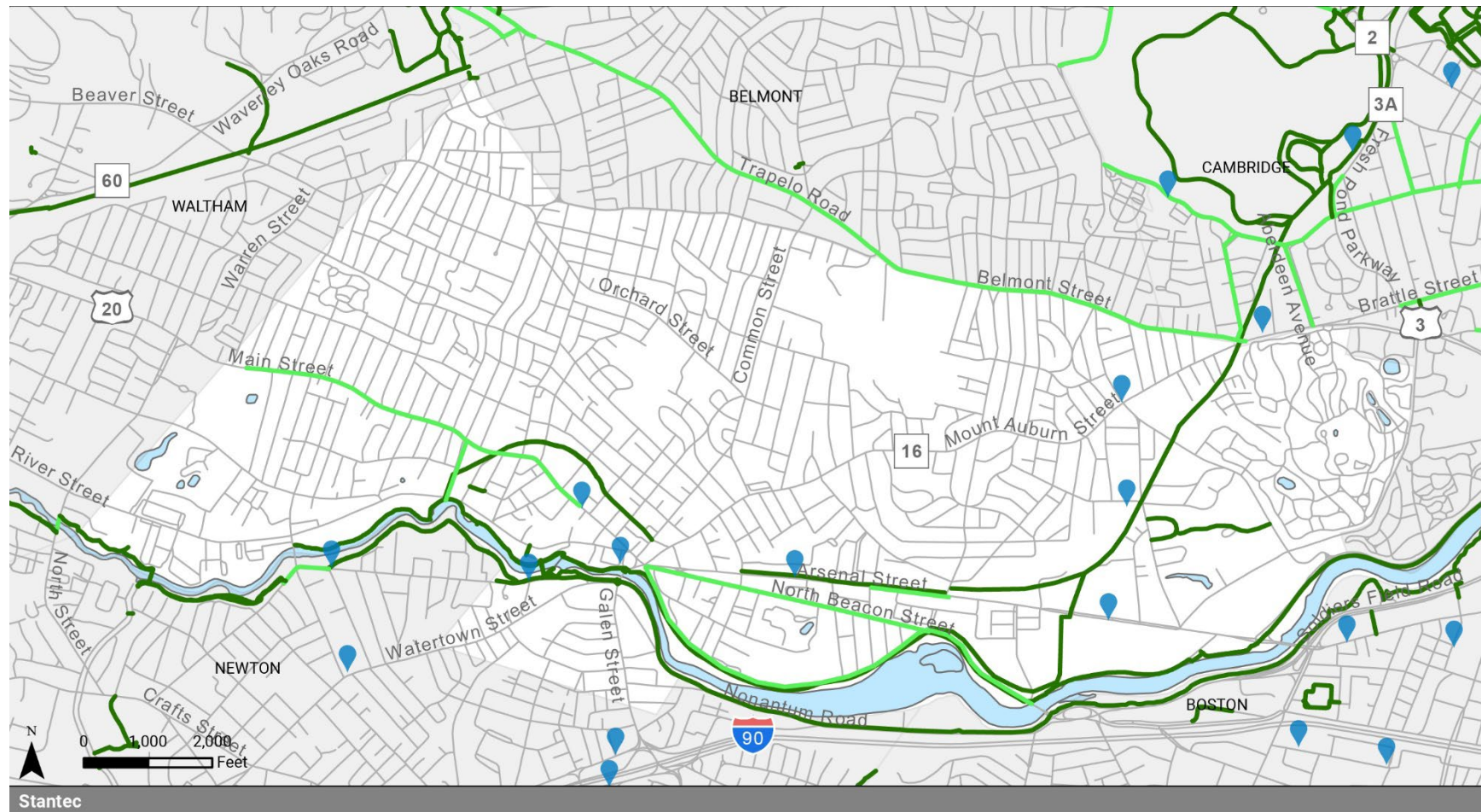
3.3.6 Bicycle Facilities

The dedicated bicycle facility network in Watertown provides an alternative mobility network outside of the roadway network, with a mix of high-quality facilities such as DCR’s Watertown-Cambridge Greenway, Paul Dudley White shared use paths along the Charles River, and the City’s Community Path. Significant gaps in the network exist where someone on a bicycle would need to ride in

mixed vehicle traffic. Figure 14 provides an overview of the dedicated bicycle network.

3.3.6.1 Bikeshare (Bluebikes)

Watertown has seven Bluebikes stations, connecting to the regional bikeshare network in Boston, Cambridge, Somerville, Newton, Arlington, and other communities in Metro Boston. The stations are generally located in the southern and eastern part of City, closest to Cambridge and Boston. Expansion has occurred in these areas first because of the density of population and jobs and proximity to existing stations. Accordingly, residents in the north and west do not have as good access to the bikeshare system. The Bluebikes system launched in August, 2020, with one station in Coolidge Square. By the end of 2021 there were 7 stations supporting 12,000 rides. The station with the highest ride origination is Arsenal Yards, followed by Watertown Square, and Coolidge Square.

Figure 14 Bicycle Facilities

Bicycle Facilities

- Off Road Facilities
- On-Road Facilities

BlueBikes Stations

Source: MAPC
April 2022
Existing Conditions Report
Watertown, MA



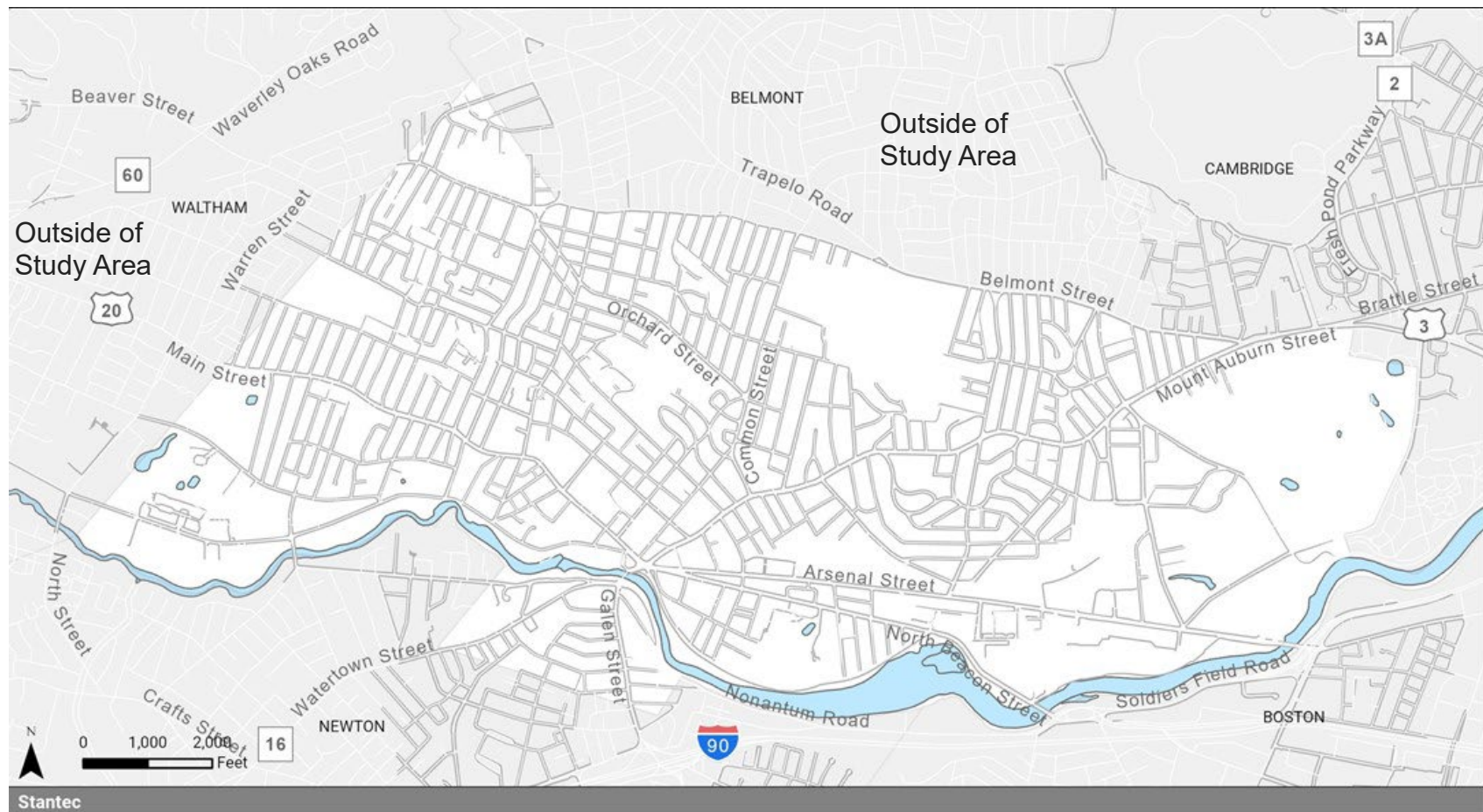
3.3.7 Pedestrian Facilities

Facilities for people walking and rolling are generally available throughout Watertown, including sidewalks, crosswalks, pedestrian signal heads, curb ramps, and detectable warning panels. Many crosswalks are “ladder” style, while others are a mix of “standard” (two lines perpendicular to the road) and “solid” (background color is tinted or painted red). This mix of treatments can be challenging to maintain, and the goal of the red crosswalks is likely to increase visibility for people crossing the street in key locations. However, thick ladder bars or “continental” style crosswalks are the safest

option as recommended by the Federal Highway Administration and is the current standard in Watertown.⁷

Several key intersections in the city have relatively long crossing distances, including in Watertown Square and Coolidge Square, which can deter people from walking as they may not feel safe and/or experience significant delay in getting across the street. This is often due to large turning radii at corners or multiple lanes of traffic, including parking lanes, and represents a hierarchy at intersections that prioritizes vehicle movement.

⁷ <https://safety.fhwa.dot.gov/provencountermeasures/crosswalk-visibility.cfm>

Figure 15 Sidewalks in Watertown

Sidewalks

— Sidewalks

Source: Open Street Map
April 2022
Existing Conditions Report
Watertown, MA



3.4 Travel Patterns

3.4.1.1 All Trips Estimates

New data provides insights into travel demand patterns for planners. Replica, a data product based on a mix of Census, traffic and transit counts, and de-identified mobile location data, allows a look at travel by all modes throughout the day in Watertown. This data is not yet available for post-COVID trip patterns.⁸

Table 6 Top Trip Origins for Trips that End in Watertown, Weekday, Fall 2019

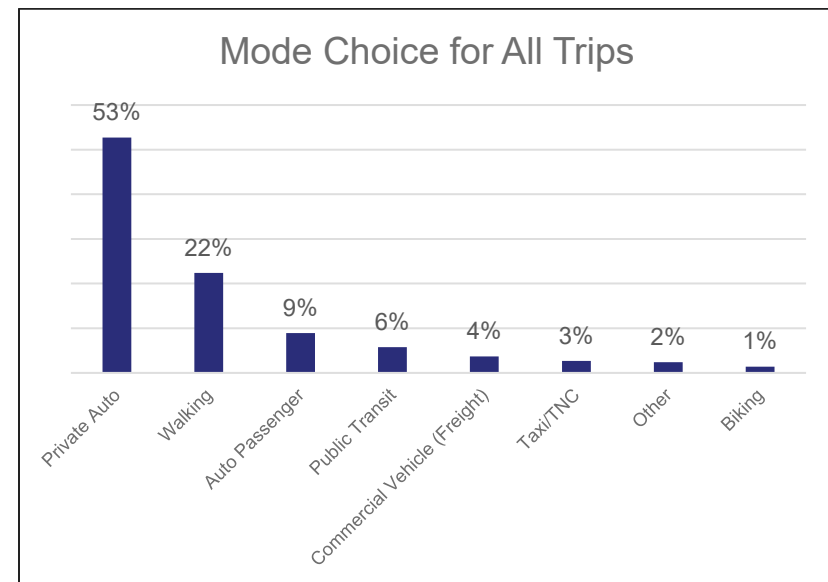
Top Origin Cities for All Trips	Share of Trips to Watertown
Watertown	41%
Boston	13%
Waltham	7%
Newton	6%
Cambridge	6%
Belmont	3%
Somerville	1%
Brookline	1%
Arlington	1%

Table 6 provides an overview of the top municipalities from which trips originate that end in Watertown on a typical weekday. Figure 17 shows this by Census Tract, which reveals an east-west demand pattern with trips originating in Waltham, Newton, and Cambridge.

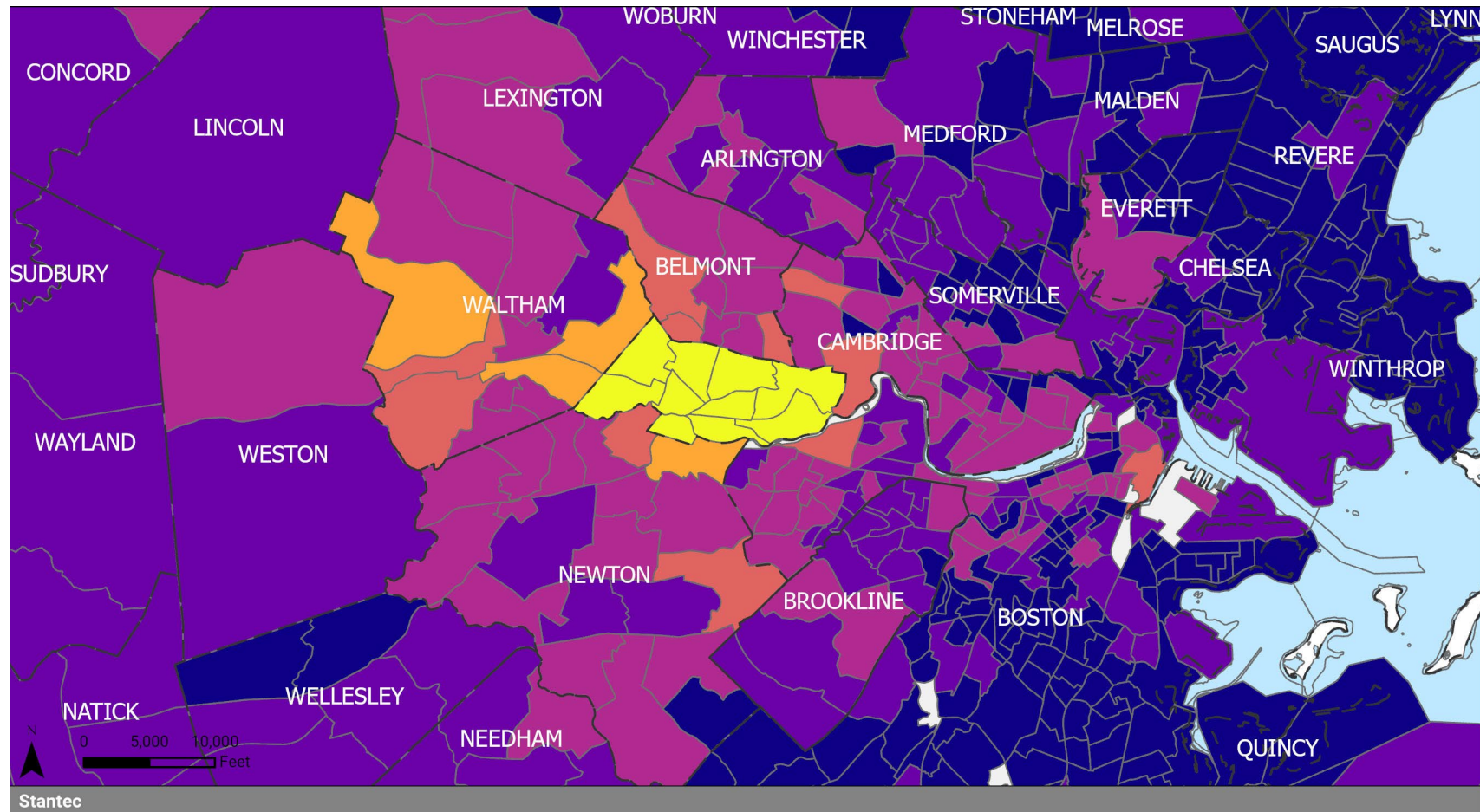
Importantly, it shows that the largest share of trips to Watertown also originate in Watertown, indicating a desire for local circulation.

Figure 16 shows that while nearly half of these trips are made by driving, walking comprises nearly a quarter of trips. Both walking and transit have a higher share of trips in Watertown than in the region as a whole. The share of trips made by bike is relatively low, given that the data shows many trips are local and therefore likely relatively short distances that should be bikeable.

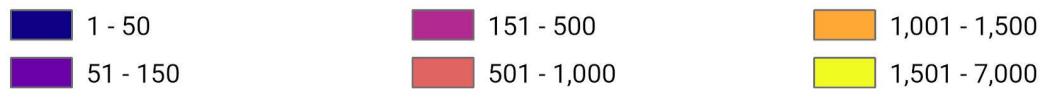
Figure 16 Estimated Mode Share for All Trips, 2019



⁸ For more information, see <https://replicahq.com/>. This data represents a Thursday in the Fall of 2019, or pre-COVID.

Figure 17 Origins of Trips to Watertown (Daily, 2019)

Origins of Trips to Watertown (Daily, 2019)



Source: Replica
April 2022
Existing Conditions Report
Watertown, MA

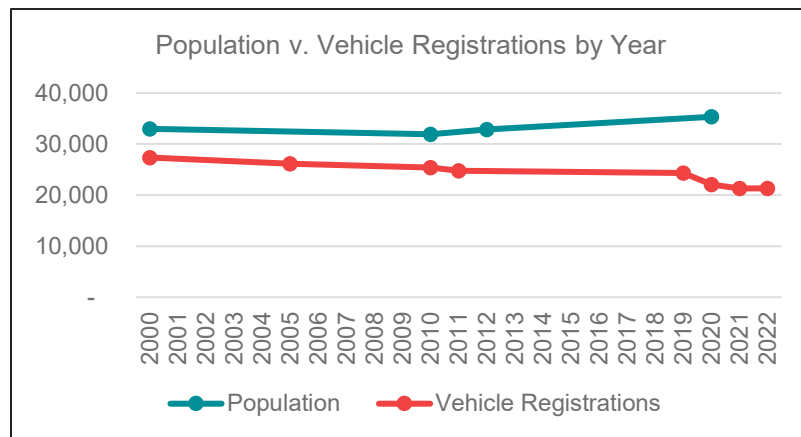


3.4.1.2 Auto Ownership

Nearly 10% of households in Watertown do not own vehicles. This represents a population that is entirely dependent on walking, biking, transit, taxis/transportation network companies, or other alternatives for mobility.

Interestingly, although Watertown's population has increased by 7% from 2000 to 2020, overall vehicle registrations are down nearly 20% in that time (Figure 18). This decrease in the ratio of vehicles to people indicates that potentially many of the new residents coming to Watertown are doing so without additional vehicles, or with fewer per person than a decade ago. In fact, the ratio of vehicles to people has decreased from 0.83 in 2000 to 0.63 in 2020.⁹

Figure 18 Vehicle Registrations v. Watertown Residents



⁹ Sources: Census/ACS data and City of Watertown vehicle excise tax numbers

3.4.1.3 Journey-to-Work

A review of the most recently available US Census American Community Survey journey-to-work data (2019) for Watertown residents and employers reveals commuting trends – specifically work location and mode choice. Table 7 and Table 9 summarize these data.

Approximately 29 percent of the estimated 20,162 employed Watertown residents commute to Boston, which is significantly higher than the 10 percent of residents that remain in Watertown. Following Boston, the top commute single destinations outside Watertown were the adjacent communities of Cambridge (13 percent), Waltham (6 percent) and Newton (6 percent). The remaining commuting destinations represent a variety of Massachusetts cities and towns, the majority of which are in Middlesex County and within 15 miles of Watertown. The table below summarizes three other communities (Belmont, Burlington, and Somerville) that draw approximately 5 percent of residents working outside Watertown.

Table 7 Location of Employment for Watertown Residents

Location of Employment	Percent of Residents
Boston	29%
Cambridge	13%
Watertown	10%
Waltham	6%
Newton	6%
Belmont	2%
Burlington	2%
Somerville	1%
All other communities (totaled)	31%

The journey-to-work census data was also reviewed to determine where people live who commute to Watertown. Approximately 14 percent of 22,407 Watertown workers live in Boston. Approximately 9 percent of people employed in Watertown resided in Watertown, while the next three top locations were all cities adjacent to Watertown (5 percent in Waltham, 3.5 percent in Newton, and 3 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 below illustrates three other communities that have between two and three percent of workers in Watertown. The balance of the workers in Watertown, or approximately 56.5 percent, traveled from other communities.

Table 8 Location of Residence for Watertown Employees

Location of Residence	Percent of Employees
Boston	14%
Watertown	9%
Waltham	5%
Newton	3.5%
Cambridge	3%
Somerville	3%
Belmont	2%
Arlington	2%
Quincy	2%
All other communities (totaled)	56.5%

3.4.1.4 Commute Mode Choice

Similar to the journey-to-work evaluation, Table 9 summarizes and compares commute mode choices for Watertown residents for 2016 and 2020.

Approximately 69 percent of Watertown residents take a car to work – either alone (61 percent) or with others (8 percent). Approximately 13 percent of Watertown residents use public transportation, while approximately 6 percent walk, use a bicycle or commute via other means. Likely due to the COVID-19 Pandemic, the percentage of residents working from home has increased from 5 percent to 12 percent.

Table 9 Watertown Residents Mode Share (2016 and 2020)

Mode Share	Percent of Residents (2016)	Percent of Residents (2020)
Drive Alone	64%	61%
Carpool	9%	8%
Take Public Transit	16%	13%
Walk	3%	3%
Bike	2%	3%
Work From Home	5%	12%

In addition to the Census, Watertown recently completed a survey of employees focused on their housing choices that included a question about primary transportation method. Although the respondent pool is relatively small, these numbers provide some additional insight and confirm that driving is the primary mode choice for commuters.¹⁰

Table 10 Nexus Study Respondents' Primary Mode of Transportation (2022)

Primary Transportation Method	Number of Responses	Percentage of Responses (%)
Car	246	79%
Public transit	23	7%
Bike	6	2%
Walk	29	9%
Other ²	9	3%

¹⁰ Data provided by City, May 2022.



HOUSING

4 Housing

4.1 Recent Housing Trends

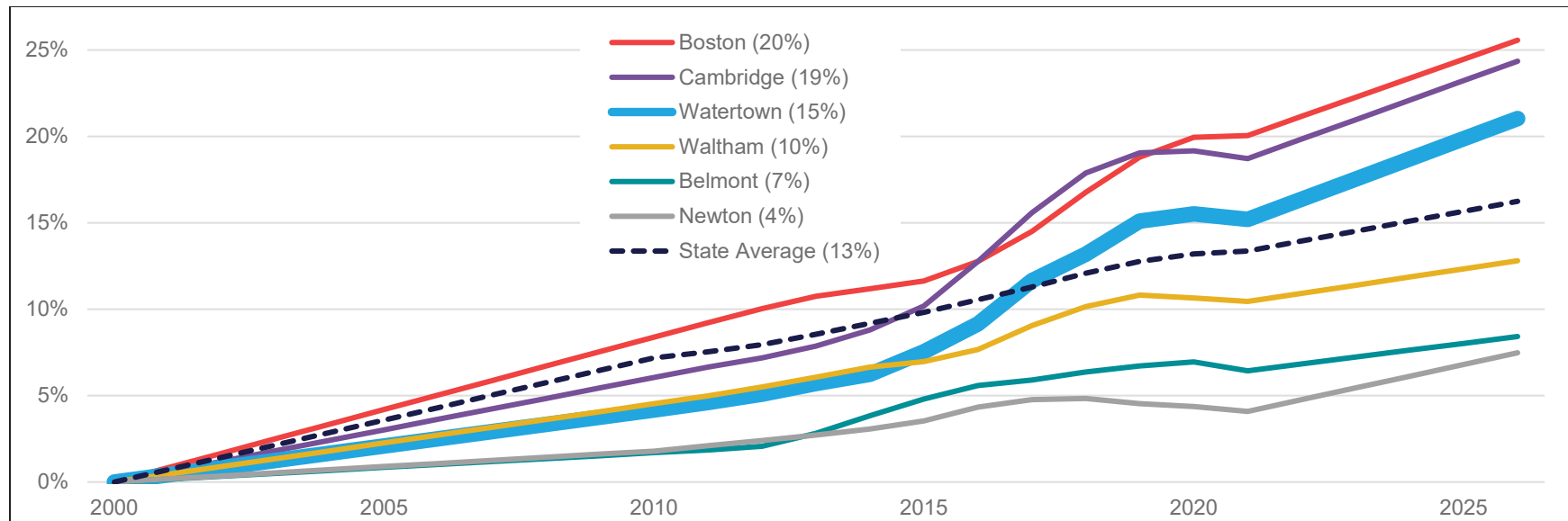
Watertown has experienced a 15 percent increase in the number of housing units between 2000 and 2020, from 14,988 units to 17,314. Much of this has been in new multi-family developments primarily along the Pleasant Street and Arsenal Street corridors. This growth rate is less than that in Boston and Cambridge but is higher than the State average or less urban neighboring communities.

In the last nine years, ten projects representing 1,573 units have been completed and another 183 units are under construction. Although there has been a lull in multi-family proposals since mid-2019, interest is starting to increase again.

Millennials and Baby Boomers have increased demand for smaller apartments, with most new projects having a bedroom mix focused on studios, 1- and 2-bedroom units.

Looking ahead to 2025, forecasting service Esri expects strong housing growth to continue. Additional development of life science space will further increase the demand for housing in the community.

The rising price of homes in Greater Boston has also led to changes in the City's single and two-family housing stock. Homeowners are increasingly trying to expand the living space in their single-family homes. Owners and small-scale developers are converting single-family homes into two-families or enlarging and converting existing two-families into condominiums. Between Fiscal Years 2016 and 2021, the condominium property type had a net gain of 318 parcels (+9%) while the two-family type had a net loss of 99 parcels (-3.5%) according to data from the Massachusetts Department of Revenue.

Figure 19 Percentage growth of housing units since 2000 for Watertown and surrounding communities (Census and Esri forecast)

4.2 Goals of the 2021-2025 Housing Plan

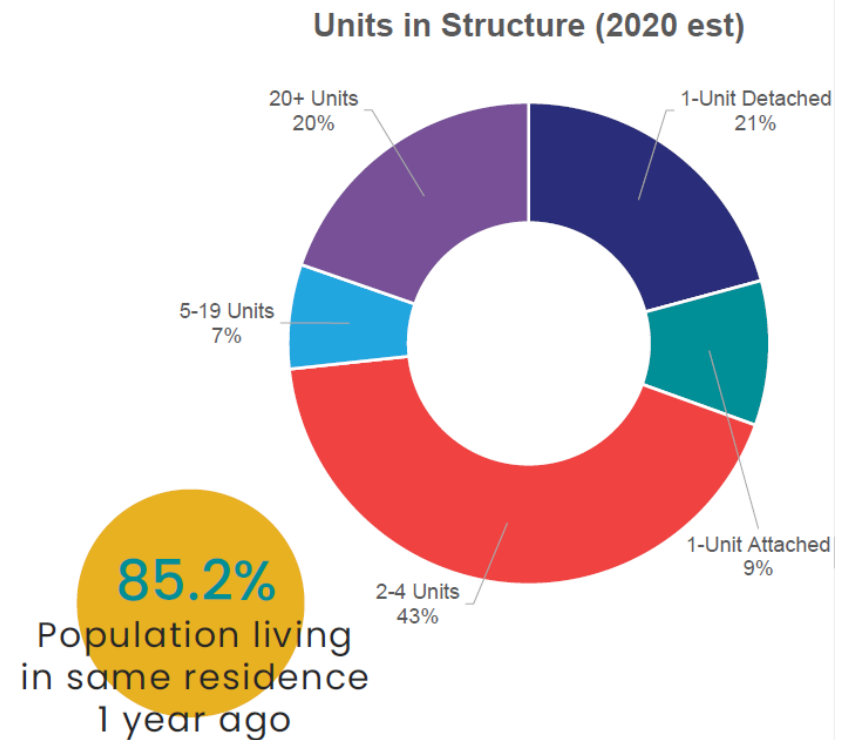
Watertown updated its Housing Plan in 2021, which sets goals for 2021-2025 based on the 2015 Comprehensive Plan. Each goal is accompanied by a series of strategies and an implementation plan, including responsible entities and a timeframe (near-, mid-, long-term, and ongoing). The six goals are:

1. Increase affordable housing opportunities for lower-income households (less than 80% AMI)
2. Increase affordable housing opportunities for those needing deeper affordability (less than 60% AMI)
3. Increase affordable and supportive housing opportunities for seniors and individuals with disabilities.
4. Encourage the creation of a variety of housing types at different price points, with particular emphasis on providing options for residents and workers who wish to remain in Watertown
5. Preserve existing housing affordability
6. Increase community engagement around affordable housing

4.3 Watertown's Housing Characteristics

According to the 2021 Housing Plan, while most of Watertown's residential land area is occupied by one- and two-family homes, it also has a significant percentage of larger apartment and condo buildings. Approximately 33% (5,395) of all housing units are single-family homes, and an additional 33% (5,410) are two-family homes. Approximately 10% (1,668) are in three- to four-unit buildings. The remaining 25% (4,097) of homes are in buildings with five or more units. Many of the larger apartment and condo buildings have been added since the Great Recession. Just under 50% of the Watertown housing stock is renter occupied. This is slightly higher than the state average and has been growing in the last decade.

About 80% of the housing in Watertown was built prior to 1979 and over 44% was built before World War II. This is a much larger share than in similar communities nearby, or statewide. The age of the housing stock can present challenges related to accessibility, energy efficiency, and the presence of lead paint, among other considerations.



4.4 Housing Affordability in Watertown

As of 2022, Watertown has 1,233 units of affordable housing included on the State's Subsidized Housing Inventory (SHI). These units meet the requirements of the state's affordable housing law (Chapter 40B) and are operated and maintained as affordable through long-term deed restrictions, covenants, regulatory and operating agreements, or other restrictions. Occupants of this

housing must meet income eligibility requirements and the government regulates rents or sales prices. This figure includes the 589 public housing units operated by the Watertown Housing Authority. It does not include an additional 21 inclusionary units under construction.

Watertown is in “safe harbor” compliance with Chapter 40B through one of the two statutory benchmarks. The most recognized metric is for at least 10% of the year-round housing units to be deed-restricted “affordable” units for households earning up to 80% of area median income. As of 2022, Watertown is at 7.94%. The alternative metric is for 1.5% of its land area to be devoted to affordable housing as defined in Chapter 40B. DHCD agreed in December 2019 that Watertown met the “General Land Area Minimum.”

Although there are affordable units in Watertown on the Commonwealth's Expiring Use Inventory, these units are not presently at-risk. Brigham House (46 assisted living units) is covered by a regulatory agreement and a local permit restricting use of the property. Saint Joseph Hall (25 units) is a Community Housing Development Organization and HOME-assisted property.

Watertown's affordable units vary in the type of household they are targeted to support. The 589 public housing units serve as a safety net for seniors and families with the lowest incomes (327 and 228 units, respectively, as well as 35 units for individuals with special needs). On the other end, the rental and ownership units created through Watertown's inclusionary zoning ordinance generally support households that are between 60 and 80% of area median income. As the region's median income has risen in recent years, this has made it harder for existing and potential tenants to keep up with even these “affordable” rents.

Overall, 48% of the City's subsidized units are in public housing, 21% are inclusionary units in market rate developments, and 31% are in other categories. The number of inclusionary units is certain to grow while it is unlikely that the number of public housing units will increase because federal and state policy has shifted away from that model. A complete list of properties on the SHI as of March 2021 can be found in Appendix C of the Housing Plan.

One of the most common measures of housing need is whether a household is cost-burdened is if a household spends more than 30% of their gross income on housing, be it rent or mortgage payments. By this metric, about 37% of renters and 28% of owners are cost burdened.

Watertown's zoning ordinance includes a provision for inclusionary housing (Section 5.07, adopted 1989). The purpose of the ordinance is to encourage the expansion and improvement of Watertown's housing stock; provide housing choices for a diversity of households; prevent displacement of low- and moderate-income residents; provide opportunities for mixed-use development; and more. It applies to any project with more than five residential units. For those with 6-19 units, at least 12.5% must be affordable at 80% AMI and for projects with 20 or more units, at least 15% must be affordable including no less than 5% of the total at 65% AMI.

4.5 Housing Plan and MBTA Communities Implementation

Since the Housing Plan's adoption last year, the City Council has moved on two of its leading recommendations. In November 2021, the Council authorized creation of an affordable housing trust to replace the housing partnership and just confirmed its initial trustees. The Council also authorized a study of the nexus between new commercial development and affordable housing demand. After the study was issued in May 2022, the Council voted to pursue a home rule petition to impose a linkage fee to fund new affordable housing.

In addition, the City will be required to comply with the state's MBTA Communities legislation requiring Watertown and 174 other communities to provide at least one zoning district that allows multi-family housing by right within a half-mile of a transit station. The legislation will likely require rezoning some part of the city within the next year.



ECONOMIC DEVELOPMENT

5 Economic Development

5.1 Employment Base

Watertown's employment base is at an unusually fluid time. The overall job numbers suggest a growing employment base disrupted by COVID in 2020 and then stabilizing just below pre-COVID levels. Employment rose from 20,243 in 2015 to 23,216 in 2019, fell in 2020, and averaged 22,780 over the first five months of 2022. The overall numbers, however, hide a significant shift in job composition. Over the last three years, the city lost two of its largest employers (Tufts Associated Health Plans and Edassist/Bright Horizons). In that same time, it has gained new office/lab employers, including SQZ Biotechnologies at Arsenal Yards, tenants at the LINX facility, and Arranta Bio on Pleasant Street.

This shift will become even more evident in the next few years. As noted earlier, the development pipeline includes 2 million square feet under construction, another 157,700 permitted, and over 1 million square feet likely to be proposed. The Commercial Development/Housing Study issued in May 2022 projected over 6,213 new jobs in these developments over the next ten years, mostly in office/lab businesses.

Although the state's most recent city-level employment data has not caught up with these trends, it is useful to review how the city's 21,530 jobs were reportedly distributed as of the first half of 2021. According to the state, five sectors each accounted for 10-15% of total employment: Finance & Real Estate; Professional & Technical Services; Administrative, Waste & Other Business Services; Retail Trade; and Healthcare & Social Assistance. Within these sectors, the largest industries were Insurance Carriers (2,807 jobs – but likely

included Tufts Associated Health Plans), Scientific Research & Development (1,624 jobs – primarily life science firms), Child Care & Social Services (820 jobs – but likely included Bright Horizons), and Food & Beverage Stores (676 jobs). Large employers include Vanesse Hangen Burstlin Inc (VHB – engineering), athenahealth, New England Sports Network, Home Depot, Stop & Shop, Target, and Best Buy.

The state's data on Watertown's employment growth between 2015 and the second quarter of 2021 shows an increase of 4,408 jobs with two sectors leading the way: Administrative & Support Services accounted for 37.6% of these new jobs, followed by Scientific Research and Development Services at 24.5%.

The regional job base, defined as the Metro North Workforce Development Area, is well-diversified and growing. Twelve industries added at least 1,000 jobs and combined to add almost 49,000 new jobs between 2015 and the second quarter of 2021. Scientific Research & Development Services was, by far, the largest source of employment growth, adding 18,807 jobs or 39.1% of the total. The next two largest sources of new jobs were Management of Companies (i.e., corporate headquarter offices) and Management and Technical Consulting, accounting for 13.6% and 10.9% of total job growth for the 12 industries, respectively. Three information technology-related industries (Software Publishers, Other Information Services, and Computer Systems Design & Related Services) accounted for another 12.2% of job growth.

The COVID-19 Pandemic disrupted labor markets globally and locally starting in 2020. Watertown, like the Boston/Cambridge region generally, will be impacted by many trends emerging in the post-pandemic future of work. These trends include:

- Reduced demand for office real estate
- Capacity-constrained housing options
- Ridership decline in public transit
- Need for affordable, flexible childcare options
- Slowing population growth
- Greater equity challenges
- Accelerated pace and scale of reskilling
- Reduced business travel

Regional employment trends identified in Table 11 create local opportunities. The regional fundamentals remain strong, including access to a strong labor pool and skilled talent, proximity to research institutions, and continued growth in e-commerce, biotechnology, AI,

and healthcare. These industries have higher in-person work given the nature of the tasks required. For example, biotechnology and labs are less susceptible to remote work as scientific research typically occurs in rigidly controlled environments.

Table 11 Employment Trends: Regional Trends and Local Assessment

	Hybrid or Remote Work	Growth in Healthcare and New Economy Sectors	High Cost of Living	High Cost of Doing Business
Regional Trends¹	One-third of Massachusetts residents can work remotely. Depending on adoption of remote work by employers, the pre-COVID trend toward 1 remote day per week could increase to 2 or 3 days. Such a shift in remote/hybrid work would reduce demand for office real estate. It also means more time closer to home, impacting spending habits, transit needs, and where/what type of housing is needed.	By 2030, an estimated 210,000-230,000 more jobs in healthcare are expected. At the same time, it is likely that new economy sectors like artificial intelligence (AI), clean energy, and biotechnology will grow if the region can attract and retain a sufficient supply of talent and skilled labor.	High cost of living is barrier to retaining and attracting talent. Massachusetts will need 125,000 – 200,000 additional housing units by 2030 to achieve national vacancy benchmarks. 25,000-30,000 childcare workers will be necessary to support the childcare needs of employees by 2030.	High cost, complexity of doing business, and regulatory hurdles are barriers to attracting and retaining businesses.
Local Assessment	The opportunity for Watertown is that more residents will be able to work from home. Along Watertown's walkable corridors, more daytime residents and/or workers may mean growth opportunities for small businesses. There may also be an increase in the need to accommodate daytime mobility by residents/workers. However, this opportunity could be offset by the city's lab developments, which are less likely to allow remote work than offices.	Watertown is already attracting biotech development; whether those new businesses will prosper depends on their ability to compete for talent. To some degree, the City can influence that through the amenities, transit access and housing available.	The cost of housing in Watertown is rising, driven by regional supply/demand factors. The availability of affordable housing can mitigate this trend and, along with other amenities (including childcare), make it easier for Watertown employers to attract/retain workers.	Access to a highly skilled regional labor market is currently adequate compensation for the high transaction costs associated with "new economy" real estate development. However, as some industries become less dependent on in-person work, there will be growing economic incentives to relocate to avoid high-cost markets.

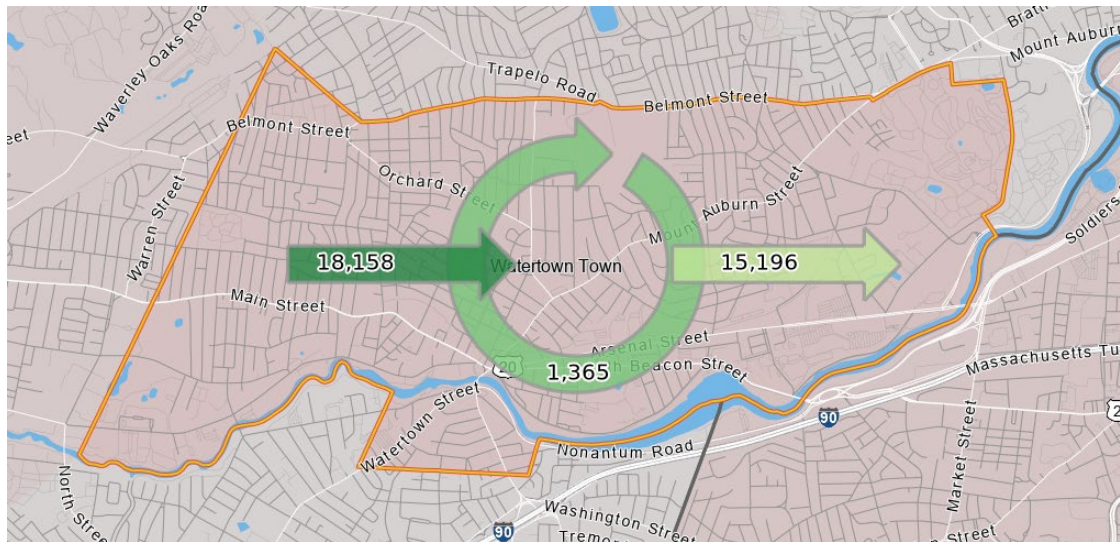
¹ "Preparing for the Future of Work in the Commonwealth of Massachusetts". McKinsey & Company for the Commonwealth of Massachusetts (July 2021)

See Section 2.3 for more discussion of recent development and tax levy growth.

Pre-pandemic, only 1,350 residents both lived and worked in Watertown and more than 15,000 residents left the city to work at

jobs elsewhere. Hybrid work is affecting many communities however, and 19% of Watertown residents are in fields that lend themselves to flexible work. Remote work options may change the outflow of residents, keeping more residents closer to home during the day.

Figure 20 Commuter inflow and outflow



5.2 Market Scan

Watertown has several clusters of economic activity ranging from large regional attractions to small neighborhood centers. Arsenal Street including Arsenal Yards, Pleasant Street, and Watertown Square are primary clusters while Coolidge Square, Galen Street, and Waverley Avenue are secondary clusters. There is limited retail competition immediately to the west. Arsenal Yards, a regional draw, is targeting similar tenants as Harvard Square in Cambridge and

Newbury Street in Boston, while also pulling tenants from Newton and Belmont.

These clusters can also be classified according to the International Council of Shopping Center's (ICSC) Shopping Center Classification system which is based on type of retailers, size and scale, tenant mix, and trade area. These categories provide a baseline framework for commercial areas and help to ensure that zoning and policy are

aligned with the current and projected typologies of Watertown's commercial districts.

- Strong Regional Destinations. Approx. 1.8 million square feet of retail activity with significant regional draw (Arsenal Yards and Arsenal Street).
- Community Serving Districts. Coolidge Square, Pleasant Street, and Galen Street function primarily as neighborhood centers, offering food and beverage and convenience-oriented services for nearby residents and

workers. Coolidge Square, perhaps more so than either Pleasant or Galen Streets, also draws its customers from a larger trade area owing to the unique offerings, particularly in the Food & Beverage sector.

- Neighborhood Convenience Districts. Waverley Avenue offers small scale convenience for nearby residents
- Districts in Transition. Watertown Square was once the city's largest concentration of commercial activity but has been replaced by other districts.

Table 12 Market Scan by District

Districts	Zoning Designation	Gross Leasable Floor Area (ft ²)	Anchors	Resident Population (0.5 mi)	Types of Downtown/ Commercial District (ICSC Classification)
Arsenal Yards, Watertown Mall, Arsenal on the Charles	Mixed Use/ Industrial	1,819,974	Arsenal Yards (Home Depot, Marshall's) Watertown Mall (Best Buy, Target) Arsenal on the Charles (athenahealth, Mosesian Center for the Arts, Branch Line)	11,478	Super Regional Mall/ Power Center
Watertown Square	Central Business	383,604	Armenian Museum of America Restaurants City Administration and Library	11,616	Community Center (Large Neighborhood Center)
Pleasant Street	Pleasant Street Corridor	296,250	Stop and Shop Arranta Bio Riverworks	13,050	Neighborhood Center
Galen Street	Limited	179,032	Watertown Yard (MBTA)	3,120	Neighborhood Center

	Business		Stop and Shop CVS Vows WiTricity		
Coolidge Square	Limited Business	104,812	Restaurants Middle Eastern markets (Arax, Sevan, and Massis) CVS	6,776	Neighborhood Center
Waverley Avenue	Neighborhood Business	19,569	Quebrada General Market and restaurants	5,232	Strip Convenience

Citywide, approximately 64% of retail businesses are classified as Food & Beverage. One-quarter are Neighborhood Goods & Services and 11% are General Merchandise, Apparel and Accessories, Furniture and Other Sales (GAFO).

Watertown has an annual retail leakage of over \$103 million, representing the sales that are lost to other communities because of gaps in local businesses or competitive disadvantage. This amount of leakage -- approximately 13% of total spending --is relatively normal and suggests a stable market. There are some discrete opportunities to improve offerings and attract new businesses in

categories that are aligned with the kinds of uses that are well suited for the local commercial districts, particularly in Food Service and Drinking Places, Food and Beverage Stores, Clothing and Accessories and Sporting Goods, Hobby, Book & Music Stores. If new and/or existing retailers can capture this leakage at the “Capture Rates” outlined below, **there is approximately 79,000 sf of supportable retail** across categories aligned with the City’s commercial districts, including neighborhood goods/services, food/beverage, and General Merchandise, Apparel, Furniture and Other (GAFO).

Table 13 Supportable Retail Square Footage by Category

Retail Category	Total Leakage	Capture Rate	Projected Supportable Retail SF
Furniture and Home Furnishing Stores	\$12,569,161	5%	1,976
Misc. Store Retailers	\$1,740,970	40%	1,741
Sporting Goods, Hobby, Book & Music Stores	\$19,396,324	20%	8,698
Health and Personal Care Stores	\$11,174,094	40%	7,449
Electronics and Appliance Stores	\$3,679,891	20%	1,650
Food Services and Drinking Places	\$37,209,911	30%	24,807
Clothing and Accessory Stores	\$21,725,776	10%	5,459
General Merchandise Stores	\$4,540,603	20%	2,829
Food and Beverage Stores	\$30,585,902	30%	25,278
		Total	79,887

Source: Streetsense Sales per SF Figures

5.2.1 CONSUMER PREFERENCES

Psychographic profiles offer another way to understand the local and regional consumer base and preferences. Businesses often use these profiles when making location and marketing decisions. These profiles describe segments of the population based on “like” characteristics including age, income, and education. The following psychographic profile types are most relevant to Watertown businesses:

- “Trendsetters” make up the largest share of any psychographic profile. These individuals tend to be young (median age 35.5), diverse, mobile, and educated. Their housing preference is typically for upscale, multi-unit buildings in areas with public transit accessibility.
- Those in the “City Lights” profile type tend to be slightly older (median age 39) with above-average incomes. This diverse group often prefers single-family or

townhome living and depends on public transit, although most also own vehicles.

- “Laptops and Lattes” and “Urban Chic” tend to have high incomes, be well-educated, and often prefer single-family homes. “Laptops and Lattes” are typically singles (median age 37) while “Urban Chic” tend to be slightly older couples and families (median age 43).

The COVID-19 Pandemic has accelerated significant changes in consumer preferences and lifestyles, altering the demand for various types of goods and services (frequency and size of purchases), and therefore impacting the way that commercial real estate is being used. Several nationwide trends indicate the growing move away from traditional brick-and-mortar retail in commercial districts to a wider set of uses that complement retail and that create unique in-person experiences that cannot be replicated digitally.

Table 14 Change in Consumer Preferences

	Buy Online, Pick Up in Store	Health/Personal Care and Neighborhood Services	Local and Artisan	In-Person Experiences and Connections
Change in Consumer Preferences	Demand for 'buy online, pick up in store' (BOPIS) has surged 40% since the start of the pandemic. E-commerce volumes grew as much in the first quarter of 2020 as in the previous ten years ¹ .	Health spending in the U.S. increased by 4.6% in 2019 to \$3.8 trillion or \$11,582 per capita ² . In response, top U.S. retailers are quickly joining the healthcare industry, including Walmart, Walgreens and CVS.	Consumers' increased time spent at/near homes (following lock down/ work-from-home policies) has grown a Shop Local/ locavore movement in consumer spending. 56% of consumers are shopping in neighborhood stores or buying more locally sourced products ⁴ .	Although restaurants and entertainment venues have been hardest hit during the pandemic, consumer sentiments indicate that Americans are indeed missing the pre-pandemic dining experience and socializing. 60% of Americans polled have consistently said the activity they are most comfortable with is dining out.
Opportunities for Growth	Along commercial corridors, smaller store footprints may be better able to accommodate seamless customer pickup, micro fulfillment, delivery services, etc.	In 2019, nearly 28,000 shopping centers in the U.S. included healthcare tenants, up from about 21,600 in 2013 ³ . These sites will increasingly see growth in 'MedTail' or health and personal care tenants including doctor groups, dental groups, urgent care clinics, cosmetic/ medical spa, yoga studios, gyms, and specialized medical services like kidney dialysis, mental health counseling centers, and holistic/ alternative care centers.	Growth in artisan tenants (including galleries, maker spaces, incubator artist spaces/ cooperatives, and even light manufacturing of consumer products)	Growth in multidimensional, experiential destinations and activities as well as alternative, flexible workspaces.

¹ "Retail Speaks: Seven Imperatives for the Industry". McKinsey & Company and Retail Industry Leaders Association, 2021.

² "National Health Expenditures, 2019: Steady Spending Growth Despite Increases in Personal Health Care Expenditures in Advance of the Pandemic". American Medical Association, 2020.

³ CoStar 2020

⁴ "How is COVID-19 changing the retail consumer?" Accenture 2020

5.3 Physical Assessment

The integrity of public infrastructure and private buildings and storefronts plays an important role in the experience of a downtown or commercial district. Visually appealing, well-maintained, and comfortable streetscapes together with inviting storefronts and clear signage impact the vitality of a commercial district. It is helpful to separate the physical environment into the public realm and the private realm to acknowledge the fundamentally different nature of the tactics and funding mechanisms available for each due primarily to ownership. It is also useful to understand how people travel to the district and move around once there. Accessibility includes the various travel modes that connect commercial districts to neighborhoods and other parts of the city, pedestrian connections within the district, and parking. The following public and private elements of Watertown's physical environment have been analyzed to develop a composite score for each district:

- Public Realm: Sidewalks, street trees & benches, lighting, wayfinding and signage, roadbed and crosswalks
- Private Realm: Storefront windows, facades, outdoor display and dining, signage, awning, and lighting
- Accessibility: Travel mode(s) to districts, parking, pedestrian connectivity

The Physical Environment Diagnostic poses the question: "How conducive is the physical environment to meeting the needs and expectations of both businesses and customers?"

5.3.1 PUBLIC REALM

The physical characteristics of a community's public realm should support economic activity. As part of this existing condition analysis, each of the major areas have been reviewed against the following guiding principles wherever possible:

- Sidewalks should be wide enough to accommodate both the flow of customers and spillover retail/dining activity. In addition, sidewalks should be clean and well-maintained to ensure the safety and comfort of pedestrians.
- Sidewalks should facilitate a variety of activities, including resting, people-watching and socializing. Street trees and benches are key amenities that support such activities and should be made available without disrupting the flow of pedestrians.
- Street lighting should improve pedestrian visibility and personal safety, as well as aid in geographic orientation.

- Wayfinding should support overall accessibility of a commercial district. It should benefit pedestrians and bicyclists and direct motorists to park and walk. Without clear visual cues, customers may find it difficult to park or may be less aware of local offerings.
- Roads should be well-maintained to ensure safety of drivers and pedestrians. Crosswalks that are unsafe or inconvenient to customers may undermine accessibility between stores and overall shopper experience.

Table 15 Public Realm Physical Assessment Summary

Public Realm	Pleasant St	Watertown Sq	Galen St	Arsenal Yards	Coolidge Sq	Waverley Ave	Arsenal St
	C+	B-	C	A	B	B	B
	Pleasant St is oriented to automobile rather than pedestrians. While there is a bike/pedestrian path along the river, Pleasant St itself has adequate sidewalks, no bike facilities, limited lighting and no pedestrian furniture.	There is adequate pedestrian lighting and furniture, however intersection is hazardous. There are also areas of pedestrian voids with limited activation.	Adequate sidewalks but limited pedestrian furniture and cyclist infrastructure. Crosswalks are limited and long. Abandoned and unfriendly pedestrian voids.	Substantial amount of pedestrian furniture and wayfinding signage give Arsenal Yards a sense of place that makes those who work there, stay. Located within an auto-centric corridor.	Good street lighting, some benches. Lack of pedestrian/cyclist amenities, narrow sidewalks, and limited crosswalks.	Crosswalks and sidewalks in good shape but no pedestrian/cyclist amenities.	Exceptional bicycle infrastructure and sidewalks from Irving St to School St. Other segments primarily automobile-centric with limited street trees and no street furniture.

Note: Arsenal Street includes all non-Arsenal Yards development including Arsenal on the Charles

5.3.3 PRIVATE REALM

Like how the public realm impacts economic development, the characteristics of the private side of the lot line should also support economic activity. As part of this existing condition analysis, each of the major areas have been reviewed against the following guiding principles for the private realm:

- Storefronts that maintain a minimum of 70% transparency ensure clear lines of sight between the business and the sidewalk to enhance attractiveness of storefront, as well as improve safety for the business, customers, and pedestrians.
- Attractive window displays and spillover retail/restaurant activity on sidewalks or adjacent parking spaces can help contribute to overall district vibrancy.
- Signage can help customers identify the location of storefronts and businesses from a distance. Signage should also reflect the visual brand and identity of tenants to help attract new customers.
- Awnings can provide shade during warmer months, enabling comfortable outdoor dining arrangements for customers. However, they must be well-maintained and designed in coordination with other elements of the storefront.
- Storefronts that use high-quality and durable building materials, as well as paint and color to differentiate from other businesses, can dramatically improve the appearance of the commercial district to potential customers.
- Storefront interior lighting after business hours helps to enliven the corridor and boost security on the street.

Table 16 Private Realm Physical Assessment Summary

	Pleasant St	Watertown Sq	Galen St	Arsenal Yards	Coolidge Sq	Waverley Ave	Arsenal St
Private Realm	A-	A-	B	A	A-	B-	C
	Most residential/lab/office properties on Pleasant St have adequate facades, lighting, and signage	Most businesses have adequate signage and lighting	Most businesses have adequate signage and lighting, but some are not level with sidewalk and lacking signage	New development has adequate facades, lighting, and windows	Lack of pedestrian signage but exceptional lighting and facades	Storefronts with obstructed views inside and limited pedestrian signage	Many business are set back from sidewalk and do not have pedestrian scale lighting or signage

Note: This assessment is based on existing conditions. Arsenal on the Charles, part of the Arsenal Street area in the chart above, is undergoing redevelopment which is improving conditions there.

5.3.4 ACCESSIBILITY

Watertown Square

- Most residents park adjacent to Watertown Square in the municipal lot or Library lot, rather than on the street. On street parking is used along Mt Auburn and a portion of Main St for the adjacent stores.
- Alley (Merchant's Row) connection from the municipal lot allows pedestrians to access Main Street efficiently; lighting is satisfactory, but aesthetic improvements are needed.
- There is limited signage to Main Street for those that choose to park in the Library lot.

Coolidge Square

- Most consumers arrive to Coolidge Square via automobile, bus, or walking.
- Consumers have the option to park at metered, time limited, unregulated, handicap, Wells Avenue municipal lot, and Nichols Avenue municipal lot.
- 30% are unaware of available parking in municipal lots. Both lots do not offer adequate connectivity to Mt. Auburn and are poorly lit.
- There is a lack of connectivity for cyclists in Coolidge Square to other districts.(note: accessibility will improve with the Greenway)

Arsenal Street and Arsenal Yards

- Shuttles
 - WATConnector Arsenal Street Shuttle – transports passengers to and from Harvard Square (15 min intervals)
 - Private shuttles are also offered at certain developments.
- MBTA
 - Bus 71 travels to and from Watertown Square to Harvard Square about every 18 minutes. This route travels on Mount Auburn and terminates at Watertown Square.
 - Bus 70 travels from to and from Central Square in Cambridge to Watertown Square and to Waltham, stopping at Arsenal Yards and Arsenal Street.
 - Pleasant Street currently does has limited MBTA bus service. There is an express bus that runs on a small portion, but it is being considered for elimination.
 - Bus shelters are lacking throughout Arsenal Street however the city is working on easements for installation from School Street to Greenough Boulevard.

- Community Path
 - Between the Watertown Community Path, Charles River greenway, and Watertown-Cambridge Greenway, there is exceptional east-west connectivity through Watertown.
 - North-south connectivity to Coolidge Square from Arsenal Street and Arsenal Yards is difficult to navigate and lacks wayfinding signage.

Pleasant Street

- WATConnector Pleasant Street Shuttle transports passengers to and from Watertown Square and Harvard Square at 15-minute intervals.
- Access to the public is allowed. Passengers can ride for \$1 per ride each way.

5.4 Business Organizations

Watertown has one local and one regional organization dedicated to business advocacy and promotion. There are currently no business improvement districts (BIDs) in Watertown.

- The Watertown Business Coalition (WBC) is a nonprofit organization founded in 2019 to connect local business owners to resources and encourage more local spending. The WBC hosts regular events for members to network and share ideas.
- The Charles River Regional Chamber is also a nonprofit organization that works to strengthen the economic and cultural vitality of its member communities. It offers education seminars, member events, and advocates for the business and nonprofit community.



OPEN SPACE AND RECREATION

6 Open Space and Recreation

6.1 Inventory of Resources

Open space and recreation resources provide opportunities to play, socialize, and exercise in Watertown. In a dense, urban landscape like Watertown, these resources also provide needed green spaces to the City's residents.

There are approximately 117 acres of city owned open space and recreation land in Watertown. These range from facilities like playgrounds, multiuse fields, ballfields, courts, and other play areas to more passive spaces with walking paths, benches, community gardens, memorials, and non-programmed green space. In combination with other publicly and privately owned land, there are a total of 468 acres of open space and recreation land in Watertown.

Table 17 Ownership of Open Space and Recreation Resources

Ownership	Area (acres)	% of Total Open Space Area
City of Watertown	117	25%
State/DCR & City of Newton	59.1	13%
Private	291.8	62%
TOTAL	467.8	100%

Source: Watertown Community Preservation Committee, "Community Preservation Act, 5-Year Plan, 2021-2025" (2021)

Historically, communities have relied on the National Recreation and Park Association (NRPA) standards, developed in 1996, to guide the number and type of recreational opportunities offered for residents. Recognizing that no two communities are alike given their unique sizes, locations, and resident needs, NRPA shifted away from standards in 2019 and established its NRPA Park Metrics. NRPA now surveys park and recreation agencies around the country and releases key findings in an Annual Performance Review. Park and recreation agencies can use these data to see how they compare to their peers and identify best practices.

According to the 2022 NRPA Annual Performance Review, agencies serving similarly sized communities to Watertown (between 20,000 and 49,000 residents) have a median of 10.6 acres of parkland per 1,000 residents. Watertown has 4.9 acres of publicly owned parkland per 1,000 residents, placing it in the lower quartile of similarly sized communities.¹¹ When compared to communities with higher population densities, Watertown is slightly closer to the median 7.9

¹¹ In addition to City owned resources, this includes state-owned resources such as the Charles River Reservation.

acres of parkland per 1,000 residents.¹² As NRPA notes, its metrics are starting points for open space and recreation planning initiatives and do not assess resident satisfaction with available resources.

Watertown has recently implemented a number of improvements such as equipment replacement, aesthetic improvements, and

amenity expansions. Reconstruction of the City's elementary schools has also resulted in new, modern playgrounds and play spaces, although some now occupy smaller footprints. Several planning initiatives related to citywide bike and pedestrian infrastructure have increased connectivity to and between open space and recreation sites and residential areas (see the Transportation section).

Table 18 City Owned Open Space and Recreation Resources

Resource	Owner	Acres	Current Use	Amenities	Condition	Public Access	Protection Status	Recent & Planned Improvements
552 Main St Playground	City	2.4	<ul style="list-style-type: none"> Athletic & active recreation 	<ul style="list-style-type: none"> Athletic courts Multipurpose natural grass field Picnic tables Playground/tot lot Bicycle rack Sitting areas Nearby public restrooms 	Excellent	Open	In perpetuity (Article 97)	N/A
Arsenal Park	City	13.7	<ul style="list-style-type: none"> Athletic & active recreation Other community use 	<ul style="list-style-type: none"> Athletic courts Multipurpose natural grass fields Picnic facilities Playground/tot lot Community garden Skatepark Splash pad 	Fair	Open	In perpetuity (Article 97)	Renovations planned 2016: Connectivity planning started for link between greenways 2017: Arsenal Park redesign process started

¹² Note that Watertown has a significantly higher population density than the minimum population density for this peer community group. Watertown's population density is 8,596 people per square mile, but this peer community group includes all jurisdictions with a population density of over 2,500 people per square mile.

Resource	Owner	Acres	Current Use	Amenities	Condition	Public Access	Protection Status	Recent & Planned Improvements
				<ul style="list-style-type: none"> • Walk/bike path • Running course • Restrooms 				2018: Redesign master plan adopted 2021: Phase A on east side built and opened in 2022 2022: Phase B planned to go to bid and be constructed for the rest of the park
Bemis Park	City	1.9	<ul style="list-style-type: none"> • Athletic & active recreation 	<ul style="list-style-type: none"> • Athletic courts • Multipurpose natural grass field • Batting tunnels • Picnic tables • Bicycle rack • Playground/tot lot • Hockey rink • Portable restrooms (seasonal) 	Fair	Open	OSC Zoning District	2016: Batting tunnels installed; hard courts resurfaced 2017: Ball field maintenance (releveling, resodding, etc.)
Casey Playground	City	4.2	<ul style="list-style-type: none"> • Athletic & active recreation 	<ul style="list-style-type: none"> • Lighted athletic courts • Lighted multipurpose natural grass fields • Multipurpose rink • Playground/tot lot • Sitting areas • Portable restrooms (seasonal) 	Good	Open	OSC Zoning District	2016: Athletic courts and lights installed 2017: Electrical control box renovation 2019: LED solar flagpole light installed
Community Path	City	N/A	<ul style="list-style-type: none"> • Passive recreation 	<ul style="list-style-type: none"> • Walk/bike path 		Open		Section 1: Fully constructed and in use Section 2: Design nearly complete; construction

Resource	Owner	Acres	Current Use	Amenities	Condition	Public Access	Protection Status	Recent & Planned Improvements
								<p>anticipated to begin in spring 2023</p> <p>Section 3: Contract in place to finalize design; construction could begin as early as 2024</p> <p>Section 4: Fully constructed and in use</p> <p>Section 5: Paved path proposed</p> <p>Section 6: Construction to begin in fall 2022</p> <p>Section 7: Fully constructed and in use</p>
Cunniff School Playground	City	2.3	<ul style="list-style-type: none"> • Athletic & active recreation • School 	<ul style="list-style-type: none"> • Athletic court • Multipurpose natural grass fields • Playground/tot lot • Use nearby public restroom (seasonal) 	Excellent	Open, with limits during school hours	OSC Zoning District	<p>2021: Reconstruction of school finished and grounds being finalized in 2022</p>
Filippello Park	City	16.9	<ul style="list-style-type: none"> • Athletic & active recreation • Other community use 	<ul style="list-style-type: none"> • Athletic courts • Multipurpose natural grass fields • Picnic facilities • Walking path • Playground/tot lot • Splash pad • Restrooms • Dog park 	Good	Open	In perpetuity (Article 97)	<p>2016: Tot lot resurfaced; benches repaired & replaced</p> <p>2017: Electrical control box renovation; walkway, parking lot, and pavilion lights repaired & replaced; main pavilion repainted; draft design for dog park completed</p> <p>2018: Grove Street Entrance Renovation</p>

Resource	Owner	Acres	Current Use	Amenities	Condition	Public Access	Protection Status	Recent & Planned Improvements
								95% complete (includes new picnic facilities, dog park, courts, etc.) 2019: Drinking water fountain for dog parks installed per grant requirement 2021: LED lights, scoreboard, and batting tunnel installed.
How Park	City	1.6	<ul style="list-style-type: none"> Athletic & active recreation Other community use 	<ul style="list-style-type: none"> Athletic court Multipurpose natural grass field Playground/tot lot Dog park 	Good	Open	OSC Zoning District	2018: Dog park surface updated; accessible entryway and new sidewalk installed
John A. Ryan Arena	City	2.1	<ul style="list-style-type: none"> Athletic & active recreation 	<ul style="list-style-type: none"> Ice rink 	Good	Open		2016: Funding for new scoreboard and replacement of emergency exit doors approved 2017: Energy efficiency upgrades to boilers, heaters, and lights; replacement of emergency exit doors completed; new rink doors installed 2018-19: Internal doors replaced
Linear Park	City	1.0	<ul style="list-style-type: none"> Passive recreation 	<ul style="list-style-type: none"> Walk/bike path 	Good	Open	Dedicated park land	Sculpture pads planned to mount art installations 2018: Council approved funds for upgrade & installation of new lighting
Lowell Park	City	6.9	<ul style="list-style-type: none"> Athletic & active recreation School 	<ul style="list-style-type: none"> Ball field Batting tunnel 	Fair	Open, with limits	OSC Zoning District	2016: Hard court resurfacing

Resource	Owner	Acres	Current Use	Amenities	Condition	Public Access	Protection Status	Recent & Planned Improvements
				<ul style="list-style-type: none"> • Athletic court • Multipurpose natural grass fields • Playground/tot lot 		during school hours		2017: Batting tunnel installed
Moxley Playground	City	4.9	<ul style="list-style-type: none"> • Athletic & active recreation • School 	<ul style="list-style-type: none"> • Ball field • Batting tunnel • Athletic courts • Multipurpose natural grass fields • Playground/tot lot • Coliseum • Restrooms 	Fair	Open	OSC Zoning District	Fields will be unavailable beginning in November 2022 to accommodate planned reconstruction of Watertown High School. Moxley Playground will reopen following the end of school construction.
O'Connell Playground	City	4.7	<ul style="list-style-type: none"> • Athletic & active recreation • School 	<ul style="list-style-type: none"> • Ball fields • Batting tunnels • Athletic courts • Multipurpose natural grass fields • Playground/tot lot • Street hockey court 	Fair	Open	OSC Zoning District	2016: Batting tunnel installed 2022-2023: Facilities will be reopened after site completed.
Phillips School Playground	City	0.5	<ul style="list-style-type: none"> • Athletic & active recreation • School 	<ul style="list-style-type: none"> • Playground (school use only) 	Fair	Open	OSC Zoning District	
Saltonstall Park	City	5.3	<ul style="list-style-type: none"> • Athletic & active recreation 	<ul style="list-style-type: none"> • Lighted athletic court • Lighted multipurpose natural grass field • Playground/tot lot • Portable restrooms (seasonal) 	Good	Open	In perpetuity (Article 97)	2017: Electrical control box renovation 2019: New benches installed; Farmers' Market moved to park; LED lighting upgrades

Resource	Owner	Acres	Current Use	Amenities	Condition	Public Access	Protection Status	Recent & Planned Improvements
Sullivan Park	City	1.2	<ul style="list-style-type: none"> Athletic & active recreation 	<ul style="list-style-type: none"> Multipurpose natural grass fields Athletic court Playground/tot lot Portable restrooms (seasonal) 	Good	Open	OSC Zoning District	2018: Paver walkway, monument, and solar lit flagpole installed 2019: Ball field maintenance (releveling, resodding, new clay) 2022: Resurfaced court
Victory Field Complex	City	11.1	<ul style="list-style-type: none"> Athletic & active recreation Other community use School 	<ul style="list-style-type: none"> Lighted multipurpose natural grass and artificial turf fields Picnic facilities Track and field Playground/tot lot Bicycle rack Field house & stadium 	Good (artificial turf); fair (grass turf)	Open	OSC Zoning District	2011: Phase 1 consisting of 160,000 sf of renovated space 2016: Tot lot resurfaced 2019: Funding approved for Phase 2 Project for improvements to track and field, playing field, athletic courts, parking area, lighting, stormwater system, etc.
Whitney Hill Park	City	10.26	<ul style="list-style-type: none"> Passive recreation 	<ul style="list-style-type: none"> Walking paths 	Fair	Open	In perpetuity (Article 97)	
Old Burying Place (Arlington Street Cemetery)	City	1.24	<ul style="list-style-type: none"> Cemetery 	<ul style="list-style-type: none"> N/A 	N/A	Open	OSC Zoning District	2022: Approved by State for listing on the National Register of Historic places
Common Street Cemetery	City	2.5	<ul style="list-style-type: none"> Cemetery 	<ul style="list-style-type: none"> N/A 	N/A	Open	OSC Zoning District	2022: Approved by State for listing on the National Register of Historic places
Ridgelawn Cemetery	City	17.58	<ul style="list-style-type: none"> Cemetery Passive recreation 	<ul style="list-style-type: none"> N/A 	N/A	Open	OSC Zoning District	2019: Site beautification plan developed
Carver Road Delta	City	0.25*	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Sitting areas 	N/A	Open		

Resource	Owner	Acres	Current Use	Amenities	Condition	Public Access	Protection Status	Recent & Planned Improvements
Columbus Delta	City	0.69*	• N/A	• Sitting areas	N/A	Open	OSC Zoning District	
Irving Park	City	0.5*	• N/A	• Sitting areas	N/A	Open	OSC Zoning District	2022: Community Preservations funds requested for major renovation
Knowles Delta	City	0.25*	• N/A	• Sitting areas				
Shattuck Road Delta	City	0.25*	• N/A	• N/A				
School and Belmont Streets Delta	City	0.25*	• N/A	• Sitting areas				
Storer Delta	City	0.25*	• N/A	• N/A				
Templeton Parkway Delta	City	0.25*	• N/A	• N/A				

* *Approximate acreage*

The Massachusetts Division of Conservation and Recreation (DCR) owns 56.6 acres of land in the city as well.¹³ Approximately 54 acres along the Charles River is part of the Charles River Reservation, a regional resource.¹⁴ There are specific parks within the reservation system in Watertown such as Cannalonga Park, Riverfront Park, Squibnocket Park, and Little Greenough and Greenough Parks (which include a portion of the Paul Dudley White bike path). The former GSA site adjacent to Greenough Boulevard, also owned by

DCR, will be developed in the future with passive recreational opportunities and add to the acreage of the reservation. There will be walking trails and limited public access to protect the wetland plantings. The Watertown-Cambridge Greenway is a linear greenway also owned by DCR.

¹³ Watertown Community Preservation Committee, “Community Preservation Act, 5-Year Plan, 2021-2025” (2021).

¹⁴ Ibid

Table 19 Other Publicly Owned Open Space and Recreation Resources

Resource	Owner	Acres	Intended Use	Public Access
Boyd Park (partial)	City of Newton	2.6	<ul style="list-style-type: none"> Athletic & active recreation 	Open
Charles River Reservation <ul style="list-style-type: none"> Cannalonga Park Riverfront Park Squibnocket Park Little Greenough and Greenough Parks Paul Dudley White Bike Path	State	54.2	<ul style="list-style-type: none"> Athletic & active recreation Passive recreation 	Open
Former GSA Site (adjacent to Greenough)	State	13	Passive recreation	Closed
Dealtry Pool	State	NA	<ul style="list-style-type: none"> Athletic & active recreation 	Open (seasonal)
Watertown-Cambridge Greenway (partial)	State	2.6	<ul style="list-style-type: none"> Passive recreation 	Open

Private properties with publicly available spaces are listed in Table 20. These properties have varying restrictions on use and public access. Included in this list is the Gore Estate, which is owned by a nonprofit and straddles Watertown and Waltham.

To add to Watertown's inventory of publicly owned open space, the City encourages developers to design publicly available space within

their projects. These spaces can serve as an amenity for both the building occupants and the surrounding neighborhood. For example, this approach has been successful with Arsenal Yards, which incorporated a courtyard that connects the retail portion of the development to Arsenal Park.

Table 20 Private Open Space and Recreation Resources

Resource	Owner	Intended Use	Public Access
66 Galen Street	Private	<ul style="list-style-type: none"> Passive recreation 	Open (upon completion)
85 Walnut Street	Private	<ul style="list-style-type: none"> Passive recreation 	Open (upon completion)
99 Coolidge Street	Private	<ul style="list-style-type: none"> Passive recreation 	Open (upon completion)

Resource	Owner	Intended Use	Public Access
130 Arsenal Street (Elan Union Market)	Private	<ul style="list-style-type: none"> Passive recreation 	Open
204 Arsenal Street (Gables Arsenal Street)	Private	<ul style="list-style-type: none"> Passive recreation 	Open
330-350 Pleasant Street (Watermills)	Private	<ul style="list-style-type: none"> Passive recreation 	Open
490 Arsenal Way (LINX)	Private	<ul style="list-style-type: none"> Athletic & active recreation Passive recreation 	Open
Arsenal Yards	Private	<ul style="list-style-type: none"> Passive recreation 	Open
Gore Estate (27 acres in Watertown, 50 acres total)	Private/ Nonprofit	<ul style="list-style-type: none"> Educational Passive recreation 	Grounds are open to the public. Special events and educational tours require admission fees.
Mt. Auburn Cemetery	Private	<ul style="list-style-type: none"> Cemetery Educational Passive recreation 	Open
Oakley Country Club	Private	<ul style="list-style-type: none"> Athletic & active recreation 	Not open to the public (members only)
St. Patrick's Cemetery	Private	<ul style="list-style-type: none"> Cemetery Passive recreation 	Open

6.2 Community Preservation Act

The CPA Five-Year Plan 2021-2025 notes that much of the open space land in Watertown is privately held with limited public accessibility (Mount Auburn Cemetery and Oakley Country Club being the largest of these). Publicly-owned parks and playgrounds are primarily used for active rather than passive recreation. Participants in the public engagement process to help development that plan identified open space as the top priority and focused on the

need to protect and enhance Watertown's limited green open space and natural resources. A particular interest in more open space for passive recreation was noted.

See the Introduction for more information on the Community Preservation Act, approved by residents in 2016, and the Community Preservation Committee, formed in 2018.

Figure 21 Facilities

--- Town Boundaries
 — Major Streets
 — Secondary Streets

— Minor Streets
 — Highways
 Surface Water

Open Spaces & Recreation Areas
 Recreation Facilities

Source: MassGIS
 April 2022
 Existing Conditions Report
 Watertown, MA





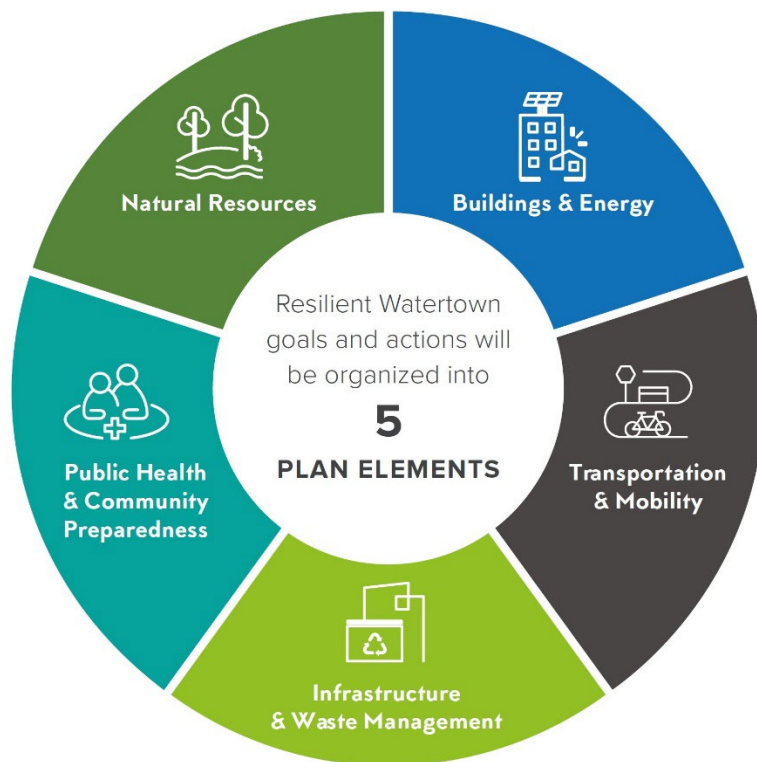
SUSTAINABILITY AND RESILIENCY

7 Sustainability and Resiliency

7.1 Sustainability, Resilience, and Energy

7.1.1 RESILIENT WATERTOWN

Figure 22 Resilient Watertown Plan Elements



Watertown has made a commitment to mitigating its contribution to climate change by 2050. Its biggest climate change related risks are intense storms, flooding, drought, and heatwaves. To address these dual concerns, the City went through a comprehensive public planning process to develop a detailed and quantitative action plan. The Resilient Watertown Climate and Energy Plan spans the five plan elements in the figure to the left, as well as cross-cutting strategies. Since this plan is so current, its data and findings are incorporated by reference in the baseline assessment.

The following goals and actions are of particular note for the comprehensive plan update, most of which have a 2050 deadline:

- 100% renewable energy and carbon neutrality
- Solar energy on 6,700 rooftops
- Increase in non-vehicle transportation
- 100% electric vehicles registered in Watertown
- Zero waste community
- Increase equity and maximize public benefits

7.1.2 ENERGY

Since the last comprehensive plan, Watertown has taken several steps to reduce energy costs, diversify energy generation, and reduce greenhouse gas emissions associated with municipal

operations. This includes progress towards sustainable energy. In support of this goal, the City has constructed the state's first net-zero energy school buildings and has more net-zero energy school projects planned.

According to the 2020 Annual Report, the Watertown Electricity Choice (WEC) municipally sponsored electricity volume purchase program allows Watertown residents and businesses a much cleaner energy supply and a typical cost savings. The WEC default option currently supplies 53% clean local energy (2nd highest in the State when launched), driving new renewable generation installations and jobs while reducing harmful pollution. WEC currently has over 84% participation in residential and small businesses and about three percent of the participants have opted up to 100% renewable energy. Annually WEC reduces Watertown's carbon footprint by the

equivalent of 40 million miles driven by the average passenger car. WEC's goals are to continue to advocate for residents to opt in if not currently participating or, if enrolled, opt- up to 100% green.

Other ongoing programs include:

- Green Communities Designation
- Municipal Energy Audit
- Renewable Energy Efficiency Projects
- Community Energy Programs and Projects
- Promoting Energy Efficiency in Watertown
- Zoning for Energy Efficiency

7.2 Natural Resources

7.2.1.1 Geology, Soils and Topography

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

Watertown's elevations range from less than ten feet along the Charles River's banks to 220 feet near the Oakley Country Club. Spruce St Hill, Strawberry Hill (Meeting House Hill), and Coolidge Hill

are prominent hills that provide excellent views of the Charles River basin and the Boston skyline to the east. These hills are drumlins, which are made up of large mounds of glacial till (clay and rock) that were formed when glaciers reshaped the landscape 10,000 to 12,000 years ago. The massive weight of the glaciers pushed much land in coastal areas below sea level as they moved across New England. The bedrock beneath the glacial till results from the erosion of a high mountain range to the west of the Boston Basin 350 million years ago.

Watertown's general topography has remained stable since the glaciers and subsequent sea-level changes occurred thousands of years ago. However, human activity has had a significant impact on the post-glacial landscape. For example, damming the Charles River in the mid to late nineteenth century to harness waterpower for the

burgeoning Industrial Revolution changed the river's course and character so that it is no longer the swift-moving waterway of yesteryear. Large wetlands that used to provide natural flood buffers or surface runoff filtration are no longer present. Much of the wetland soil along the Charles River was filled and built on during the late nineteenth century, but a significant band of wetlands remains along the river on DCR property. Paving, filling, and grading are examples of human-made land modifications for dense residential and commercial development and transportation networks. Only areas where the slope is too steep to grade or the substrate is too difficult to manipulate, such as Whitney Hill, have remained unchanged from the original post-glacial topography.

Watertown's surficial geology is primarily made up of deposits left behind by the last ice age's glaciers, upland sedimentation, and post-glacial sea-level changes. Most of the City is now "urban land complex" (bituminous or concrete pavement) and loamy sand. The Gore Estate, located at the west end of city, is the only remnant of a once-thriving agricultural community supported by alluvial soils along the Charles River's banks. The general soils map created with the help of the Soil Conservation Services (SCS) shows that Watertown has been heavily urbanized.

7.2.1.2 Landscape Characteristics

The landscape of Watertown is distinguished by its dense suburban and urban setting. However, among the developed neighborhoods, there are several scenic features. The Charles River, which winds along the city's southern boundary, is the most significant resource.

The DCR walkways along the river provide scenic vistas and access to valuable natural resources for pedestrians and bicyclists.

Several prominent hills, such as Mt. Auburn Cemetery's hill and tower (136 feet) and Coolidge Hill, offer views of the Boston skyline. Furthermore, at its highest point, Palfrey Street provides semi-urban views of the hills and valleys to the south and west towards Newton and Waltham, while the Oakley Country Club on Meeting House Hill also offers excellent views of Boston.

7.2.1.3 Water Resources

The Charles River Watershed encompasses the majority of Watertown. The river, which runs along the community's southern boundary, is not only an important part of the City's quality open space, but it also connects to Watertown's rich waterfront industrial history. Improved water quality in recent years has led to an increase in water-based recreational activities along the river, such as rowing, sailing, fishing, and canoeing. However, this section of the river is not yet clean enough for swimming. As of 2020, the Charles River in Watertown earned a B- overall grade from the EPA¹⁵. The Charles River Conservancy holds an annual swim event further downriver to demonstrate that water quality is improving. Since stormwater runoff from urban activity has been identified as a major source of pollution affecting river water quality, it is critical to continue reinforcing stormwater management throughout the City to ensure the Charles River's long-term viability. Stormwater management best practices are used by the City for current and proposed municipal infrastructure projects and private development.

¹⁵ <https://www.epa.gov/system/files/documents/2021-07/charles-river-report-card-map-2020.pdf>).

Groundwater was abundant in Watertown, providing drinking water and irrigation for agricultural ventures. For example, artesian springs near Whitney Hill were historically used to irrigate pear and apple groves along Orchard Street. However, Watertown now gets its potable water from the Massachusetts Water Resource Authority (MWRA) rather than groundwater. It is unclear how and to what extent groundwater has been impacted by land use changes and associated pollution over the years, but significant contamination was discovered on the Arsenal campus, prompting its designation (now lifted) as a federal Superfund site.

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

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

Watertown also has several wetland areas associated with its surface water resources, including Walker Pond and another unnamed pond on the western outskirts of the city between Waltham

Street and Pleasant Street, and Sawins Pond in east Watertown between Arlington Street and Coolidge Road. 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, two isolated and small areas of wetland connected with the Charles River have been identified.

7.2.1.4 Vegetation

Watertown's surface is mainly paved, with few large tracts of woodlands and species associated with forested areas. The majority of the original forests were cleared for agriculture or pastures a long time ago. The trees seen today in Watertown's yards, streets, and parks are the result of plantings or natural pollination of species over time, 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. Mount Auburn Cemetery contains 100 heritage trees. Some neighborhoods also have a few stands of native trees, such as a group of large Silver Maples near Harrington and Sycamore Streets.

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

- Common hardwoods: red maple, white oak, beech, hickory, birch, and black oak.
- Common softwoods: eastern 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, euonymus, and black swallow-wort.
- 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 city.

Mt. Auburn Cemetery, Watertown's most significant contiguous and publicly accessible open space, consists of 151.1 acres of well-manicured grounds with numerous indigenous and exotic tree and shrub species. While the cemetery is an important historical heritage site in Watertown, it also holds national historical significance as the country's first rural cemetery and also serves as an arboretum, with over 5,500 trees and nearly 700 species and varieties thriving among its hills, ponds, woodlands, and clearing.

Street trees are an essential component of the City's natural resource inventory. Recognizing the social and environmental benefits of street trees, including reducing "heat island" impacts in a densely populated community, are critical. The Watertown Tree Warden is in charge of planting, protecting, and managing the City's public shade trees and manages the staff within the Department of Public Works for all routine maintenance. Every year, nearly 120 trees are planted in the spring and fall seasons combined. The tree species mix in the city has evolved over time in response to the amount of salt used during the winter. A diverse range of appropriate species has replaced overplanting of the invasive Norway Maple and Bartlett Pear.

Watertown's first street tree inventory was created in July 2008. The street tree inventory assists in better forecasting and coordinating tree replacement, requests, and maintenance, as well as identifying issues that affect the long-term health of the city's urban forest stock. Watertown's Department of Public Works has received an Urban and Community Forestry Grant from the State's Department of Conservation & Recreation to update the City's tree inventory. Activities associated with the grant will include a digitized tree inventory including a GIS database of tree locations, species, size, health, and conditions assessment and a capital plan for trees that includes trimmings, takedowns, and plantings.

7.2.1.5 Fisheries and Wildlife

Salmon used to swim up the Charles River to spawn, contributing significantly to the area's seasonal wildlife cycles. Unfortunately, some of these indigenous aquatic species and numerous related species vanished with the damming of the river. Above the Watertown Dam, the river's fish populations 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 originally built in the mid-17th century and was used to power industry that later grew along the river corridor. The current dam is still standing and has a fish ladder that allows native Alewife, Herring, and other fish (the state stocks fish in the Charles River) to cross and expand their habitat upstream, though other fish are unable to pass through the current fish ladder. The Charles River Watershed Association is advocating for the removal of the dam for ecological restoration purposes.

7.2.1.6 Scenic Resources and Unique Environments

Although Watertown does not have any DCR designated Scenic Landscapes, the city does have several landscape features that

provide scenic escapes from the built environment. For example, drumlins in Mt. Auburn Cemetery and other hills such as Strawberry Hill and Whitney Hill provide views of the Charles River Valley and the Boston skyline.

The Charles River, a regional waterway as well as a historic, environmental, and recreational resource, is Watertown's primary scenic resource. With over four miles of riparian corridor within Watertown, which is entirely within the DCR's Charles River Reservation, the river not only provides unparalleled recreational opportunities but also connects to many iconic cultural landmarks along its route, including the Watertown Arsenal, the Perkins School campus, Watertown Square landing, and the Aetna Mill complex. The Charles River multi-use paths, which extends into Boston, passes through Watertown's relatively natural riverbanks. Many areas east of the Watertown Dam provide pedestrians and bicyclists with intermittent views of downtown and the river, whereas the river greenway west of the dam offers a similar scenic quality with more variety.

Aside from the Charles River, three privately owned but regionally recognized landscapes are entirely or partially within Watertown's boundaries. The Gore Estate, Oakley Country Club, and Mount Auburn Cemetery are among them. By providing scenery and habitat, retaining the ecological benefits of open land, and stimulating air circulation, these large tracts of open land help balance local environmental health in this relatively dense community.

7.2.1.7 Environmental Challenges

Like other communities in the Boston area, Watertown is confronted with several environmental challenges related to its industrial heritage, the evolution of land use changes, and new development trends.

Hazardous Waste Sites

The General Services Administration's (GSA) site is in the southern part of the city, between Arsenal Street and Greenough Boulevard along the Charles River. This 13-acre parcel, which the Army once used for equipment storage and the burning of uranium and other waste, was one of the more contaminated parcels in the area. Cleanup of this site has been completed and the state's Department of Conservation and Recreation has taken ownership of the property. The Army Corps of Engineers (USACE) will continue to provide regular reports on the status of the cap, the constructed wetland, and the drainage of the site into the Charles River. The intended use is limited passive recreation for nature enjoyment. There will be walking trails and limited public access to protect the wetland plantings.

Furthermore, the Department of Environmental Protection (DEP) maintains a reported release registry that includes over 200 sites. Contamination at Sawins and Williams Ponds is included. Most of these locations are in historically industrial and commercial corridors such as Pleasant Street, Mt. Auburn Street, and Arsenal Street. They are typically former industrial uses or gas stations with underground storage tanks in various stages of assessment and cleanup.



HISTORIC AND CULTURAL RESOURCES

8 Historic and Cultural Resources

8.1 Historic Preservation

The City's interest in historic preservation is shown by its creation of a historical commission which enforces a demolition delay ordinance and a historic district commission which regulates exterior changes in the city's historic district along the western portion of Mt. Auburn Street. The demolition delay ordinance requires owners to appear before the historical commission if demolition is proposed for a building that is 50 years or older. If the commission finds the building of historical significance and preferably preserved, it can impose a demolition delay of up to one year. A commission review in 2021 found that over the prior 20 years, approximately 15% of the demolitions were delayed and that about half received a full-year delay. Since the historic district was created in 2002, the commission has issued design review guidelines and heard owner applications for exterior changes to buildings and landscapes within the district.

Watertown has had two significant inventories of buildings/structures. The first was in 1982, while the second in 1999 focused on properties in the Mt. Auburn Street Historic District. These properties were added to the State's historic resources database (MACRIS). Since then, various organizations and individuals have periodically done research resulting in additions to MACRIS. There are currently over 1,000 Watertown entries in MACRIS, some overlapping (19 areas, 693 buildings, 3 burial grounds, 237 objects and 52 structures). Although extensive, the inventory of buildings and structures is far from complete, and information on many of these properties and other assets is outdated. In addition, there are public

and private organizations that have historic or archival materials, including the Watertown Free Public Library, city departments, and the Watertown Historical Society.

The CPA Five Year Plan (2021-2025) identifies four goals for historic preservation:

- Preserve and rehabilitate City-owned historic resources, including buildings, landscapes, monuments, documents, and artifacts.
- Support preservation of privately-owned historic resources that demonstrate appropriate public benefit
- Acquire and preserve underutilized, threatened, or abandoned privately-owned historic resources
- Enhance public access to historic resources.

Participants in the public engagement process to help development that plan suggested important historic resources including the Commander's Mansion, Administration Building murals, Old Burial Ground/Arlington Street Cemetery, Edmond Fowle House, and North Branch Library. See the Introduction for more information on the Community Preservation Act, approved by residents in 2016, and the Community Preservation Committee, formed in 2018.

8.2 Public Art

Watertown adopted a Public Arts Master Plan in 2020. The plan guides the commissioning, creation, selection, and care of public art. The plan includes a detailed history of public art in Watertown, vision and goals, recommendations, and an implementation matrix. The plan calls for integrating public art into educational facilities, parks, open spaces, streets, and sidewalks, as well as to celebrate the local identity.

The implementation of the plan is in three phases: getting started, building momentum, and expanding impact. At the end of the five-year period, art implementation projects started at the beginning of the plan should be implemented, new policies adopted, and existing monuments reviewed. This program is intended to be realized with significant community participation, including artists emerging from Watertown. To begin this implementation, the City Council passed a resolution to create a Public Arts & Culture Committee. The Committee has started working on next steps.



Image Attribution: Detail of "The Time is Always Right to Do What is Right" Mixed media mural, Ruth Henry, 2018



PUBLIC SERVICES AND FACILITIES

9 Public Services and Facilities

9.1 Public Services

The municipal government provides a host of essential services for the residents, businesses, and government operations. The following list summarizes those activities.

- 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
 - Preservation
 - 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
- Commander's Mansion Event Facility
- Watertown Services and Facilities
 - Department of Public Works
 - Tree warden
 - Police department
 - Fire department
 - Council on aging
 - School District
- Human Services
 - Veterans' services
 - Commission on disabilities
 - Wayside multi-service center
 - Social services resource specialist
 - Project literacy
 - Health department
- Administration and Finance
 - City manager
 - City clerk
 - Assessor
 - Audition
 - Purchasing
 - Personnel
 - City treasurer/collector
 - Information technology

During the COVID-19 pandemic, Watertown's Health Department has been tracking confirmed cases in the community and supporting residents with many actions, including testing, contract tracing, safety protocols, and a food pantry. In 2020, Watertown had 1,351 cases, 55 hospitalizations, and 28 fatalities.

9.2 Public Facilities

The municipal government maintains numerous buildings throughout the city that house its departments and services. The following list summarizes those public facilities:

- Watertown's Administration Building, housing most departments, was opened in 1932 and was last renovated in the 1980's. The heating and cooling system has been substantially updated since 2015.
- The Police Department is located at 552 Main Street, in a building opened in 2010. The Police Department has cruisers, motorcycles and SUVs maintained and repaired internally by the Department except for major repairs. As of the summer of 2022, there are 71 sworn officers, 14 civilian staff and 21 crossing guards.
- The Fire Department maintains three stations: Station 1 at 99 Main Street serves as the Department's headquarters (built in 1991); Station 2 at 564 Mt. Auburn Street (built in 1912 and renovated in 1989); Station 3 at 270 Orchard Street (built in 1959; renovated in 2002 and 2018). It operates five motorized apparatus, 1 fire rescue vehicle and 1 command vehicle. It has additional reserve and administrative vehicles. As of the summer of 2022, Department has 88 uniformed and two civilian full-time clerks.
- The Department of Public Works operates with 53 staff members and is headquartered at 124 Orchard Street.
- The Watertown Free Public Library is located on Main Street between the Administration Building and Fire Station 1. It was originally constructed in 1884 and the library was renovated and expanded in 2006. According to its latest Annual Report, the library has a total circulation of over 660,000 items and logged over 440,000 total visits.
- The Senior Center is located at 31 Marshall Street and is housed in a 3,600 square foot building constructed in 1993. The Center is attached to an addition to the former Phillips School (mainly occupied now by the School Department's administrative offices). The Senior Center 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. The City is considering changes to the Senior Center and/or former Phillips School.
- The John A. Ryan Skating Arena was built in 1972 and is located at 1 Paramount Place (off Pleasant Street). The facility has an NHL size 200' by 85' foot skating surface and seating for 1250.
- The Commander's Mansion at 440 Talcott Avenue within the former U.S. Arsenal complex is a historic building (built in 1865) currently used for public and private events.
- The City owns two former public buildings that require a new use. The former police station is located on John Sonny Whooley Way (behind Fire Station 1 and next to the library). The building is being considered for demolition with municipal reuse of the site. The former North Branch Library is a one-story brick structure with a full basement at the corner of Orchard Street and

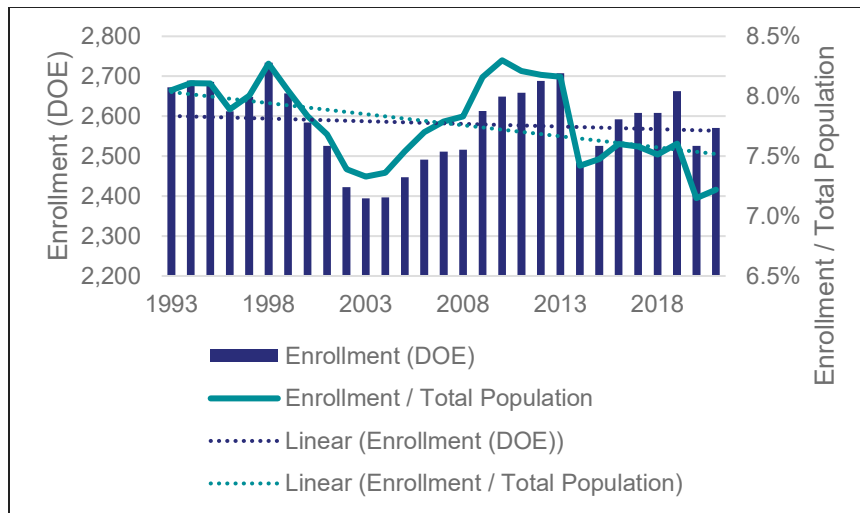
Waverley Avenue. The city is currently exploring municipal uses for this property, including as a community arts space.

A notable change since 2015 is the expanded Information Technology Department. A 2020 comprehensive assessment led to a significantly increased capital and operating budget, hiring of the city's first Chief Information Officer and more than tripling the department's staffing.

9.3 Watertown Schools

Since the adoption of the 2015 Comprehensive Plan, the most significant changes to the City's public facilities have come within the school system. Following a 2014 Schools Facilities Assessment, the City embarked on a "Building for the Future" program. The City replaced two outdated elementary schools (the Cuniff and Hosmer) and a renovation and addition to the Lowell Elementary School is under construction. All three were funded within the confines of Proposition 2 ½ and designed to be "Net Zero" energy (see Section 2.3 for a discussion of recent development and tax levy growth). A new Watertown High School is progressing through the design process at the State level with construction expected to begin in the summer of 2023. The city's 2023-2027 Capital Improvement Plan (CIP) includes significant renovations in the Middle School (last renovated 1998).

There are 2,526 students enrolled in Watertown Public Schools (preschool through grade 12) for the 2020-2021 school year. The school enrollment projections completed for the "Building for the Future" program in 2016 anticipated 2,682 students in 2021 and 2,719 in 2022, slightly higher than the actual enrollment. School enrollment has fluctuated between about 2,450 and 2,700 students since 2000. The trendline for school enrollment for the past 28 years has been slightly negative (Figure 23). The ratio of students to overall population has also been rather consistent between 8.3% and 7.1%, although this also has a slightly negative trendline as well. School enrollment is driven by many factors including population demographics, birth rates, migration, and housing characteristics. Single and two-family housing typically generates more school-age children per unit than multi-family housing, especially when those projects contain mostly studios and 1-bedroom units.

Figure 23 School enrollment (DOE) and trend of enrollment as percentage of total population

A photograph of a community engagement meeting, overlaid with a blue tint. In the foreground, a group of people are gathered around a round table, looking at documents and a map. One person is pointing at the map. In the background, other people are seated at tables, some talking and some looking at documents. The room has large windows and a modern, open-plan design.

COMMUNITY ENGAGEMENT AND VISION

10 Community Engagement

Hearing from residents and other stakeholders is an important complement to data collection and analysis. Their perspectives and ideas form an important part of the baseline assessment to better understand the current issues that the Watertown community are facing. The community engagement process is meant to provide a variety of ways for people to interact with the project team, share their thoughts, and respond to draft recommendations through the process. A critical goal of the community engagement effort has been to include individuals who are often under-represented in planning initiatives.

10.1 Project Website

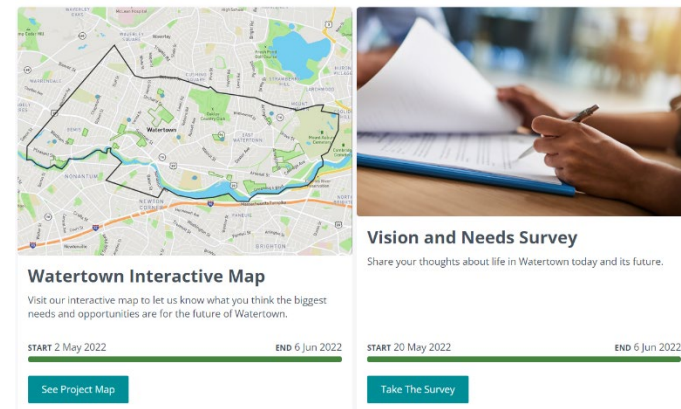
Before this engagement process began, the consultant team reviewed the community input summarized in four major plans finalized in the preceding 18 months. Outreach for the Climate and Energy Plan involved four surveys with 645 responses, 931 website comments and five public events. The Bicycle/Pedestrian Plan included an online survey with 574 complete responses, an interactive online map, and two public meetings. The Community Preservation Act Plan included 443 survey responses, an interactive online map and two public meetings (condensed because of the COVID outbreak). Finally, the Public Arts Master Plan engaged the community through two surveys and two public forums.

An interactive project website was launched for the comprehensive plan update process in March 2022. It is the home for project updates, online engagement activities, upcoming event information, project documents, and a sign-up for e-newsletter updates. From its launch through mid-June, more than 1,750 unique users visited the site at least once, and many more than once. There have been 270 unique stakeholders engaging in the survey and interactive map, completing 212 surveys and leaving 209 comments on the map. The

project team expects to post another online survey and new and/or enhanced interactive features in fall 2022.

www.watertown-ma.gov/comp-plan

We want to hear from you!



Although not designed to obtain community input, the project team interviewed a number of Watertown stakeholders to obtain information relevant to this baseline assessment. These interviews included significant developers and employers, owners of small

businesses located in the commercial districts, municipal staff, and members of certain City boards and committees.

10.2 Planning Advisory Committee

A seven-member Planning Advisory Committee (PAC) was formed to help guide the community engagement process and promote the planning process. It includes representatives from City Council, the Planning Board, Conservation Commission, and the Watertown Business Coalition, one resident with transportation expertise, and two residents from under-represented populations within the community. The City engaged in a public process to select the resident with transportation expertise and the two residents from under-represented populations (defined as including, but not limited to, minority, non-native English speaking community members, families with children, younger adults, and shift workers).

At their first meeting in late April, PAC members learned about the purpose of the comprehensive plan update and discussed ideas for reaching residents with project information. At their second meeting in mid-June, they heard key themes from the visioning forum and online engagement process and discussed local events over the summer where the planning process could be promoted.

10.3 Visioning Forum

The kickoff public event was held Thursday, May 19, 2022 in a hybrid format, offering both in-person and online meeting options. The event was publicized via e-newsletter, the City's social media channels, and flyers. A total of 74 community members participated, almost evenly split between in-person at the newly opened Hosmer School and online via Zoom. The meeting presentation was recorded and is available on the Watertown Community Access Television website.

Steve Magoon, Watertown's Director of Community Development & Planning and Acting Deputy City Manager, welcomed everyone and discussed the importance of the planning process and hearing from as many people as possible. The City's lead consultant, Stantec, gave a presentation that covered the purpose of the comprehensive plan update, planning process, and key demographic characteristics and trends in Watertown.

Participants transitioned into facilitated small group discussions, both in-person at the school and in Zoom breakout rooms online. The first exercise asked people to review the vision statement from the current 2015 comprehensive plan. As individuals, they noted words or phrases that are important to them and suggested anything they thought should be added or removed to update the vision statement. Then, everyone shared their responses within each group and worked to identify shared themes from the individual responses. The second exercise asked participants to identify opportunities and needs on a map of Watertown, with a focus on those related to land use, transportation, economic development, and open space and recreation. After almost an hour of discussion, each small group facilitator reported back to the whole group on the common themes or priorities that were shared.



10.3.1 VISION AND NEEDS SURVEY

Following the visioning forum, an online survey was published on the project website. The survey questions covered quality of life, land use changes, shopping preferences, and transportation and open space considerations. A section also asked about the 2015 vision statement similar to the visioning forum small group exercise. In the three weeks after the visioning forum, the survey received 206 responses.

10.3.2 INTERACTIVE MAP

The project website also hosted an interactive map that invited people to drop pins and identify opportunities or needs in the four key topic areas: land use, transportation, open space and recreation, and economic development, as well as a catch-all category for other topics covered in the comprehensive plan update. In the three weeks after the visioning forum, the map received 192 comments. Almost half of comments related to transportation issues. Participants are reviewing and responding to other comments in addition to leaving their own – 90% of map comments received at least one “up” vote.

10.4 Walk and Ride Series

City staff hosted four tours in June that explored different parts of Watertown. Three walking tours discussed aspects of Watertown Square, Coolidge Square, and the Pleasant Street corridor. A bike tour led participants along the recently opened segment of the Watertown-Cambridge Community Path to Fresh Pond in Cambridge.



10.5 Community Input Summary

10.5.1 VISION STATEMENT

Almost 90% of survey respondents felt the vision statement is valid either as-is (33%) or with minor changes (55%). Words or phrases in the 2015 statement that resonated most with respondents or are most important to them include sustainability, diverse, attractive streetscapes, infrastructure, and healthy lifestyle. Respondents suggested adding references to affordability, sustainability and climate change, equity and diversity, and community or neighborhoods.

“Watertown needs to be equitable and just in making it a community that everyone feels part of”

“Balancing vibrant economic development with affordability to increase the City's diversity”

“Developing with climate resiliency in mind”

10.5.2 SURVEY

Quality of Life

83% of respondents rated their quality of life as excellent or good, and 69% says it has improved or stayed about the same recently (not accounting for the impacts of the COVID-19 Pandemic). This reflects well on the experience of residents in Watertown.

Land Use

The Pleasant and Arsenal Street corridors have seen significant land use changes in the past twenty years. Respondents were asked

about the types of development they would prioritize in the next ten years in these areas. Restaurants, mixed-use development, and apartments with affordable units were rated as the highest priorities. Low priorities included warehouse and industrial uses, labs and life sciences, and commercial offices. Retail and condominiums fell in the middle.

Economic Development

About 20% of respondents indicate they primarily shop or dine in Watertown while 36% indicate they frequently leave the city for shopping and dining. About 43% of respondents spend an equal amount of time shopping and dining in Watertown as they do elsewhere.

Another question asked about the impact of potential improvements to commercial areas like Watertown and Coolidge Squares. Public realm improvements like street trees, benches, and landscaping; public gathering spaces; pedestrian and bicycle connections; affordable price points; and parking were all rated as highly likely to improve the experience. Less likely to improve the experience were online promotions/marketing, more security, extended business hours, and events/programming. Interestingly, pedestrian and bicycle improvements and parking were third and fourth on both lists of ‘highly likely’ and ‘not likely’ to improve the experience, an indication of how different people use different modes of transportation to access these areas.

Transportation

Among survey respondents who work, almost 40% work in Watertown and 39% in Boston or Cambridge. Almost half of

respondents who reported a mode of travel to work indicated that driving alone is their primary mode. MBTA bus or subway accounts for 17% and another 17% walk or bike as their primary mode. 16% selected 'other' as their mode, perhaps indicating a mix of travel modes.

Another question asked about transportation changes that would improve the experience of getting around Watertown. Pedestrian and bicycle improvements were frequently mentioned. Most comments about bicycles were supportive about adding protected lanes and bike parking or connecting destinations, although some respondents felt too much emphasis has been given to bikes at the expense of car travel. Respondents would like more pedestrian improvements like crosswalks and sidewalk repairs. Bus improvements including more frequent service and more routes were also frequently mentioned but are largely outside the City's control. A desire for neighborhood traffic calming and concerns about new development increasing traffic congestion were shared by many respondents.

Open Space and Recreation

Respondents had a variety of input when asked about open space and recreation needs and opportunities. The need for more trees was frequently mentioned – along streets, in parks and open spaces, and particularly in East Watertown. Playground improvements and more connections to existing bike paths were also mentioned often.

10.5.3 MAPPING

Many comments were related to transportation and focused primarily on improving conditions for walkers, cyclists, and transit riders. Commenters also discussed how safe (or not) they felt walking, biking, or driving at different locations throughout the City. Many comments were concentrated along Arsenal Street, Route 16, and in Watertown Square.

While nearly half of the map comments were related to transportation, the most-liked map comments were related to economic development issues and include access to Coolidge Square, the character of Watertown Square, and the types of Main Street businesses:

"Coolidge has amazing local businesses (arax, bakeries, hardware, barber, etc.) that I love. People walk to these businesses. Many take the bus from or to here. All the car traffic is obnoxious and dangerous. People here are often driving THROUGH Watertown, not FROM/TO Watertown. Beautify the street to calm the car traffic. Prioritize the buses somehow. Celebrate this unique area of Watertown by treating it less like a highway/parking lot and more like a neighborhood." (32 up votes)

"I'd like to see improvements to the aesthetics of [Watertown] Square's streetscape - not to be a forcibly planned cookie-cutter town, but to make consistent architectural changes, large and clear glass (not tinted!) on store fronts, welcoming banners and front displays, sidewalk benches. I hear Watertown used to be quaint. Many buildings now are ugly and shabby. Who would want to stroll around and shop here?" (27 up votes)

“Would really appreciate small restaurants, cafes, bookstores, shops friendly to the many children in town, bakeries, etc on the main street. Feels like there are limited options right now, and much has closed.” (27 up votes)

“The store fronts at the center of Watertown Square are in near disrepair. What plans are in place to revitalize this area to be more attractive for new businesses to enter the area.” (26 up votes)

“New Development and Town Policies and Practices should build neighborhood hubs and villages that incorporates the range of retail and other amenities such as recreation, socialization, and errands that allow residents to meet most of their daily needs without a car. low rent local business and community spaces should be treated as a value-added amenity contributing to the long term vitality and viability of a neighborhood.

This is also an Economic Development and Transportation Issue” (25 up votes)

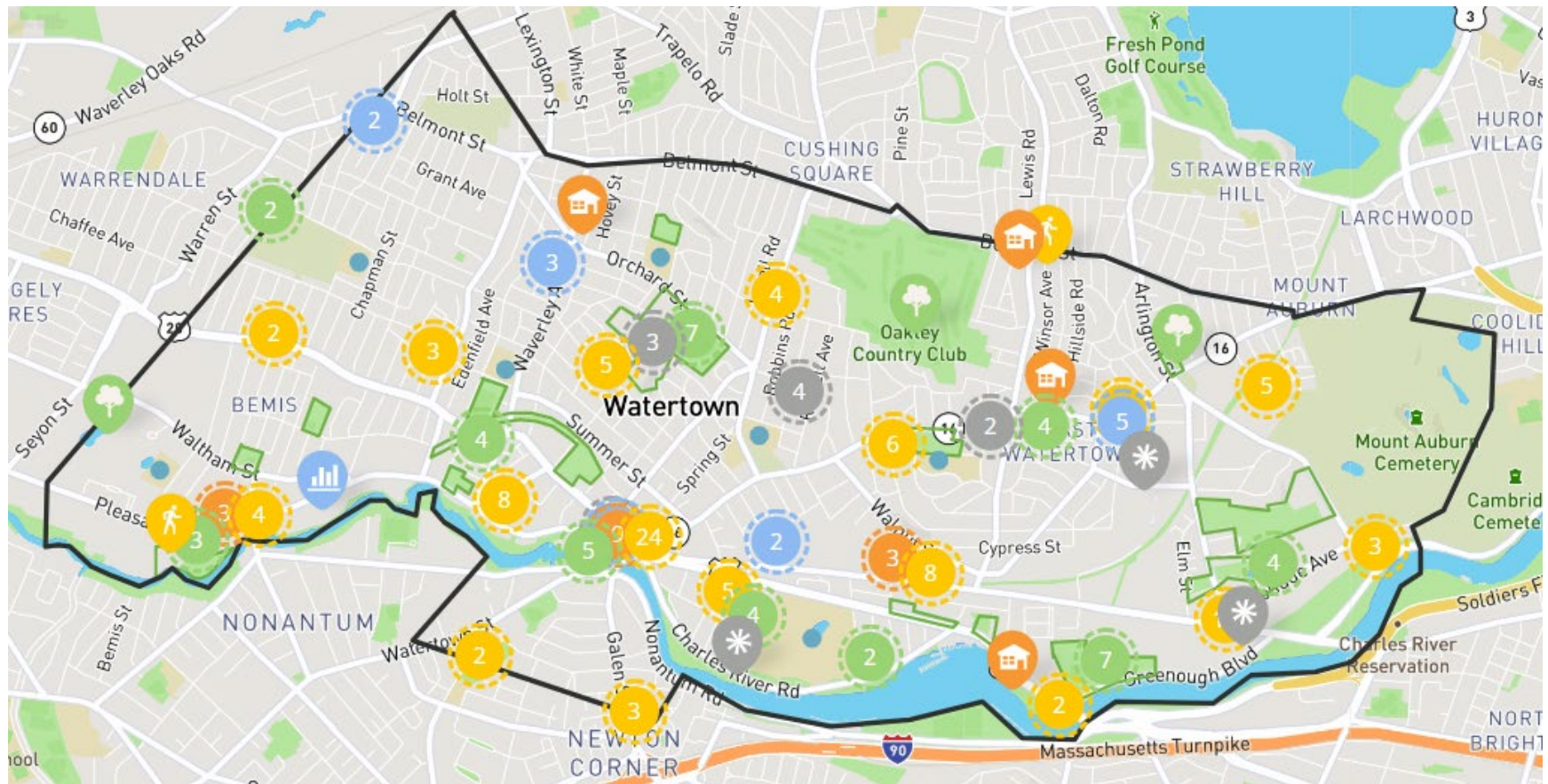
Other most liked comments by topic area include:

“The Climate Action Plan includes a recommendation that development planning and current zoning rules consider ways to encourage what are known as 15 minute neighborhoods. The objective of this approach is to insure (sic) that there are small business zones within a 15 minute walk of every residential neighborhood in Watertown. Will this concept be considered in the new Comprehensive Plan?” (Economic Development, 21 up votes)

“Can we connect, via easement path, Canalouga [*sic*. *Cannalonga*] Park with the bike path that ends abruptly at Bridge Street? And also upgrade the park? Lots of residential development in this part of town and no new parks.” (Land Use, 19 up votes)

“The playground here has seen better days [Pat and Gabriel Farren Playground along Charles River]. Parts of the structure on boarded up and not usable and there is no shade/cover on hot days. An upgrade is much needed to such a heavily used playground” (Open Space and Recreation, 20 up votes)

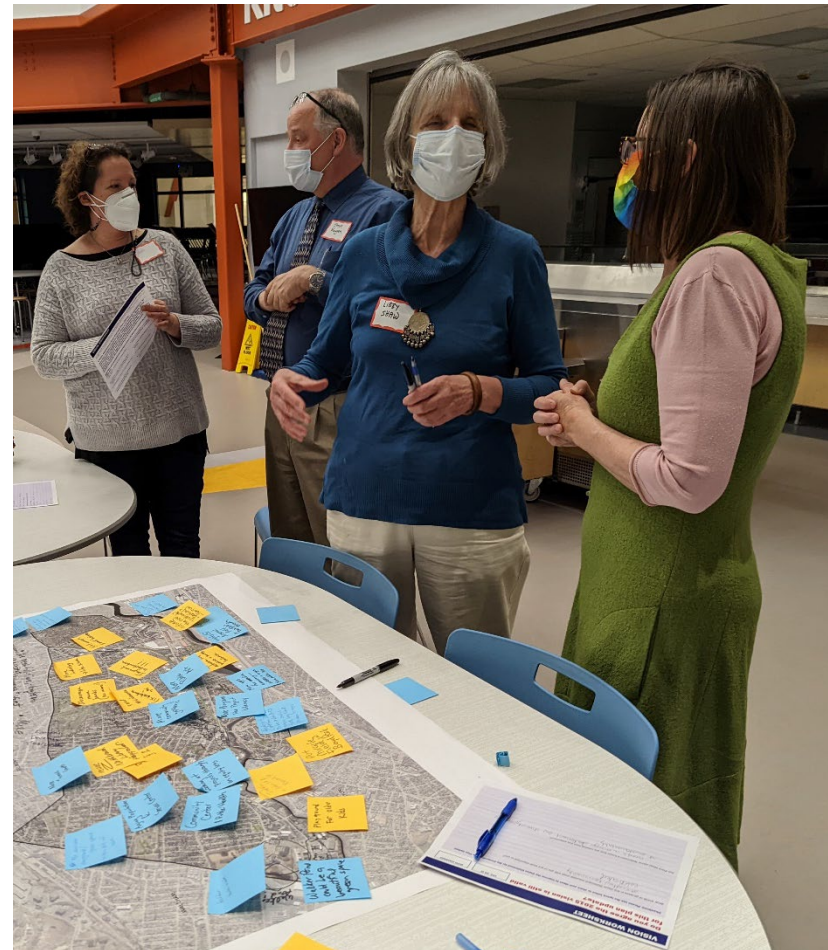
“Crossing [Watertown] Square should be more pedestrian-friendly. It takes forever to get from Main St to the river” (Transportation, 21 up votes)



Interactive map showing locations of comments.

11 Vision

The Vision Statement succinctly summarizes the key features of Watertown's desired future. It will guide the development of goals and strategies that will help achieve the vision. For this Comprehensive Plan update, the current 2015 plan vision was used as a starting point to revisit and modify as needed. Small group exercises at the visioning forum and online survey questions gave residents the opportunity to weigh in on potential changes as described in the previous section. The 2015 plan vision statement was revised based on this feedback to provide updated guidance for the comprehensive plan update process.



Vision for the Comprehensive Plan Update:

Watertown envisions an inclusive and sustainable future that enhances its vibrant neighborhoods and weaves the community together with a mix of new development and rejuvenated traditional commercial districts.

Watertown will continue to foster and strengthen community, ensuring a built environment with diverse institutions, high quality schools, celebrated arts and cultural amenities, and recreational facilities that each foster connections important to the community.

To achieve this vision, Watertown will prioritize:

- *Improving and enhancing the Charles River and other natural areas, providing more opportunities for residents and businesses to interact with the Charles River, its ecology, and natural habitat.*
- *Reinforcing the character of Watertown's neighborhoods, squares, and corridors by blending high quality design, preservation, resilience, and redevelopment.*
- *Strategically targeting economic development opportunities in ways that support innovative, successful, and environmentally conscious employment centers, contribute to the local tax base, and enhance neighborhood character and existing built environment.*
- *Facilitating housing types affordable to a diverse population and pursuing strategies to address the needs of existing and new residents.*
- *Proactively maintaining and developing infrastructure and public services, with continued support and improvements of the school system, parks, recreational programming, library, and public arts and cultural assets.*
- *Celebrating its unique neighborhoods, historic and cultural heritage, and diversity, where new and long-time residents alike mingle in distinctive local businesses and restaurants, arts venues, beautiful parks, and active plazas.*
- *Incorporating welcoming, attractive streetscapes and gateways along well-designed pedestrian-oriented, bicycle-friendly, tree-lined streets while promoting convenient transportation alternatives for residents and workers.*
- *Being a leader on sustainability and managing climate change impacts by reducing citywide emissions and strengthening community resilience.*
- *Promoting an active, healthy lifestyle where residents have access to social services, nutritious and affordable food, and places to be physically active.*