

3

Community Setting

A. Regional Context

Physical Location

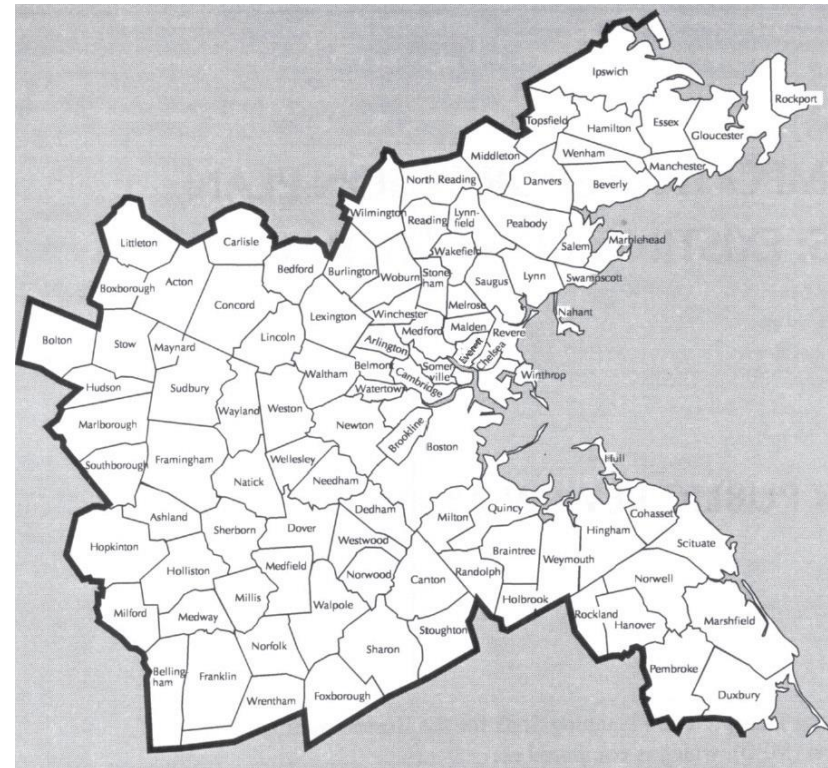
The Town of Arlington is located in eastern Massachusetts and lies at the edge of the Boston Basin (a broad, flat, flood plain). Located about six miles northwest of Boston, Arlington's population of 42,844 (2010 U.S. Census) occupies five and one half square miles or 3,509.9 acres. Arlington is part of Middlesex County and the Boston metropolitan area; its neighboring communities are Lexington, Winchester, Medford, Somerville, Cambridge, and Belmont (see Map 3-1). The commercial corridors of Massachusetts Avenue and Broadway bisect the Town and connect it to Cambridge and Somerville on the east and Lexington on the west.

Arlington is a Town governed by a five-member Board of Selectmen, an elected legislative Town Meeting of 252 members, and an appointed Town Manager, similar in governance to the adjacent towns of Lexington, Winchester, and Belmont. Like the cities of Cambridge, Somerville, and Medford, Arlington is densely developed with a high level of population per square mile (see Population Characteristics, Section 3C, for statistics on regional population density).

Arlington residents' median family income is not as high as neighboring towns (Lexington, Winchester, Belmont), but is higher than neighboring cities (Cambridge, Somerville, Medford). More than 60 percent of Arlington residents over the age of 25 have at least a bachelor's degree,

and 35 percent hold a graduate or professional degree. Town residents work in both blue collar and professional occupations. As in Arlington's surrounding communities, the Town has a large segment of aging people and a growing segment of couples with young children.

Map 3-1. Arlington and Surrounding Communities



Source: Town of Arlington Open Space and Recreation Plan 2007-2012.

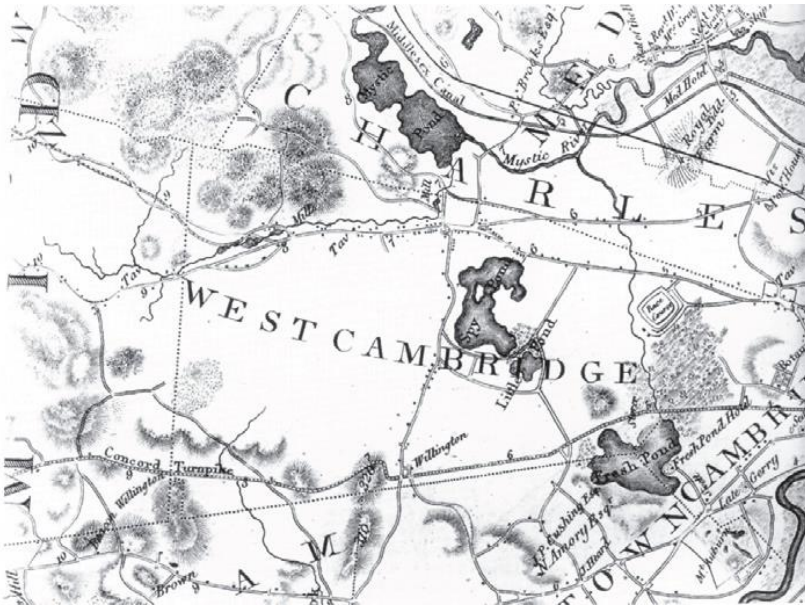
Community Development

Many factors have shaped Arlington's natural and recreational open space as the Town developed from a small farming community in the colonial period to the densely developed suburban community it is today (see Maps 3-2, 3-3, and 3-4). The biggest influence on Arlington's development

has been the growth of metropolitan Boston. The Town's close proximity to Boston and Cambridge, and to many colleges and universities in the region, makes it an ideal residential community for people affiliated with academia, financial institutions, high-tech and bio-tech industries, and other regional employment sectors.

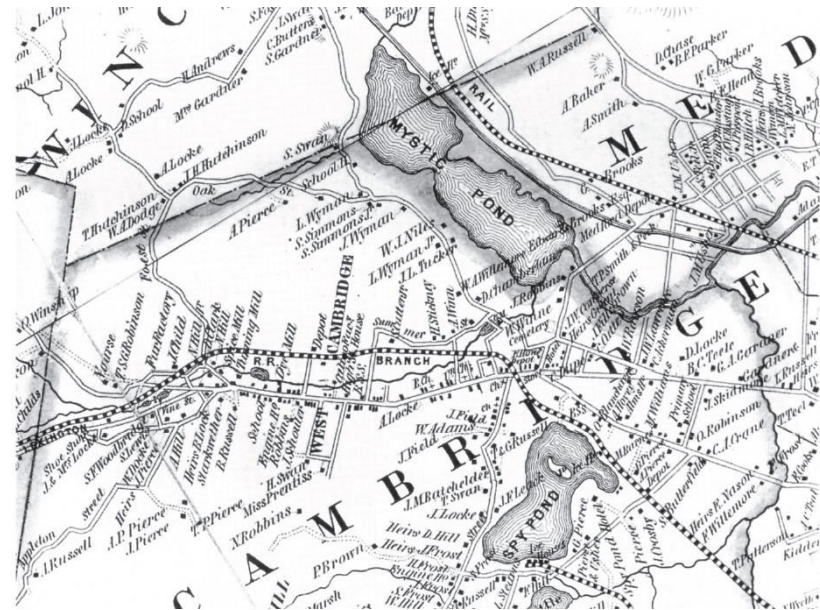
The character of Arlington's once rural community began to change in 1846 when the Lexington and West Cambridge Railroad opened to Arlington, allowing more residents to work outside of Town (Neckar and Zellie 1980). The continued growth of transportation options accelerated this change of life for Arlington residents and the change of character for the Town's landscape. As Boston grew, the pressure for the development of residential building lots within commuting distance grew as well. Over time, Arlington became less "country-like" and more "suburb-like" in character.

Map 3-2. Arlington (then West Cambridge) in 1830



Source: Neckar and Zellie 1980, 12.

Map 3-3. Arlington (then West Cambridge) in 1853



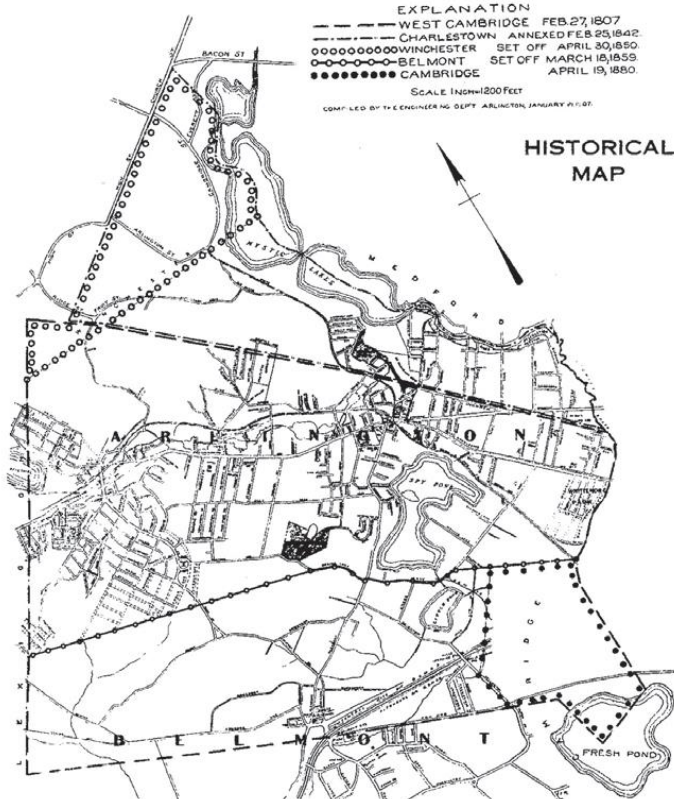
Source: Neckar and Zellie 1980, 13.

Arlington Land Uses

Residential Land Use

The majority of Arlington's land use is residential—approximately 72 percent of the total land area of the Town as reported in the 2015 Arlington Master Plan land use element. Arlington is a safe and convenient place to live for people who may work in nearby cities but wish to live in a town with a more suburban character. The majority of Arlington homes are situated on small lots ranging in size from 3,500 to 9,000 square feet. These small residential lots and a relatively small amount of open space (approximately 448 acres, including both public and private land, or about 13 percent of the land within Town borders) are two of the important factors driving Arlington's need to preserve, protect, and nurture its limited open space.

Map 3-4. Arlington in 1907



Source: Neckar and Zellie 1980, 9. This map shows how Arlington's boundaries have changed over the years.

Transportation and Commercial Land Uses

Many major roads (Massachusetts Avenue and Routes 2, 2A, 3A, 16 and 60) pass through Arlington, linking residents with neighboring towns, Boston, Cambridge, and nearby highways (Interstates 93 and 95). During peak commuting hours these roads are highly congested. Public bus transportation also traverses Arlington, carrying commuters to regional destinations. Many of the roadways that pass through Arlington border the

Town's water bodies (for instance, Route 2 borders Spy Pond on the south, Route 16 borders Alewife Brook, and Mystic Valley Parkway borders the Mystic Lakes and Mystic River), thereby putting constraints on the use of open space abutting them. While these roadways provide many scenic views for the traveling public, their presence contributes to pollution of these waters.

Arlington does not have any major shopping malls or superstores to draw in large numbers of customers from surrounding towns. The Town's three commercial centers (East Arlington, Arlington Center, and Arlington Heights) feature small specialty stores, theaters, and restaurants frequented by residents and nonresidents. Traffic around these shopping areas and businesses (the majority of which are located along Massachusetts Avenue) is usually manageable, although residents frequently comment on the need for additional parking. Traffic around Arlington's more popular recreational resources presents additional seasonal problems.

Public Open Space Land Uses

Arlington has a number of relatively small open spaces that add to its character and beauty. Both residents and nonresidents enjoy Arlington's open space destinations and are invited to register for Arlington's recreational activities and programs. Arlington's largest and most popular open space destinations are described here (see chapter 5 for a complete inventory and additional information).

- Arlington Reservoir** combines a water body of 29 acres and land totaling 65 acres, including woods, open areas, and a sandy beach. More than half of this site is located in Lexington. The Reservoir is frequented by many visitors, particularly in the summer, because of its beach and supervised swimming area. A one-mile wooded path around the Reservoir is used regularly by walkers, joggers, bird watchers, and others who seek a quiet place to enjoy the outdoors close to home.

- **Great Meadows** (located in Lexington, but owned by Arlington) is a 183-acre area with a significant amount of wetlands and wet meadows. Several entrances are available from the Minuteman Bikeway, and boardwalks have been built by volunteers in recent years to make the trails more accessible. Residents of Arlington and neighboring town often visit Great Meadows to observe the diverse flora and fauna, to cross-country ski, or to use the trails for walking and bird watching.
- **Menotomy Rocks Park**, established in 1896, includes Hill's Pond and a playground, as well as wooded areas boasting many plant and wildlife species. Visitors use the 35-acre park for ice skating, picnicking, walking, jogging, ball playing, birding, and relaxing. The park is also known for its spectacular glacial ledges.
- **Robbins Farm Park** contains 11 acres of recreation areas, open space, and a community garden. In the summer, visitors use the playground area, ball field, basketball court, and grassy areas; in the winter, visitors use the area for sledding and cross-country skiing. The site atop a steep slope provides a panoramic view of Boston's skyline and is a wonderful spot for viewing the nighttime starry sky and the Fourth of July fireworks in Boston.
- **Spy Pond and adjacent Spy Pond Park** are popular destinations for families with young children, sunbathers, boaters, birders, and anglers. The 100-acre pond provides tranquil respite for people of all ages; however, the lack of a walking trail around the entire pond limits public access. Spy Pond Park borders the pond and the Minuteman Bikeway, and contains 3.7 acres of grassy recreation area, including a tot lot and boat launching ramp. The Spy Pond Path traverses the south edge of the pond next to Route 2. The nearly two-acre Elizabeth Island was purchased by the Arlington Land Trust in 2010 as

permanent conservation land. It is accessible to the public via small boats that are permitted on the pond.

- **Historic sites and landscapes** in Arlington attract out-of-town tourists and local people alike. Several notable sites are the Jason Russell House and Smith Museum, the Samuel Wilson ("Uncle Sam") monument, the Old Schwamb Mill, the Whittemore-Robbins House and adjacent gardens in the Civic Block, and the Cyrus Dallin Art Museum in the historic Jefferson Cutter House.



Historic Jason Russell House in Arlington Center. Credit: Ann LeRoy

Open Space Resources Shared with Other Towns

Arlington shares a few important and unique resources with neighboring towns, and is actively engaged in regional planning efforts to preserve, protect, and enhance those areas.

- Minuteman Bikeway** — This rail/trail conversion was dedicated in 1992. The 11-mile paved bike trail runs from Bedford in the west through Lexington and Arlington, terminating at Cambridge's Alewife T (MBTA) Station. The Arlington section is called the Donald Marquis/Minuteman Bikeway in honor of the retired long-time town manager. Built over an abandoned railroad corridor, the bikeway abuts a mix of commercial and industrial land uses and connects them to many residential neighborhoods and open space parcels.

The future may include more opportunities for linkages between the Minuteman Bikeway and bikeways in adjacent communities. Neighboring communities of Watertown and Belmont are also working to create bikeways that would link to the Minuteman Bikeway and other communities to the West. The state Department of Conservation and Recreation's master plan for the Alewife corridor included a path extension from the Alewife T Station along Alewife Brook Parkway with a connection to the proposed Green Line T Station in West Medford. This Alewife Brook Greenway Path was completed in 2013.



Minuteman Bikeway in Arlington. Credit: Ann LeRoyer

- Water Bodies** — Arlington shares several water bodies with neighboring communities. Alewife Brook on the eastern side of Town creates borders with Belmont, Cambridge, and Somerville. It flows into the Mystic River, which then passes through Medford, and Somerville on its way to Boston Harbor. The Mystic Lakes border Arlington, Medford, and Winchester. Alewife Brook, Mystic River, the Mystic Lakes, and adjacent green space are all owned and controlled by the Department of Conservation and Recreation (DCR), formerly the Metropolitan District Commission (MDC). On the western edge of Town, the Arlington and Lexington border runs about midway through the Arlington Reservoir.

- Parkways** — Multiple highways and roads (Routes 2, 2A, 3A, 16, and 60) pass through Arlington. Alewife Brook Parkway (Route 16) and the Mystic Valley Parkway offer particularly scenic and open space value. These two roadways are owned and controlled by the DCR and are shared with surrounding Cambridge, Somerville, and Medford. Planned over 100 years ago as part of Charles Eliot's plan for the Boston metropolitan area, these parkways were designed as carriageways that would provide scenic views to the traveling public. Besides serving as transportation corridors, these parkways provide a buffer area between land uses.

- Additional Open Space Resources** — The following open space resources are among those located in neighboring towns that are also enjoyed by Arlington residents:

- Beaver Brook Reservation (DCR) in Belmont and Waltham
- Habitat, a Massachusetts Audubon Society sanctuary in Belmont
- Rock Meadow in Belmont (town conservation land that was part of the former Metropolitan State Hospital Complex)
- The Western Greenway traversing numerous public and private properties in Belmont, Waltham, and Lexington

- Fresh Pond, Mt. Auburn Cemetery, and the Charles River in Cambridge
- Alewife Reservation (DCR) in Cambridge, bordering Belmont and Arlington
- Great Meadows in Lexington (owned by Arlington)
- Whipple Hill, Willard Woods, and other conservation lands in Lexington
- Middlesex Fells (DCR) in Winchester, Medford, Melrose and Stoneham
- Dilboy Field in Somerville, offering a stadium, other sports fields, playgrounds, and walking trails

Regional Planning Efforts

Arlington is a member of the Metropolitan Area Planning Council (MAPC), a regional planning agency that serves 101 towns and cities in Greater Boston. The Town participates actively in MAPC planning activities, such as the Inner Core Committee (which includes representatives of communities close to Boston who meet regularly to discuss common interests, such as open space).

Arlington consults the Statewide Comprehensive Outdoor Recreation Plan (SCORP) in its open space planning. The Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA) produces the SCORP, which documents the available recreational resources across the state.¹ It also documents problems in providing recreation access and protecting resources. The relevant portions of the most recent Massachusetts SCORP (2012) are summarized in chapter 7.

Increasing development pressures in the Alewife region around the Route 2 rotary at the MBTA station and more frequent flooding and traffic congestion in East Arlington in recent years have caused growing concerns

and activism. One of the major groups in the area is the Friends of Alewife Reservation, which is dedicated to the protection and preservation of the water quality and wildlife habitat of that state-owned land in the adjacent communities of Arlington, Belmont, and Cambridge.

The Coalition to Preserve the Belmont Uplands has also worked hard to preserve the Silver Maple Forest in Belmont. A long-standing controversy with the developer of a proposed chapter 40B residential development came to a head in the summer of 2014, when most of the forested area was cleared in preparation for the development. Local residents in all three communities are concerned about the loss of land in this ecologically sensitive area and its role in providing water absorption and flood prevention, habitats for many varieties of animals, an outdoor oasis for area residents, and an environment in which the largest Silver Maple Forest in the Boston area can thrive.

To further address water pollution and flooding issues in and around Alewife Brook, the Tri-Community Flood Group for Arlington, Belmont, and Cambridge includes town engineers, elected officials, and concerned neighbors and volunteers. Among the issues the group discusses are the combined sewer overflows (CSOs) that enter the brook from Cambridge and Somerville after heavy rains.

The Mystic River Watershed Association (MyRWA; 2001) works to protect the Mystic River watershed area, including Alewife Brook, Mill Brook, and the Mystic River and Lakes. It sponsors a variety of water quality monitoring programs and offers educational and outreach opportunities throughout the year. MyRWA's members represent Arlington, Belmont, Cambridge, Medford, Somerville, Lexington, Winchester and Woburn. The river and much of the land along the waterway is managed by the state Department of Conservation and Recreation, which is undertaking a master plan for the area. MyRWA headquarters are located in the former Central School next to Town Hall in Arlington.

¹ Massachusetts Executive Office of Energy and Environmental Affairs, Massachusetts Statewide Comprehensive Outdoor Recreation Plan, 2012, p. 1

B. History of the Community

Menotomy: Pre-Colonial Era

The Massachuset Tribe

When the first English colonists arrived in the Boston area, the only inhabitants of the region were members of the Massachuset tribe. The Massachuset occupied valleys of the Charles and Neponset rivers in eastern Massachusetts, including the present site of Arlington, which they called Menotomy (meaning "place of swiftly running water"). The name Massachuset means "at the range of hills," probably with reference to the ring of hills surrounding the Boston Basin created during the last ice age.

The Massachuset tribe spoke what linguists call the Algonquian N-dialect. The same dialect was spoken by the neighboring Narragansett, Nauset, Niantic and Wampanoag. Algonquian (or Algonquin) is the name used for the largest pre-colonial language group in North America. Some evidence of the migrations of ancestors of the Massachuset tribe lies in the fact that Algonquian dialects are spoken from Montana to Massachusetts by the Arapaho, Cheyenne, Gros Ventres, Blackfoot, Cree, Ojibwe, Ottawa, Potawatomi, and numerous tribes along the Atlantic coast from Hudson Bay to South Carolina.

In 1614, when Captain John Smith explored the coast of New England, there may have been as many as 3,000 Massachuset living in 20 villages around Boston Bay. They were divided into six sub-tribes named after their chiefs or sachems. Between 1614 and 1617, disaster struck in the form of three separate epidemics of European diseases. During the same period, the Abenaki tribe from the north attacked the Massachuset villages. In 1620 the Pilgrims found that most of the Massachuset villages in the region were empty and only recently abandoned. When the first Puritans settled at Boston in 1629, only 500 Massachuset were left in the immediate area, and smallpox killed many of these in 1633. No organized groups of the Massachuset are known to have survived after 1800.

The Massachuset are memorialized in Arlington today by "The Menotomy Indian Hunter," a sculpture by Cyrus Dallin located in the Winfield Robbins Memorial Garden next to the Town Hall.

The Squaw Sachem

The hereditary chief of the sub-tribe that occupied Menotomy was a woman whose full name is unknown. She is known by her title, Squaw Sachem, and she was married to Nanapeshemet (or the New Moon), one of the greatest sachems in New England, ruling over a larger area than any other. He resided in what is now the city of Lynn until the war with the Abenaki (aka Tarratines), which began in 1615. He then retreated to a hill on the banks of the Mystic River (in Medford), where he built a house and fortified himself. The Abenaki pursued him to his retreat and killed him in 1619. At his death, his widow became sachem because his sons were too young to rule. After about a decade, however, the two eldest sons were old enough that the English recognized them as chiefs in Charlestown and Saugus. They both died in 1633, so again there was no sachem. The settlers' deeds were executed with the Squaw Sachem. In some of those documents, her name is joined with that of her second husband, Web Cowet, a "great physician," whom she married before 1635.

The Squaw Sachem conducted raids against tribes that tried to encroach on her territory. These raids ceased after 1625, because her tribe had gotten too small for such aggressive action. To survive, she had to establish a friendly relationship with the English colonists. Following is the text of the agreement by which she sold Menotomy and adjacent land to the colonists.

" The 15th of the 2d mo.,1639.

Wee Web-Cowet and Squaw Sachem do sell vnto the Inhabitants of the Towne of Charlestowne, all the land within the line granted them bythe court, (excepting the farmes and the ground, on the west of the two great Ponds called Misticke ponds, from the south side of Mr. Nowell's lott, neere the vpper end of the Ponds, vnto the little runnet that cometh from Capt. Cook's mills, which the

Squaw reserveth to their vse, for her life, for the Indians to to plant and hunt vpon, and the weare above the pons, they also reserve for the Indians to fish at whiles the Squaw liveth, and after the death of Squaw Sachem, she doth leave all her lands from Mr. Mayhue's house to neere Salem to the present Governor, Mr. John Winthrop, Sen'r, Mr. Increase Nowell, Mr. John Wilson, Mr. Edward Gibbons to dispose of, and all Indians to depart, and for sattisfactio from Charlestowne, wee acknowledge to have received in full sattisfaction, twenty and one coates, ninten fathom of wampom, and three bushels of corne: In witness wherof we have here vnto sett o'r hands the day and yeare above named. the marke of Squaw Sachem, the marke of Web Cowet."

There are records of several other sales of land by the Squaw Sachem and Web Cowet to the English settlers. In addition to the proceeds from such sales, they received help and goods from the settlers. In May 1640, Cambridge was ordered to give the Squaw Sachem a coat every winter for life. In 1641, Cambridge was enjoined to give her 35 bushels of corn and four coats (for two years). In 1643, the court granted her gunpowder and shot and ordered "her piece to be mended." The Squaw Sachem died circa 1667. She was buried in what is now Medford; the exact location is unknown.

Post-Colonial Era

When first settled by the English around 1635, Arlington was known as Menotomy and was part of Cambridge. Almost 200 years later, in 1807, Arlington was incorporated as West Cambridge. In 1850 a part of West Cambridge was annexed to Winchester and in 1856 another part of West Cambridge was separated to create Belmont. Arlington adopted its present name in 1867 to honor civil war veterans buried at Arlington National Cemetery in Arlington, Virginia.

In Arlington's early colonial years, industry and agriculture thrived. Gristmills for corn and wheat, sawmills, ice harvesting, dairying and market gardening provided work for Town residents. Small family-owned mills along Mill Brook and its series of millponds also powered shoemaking,

calico printing, woodturning, paint grinding, and other industries. The industrial and agricultural nature of the community began to change with transportation improvements, notably the construction of a railroad in 1846 and later the use of electric streetcars (Neckar and Zellie 1980).

The historic Old Schwamb Mill on Mill Lane reflects the changing character and economic foundation of the Town over time (Old Schwamb Mill 1993). The mill was established in 1650 at the Foot of the Rocks as a gristmill and saw mill, where water-powered millstones ground grains and spices and where logs were sawn into planks. In 1864 Charles Schwamb, a German immigrant woodworker, and his partner converted the mill into a woodworking shop for the manufacture of high-quality oval and circular picture frames and picture frame moldings. The business thrived for 105 years, until the late 1960s, when cheap imports and other technologies reduced demand for high-quality wooden frames. The mill was protected by a group of Arlington preservationists and established as a working museum in 1969.

By the late 1800s, the Town's character changed dramatically, as Arlington became part of the greater Boston metropolitan area, both economically and socially. Civic and state leaders became aware of the need to preserve the Town's open space, and in 1896 land was assembled to create the Town-owned Menotomy Rocks Park (Mattheisen 1996). As the twentieth century progressed, however, the development of businesses, new homes and road construction began depleting more and more of the Town's land (Neckar and Zellie 1980). The post-World War II home-building boom was significant in some lowland areas of the Town that previously had been preserved in farmland and floodplains.

Until 1972, when Arlington put a development moratorium on building permits, commercial and residential development boomed. In 1975, after overhauling many of its zoning bylaws, the Town adopted a modified set to better regulate development. The 1975 zoning bylaws did not save much open space, however, because the Town had little open space left to save by that time. The effect of this intense history of development remains visible in Arlington today.

C. Population Characteristics

Understanding Arlington's population characteristics and recent trends is essential so the Town can maximize the appropriate use of its open space resources and plan for the future. The following discussion provides statistical demographics and then analyzes how Arlington's open space planning can respond to those demographics.

Unless otherwise noted, the 2010 U.S. Census provides the demographic statistics referenced in this subsection. Though collected five years ago, these data continue to be the most up-to-date and reliable that exist currently. The 2010 Census documents 42,844 residents in Arlington. This represents a small gain since 2000, when the population was 42,389. The 2010 population statistics show that the majority of Arlington's population is between 20 and 64 years of age. In general, the age ranges of under 14 years old and 55-64 have shown increases and the rest of the age cohorts have shown various levels of decline. Overall, Arlington is seeing an aging population where the median age is 41.7 in 2010 compared to 37 in 1990 and 39.5 in 2000. The Town's 18,969 households have declined slightly in number from 19,011 in 2000 but increased slightly in size from 2.22 to 2.24 occupants since 2000.

As recorded in the 2010 Census, Arlington's 5.5 square miles (5.2 sq. mi. in land, .3 sq. mi. in water) were populated with 42,844 people, presenting a population density of about 7,790 persons per square mile—far more than 2,082 persons per square mile, which is the average population density of other MAPC member communities. With the exception of Lexington, the cities and towns abutting Arlington also have a relatively high population density average, indicating that abundant open space resources for Arlington residents are not available nearby.

More evidence of Arlington's densely settled residential character is the relatively small size of its average house lot (6,800 square feet). Small house lots mean that residents may not have ample yard space for recreation and may need to use Town-owned resources. The results of the 2014 Vision 2020 Open Space Survey indicated that residents desire more

natural open space areas, swimming and ice skating facilities, off-leash dog walking areas, and community garden space (see Appendix B).

Population Statistics

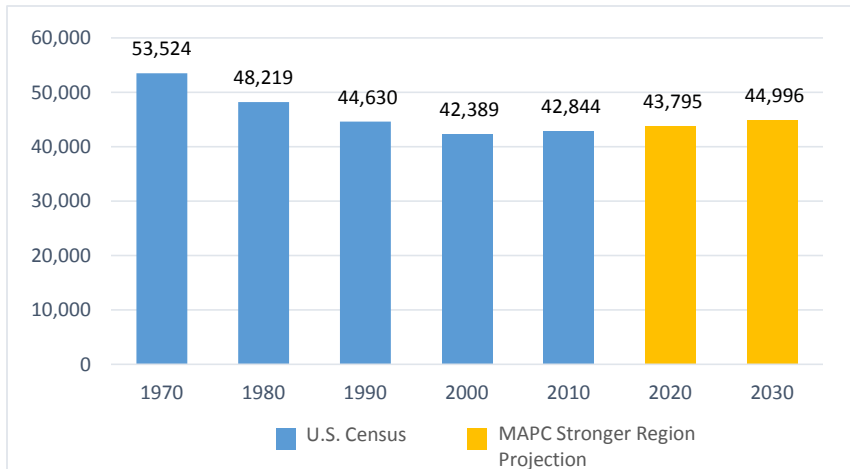
This section uses information from the 2010 U.S. Census, the Metropolitan Area Planning Council (MAPC), and the University of Massachusetts-based Institute for Social and Economic Research (MISER). The following population data and projections represent our best understanding of current population configurations and estimates.

Arlington's Current and Projected Population

As mentioned, the 2010 U.S. Census reported that Arlington had a population of 42,844 persons. Figure 3-1 shows that Arlington's population has declined from a peak of more than 53,000 in 1970 to 42,389 in 2000. This loss of population is related to such national trends as declining birth rate, aging population, and smaller household size. However the 2010 U.S. Census indicated a slight population gain of 455 people between 2000 and 2010. Furthermore, according to the Metro Boston Population and Housing Demand Projections conducted by MAPC in 2014, Arlington will continue to expect a growing population through 2030 under the Stronger Region scenario². Arlington is projected to have a population of nearly 45,000 by 2030.

² MAPC projections include two scenarios for regional growth. Each scenario reflects different assumptions about key trends. The "Status Quo" scenario is based on the continuation of existing rates of births, deaths, migration, and housing occupancy. Alternatively, the "Stronger Region" scenario explores how changing trends could result in higher population growth, greater housing demand, and a substantially larger workforce. The "Stronger Region" scenario is considered in this study as more comprehensive and dynamic, and therefore is used for demographic trend analysis.

Figure 3-1. Population Trends, Arlington, 1970-2030



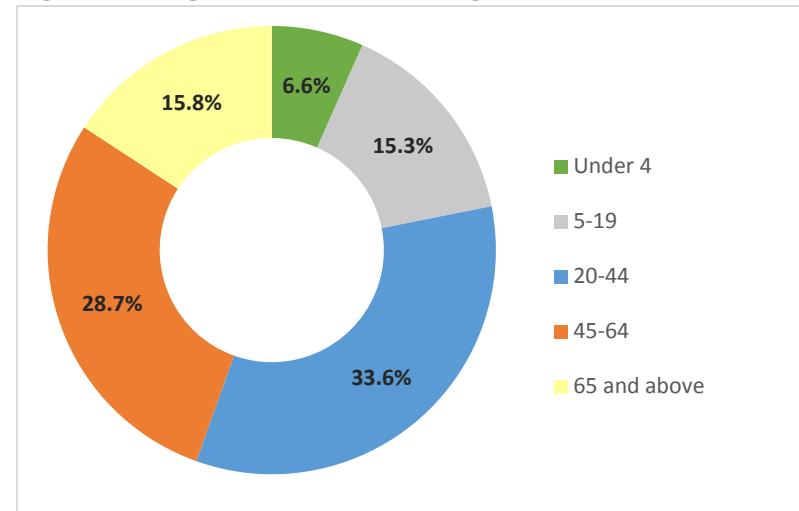
Source: U.S. Census and MAPC. *Metro Boston Population and Housing Demand Projections, 2014* (<http://www.mapc.org>).

Age Distribution of Arlington Residents

Change in the size of Arlington's population is one of the factors causing changes in the age composition of its residents. Figure 3-2a indicates the 2010 age composition for Arlington residents while Figure 3-2b shows the change of age composition between 2000 and 2010.

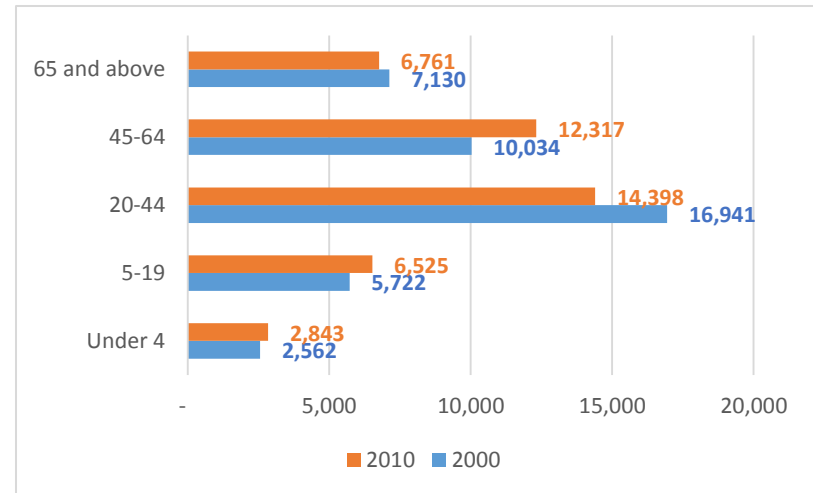
The 2010 data show that most of Arlington's population is between 20 and 64 years of age. The town has seen slight population growth in the infant and young child group and in those 5 to 19 over the decade. The most significant population increase occurred among people between 45 and 64 years (the Baby Boomers). Yet the adult population ages 20 to 44 declined significantly during the same period, in addition to a slight decrease in elderly population above 65 years. Given the significant increase in the 45-64 cohort, the Town can expect that the elderly population is likely to increase dramatically between now and 2030. Overall, Arlington is seeing an aging population where the median age is 41.7 in 2010 compared to 37 in 1990 and 39.5 in 2000.

Figure 3-2a. Age Distribution of Arlington Residents, 2010



Source: U.S. Census.

Figure 3-2b. Change of Age Distribution of Arlington Residents, 2000 and 2010



Source: U.S. Census.

Employment Characteristics

Arlington's residents are predominantly employed in white-collar managerial, professional, or technical jobs. Among Arlington's 23,733 civilian employed population 16 years and over in 2010, nearly 64 percent have management, business, science, and arts occupations. More than 21 percent of the Town's employed residents work in sales and office related industries, and nearly 9 percent are employed in the service sector.

The number of people working in jobs requiring manual labor, such as construction, maintenance, production, transportation and material moving, has been declining since 1970, and they together account for 6.4 percent of Arlington's employed population in 2010. Although Arlington has lost most of its industrial and manufacturing employers, the Town has a growing service sector, including retail, medical and information technology, and restaurants and food-related services. While the majority of Arlington residents work outside of the Town, a growing number of residents have home offices in Arlington.

Perhaps because of Arlington's proximity to many Boston and Cambridge-area universities and colleges, the Town is also home to many people associated with higher education, such as teachers, professors, graduate students, and staff. Also, due to Arlington's close location to Boston, Cambridge, and Routes 2, 93, and 128, the Town is an ideal place for entrepreneurs and technology-based small businesses, many of which start as "kitchen-table" enterprises and provide employment on a part-time or small-scale basis.

Environmental Justice Populations

According to MassGIS data definitions, Arlington has six environmental justice block groups out of 44 (13.6 percent). The total population in these block groups was 7,333 in 2010, or 17.1 percent of the total population of 42,844. The two relevant MassGIS definitions for EJ populations are:

- *Minority: Any Block Group with a % Minority \geq %25*
- *Income: Any Block Group with a median household income in 2010 (B19013) less than or equal to \$40,673.*

Minority Characteristics

Arlington has limited racial and ethnic diversity, but there is a growing foreign-born population and some people speak languages other than English at home. According to the U.S. Census Bureau, 85.7 percent of Arlington's population is white, with racial minorities comprising 14.3 percent. The majority of this group, and the fastest growing race, is Asian (8.3 percent, mostly Asian Indian and Chinese), with 2.4 percent identifying as African American and 2.5 percent identifying two or more races. Only 3.3 percent identify as Hispanic or Latino, but they may be of any race. By contrast, minorities account for 27 percent of the Boston metropolitan area's population and 23.5 percent of Middlesex County's total population (U.S. Census Bureau 2010).

Approximately 15 percent of Arlington's residents are foreign born—people who immigrated to the U.S. from some other part of the globe—and most have been in the U.S. for over a decade. Immigrant communities make up much larger shares of the populations in most cities and towns around Arlington. In addition, Arlington has fewer residents for whom English is not their native language. Still, the presence of an ancestrally mixed foreign-born population – with many families from China, India, Japan, Russia, Italy, Ireland, and Greece – sheds light on why so many residents think of Arlington as a diverse town.

Income Characteristics

A comparison of 1999 U.S. Census data and 2010 ACS 5-Year Estimates are used for income characteristics analysis. The figures in Table 3-1 show increases of income for all households including family and nonfamily households, at a growth rate of respectively 34 percent and 36 percent between 1999 and 2010. Overall, Arlington's median household income exceeded that of Middlesex County and the state as a whole. Approximately 39 percent of all Arlington households had annual incomes over \$100,000 in 2010, including families and nonfamilies.

Despite Arlington's relatively low poverty rates in the Boston Metro area, approximately 4.9 percent of Arlington's population is determined as living

Table 3-1. Median Income in Arlington and Middlesex County, 1999 and 2010

	1999			2010		
	Arlington	Middlesex County	MA	Arlington	Middlesex County	MA
Median family income (persons living in a household who are related by birth, marriage, or adoption)	\$78,741	\$74,194	\$61,664	\$105,316	\$97,382	\$81,165
Median non-family household income (persons living in a household who are not related by birth, marriage, or adoption)	\$42,269	\$36,954	\$29,774	\$57,656	\$46,680	\$37,606
Median household income (avg. of both family and non-family households)	\$64,344	\$60,821	\$50,502	\$82,771	\$77,377	\$64,509

Source: U.S. Census.

below the poverty level. Approximately 25.5 percent of households receive Social Security income in 2010, with another 6.6 percent receiving Supplemental Security Income, public assistance income, or Food Stamp/SNAP assistance. The childhood poverty rate was very low at 2.3 percent, but the poverty rate for seniors was 7.5 percent.

Characteristics of EJ Block Groups

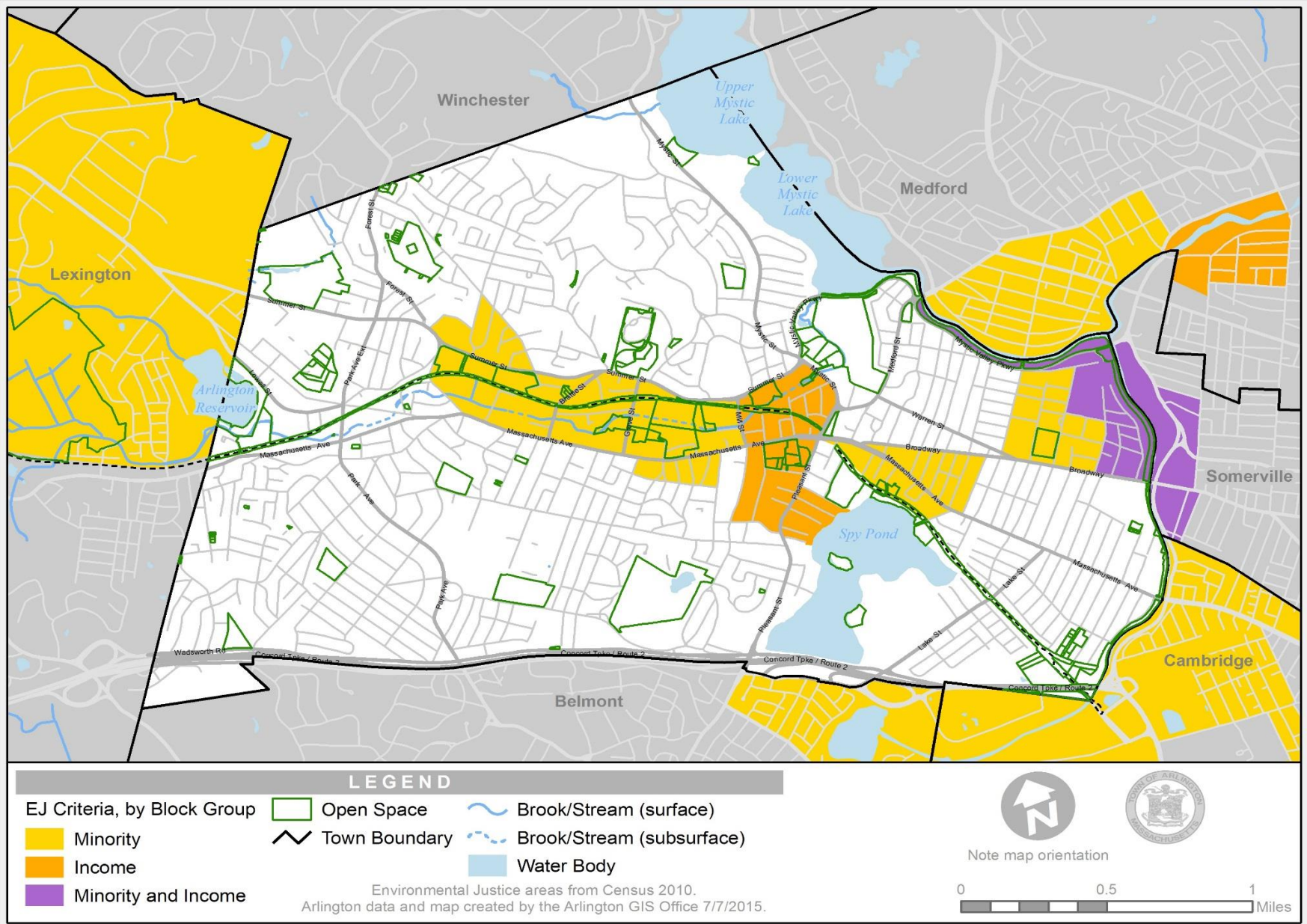
The six MassGIS designated environmental justice block groups in Arlington are shown in Map 3-5 and briefly described below:

- Two Minority areas west of Arlington Center and north of Mass Ave and – many large apartment buildings and multi-family homes with rental units, close to mass transit, some commercial development;
- Minority area east of the Center between Mass Ave and Broadway – many two- and three-family homes, close to mass transit, some commercial development;
- Income area in Arlington Center – commercial district and location of several group homes for adults and juveniles, elderly and disabled housing managed by the Arlington Housing Authority, and clusters of larger condos and rental apartments;
- Two areas, one Minority and the other Minority/Income, in East Arlington adjacent to Somerville and Medford – Thompson School district with the town's most diverse student body; Menotomy Manor public housing complex; multiple apartment buildings.

These areas are different from other outlying single-family and two-family neighborhoods in Arlington due to their proximity to denser and more urbanized areas of Somerville and Medford, and their concentration around the commercial spine of Massachusetts Avenue, where larger rental apartment buildings and public housing complexes are also located.

Nevertheless, all of these areas are close to open space and recreational resources, as shown on the map. Since Arlington is a compact town, access to other facilities is also quite easy. The minority or income areas in the center are adjacent to the mass transit on Mass. Avenue and are bisected by or adjacent to both the Minuteman Bikeway and the Mill Brook corridor. They are also near numerous playgrounds, parks, and playing fields (i.e., Summer Street Sports Complex, Buzzell fields, and Spy Pond), and they are close to the Civic Block of administrative and historic resources. The East Arlington area is adjacent to state DCR land along the Alewife Brook and Mystic Brook Reservations, and the North Union Park and Lussiano Field next to the Thompson School.

Map 3-5. Environmental Justice Populations in Arlington



People with Disabilities

In 2012, about 3,600 Arlington residents (8.5 percent of the population of about 42,800) had some sort of mobility and/or self-care limitations; approximately 1,752 people with disability, or 26 percent of the total population, are 65 years and over (U.S. Census Bureau 2008-2012).

Population Impacts on Open Space Needs

The following discussion is based on Arlington's population demographics and is not a final open space needs analysis. Refer to chapters 6, 7, 8 and 9 for analysis and detail on the Town's open space goals, needs, objectives, and actions.

Senior Citizens' Needs

Arlington residents over 65 comprised about 16 percent of the population in 2010, a slight decrease from 17 percent in 2000. Arlington will need to continue planning for the open space needs of senior citizens and increasing their access to facilities. Some senior residents in Arlington live on limited or fixed incomes; thus, while many Town residents can travel for their recreational needs and enjoy sports requiring expensive equipment or large amounts of open space, many senior citizen residents need open space and recreation resources that are easily accessible by walking or public transportation in all seasons. For example, over the past several years the Town has contracted for the Minuteman Bikeway to be plowed after snowstorms, for both bicycle commuters and pedestrians.

Also, although there are a number of indoor facilities and programs for senior citizens, they need more programmed outdoor activities, especially as seniors remain stronger and healthier longer than in the past. Areas for passive recreation, such as walking, picnicking and bird watching, and events for the elderly, such as sightseeing tours, are popular with the over 65 group and should be made more easily accessible and available to them. Installing benches and establishing rest areas at recreational areas, commercial pedestrian spaces and local neighborhood parks may help to make some open spaces more accessible to the elderly. For example, a

new multi-generational park with bocce court and game tables was built as part of renovations around the Summer Street Sports Complex in 2011.

Adults' Needs

Arlington residents between the ages of 20 and 44 comprised 33.6 percent of Arlington's population in 2010, and those between the ages of 45 and 64 accounted for 28.7 percent, totaling over 62 percent of the population. Although the 20-44 age group is projected to decline, the 45-64 group will increase. Thus the adult population, not including senior citizens, will likely be about 60 percent. These residents need active recreational facilities and resources for ball sports and biking, and passive recreation resources to enjoy activities such as picnicking and watching wildlife.

Toddlers', Children's and Teens' Needs

Toddlers, children and teens (ages 0-19) make up almost 22 percent of Arlington's population according to the 2010 U.S. Census, up from 20 percent in 2000. Arlington has limited park and recreation space for the number of young people in Town, and existing spaces are not evenly distributed throughout the neighborhoods. The household demographic trend points to a continued need for parks and play areas for very young children, including ample access to Spy Pond, the Reservoir, and other waterways for walking and observing wildlife. The Town is experiencing increased demands for playing fields for soccer, baseball, lacrosse and football by both boys' and girls' teams at Arlington High School and Arlington Catholic High School, as well as growing demands by league sports, especially soccer and baseball, for youngsters of all ages.

People with Disabilities' Needs

Almost 8.5 percent of Arlington's population has some kind of mobility or self-care limitation (U.S. Census Bureau 2008-2012) and the Town will continue to increase the amount of open spaces accessible to people with disabilities, particularly parks, playgrounds, and passive recreation areas.

Under the national Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act, the Town has an obligation to plan for people

with disabilities to participate in all aspects of Town government (see Appendix D). In 2014 the Town and the Institute for Human Centered Design (IHDC) completed an ADA study that focused on parks and recreational sites and programs (see Appendix E).

Arlington makes it a point to ensure the inclusion of people of all ages and abilities in Town open space activities. For instance, people with disabilities are explicitly invited (in the Town's seasonal recreation pamphlet) to participate in Arlington Recreation Department activities and programs. Furthermore, the Park and Recreation Commission assures accessibility for people with disabilities in all of its renovation and expansion plans. And, as part of new capital investments, Town policy is to upgrade its open space facilities to national accessibility standards for people with disabilities.

Cross-age Group Needs

Arlington needs to better maintain its parks, playgrounds, and team playing fields for the recreational enjoyment of Arlington residents of all ages. The Park and Recreation Commission regularly assesses the needs for improving the Town's recreational facilities and has developed a multi-year capital planning process for scheduling park and playground renovations.

Low-income and Minority Family Needs

While Arlington is primarily a middle-income community, approximately 4.9 percent of the population is determined as living below the poverty level, and several neighborhoods have been designated as environmental justice areas based on minority status and/or income. Approximately 25.5 percent of all households in Arlington received Social Security income in 2010, with another 6.6 percent receiving Supplemental Security Income, public assistance income or Food Stamp/SNAP assistance. Thus, despite the increase in average household income, the Town still needs to address the percentage of its population that cannot afford to spend time and money to access recreation programs, especially those requiring fees.

The Arlington Boys and Girls Club, Fidelity House, Boy and Girl Scouts, and various church groups, sports leagues and clubs offer their recreation programs to all residents, regardless of income level. Community

Development Block Grant (CDBG) funds help to subsidize scholarships for these programs. Many private groups also offer assistance (through scholarships and other methods) to people in need.

Summary of Needs

User needs for and concerns about access to open space and recreational facilities for all ages have persisted in recent years. Demands on parks, playgrounds, and playing fields for youth and adult activities are recognized throughout the Town. Volunteer neighborhood groups have worked with the Park and Recreation Commission to organize tot lots and playground renovations in several areas. The proliferation of Friends groups to support parks such as Menotomy Rocks, Robbins Farm, and Spy Pond also illustrates the need and desire of citizens to be directly involved in their neighborhood open space resources, and to supplement Town efforts on maintenance and beautification projects.

Arlington is also more actively committed to providing additional affordable housing, elderly housing, and assisted living facilities for low-income and elderly residents, and their needs for open space and recreational facilities must be addressed. In addition, new condominium and rental apartments near Arlington Center and the Arlington 360 apartments at the former Symmes Hospital site are attracting younger working people who appreciate the convenience of Arlington, as well as its suburban character, restaurants, and recreational opportunities, especially the Minuteman Bikeway. The resulting increased use of these resources means that even more attention to maintenance will be needed in the future.

D. Growth and Development Patterns

Land Use Patterns and Trends

Arlington has evolved from a farming community during colonial times to a Town where roughly 88 percent of the land available for development is currently developed for a combination of residential and commercial uses. Because Arlington is almost completely developed, it is unlikely that significant change in the land use patterns will occur.

The majority of Arlington's land use today is residential (72 percent). Arlington has a base of single-family homes, but sizable portions of Arlington's population live in two-and-three family homes, condominiums, and apartment buildings. House lots in Arlington are generally quite small (3,500 to 9,000 square feet – an average of 6,800 square feet) and do not usually provide sufficient recreational space. Residents, therefore, rely on the Town's open space, which is also quite limited because of Arlington's population density.

Arlington's Land Use

Arlington contains 3,509.9 acres within its borders. Arlington's land use, divided by 19 zoning designations and acreage, is shown in Table 3-3.

Arlington Zoning and Open Space

Arlington Town Meeting in 2001 voted to approve the creation of an open space district, increasing the number of zoning districts to 19. Nearly 50 Town-owned parcels, including parks, playgrounds and playing fields throughout the Town, were transferred into this new district, adding an extra level of protection from development to those designated sites. Eight of Arlington's other zones are residential, six are business, and the others are zones for special uses, such as industry and transportation.

Table 3-3. Arlington's Zoning Districts by Land Area

Zoning District (Abbr.)	District Name	Acres	Zoning District (Abbr.)	District Name	Acres
R0	Large Lot Single Family	238.2	B1	Neighborhood Office	25.9
R1	Single Family	1,771.5	B2	Neighborhood Business	16.9
R2	Two Family	619.7	B2A	Major Business	22.2
R3	Three Family	8.3	B3	Village Business	30.2
R4	Town House	19.4	B4	Vehicular Oriented Business	30.0
R5	Apartments Low Density	63.7	B5	Central Business	10.3
R6	Apartments Medium Density	49.0	I	Industrial	48.7
R7	Apartments High Density	18.7	MU	Multi-Use	18.0
OS	Open Space	275.9	T	Transportation	0.8
PUD	Planned Unit Development	16.2			
Total acres without water – 3,283.6					

Source: Arlington GIS, "zoning.shp". Table omits water area. With water, the total area in the GIS zoning map is 3,509.89 acres (5.6 sq. mi.) as found in the 2015 Arlington Master Plan.

Arlington also has a land use regulation known as Environmental Design Review (EDR), which helps to improve the visual quality of the environment and is required for certain classes of special permits.³ Most major development projects have to undergo EDR by Arlington's Redevelopment Board. EDRs have strict review standards. As part of the

³ Special permits are regulated under Massachusetts General Law Chapter 40A, "The Zoning Act." The other special permit granting authority in Arlington is the Zoning Board of Appeals. Arlington grants special permits for uses that are desirable but that need special consideration and attention to limit any possible adverse impact.

EDR, the board reviews the development plan for such elements as landscaping and relation of the site plan to the surrounding neighborhood. While these visual elements *do not add* open space to Arlington, they do affect the visual quality of the Town (including its green character); they also provide buffer zones between adjacent land uses.

Projects that undergo EDR are typically located along major thoroughfares. These projects have an important effect on Arlington's open space system. For example, when conducting an EDR on a proposed development, the Arlington Redevelopment Board considers the site's proximity to major or significant open space. If the proposed site abutted the Minuteman Bikeway, for instance, the proposed project would be reviewed in terms of its relationship to the Bikeway. The Board might then recommend that the proposed project offer access to and from the bikeway. Projects near major water bodies or special features, such as entryways into the Town, would also undergo careful EDR. An EDR enhances Arlington's character and assures that major development parcels will maximize visual potential and consider their relation to the surrounding environment.

Infrastructure

Because Arlington is highly developed, its existing infrastructure is not expected to change drastically or to significantly determine the development of open space, although pressure for residential development has increased in recent years.

Transportation Systems

Arlington has a variety of systems suitable for various methods of transport:

- The Town's well-developed road system consists of 102 miles of public streets, 23 miles of private streets, and 6 miles of state highways and parkways.
- The Minuteman Bikeway carries bicycle and pedestrian commuter and recreation traffic. This rail/trail conversion project runs through Arlington's central valley (Mill Brook Valley), which also provides the

most level and direct route through Town. The Bikeway links directly to the Alewife T Station in Cambridge and extends 11 miles through Lexington and into Bedford. In recent years, bike lanes and shared use designations have been marked on many sections of Massachusetts Avenue and on a few other Town roads.

- The Massachusetts Bay Transit Authority (MBTA) provides bus service that connects to the Alewife T Station, to parts of Cambridge (including Harvard Square), and to other communities, including Somerville, Lexington, Bedford, Medford, and Burlington. The MBTA also provides The Ride, a van for low-income handicapped residents.
- The Council on Aging provides a jitney (van) service called "Dial-A-Ride." This service provides individualized routes and time of service to suit peoples' transportation needs. This service is supported by a federal grant for people with disabilities, the elderly, and lower-income people. The Council also has a van to transport elders to the Senior Center for activities and to medical appointments on an as-needed basis for a small fee.

Water Supply Systems

Arlington receives its drinking water from the Massachusetts Water Resources Authority (MWRA). Very few wells remain in Arlington, so they do not play a significant role in long-term planning.

Sewer Service

The MWRA disposes of Arlington's sewage. Arlington's sewer system consists of approximately 117 miles of pipe. There are five combined sewer outfalls (CSOs) on Alewife Brook between Massachusetts Avenue and the Mystic River (from the Somerville and Cambridge sides). The MWRA has proposed significant improvements to these outfalls to reduce wet weather discharges to Alewife Brook, and some work has been done. While the MWRA Sewer System serves the entire Town, a small number of septic systems remain in Arlington.

Long-term Development Patterns

As mentioned, the long-term development patterns of Arlington are already in place since the Town is almost fully developed. Land use regulatory policy now centers more around the redevelopment of existing sites and regulation by special permit for new uses rather than new subdivision control. The town is preparing a master plan (to be completed in 2015) to look at all aspects of physical development (transportation, housing, commercial centers, public facilities, etc.) as well as possible zoning changes, impacts on natural resources and open space, and effects on historical and cultural resources.

Control of land subdivision rests with the Arlington Redevelopment Board, acting in its capacity as the Town's Board of Survey pursuant to the 2009 law establishing that role. The Rules and Regulations Governing the Design and Installation of Ways were adopted by the Board of Survey in June 2010. This arrangement is unusual in Massachusetts (usually the Town planning board is in control of subdivision) and is due to historical factors in the Town's early-twentieth-century development. Arlington's Department of Planning and Community Development provides planning research and advice to Town officials and boards.

Arlington's Zoning Map 3-6 shows the Town's 19 zoning districts, including single- and multi-family residential, open space, business, transportation, industrial, multi-use (MU), and planned unit development (PUD).

Long-term Changes to Land Use Patterns

The existing pattern of Arlington's land use may evolve naturally over time with changes in local or regional circumstances, but major changes are not anticipated.

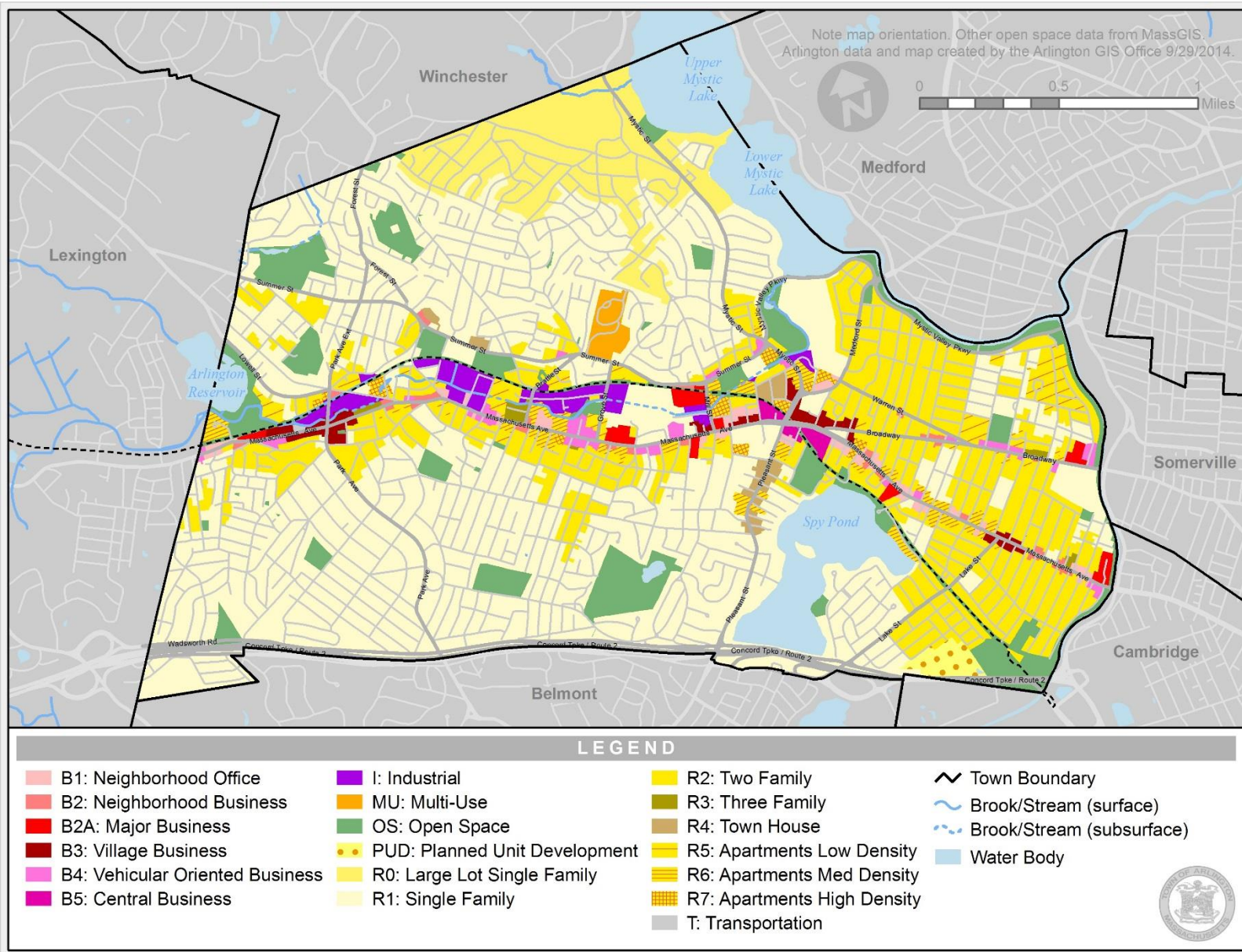
A significant circumstance that could change Arlington's land use patterns would be economic pressure for even more intense development that would cause the rezoning of land. Arlington has only a few vacant properties with development potential. Usually, though, these properties also have development constraints. For instance, the undeveloped land that comprises the Mugar site, located in East Arlington, is largely wetlands

and floodplains, although it has been the subject of numerous development proposals. Town Meeting has voted several times to protect the property as open space.

Arlington is now focused more on preservation of existing protected lands and on acquisition of small parcels of open space where possible. Open space acquisition will likely occur on a piecemeal basis when properties in which the Town has interest come up for sale on the open market.

Build-out Analysis

Because Arlington is almost fully developed, this Plan does not contain a build-out analysis, which would show what could happen if the Town developed all its land to maximum potential under zoning. This type of analysis is more revealing for rural or more suburban communities than for an older developed suburb like Arlington.



Map 3-6. Arlington's Zoning Map

Town of Arlington Open Space and Recreation Plan, 2015-2022
3-Community Setting