

**Massachusetts Statewide Comprehensive  
Outdoor Recreation Plan  
2017**

DRAFT

## **Chapter One — Introduction**

### **Benefits of Outdoor Recreation and Open Space Protection**

There are countless benefits for protecting land for outdoor recreation and open space. Protected open space increases the quality of life for the Commonwealth's residents. It helps to improve the economy by making the state more attractive for companies to locate. The tourism industry cites outdoor recreation as one of the main reasons that visitors come to Massachusetts. Trees help to mitigate the effects climate change by capturing carbon dioxide and reducing household energy use. Open spaces make our communities more dynamic and create a sense of place.

Without the availability of open spaces throughout the Commonwealth, residents would not have the ability to go outside and recreate, whether it be for a hike in the woods or to toss around a football. Open spaces provide a place for people to develop an appreciation of the outdoors, leading to a better understanding of how important it is to invest in their protection. Participating in these types of activities helps to create stewards and advocates for the outdoors.

To build this network, it is important to be able to provide the types of resources that outdoor recreation enthusiasts are looking for. Whether it be maintaining our current supply of outdoor recreational amenities or building new facilities that reflect the needs of a changing and growing population, outdoor recreation funding must be directed towards the needs of our residents. A thoughtful discussion is required on how to best accomplish this task.

### **Funding Outdoor Recreation Projects**

The Commonwealth of Massachusetts is fortunate to have multiple funding sources for outdoor recreation projects.

#### **Land and Water Conservation Fund**

The Land and Water Conservation Fund (LWCF) was authorized by the federal Land and Water Act in 1965 with the intention of preserving, protecting, and assuring the availability of close-to-home outdoor recreation areas and conservation land for all current and future citizens of the United States. By establishing a steady source of funding through offshore oil and gas receipts, Congress ensured continued state and federal investment in outdoor recreation. Congress distributes the funds to the states on an annual basis. Through the first 52 years of the program, \$16.7 billion had been awarded to more than 42,000 projects, protecting over three million acres of land across the country. Nearly 30,000 grants have been awarded to development/redevelopment projects, including those that have improved accessibility for people with disabilities. Almost 11,000 grants have been awarded for land acquisition.

The LWCF program has two components — the federal program and the stateside program. The federal program funds the acquisition of land and water conservation areas by federal agencies, such as the National Park Service (NPS), the Forest Service, and the Fish and Wildlife Service. The funds are directly appropriated to these agencies by Congress. The stateside program funding is awarded to each state and territory by formula. States awards grants

through a competitive process to communities or state agencies for the acquisition of land, the development of new parks, renovations to existing parks, and the development of trails. The LWCF grant program requires a 50% contribution from the awardee. To remain eligible for these funds, each state must complete a Statewide Comprehensive Outdoor Recreation Plan (SCORP) every five years.

### **LWCF in Massachusetts**

The Executive Office of Energy and Environmental Affairs’ (EEA) Division of Conservation Services (DCS) administers the LWCF program on behalf of the NPS for the Commonwealth of Massachusetts. The Secretary of EEA is appointed by the Governor to act as the State Liaison Officer for the grant program and the Director of EEA’s DCS is the Alternate State Liaison Officer. Liaison officers are authorized to represent and act for the state to the Director of NPS on all LWCF matters. Accepting and administering funds from the NPS on approved LWCF projects is also under their purview.

Any municipality in the Commonwealth with an up-to-date Open Space and Recreation Plan is eligible to apply for LWCF grants. The Departments of Fish and Game and Conservation and Recreation are also eligible applicants. Eligible projects include the acquisition of conservation or recreation land, the development of a new park, the renovation of an existing park, or the development of trails. All LWCF-funded park and conservation areas are protected from development for anything other than public outdoor recreation in perpetuity through Section 6(f)(3) of the LWCF Act, as well as Article 97 the Massachusetts State Constitution. Any land subject to a LWCF grant cannot be converted to non-recreation or conservation use without the approval of the state legislature and NPS. Both NPS and EEA’s own No Net Loss Policy requires that land of equal value and utility be found and dedicated to outdoor recreation use to replace any converted land. This ensures that LWCF projects will remain as a part of Massachusetts’ outdoor recreation landscape for future generations.

<b>LWCF Apportionment by Federal Fiscal Year</b>	
2007	\$617,517
2008	\$508,388
2009	\$598,743
2010	\$841,858
2011	\$812,191
2012	\$917,810
2013	\$869,752
2014	\$919,127
2015	\$906,468
2016	\$2,014,153
2017	\$2,001,040

LWCF has funded 527 projects and awarded nearly \$100 million in Massachusetts since the program’s inception. Some of Massachusetts’ most iconic landscapes and recreation areas have been funded in part through the LWCF program. From the Appalachian Trail in the Berkshires to the Cape Cod National Seashore to the United States’ first public park, the Boston Common, LWCF money has been used to protect and improve land across the state. The diversity of projects reflects well the flexibility inherent to the LWCF program.

### **A Sample of Our 527 LWCF Projects**

In 2014, the Town of Boxford received a grant for the Nason 46 Acres on Hovey's Pond project. With the assistance of the Boxford Open Land Trust, the town acquired 46 acres of land that connects to an additional 500 acres of protected open space. The town worked cooperatively with the land trust to make the site available for recreation quickly, establishing trails and a parking area.

The Commonwealth's Department of Conservation and Recreation was awarded a grant in 2013 for the development of a waterfront Braille Trail in the Town of Watertown. The work was completed along a 3,200-foot-long, crescent-shaped swath of parkland along the north bank of the river between Watertown Square and the Perkins School, encompassing 12 acres. It includes a Braille Trail and Sensory Garden, with a design managed by DCR and developed with the assistance of the Perkins School, as well as improvements to the site's riverbank, pathways, and landscape. A signalized crossing at the Irving Street-Charles River Road intersection will be among the improvements made.

In 1973, the Town of Great Barrington was awarded a grant to acquire 29.1 acres of land along Lake Mansfield. The Lake Mansfield Recreation Area abuts a 29-acre Conservation Forest. The area is a vital natural habitat and treasured community space. The lake, beach area, and conservation forest are owned by the Town of Great Barrington and overseen by the Parks and Conservation Commissions. Stewardship is provided by Lake Mansfield Alliance.

## **State-funded Municipal Grant Programs**

### **Parkland Acquisitions and Renovations for Communities (PARC) Grant Program**

The PARC Grant Program was established in 1977. It is a municipal grant program that funds the acquisition of parkland, the renovation of existing parks, and the development of new parks. Grants are awarded through an annual competitive grant program. The grant reimburses anywhere between 52 and 70% of the total project cost up to that year's grant award maximum, which has been \$400,000 for the past number of grant rounds. Land funded through this program must be open to all residents for active recreation and remains protected in perpetuity.

### **Community Preservation Act**

The Community Preservation Act (CPA) was signed into law by Governor Cellucci on September 14, 2000 as a tool to help local smart growth efforts. The CPA funds affordable housing, historic preservation, and open space and outdoor recreation projects. Each municipality votes to approve the CPA through ballot referendum, deciding on a surcharge of not more than 3% of the tax levy against real property. To date, 172 communities (49% of the state's 351 municipalities, including Boston) have passed the CPA. CPA communities have protected 26,297 acres of open space and initiated more than 1,700 outdoor recreation projects.

The law also created a Statewide Community Preservation Trust Fund, which distributes monies on an annual basis to the communities that have passed the CPA. This serves as an incentive to communities to pass the CPA. The Fund's money comes from surcharges on Registry of Deeds transactions. Each CPA community forms a Community Preservation Committee, which recommends to the local legislative body projects to fund. The ability to make decisions on open space, affordable housing, and historic preservation projects at the local level makes the program popular.

### **Local Acquisitions for Natural Diversity (LAND) Grant Program**

The LAND Grant Program was established in 1961. It is a municipal grant program for conservation commissions to acquire conservation land. Grants are awarded through an annual competitive grant program. The grant reimburses anywhere between 52 and 70% of the total project cost up to that year's grant award maximum, which has been \$400,000 for the past number of grant rounds. Land funded through this program must be open to all residents for appropriate passive recreational use and remains protected in perpetuity.

### **Gateway City Parks Grant Program**

The Gateway City Parks Grant Program funds the creation or restoration of significant urban parks and trails in the 26 Gateway Cities, often projects that would otherwise be difficult to build. Gateway Cities are midsize urban centers that anchor regional economies around the state. Priority is given to projects that support broader urban revitalization efforts; are ineligible for other funding sources; address critical park infrastructure needs; have strong support from city leaders; engage local businesses, neighbors and others in park financing, programming and stewardship; or are accessible to Environmental Justice populations.

**Greening the Gateways Cities Initiative**

The Massachusetts Greening the Gateway Cities Program (GGCP) is an environmental and energy efficiency program designed to reduce household heating and cooling energy use by increasing tree canopy cover in urban residential areas in the state's Gateway Cities. GGCP is a partnership between the Executive Office of Energy and Environmental Affairs (EEA), the Department of Conservation and Recreation (DCR) Urban & Community Forestry Program, the Department of Energy Resources (DOER) and the Department of Housing and Community Development (DHCD), along with Gateway Cities and local grassroots organizations and is currently planting trees in 13 cities. The program plants trees (ranging from 6 feet to 10 feet tall) with a goal of covering 5-10% of the target neighborhoods in new tree canopy cover. Trees are planted by DCR Bureau of Forestry, Urban & Community Forestry crews hired from local communities. The program has planted more than 10,000 trees in its first three years.

GGCP is based on current research, which includes on-the-ground tree and energy measurements in Worcester and other northern climate cities. These studies show that tree canopy brings the greatest benefits when established over an entire neighborhood area, by lowering wind speeds and reducing summertime air temperature, in addition to the benefits of direct shading. It is estimated that every 1% increase in tree canopy above a minimum 10% canopy cover brings a 1.9% reduction in energy needs for cooling and up to a 1.1% reduction in energy for heating. All households in a neighborhood benefit, not just the ones with trees directly adjacent.

This program targets the parts of Gateway Cities that have lower tree canopy, older housing stock, higher wind speeds, and a larger renter population. In addition, plantings are concentrated in Environmental Justice neighborhoods, to benefit those most in need. Within planted areas temperature, energy use, and other information is tracked to document the energy savings new trees provide residents over time.

**Landscape Partnership Grant Program**

The Landscape Partnership Grant Program protects large blocks of conservation land. Local, state, and/or federal agencies partner with non-profit groups to protect at least 500 acres of land. A 50% match is required from the grantees. Land acquired through this grant program must allow for appropriate public access for passive recreation. The land is protected in perpetuity.

**Conservation Partnership Grant Program**

The Conservation Partnership Grant Program is for non-profit organizations to acquire land for conservation or recreation use. The grant can be used to acquire the fee interest in land or a conservation restriction or to help fund the due diligence associated with a gift of land. The grantee must award a permanent conservation restriction to a state or local government agency or another land trust. Appropriate public access must be provided.

**Drinking Water Supply Protection (DWSP) Grant Program**

The DWSP Grant Program provides financial assistance to public water systems and municipal water departments for the purchase of land or interests in land for the protection of existing public drinking water supplies and the protection of planned future public drinking water supplies. The grants are awarded on an annual basis and reimburse 50% of the total project cost, up to that year's grant award maximum. Protection is permanent and appropriate public access must be provided.

## Statewide Comprehensive Outdoor Recreation Plan (SCORP)

Massachusetts SCORP 2017 is a planning document that discusses the available recreational resources in the Commonwealth, along with the needs of its residents, and identifies the gap between them. Over the next five years, the SCORP will be used to distribute LWCF monies, as well as state funding, to projects that will narrow this gap through a competitive application process, focused on fulfilling the state's residents' recreational needs. The SCORP is also the method through which all states fulfill multiple goals of the LWCF Act, as required by NPS. These requirements include allowing appropriate time for a thorough public participation process that appropriately distributes LWCF apportionments and determining ways to advance the findings and objectives of the plan.

### SCORP Planning Process

In the Spring of 2017, EEA Secretary Matthew A. Beaton invited members of the conservation and recreation community to participate in the SCORP Advisory Committee. The mission of the Advisory Committee was to help inform the SCORP through the members' work in conservation and recreation organizations, non-profits, and state, local, and federal government. The members were chosen to represent the breadth of outdoor recreation providers and resources in the state, as well as the diversity of its communities.

The Committee met in April as a kick-off to the public participation process and reviewed the SCORP draft prior to its submission to the NPS for federal review and approval. The members of the Committee have discussed how the SCORP's findings are relevant to their own work. EEA intends to continue to meet with the Advisory Committee over the next five years, looking to the Committee to help implement the SCORP's findings. The hope is that the findings will impress upon the Commonwealth's residents and legislators how important outdoor recreation issues are to the public and that they will serve as a guide for local investment as well.

### SCORP Advisory Committee Members

Mr. Dan Sieger, Assistant Secretary of the Environment, EEA
Mr. Leo Roy, Commissioner, Department of Conservation and Recreation
Mr. Tom McCarthy, Director, Universal Access Program, DCR
Mr. Ronald Amidon, Commissioner, Department of Fish and Game
Mr. John Lebeaux, Commissioner, Department of Agricultural Resources
Ms. Marylynn Gentry, Executive Director, Massachusetts Land Trust Coalition
Mr. John Whalen, Executive Director, Massachusetts Recreation and Park Association
Ms. Barbara Erickson, President & CEO, The Trustees of Reservations
Mr. Gary Clayton, President, Mass Audubon

Mr. Charlie Tracy, New England Trail Administrator, National Park Service
Ms. Heather McMann, Executive Director, Groundwork Lawrence
Dr. Monica Bharel, Commissioner, Department of Public Health
Mr. John Kellstrand, President, Massachusetts Sportsmen Council

Citizen input was sought in a number of ways. EEA attended a variety of meetings across the state convened by partnering outside organizations to gather feedback on users’ and providers’ needs (see box). Three surveys were posted on the EEA website and multi-media announced across the state: one for residents that use outdoor recreation facilities, one for municipal recreation providers, and one for land trusts. About ten newspapers ran articles advertising the surveys’ availability. Advisory committee members promoted the surveys through their websites and listservs.

**Public Meetings**

Access Recreation Boston
Massachusetts Land Trust Coalition Quarterly Meeting
Massachusetts Interagency Lands Committee Meeting
Merrimack Valley Planning Commission Meeting
Old Colony Planning Commission Meeting
Franklin Regional Planning Board
Montachusett Regional Trail Commission
Valley Development Council
Central Massachusetts Regional Planning Council Meeting

EEA wanted to ensure that statistically valid and significant statewide data was used in developing the goals and objectives of the SCORP. In order to do so, Insights and Answers, Inc. of Virginia Beach, Virginia was hired to complete two surveys. The first was a phone survey, completed in the fall of 2017, which gathered information on 400 residents’ feelings towards open space and recreation. The second was a survey of 215 middle and high school students, which enabled a better understanding of which outdoor recreation issues are most important to the youth of Massachusetts. An executive summary of the surveys can be found in Appendix C.



### **SCORP 2012**

The four goals of the Massachusetts' 2012 SCORP were:

1. Increasing the availability of all types of trails for recreation
2. Increasing the availability of water-based recreation
3. Invest in recreation and conservation areas that are close to home for short visits
4. Invest in racially, economically, and age diverse neighborhoods given their projected increase in participation in outdoor recreation

Of the 27 LWCF projects awarded since the plan's implementation, 10 trail-based projects were awarded, increasing the availability of trails by three and a quarter miles. Ten recreation areas were funded that have water-based amenities, including the acquisition of 16.61 acres on the Mattapoissett River in Mattapoissett. Eleven parks were funded in Environmental Justice neighborhoods, including a new park in the City of Brockton. Many projects realized all four SCORP goals.

## **Planning on a Local Level**

The Commonwealth's 351 cities and towns have various ways in which they plan for their outdoor recreation amenities. Any community that wants to apply for the grant programs administered by DCS must have an up-to-date Open Space and Recreation Plan (OSRP). An OSRP is, more or less, a community-level SCORP. DCS reviews and approves OSRPs, which must contain nine required sections. All communities must perform a thorough public participation process to ensure that residents all have an equal opportunity to provide feedback. DCS requires enhanced outreach to be performed in Environmental Justice (EJ) neighborhoods. EJ neighborhoods are those Census tracts with residents of low income, minority, and/or non-English speakers above 25% of the population. An approved OSRP gives a community seven years of eligibility for DCS grant programs.

Massachusetts has thirteen regional planning agencies (RPA). The RPAs are public organizations made up of any number of municipalities. Each RPA has a regional council that works cooperatively on issues that are relevant across municipal boundaries by coordinating efforts and facilitating communication. This can include region-wide open space and recreation planning, recognizing that many amenities are used by residents outside of their own community's borders. RPAs also act as resources for their member communities, especially small towns that do not have their own professional staff.

The Commonwealth of Massachusetts, under Executive Order 525, through its Executive Office of Housing and Economic Development, in coordination with EEA and the Massachusetts Department of Transportation, has had a focus on facilitating sustainable economic development on a regional scale by targeting priority development areas (PDAs). These PDAs are targeted for economic development and are supported by the region. PDAs are balanced by Priority Preservation Areas (PPAs). Grants for land conservation are not awarded in PDAs. Those that are located in PPAs are given priority for funding. Currently, five plans have been completed — the South Coast Rail Corridor Plan, Merrimack Valley Land Use Priority Plan, 495/ MetroWest Development Compact Plan, Metro North Plan, and the Central Massachusetts Regional Planning Commission Plan.

## **Chapter Two — Massachusetts Overview**

### **History of Outdoor Recreation in Massachusetts**

Massachusetts has a proud and rich history of open space protection. Boston Common was the country's first public park. In 1634, the Commonwealth of Massachusetts purchased the land that now makes up the Common from a settler to use the land for livestock grazing. In 1837, the Public Garden was built on land filled to the west of the Common. Massachusetts also boasts the nation's oldest land trust, The Trustees of Reservations, which was established by an act of the legislature in 1891. The Trustees' founder, Charles Eliot, was a landscape architect who was concerned about the rapid development of the land in and around Boston. He proposed that land be set aside for the enjoyment of urban residents so they would have a respite from the noise and crowded living conditions of the city. Due to his efforts, hundreds of land trusts are able to own and hold land for the benefit of all people.

Since the 1630s, Massachusetts has allowed public access to land, such as tidelands and great ponds for fishing. State government did not have the authority to own land for conservation purposes and administer its use until the Metropolitan Parks District was established by the state legislature, along with The Trustees of Reservations, in 1892. Mt. Greylock State Reservation was established by the legislature in 1898. It was the first acquisition of land solely for forest preservation. President Franklin D. Roosevelt's formation of the Civilian Conservation Corps (CCC) in 1933 was important to Massachusetts parks. The CCC was a public works program that opened up the state forests and parks to Massachusetts residents by building campgrounds and picnic areas. Until then, most of the state-owned land was inaccessible. Since these beginning days of land protection in Massachusetts, the Commonwealth's public and private entities have protected over 1.3 million acres of land (25% of the Commonwealth).

In 1972, the Massachusetts legislature and electorate voted to add Article 97 to our state's Constitution. This amendment guarantees that "the people shall have the right to clean air and water, freedom from excessive and unnecessary noise, and the natural, scenic, historic, and esthetic qualities of their environment. Lands and easements taken or acquired for such purposes shall not be used for other purposes or otherwise disposed of except by laws enacted by a two-thirds vote taken by yeas and nays, of each branch of the general court." Both state- and municipal-owned land acquired for conservation or recreation purposes are protected by Article 97. In addition to the legislative two-thirds vote, municipal conservation or recreation commissions must approve the conversion, as well as the town meeting or city council. Replacement land of equal value and utility must also be found and dedicated to recreation or conservation purposes. Article 97 is very much like Section 6(f)(3) of the Land and Water Conservation Fund Act.

### **Geography**

At 10,554.57 square miles, Massachusetts is the 44th largest state in the union. Even though it is small in size, it has a diverse and varied geography. From the mountains in the west, to the coasts of Cape Cod and the islands of Nantucket and Martha's Vineyard in the east,

residents of our state can enjoy any number of scenic landscapes and recreational opportunities. The types of opportunity vary by region. The Berkshires has a large amount of protected open space, most of it used for passive recreation, with a high concentration of state parks and forests and wildlife management areas.

The Connecticut River Valley, east of the Berkshires, is unique in that the southern part of the region is heavily urbanized, but becomes much less so as you head north along the Route 91 corridor. The Quabbin Reservoir, which serves as metropolitan Boston’s drinking water supply, is in this region. Much of the land around the Quabbin is protected to ensure the quality of the drinking water supply. The cities of Springfield, Westfield, Holyoke, and Chicopee are in the south and have a higher percentage of active recreational facilities where field-based sports occur than the rest of the region.

Central Massachusetts has a similar dichotomy. Worcester, the second most populous city in New England, is here, along with two other drinking water supplies — the Wachusett and Sudbury Reservoirs. The manufacturing centers of Leominster and Fitchburg are in this region. While densely developed, both cities are fortunate to have large protected drinking water supply areas, which are also available for recreation. A mix of state-owned protected open space and active recreation lands are found here.

Boston and its expanding suburbs, from Essex and Middlesex Counties to the north and Norfolk, Bristol, and Plymouth Counties to the south, share a variety of open space and recreation resources. These include state- and municipally-owned land, along with non-profit conservation land. In the northeast, Essex County has a large amount of protected open space, including the federally-owned Parker River National Wildlife Refuge. Moving south towards Boston, more active recreation sites have been developed. In the southeast, Bristol and Plymouth Counties have a variety of coastal amenities.

Cape Cod and the islands of Martha’s Vineyard and Nantucket are known by people world-wide for their abundance of coastal resources and recreational amenities. Tourism, as well as second home construction and fishing, is critical to the area’s economy. Therefore, land protection is extremely important to the region. Federal, state, and local resources are found here, including the Cape Cod National Seashore, a LWCF recipient, which was visited by 4.5 million people in 2015 alone.

**Amount of Protected Land by Region**

Region	Acres
North	126,198
Boston	11,886
South	225,724
Central	199,088
West	300,522
Total	863,417

**Population Trends**

**Demographics**

According to the Census Bureau, in 2016, Massachusetts had 6,811,779 residents. This is a 4.0% increase from the 2010 Census. With 871 people living per square mile, only Rhode

Island and New Jersey are more densely populated than Massachusetts. Massachusetts' increase in population is mostly from new immigrants moving into the state. In fact, without immigration during this time period, Massachusetts would have lost population. As of 2015, there were 1,095,953 foreign born residents in the state, or 15.5% of our population. By region of birth, Latin Americans (35.8%) made up the largest percentage of foreign born residents. This is followed by Asia at 30.3%, Europe at 21.2%, Africa at 9.1%, and North America at 3.2%. The Donahue Institute at the University of Massachusetts projects that by 2030, Massachusetts will see an additional increase in its population of 4.4%.

## Racial and Ethnic Diversity

Overall, 18.2% of Massachusetts residents identify as Black, American Indian, Asian, Native Hawaiian, or Hispanic or Latino, or two or more races. Comparatively, the rest of the country is 27.6% minority. The most diverse county in Massachusetts is Suffolk County, which includes Boston, with 61.9% of its population identifying as white. The least diverse county in Massachusetts is Franklin County, in western Massachusetts, where 96.2% identify as white. Norfolk and Middlesex Counties, abutting Boston, are also more diverse than the Massachusetts average.

Over the past few decades, the average age of the Massachusetts population has been increasing. There has been a slight decrease of 1.5% in the under 18 population over the past six years. This segment now makes up 20.2% of Massachusetts' population. In contrast, there was a slight increase in the over 65 population. This segment now represents 15.8% of our population. The median age in Massachusetts is 39.4.

Massachusetts' median household income is \$68,563, compared to \$56,516 nationally. Income levels vary widely across the state. Middlesex and Norfolk Counties are both within commuting distance of Boston and have the two highest median household incomes in the state (see table).

### Massachusetts Income by County

County	Median Income 2015
Barnstable	\$63,251
Berkshire	\$49,956
Bristol	\$56,842
Dukes	\$64,222
Essex	\$69,068
Franklin	\$55,221
Hampden	\$50,461
Hampshire	\$61,368
Middlesex	\$85,118
Nantucket	\$84,057
Norfolk	\$88,262
Plymouth	\$75,549
Suffolk	\$55,044
Worcester	\$65,313
Massachusetts	\$68,563

Statewide, 89.8% of Massachusetts residents have a high school diploma and 40.5% have a bachelor's degree or higher. Both figures are higher than the national average of 82.0% and 32.0%, respectively. The percentage of Massachusetts' residents with degrees varies widely based on region. For example, almost half of Middlesex County's residents (49.3%) have a bachelor's degree, while less than a quarter (23.8%) of Hampden County residents do.

Demographic factors must be incorporated into outdoor recreation planning. People's national origins can help determine what types of recreational pursuits they desire. The aging of our population may require a shift in recreational amenities to those that are more passive than active. Residents that do not earn as much as others may be more dependent upon public recreational amenities as they may not be able to afford private facilities or equipment.

## **Disability**

In 2015, 11.7% of Massachusetts residents self-identified as having a disability, with the majority of them being ambulatory. The national average is 12.6%. Between 2014 and 2015, the percent of Massachusetts residents with a disability increased 1.5%. While the rate of residents with disabilities was pretty evenly split amongst genders, over 46% of persons older than 75 identified as having a disability. As referenced earlier, the average age of Massachusetts is increasing, making it more important than ever to consider recreational spaces that are suitable for those with disabilities. The phone survey results demonstrate that households that include a member with a disability prefer more passive recreational pursuits. Attendees at the Access Recreation Boston meeting in August 2017, a group for people with disabilities, specifically mentioned that getting to facilities to recreate is quite difficult as public transit is not reliable for them. These needs should be considered when planning for funding of outdoor recreation projects.

Secretary Beaton has made it a priority of EEA to provide more recreational amenities to those with disabilities. The Department of Conservation and Recreation (DCR) runs the Universal Access Program. It is dedicated to providing outdoor recreation opportunities in Massachusetts State Parks for visitors of all abilities. Accessibility to the parks is achieved through site improvements and providing specialized adaptive recreation equipment and accessible recreation programs. In 2016, DCR offered or supported 191 Universal Access programs that attracted 4,778 participants.

### **Goodwill Park**

The Town of Holliston was awarded a LWCF grant in 2010 for the construction of the Goodwill Park Playground, focused on the development of a Boundless Playground and associated site amenities that would be able to be used by people with sensory issues. The reconstruction of Goodwill Park was made possible by the collaborative efforts of local organizations under the direction of Mission Possible: Holliston, whose goal is to support the development, improvement and maintenance of recreational spaces in Holliston for current and future generations of all abilities. The design of the playground included transfer stations with low platforms where those using wheelchairs can lift themselves out of them, onto playground equipment; sound-play components or outdoor devices that make sound or music, such as drums and marimbas; accessible swings with features such as high backs and harnesses to assist special-needs children; and visually-impaired play features that include Braille panels, interesting textures or fragrances.

## **Development Impacts**

While Massachusetts' population growth rate may not be as high as some other states, the rate of development has increased dramatically since the Great Recession. Most of the new homes being built in the state are constructed further from existing cities, which causes a greater impact on open space. According to Mass Audubon's Planning for Growth Program, between April 2005 and April 2013, approximately 38,000 acres of forest or other undeveloped land were converted to development. This is a rate of 13 acres per day. During the same timeframe, 41 acres per day were being protected from development. This totals 120,389 acres or approximately 10% of the land that has ever been protected in Massachusetts. While this three to one ratio of protection to development should be lauded, it is important to remember that this period of time includes the years of the Great Recession when land was not being developed as quickly and was more affordable to purchase for open space.

In all, 22% of Massachusetts is developed (1.1 million acres). Just over 25% of the state is protected (1.3 million acres). In conclusion, it is important to plan for the protection of open spaces that will provide the types of recreational resources that Massachusetts' residents are looking for before they are developed.

## **Economic Profile**

Massachusetts economic base is diverse and becoming more so. Traditionally, the state has been known for its health care and higher education sectors. The top six industries in the state are financial services, technology, medical and life sciences, manufacturing, fishing, and tourism. The quality of our higher education, as well as our elementary and secondary schools, has helped Massachusetts sustain a successful economy. The quality of life provided by our more than 1.3 million acres of conservation land and parks draws companies and prospective workers to the state.

## **Tourism**

Tourism is the third largest employer in Massachusetts and was responsible for \$19.5 billion in spending in 2014. Over 20 million tourists visit the state every year. Boston is one of the top 10 destinations in the United States. Tourism to Boston alone contributes \$1 billion worth of tax revenue to the economy. Tourism creates 132,000 jobs, with a payroll income of \$4.1 billion. Our outdoor recreational resources are cited as one of the top five reasons people visit the state. The National Seashore, a LWCF project, attracted 4.5 million visitors in 2015.

### **Outdoor Recreation Industry**

In 2017, the Outdoor Industry Association completed a study on the economic impacts of outdoor recreation across the country. It found that the industry is one of the largest in the country, with \$887 billion spent annually, creating 7.6 million jobs. The report found that in Massachusetts, the outdoor industry created:

- \$16.2 billion in consumer spending
- 120,000 jobs
- \$5.9 billion in wages and salaries
- \$911 million in state and local tax revenue

### **Home Values**

Home values increase when they are located near parks and other open spaces. According to the American Planning Association, in Amherst, cluster housing with dedicated open space was found to appreciate at an annual rate of 22%, compared to a similar conventional subdivision's rate of 19.5%. This translated in 1989 dollars to a difference of \$17,100. The increase in home values also helps to generate more local tax revenue. Retirees are looking to relocate to areas that are rich in outdoor recreational resources. Based on the aging population of our state, it is realistic to assume that more open space amenities will be needed for what will be an increase in the number of retirees. The National Association of Realtors found that, when surveyed, 57% of voters would choose a home near a park or open space than one that was not. Many studies have supported the premise that parks and open spaces increased property values up to 2,000 feet away.

### **Attracting Businesses**

The availability of quality open space and recreation resources in the state helps to attract businesses. Many workers are choosing a job based on an area's quality of life, which is increased by the availability of open spaces. Furthermore, small-business decision makers rated park, recreation, and open space amenities as being the most important factor to use when measuring quality of life. This shows how important the investment of parks and open space is to the future economic well-being of Massachusetts.

## Chapter Three — Outdoor Recreation Supply

Prior to examining Massachusetts' residents' outdoor recreation needs, the current supply of outdoor recreation must be evaluated. Massachusetts residents are fortunate to have a wide variety of facilities to visit with 863,419 acres of outdoor recreation land available. This includes lands managed by federal, state, and local agencies, including the United States Fish and Wildlife Service, National Park Service, State Departments of Fish and Game and Conservation and Recreation, local Conservation Commissions and Recreation Departments, and local, regional, and statewide land trusts and conservation organizations.

There are currently nearly 300 facilities on coastal waters, great ponds, and rivers throughout the state run by the Office of Fishing and Boating Access within DFG. The Division of Fisheries and Wildlife manages 171 recreational areas, which include Wildlife Management Areas, Wildlife Conservation Easement Areas, Natural Heritage Areas, and River Access Areas.

DCR runs many types of recreation facilities. Statewide, they manage 55 ball field and courts, 60 playgrounds, and 3525 campsites. They have 27 salt water ocean beaches and 38 fresh water inland beaches, as well as 46 swimming pools, wading pools, and spray decks. Two downhill ski areas, two golf courses, and four rail trails are also available to the public. For winter recreation, there are 42 ice skating rinks for the public to enjoy, as well as many parks and forests.

Local community's Open Space and Recreation Plans (OSRPs) include a chapter on the supply of outdoor recreation facilities (conservation land, ball fields, etc.), but does not include a specific list of amenities at each site. DCR and DFG include a list of facilities available at each of their properties, including trail maps, on their websites. Outdoor recreation amenities available at each land trust properties vary by land trust. Over the next five years, there will be an active effort to work with local municipalities and state agencies to develop a database that lists all of the amenities at each facility by region. This will help to determine where specific types of amenities should be built when it is evident that there are gaps in supply. The list can begin with municipal- and state-owned facilities. Over time, private and non-profit facilities may be added. This database could also be used by residents who are searching for a particular activity, to know where they can go to swim in a pool or play frisbee golf. Forty-three percent of the phone survey respondents said that they use the internet to learn about outdoor recreation facilities, resources, and activities. Therefore, the resources available on the web should be increased and more user-friendly.

### Percent of Protected Land by Region

Region	Acres
North	14.6
Boston	1.4
South	26.1
Central	23.1
West	34.8
Total	100.0



## Public Land

### State

The Commonwealth is the largest owner of recreation and conservation land in the state. The Department of Fish and Game (DFG) and the Department of Conservation and Recreation (DCR), agencies that are located within EEA, are the two state agencies that own and manage land for outdoor recreational purposes. DFG's mission is to preserve the state's natural resources and people's right to conservation of those resources. DFG has jurisdiction over the Commonwealth's marine and freshwater fisheries, wildlife species, plants, and natural communities, as well as the habitats that support them. DCR works to protect, promote, and enhance the Commonwealth's natural, cultural, and recreational resources by improving outdoor recreational opportunities and natural resource conservation and restoring and improving facilities. DFG manages 212,880 acres of land and DCR manages over 450,000 acres.

State wildlife lands are managed primarily to provide habitat for wildlife and to give people a place to relax and explore the great outdoors. For the most part, wildlife lands are open to hunting, fishing, trapping, birdwatching, and other wildlife related recreation. Users will find unmarked trails or woods roads with simple, unpaved parking lots. These "lightly" developed areas keep wild places wild while giving people access to nature and an off the beaten path experience. These wildlife lands, found from the Berkshires to the Cape and Islands, include river corridors, wetlands, forested and grassy uplands, habitat for state-listed endangered and threatened species, and high quality parcels of other important habitat types. State wildlife lands are owned in partnership with the DFG and are managed by the Division of Fisheries and Wildlife (MassWildlife). Many of these properties are actively managed through mowing, cutting, prescribed burns, or other activities that benefit of wildlife. Regulations govern the activities allowed on these lands and focus on passive recreation. Motorized vehicles, for instance, are not permitted on state wildlife lands.

#### **State Wildlife Action Plan**

The U.S. Congress requires each state to produce a plan describing how to conserve each state's "species of greatest conservation need." The 2015 Massachusetts State Wildlife Action Plan (SWAP), the first update of the original 2005 Massachusetts SWAP, covers 570 species – 172 vertebrates, 115 invertebrates, and 283 plants. These 570 species are grouped into 24 habitats; each habitat is discussed in detail in the plan, with recommendations for needed inventories and surveys, land protection, habitat management, regulation, and public education. The SWAP is intended to provide guidance to all entities in Massachusetts concerned with conservation of biodiversity, not just MassWildlife. The Massachusetts SWAP can be downloaded from <https://www.mass.gov/service-details/state-wildlife-action-plan-swap>

Two other entities within EEA work to facilitate land protection. The Department of Agricultural Resources (DAR) runs the Agricultural Preservation Restriction (APR) Program, which just celebrated its 40th anniversary. The APR program is the first of its kind in the country. The program offers to pay farmland owners the difference between the appraised value of their land and the agricultural value in exchange for a permanent conservation restriction that

precludes any non-agricultural use of the property. DAR holds more than 900 APRs on over 73,000 acres of farmland.

DCS oversees the approval of non-state funded Conservation Restrictions (CR), known as conservation easements in other parts of the country. CRs restrict future land development by transferring some of the land owner's rights, such as building on the property, to a government agency or land trust for land conservation purposes. Massachusetts is the only state that requires state approval of CRs via review and signature by the secretary of the EEA to ensure land is permanently protected and in the public interest. Over 4,330 CRs have been signed since 1969, which permanently protect 116,141 acres of land. DCS also administers multiple federal- and state-funded grant programs for municipalities and land trusts for the protection of conservation and water supply land, as well as for the acquisition, development, and/or renovation of parkland.

### **Conservation Land Tax Credit Program**

EEA jointly administers with the Department of Revenue (DOR) the only refundable tax credit program in the United States for land owners who donate an interest in their land to conservation. The CLTC program recognizes and rewards landowners who donate a real property interest either outright, or through a Conservation Restriction. The donation must result in permanent protection of an important natural resource that is in the public's interest. EEA certifies to DOR that the conservation land has been donated and this instrument used permanently protected the land. It also reports on the appraised value of the donation so that the amount of the tax credit can be calculated. DOR provides the credit via the donor's state income tax filing. The program is funded for up to \$2 million a year through a legislative authorization to DOR. The donor(s) are provided a refundable tax credit of 50% of the donation value, up to the \$75,000 maximum.

Certified land must include one of the following resources: drinking water supply, wildlife habitat and biological diversity, agricultural and forestry production, recreational opportunities, or land holding scenic and cultural values.

Since the program's inception in 2011 through the end of 2016, the program received just under 400 applications. 228 projects have been completed, protecting 10,397 acres of land. This represents \$46,294,158 worth of gifts in return for tax credits of \$10,689,539, a ratio of 4 to 1. The program is now fully booked for donations through the middle of 2019.

## **Municipal**

The 351 municipalities across the Commonwealth are the second largest owner of open space and the largest owner by number of individual properties. Conservation Commissions were created by the state legislature in 1957 to ensure resource conservation across the state. Commissions also hold land for conservation purposes. Today, municipal Conservation Commissions own almost 130,000 acres of land. Much of this land is accessible to the general public for passive outdoor recreation. Park and recreation commissions, as well as some school departments, hold land for active outdoor recreation purposes. Water departments are also major land owners, managing about 75,000 acres, but generally have restrictions on access to their sites to protect the water supply.

## **Federal**

The federal government owns and manages critically important conservation and recreation facilities, totaling 48,179 acres. This includes the Cape Cod National Seashore, the Parker River, Great Meadows, and Silvio O. Conte Wildlife Refuges, and the Blackstone River Valley National Heritage Corridor. The Army Corps of Engineers provides important recreational facilities at the Cape Cod Canal and several flood control impoundments. The federal government has also been a valuable partner in land conservation and management, including the Boston Harbor Island National Recreation Area. Federal facilities provide many types of outdoor recreation, such as walking and hiking trails, bike paths, and historic resources.

### **Private Non-Profit and For-Profit Land Owners**

Massachusetts has an extremely active network of private non-profit land trusts. With more than 130 land trusts, Massachusetts has the most land trusts per capita in the nation. Land trusts own properties across the state that are open for various outdoor pursuits. Most of the land protected by land trusts is for land conservation and habitat protection purposes, restricting much of the land to passive recreation. The land trust community has a good working relationship with the state's environmental agencies. The two often work together to complete larger landscape-sized projects, especially with the advent of the Landscape Partnership Grant Program, mentioned earlier in this document. All together, land trusts protect over 202,000 acres, including 123,000 acres in fee and 79,000 acres in CRs. While nearly all of the fee lands are open for passive recreation, CRs vary depending on the wishes of the landowners.

Privately held recreation land includes golf courses, ski areas, marinas, and campgrounds. While most of the facilities charge a fee for service, they help to fill a recreational niche that many times cannot be fulfilled by municipal or state governments alone. They also serve as a value added commodity in that they provide additional space to perform a particular type of activity that is also provided by state facilities. For example, state campgrounds can be at capacity during many summer weekends, so privately run facilities add to the available supply of campsites. There are currently over 60,000 acres of privately held recreation land in the state.

## **Chapter Four — Outdoor Recreation Demand**

To have the clearest understanding of the demand for outdoor recreation in Massachusetts, as many residents as possible were surveyed on their recreation needs. Three different public participation methods were utilized: three online surveys (one for recreation users, one for municipal recreation providers, and one for land trusts), public meetings throughout the state (minutes of which are in Appendix B), and a statistically-relevant phone survey.

### **Outdoor Recreation Needs Survey Results**

#### **Online Survey Results for Recreation Users**

At 96.4%, the vast majority of the 780 respondents to the online survey said that outdoor recreation is very important to them. However, this figure should be taken with a grain of salt as it was a self-selecting group that responded to the survey to begin with. When asked which activities a member of their household planned to participate in over the next 12 months, the top responses included: walking or jogging (on trails and greenways), hiking, and walking or jogging (on streets and sidewalks). People were generally quite happy with the quality of their community's outdoor recreation facilities, with 78.1% stating that the facilities were in excellent or good shape. State facilities did slightly worse, with 75.0% rated as excellent or good.

Respondents explained what motivates them to participate in outdoor recreation. The number one response was for physical fitness, followed closely by mental well-being, and being close to nature. The nearness of an outdoor recreation to home was the number one reason that a facility was the one most visited on a regular basis. The enjoyment of the scenery and trees and greenery were the second and third most cited driver of visitation. Even though the majority of respondents have a park or conservation area within walking or biking distance to their residence (75.6%), the vast majority of people drive there (68.8%). This could be due to the fact that people lack time to recreate, which is the number one reason people said they do not use outdoor recreation facilities more frequently (55.5%).

Offering programming may be a good way to get more people out using parks and open spaces. As was mentioned above, many of the municipalities that responded to the survey did not provide regular programming. When asked how important it was to the respondent that more programming to be available for senior citizens, 83.7% said that it was either a somewhat or very important priority. 88.2% said that it was either a somewhat or very important priority to them for more four to 12 year old programming. Even more popular is programming for teens with 91.2% saying that it was either a somewhat or very important priority. Most popular is programming for seniors at 91.7%.

The results from the online user survey may be the most relevant to how Massachusetts' LWCF dollars will be spent over the next five years. This information specifically identifies what it is that users are doing when they go outside to recreate and what amenities are lacking there. When asked what the three activities that they participated in the most over the past 12 months, the highest number of responses could be broken down into two categories: the first being water-based recreation (specifically, boating [canoe/kayak/power boat], fishing, swimming at beach/lake/river, swimming in pool, paddle boarding, and tubing) and the second being trail-

based recreation (hiking, biking [on/off road], cross-country skiing, walking/jogging on trails, and mountain biking).

A question that directly gets at the heart of what types of projects respondents would like to see funded in the future mirrored what users are currently doing. The top responses fall into three categories: 1. trails (hiking, biking, paved walkways, trails with access for people with disabilities, and mountain biking), 2. playgrounds (for ages 2-5, designed for people with disabilities, for ages 6-12, and for ages 6 months to 2 years), and 3. water (swimming pool, canoe/kayak access, and fishing areas).

## **Municipal Employees Survey**

Municipal employees were asked to respond to an online survey to provide answers to questions regarding their current supply of open space and recreational resources, along with other questions. Responses were received from 58 municipalities or 16.5% of the Commonwealth's 351 cities and towns. A response representing all of Berkshire County was also received. The most responses came from Conservation Commissions, at 33%. Tied for second most were Planning Departments and Parks and Recreation Departments. Most of the respondents (43.6%) had more than eight parks in their communities, 52% had more than eight conservation areas. Sixty-nine percent had part- or full-time recreation staff, 82.3% had part- or full-time conservation staff. This demonstrates that communities are able to provide many types of outdoor recreation facilities for their residents.

The majority of respondents offer a variety of programming, with 53.3% providing more than nine programs annually. Less frequent are communities that provide programming that connects children to the outdoors with 65.1% offering 0-4 programs annually. There is also little programming available for people with disabilities. Only 15.5% of respondents offer more than four activities per year for this group.

The highest funding priorities for the respondents over the next five years include playgrounds, ballfields (soccer, lacrosse, baseball, etc.), community or regional trail systems, and improved pedestrian access to parks (sidewalks, safe road crossings, etc.). The need to invest more in trails and pedestrian access corresponds with the increase in popularity identified by the survey takers over the past five to 10 years in walking, trails, and hiking. Respondents also identified walking, rail trails, biking, and hiking as the activities that will increase in popularity over the next five years. When asked what facilities are not currently available in a community, but should be, trails and bicycling facilities top the list.

## **Land Trusts Survey**

Land trusts own and provide public access to 78,752 acres across the state. Thirty-eight responses were received, which is a 29.2% response rate. While land trusts themselves cannot apply for LWCF grants, they often partner with a local municipality. In fact, 28.9% of respondents had participated in the LWCF program in the past.

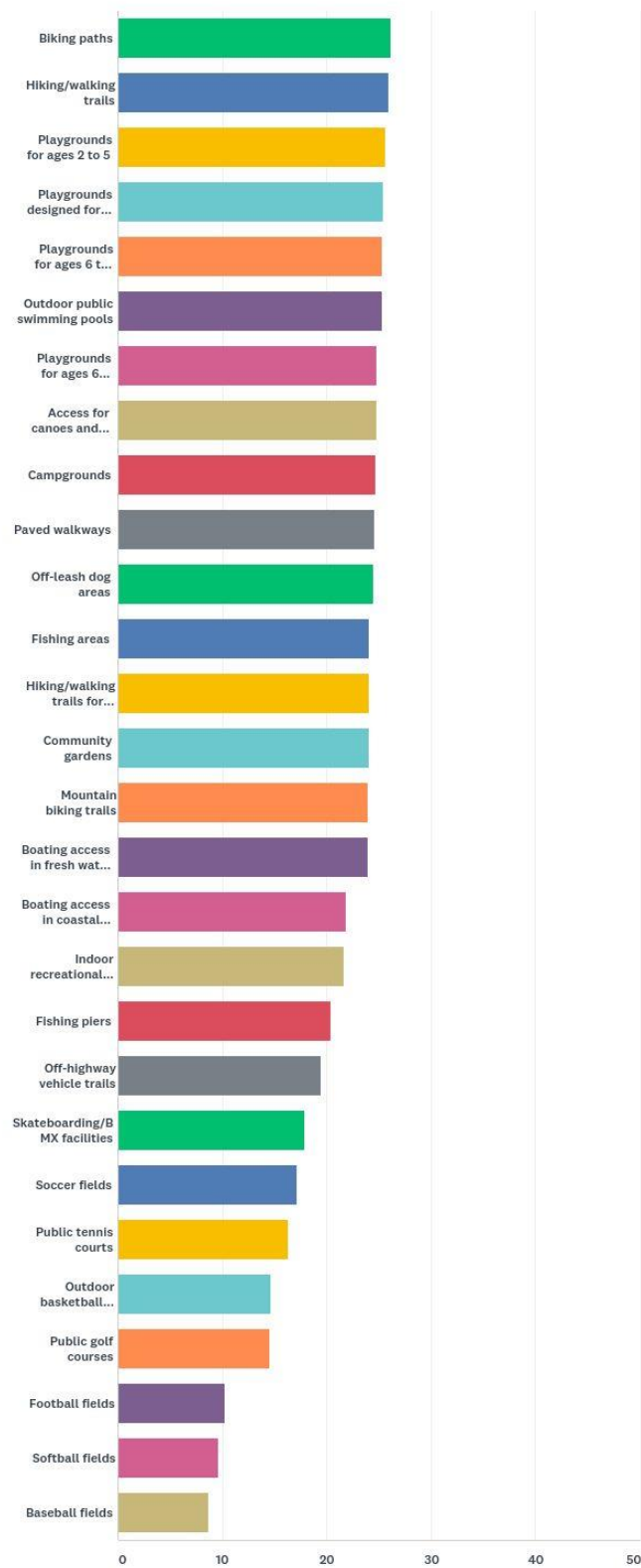
The three most popular activities on land trust properties are walking/jogging/hiking, dog walking, and nature study. Off-road vehicle use, ATV use, and fairs are the three least common activities on land trust properties. The top three issues facing land trusts are trail work, CR stewardship, and acquiring new land. The need for trails echoes that in municipalities. Invasive

species are the greatest physical issue land trusts are dealing with. As to social issues, littering and dumping are encountered most frequently.

Recreation providers, whether public or private, identify as a major concern the lack of connection people have to nature. Land trusts are no different in this case, as they cite it as the number one most important issue for the future of their organization. Connecting their land to neighborhoods and schools is the second most important issue. If land trusts can successfully connect their land to their abutters, this would certainly help address the first issue.

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Q5 What are the top 5 facilities would you like to see added to a park or conservation area in your community?



## Phone Survey Results

While responses to online surveys and input at public meetings are important, DCS wanted to be sure to have a statistically sound survey completed as well. A similar survey was conducted for the 2012 SCORP. Issues & Answers Network, Inc., an independent global marketing research firm from Virginia Beach, VA was hired to conduct surveys of 400 Massachusetts residents to:

1. Understand their use of and preferences for outdoor recreation and open space opportunities
2. Identify barriers to greater use of available resources
3. Identify desired improvements in services provided by the state and by local communities
4. Assess support for spending and fees

Participants were intentionally distributed throughout the state so that there was sufficient data for regional analysis. The data were then weighted to the Census. The executive summary of the survey can be found in Appendix C.

When asked what the top five outdoor recreation activities in which the respondent or members of their household participated in over the last 12 months, the top six responses were: running, jogging, or walking; hiking; swimming in freshwater or saltwater; road biking; swimming in pools; and canoeing, kayaking, rafting, or tubing. People who run, jog, or walk do that activity much more frequently than other activities' participants. Forty percent of them run, walk, or jog multiple times per week. Most participants recreate in facilities that are less than five miles from home and drive there. Walking or jogging is the second most frequent way to get there.

While 54% of people believe that their participation in outdoor recreation will remain the same over the next five years, 35% expect an increase. Whites tend to lag behind other groups in terms of interest in increasing exercise levels. While the number of respondents to the phone survey was small, Hispanics are most likely to expect to increase their exercise activity in the future. Four out of five residents visit either state or local facilities at least a few times a year, with 41% visiting state lands at least monthly and 32% visiting municipal facilities weekly. Fifty-four percent of respondents believe that state facilities are in very good or excellent condition. Coincidentally, the exact same percentage believes their municipal facilities to be in very good or excellent condition.

Most relevant to the purposes of the SCORP, survey participants were asked what the top three improvements to recreational facilities they would like to see. The top five responses can be broken into two categories: 50.3% mention some type of trail improvements (hiking trails; paved, multi-use trails, such as rail trails; and unpaved, multi-use trails, such as mountain bike trails) and 58.4% mention some type of water-based recreation (beaches and outdoor swimming pools or spray parks). When asked the same question about municipal facilities, a slightly different response is received: 59.0% mention some type of water-based recreation (outdoor swimming pools or spray parks; beaches, fresh or saltwater swimming areas; canoeing/kayaking/rafting/tubing areas; fishing/ice fishing areas; and waterskiing/jet skiing areas), 52.0% request neighborhood park-type amenities (playgrounds, picnic areas, off-leash dog parks, and community gardens) and 48.0% mention some type of trail (hiking trails; paved, multi-use trails, such as rail trails; unpaved, multi-use trails, such as mountain bike trails, cross-



country skiing or snowshoeing trails; off-road motorcycle or ATV trails; and snowmobiling trails).

The respondents were asked why they participate in outdoor recreation. The number one reason was physical fitness, at 26%. To be with friends and family, at 16%, was second. Close behind was for relaxation at 14%. The number one reason, by far, at 53%, why people do not participate in outdoor recreation activities is time. The second most frequent was that other commitments get in the way, but only 16% of people said this.

It is interesting to note that the statistically-relevant phone survey found very similar results to the online survey. The types of facilities people are looking for, the current most popular recreational pursuits, and the barriers to spending more time recreating were all pretty much the same. This reinforces what the Commonwealth of Massachusetts should be spending resources on over the next five years.

*Let's start with the three you would most like to see new or improved facilities developed in state parks, forests, and recreation areas. (n = 400)*

<b>Desired Improvements</b>	<b>Percent mentioning</b>
Hiking trails	19.1%
Beaches	16.0%
Paved, multi-use trails, such as rail trails	16.0%
Outdoor swimming pools or spray parks.	15.3%
Unpaved, multi-use trails, such as mountain bike trails.	15.2%
Nature preserves or wildlife watching areas	14.2%
Playgrounds	13.0%
Picnic areas or picnic shelters	12.6%
Tennis, basketball, or volleyball courts	10.7%
Off-leash dog parks	10.2%
Fresh or saltwater swimming areas	9.2%
Overnight camping areas	8.8%
Canoeing, kayaking, rafting or tubing areas	8.6%
Historic sites	7.0%
Community gardens	6.8%
Football, soccer, lacrosse, field hockey or rugby fields	6.3%
Ice hockey or skating areas	6.2%
Fishing or ice fishing areas	6.1%
Golf courses	5.4%
Nature playgrounds	5.0%
Baseball or softball fields	4.5%
Waterskiing and jet skiing areas	3.2%
Cross-country skiing or snowshoeing trails	3.2%
Off-road motorcycle and ATV trails	3.0%
Motor boating or sailing areas	2.8%
Hunting or trapping areas	1.7%
Snowmobiling or snow machining trails	1.7%
Sledding areas	1.1%
Not sure	13.4%

Now, what about new or improved facilities developed in parks and recreation areas operated by your local community?  
(n = 400)

Most important improvement	Percent mentioning
Hiking trails	18%
Playgrounds	17%
Paved, multi-use trails, such as rail trails	16%
Outdoor swimming pools or spray parks.	13%
Off-leash dog parks	11%
Picnic areas or picnic shelters	11%
Beaches	10%
Unpaved, multi-use trails, such as mountain bike trails.	10%
Nature preserves or wildlife watching areas	9%
Tennis, basketball, or volleyball courts	9%
Community gardens	8%
Fresh or saltwater swimming areas	7%
Football, soccer, lacrosse, field hockey or rugby fields	7%
Baseball or softball fields	7%
Canoeing, kayaking, rafting or tubing areas	6%
Nature playgrounds	5%
Historic sites	5%
Overnight camping areas	5%
Ice hockey or skating areas	4%
Fishing or ice fishing areas	4%
Golf courses	3%
Cross-country skiing or snowshoeing trails	2%
Motor boating or sailing areas	2%
Off-road motorcycle and ATV trails	2%
Hunting or trapping areas	1%
Waterskiing and jet skiing areas	1%
Snowmobiling or snow machining trails	1%
Sledding areas	0%
Not sure	20%

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## Middle and High School Students Survey Results

In addition to the phone survey, Insights & Answers distributed and analyzed a survey specifically geared towards middle and high school students. The goal was to identify any differences, or find similarities, in outdoor recreation needs for the younger generation of Massachusetts' residents. A total of 215 students responded to the survey.

The most popular outdoor activities for youth are team activities, such as soccer, football, lacrosse, field hockey, and rugby. Team sports are particularly of interest for boys and younger respondents. Girls also enjoy team sports, but enjoy swimming pools in equal numbers. Teens between the ages of 15 and 18 are just as apt to mention swimming, hiking, and running, jogging or walking as favorite activities. The three most common outdoor activities the participants took place in during the past year were running, jogging, or walking, swimming (any type), and road biking. They would like to increase their participation in running and swimming.

When asked why they participate in outdoor activities, a vast majority of the respondents mention "for fun and enjoyment". At 80%, this is by far and away the most popular response. Fifty-eight percent of respondents participate in outdoor activities "to spend time with friends and family", which is followed closely by "to be outside" at 54%. Girls are more likely than boys to participate in activities with members of their immediate or extended family.

Like adults, students prefer to recreate nearby, or at, their homes. However, many do not have one preferred place to participate in outdoor activities. Also similar to adults, the biggest barrier the students have to participating in outdoor activities more frequently is lack of time. Weather and preferring to use the internet are also cited. The respondents were also asked how their participation could be increased. Providing recreation areas close to home, providing equipment like sports equipment, and providing recreation spaces that are "just for kids my age" were the top three responses.

More beaches and hiking trails should be developed at the youth's local outdoor recreation facilities. The same answer was given for state facilities, with the addition of overnight camping areas. This is similar to what adults were looking for. Overall, both adults and youth in the state are looking to overcome obstacles of lack of time and want more trails and water-based facilities. This shows that, for the most part, regardless of age, outdoor recreation needs are the same.

## Chapter Five — Outdoor Recreation Goals and Objectives

Throughout the SCORP public participation process, the types of outdoor recreation people were currently participating in, what types of facilities are not currently available, but respondents would like to see, and why people were not currently recreating, fell into common themes. These answers can help determine where the next five years of LWCF and other state sources of funding should be geared towards to best provide residents with recreational amenities that they are looking for, as well as to increase their current rate of participation. The goals and objectives for the 2017 SCORP are below.

Reasons for not using facilities Why do you not use outdoor recreational facilities more often than you currently do?

Barrier to use outdoor recreation	Percent mentioning
Not enough time	53%
Other commitments get in the way	16%
Too far away	8%
Facilities and areas are not well maintained	5%
Fees are too expensive	4%
Health Issues	3%
Recreation facilities don't have what I want or need	3%
Safety of facilities	3%
Inadequate parking	3%
Walking access is not attractive or safe	3%
Inadequate transportation options	2%
Lack of disabled access	2%
Recreational equipment is too expensive	1%
Other	10%
None	6%
Don't know	2%

### Goal 1. Access for Underserved Populations

Underserved populations include specific groups that are not generally considered when designing local parks and conservation areas. These populations include people with disabilities, teenagers, and senior citizens. Underserved can also refer to areas of a community that are lacking in outdoor recreation facilities.

While finding the time to recreate can be difficult for anyone, people with disabilities may face a greater challenge than most if

facilities are not designed with their needs in mind or programming is not accessible to them in the first place. People participate in outdoor recreation first and foremost for physical fitness. Having a disability should not prevent someone from using a park or open space to achieve their health goals. As cited above, 11.7% of Massachusetts residents report to have a disability. It is also important to note that people with disabilities are not the only ones affected by the lack of resources for this group — family and friends of people with disabilities may not be able to participate in outdoor recreation if their loved one cannot.

The online recreation user survey demonstrated a need for more programming for other groups of underserved populations as well. When asked if more outdoor recreation programs should be developed for senior citizens, 83% said that it was a very or somewhat important priority. The same question was asked in regards to teenagers and 91% requested additional programming for this group. Ninety-two percent of respondents wanted more programming for people with disabilities.

Objectives:

1. Support the acquisition of land and development of new open spaces in areas that lack existing or useable open spaces, such as Environmental Justice neighborhoods
2. Develop parks and open spaces that offer amenities that go above and beyond ADA requirements for people with disabilities
3. Consider the needs of underserved demographic groups — senior citizens and teenagers — in park and open space designs

**Mass Audubon Accessible Trails Project**

Mass Audubon, New England's largest conservation organization and our largest private conservation landowner, recognizes the importance of making their facilities accessible to everyone, regardless of physical abilities. In 2010, it was awarded a grant from the federal Institute of Museum and Library Services to add multi-sensory interpretive content on existing ADA-accessible nature trails at eight wildlife sanctuaries throughout the Commonwealth. The grant helped Mass Audubon to develop a better experience for visitors of varying vision, hearing, and mobility levels. Improvements to the facilities included audio tours, brailled texts and tactile maps, tour scripts and maps designed for high readability for visually impaired and sighted visitors, new orientation maps and information panels, improved signage along trails, rope/post guiding systems, and wider boardwalks.

The second phase of the Accessible Trails Project began in 2014 when Mass Audubon evaluated the trails and distributed informational materials in order to share with others what had been learned through the first phase of the project. An informational manual that includes best practices was developed with funding assistance from the Institute of Museum and Library Services. The manual will help to facilitate collaborative partnerships that will develop and test materials with volunteer expert users and resource professionals. It can be found online at <https://www.massaudubon.org/get-outdoors/accessibility/accessible-projects-and-partners/accessible-trails-manual>.

**Goal 2. Support the Statewide Trails Initiative**

Trails are important for a number of different reasons. They connect communities. They provide a non-vehicular mode of transit. They improve public health by giving people an active way to get where they are going. They can increase the value of homes and businesses by making an area a more desirable to live or work.

Studies have shown that people that recreate in parks and open spaces with trail amenities tend to participate in endeavors that require a higher level of physical activity. Also, parks and open spaces with trails, paved or unpaved, and wooded areas are seven times more likely to be used for physical activity than those that do not. This can lead to improvements in public health. As the percent of people with obesity increases in the nation, it is critical to provide affordable and fun ways to increase physical activity.

Trails are also the second most requested recreational amenity by survey respondents. The phone survey found that 50.3% of people wanted new or improved hiking trails; paved, multi-use trails, such as rail trails; unpaved, multi-use trails, such as mountain bike trails, cross-country skiing or snowshoeing trails; and snowmobiling trails in state parks and forests. The same types of facilities were requested by 48% of respondents in their community's facilities. The community officials survey cited walking, trails, and hiking as the top three activities that have shown an increase in popularity over the past five to 10 years. The same activities were also expected to show a continuing increase in popularity over the next five years. Twenty-two

percent of respondents said that trails were not currently offered in their communities, but should be.

Objectives:

1. Support the acquisition of land and development of new open spaces that can provide a trail network
2. Fill in the gaps of existing trail networks
3. Ensure that any existing or new trails are fully accessible to people with disabilities

### **Massachusetts Trails Initiative**

Governor Charlie Baker recognizes the importance of greenways and improved trails throughout the Commonwealth. Trails provide for improved mobility, public health, economic development, quality of life, recreation, and public safety benefits. The development of more trails (defined here as a paved multi-use path or an improved, but unpaved trail) to increase the current network of 565 miles, provides an opportunity for multiple state agencies to partner together and strategically invest state and federal resources. A large source of funding for trail projects comes from the Recreational Trails Program (RTP). RTP is a federal funding source administered by DCR. It supports a wide variety of paved and unpaved trails. Since 1996, more than 230 communities have received \$11 million in RTP grants. Demonstrating his commitment to trails, Governor Baker increased the budget for the program to \$1.9 million in Fiscal Year 2018.

Cities and towns are working together with the Commonwealth's environmental, transportation, public health, aging, and economic development agencies to make trail improvements. A goal of the initiative is to look for ways to strengthen the partnership so that it is easier for communities to plan for their trail projects, including land acquisition, design, and trail funding. Communities throughout the Commonwealth recognize how important trail projects are to planning for smart growth by facilitating transportation that does not involve vehicles. The working group will develop a Shared Use Path Design Guide and State Bicycle or Motorized Plan to help improve investments in trails throughout the Commonwealth.

A good example of the economic benefit of greenway trails is along the Charles River. DCR has invested in improvements to the Upper Charles Trail, which led to economic development in Watertown and Waltham. Since 2008, 2,535 housing units worth more than \$250 million and more than 800,000 square feet of commercial space were permitted within a half mile of the river trail. Also, the Town of Wellesley has built 46 miles of biking and hiking trails with a variety of funding sources, including five cross-town trails that provide a comprehensive bicycle/pedestrian network. This includes the Fuller Brook Trail serves multiple purposes as a major sewer line, stormwater retention system, and an improved trail.

### **Goal 3. Increase the Availability of Water-based Recreation**

Protecting water resources serves multiple purposes. It provides people a place to recreate. It protects habitat for plant and animal species that depend on its water quality. It helps to protect our drinking water supplies. When asked what services our state and local parks and open spaces provide, other than outdoor recreation, the top three answers were: protecting wildlife, improving quality of life, and protecting drinking water supply.

Forests are the best source of treatment for public water supplies. The dense canopies and complex soils filter rainfall and non-point source pollution from developed areas. A study of

27 water suppliers by the Trust for Public Land found that for every 10 percent increase in forest cover around the source area, treatment and chemical costs decreased by approximately 20% — up to a 60% reduction for a reservoir with 60% forest cover on its contributing watershed. Forest conservation was one of the key actions that was used by the metropolitan Boston water supplier to avoid the construction of filtration plants that would have cost hundreds of millions of dollars to rate payers.

Water-based recreation was the number one most requested amenity by phone survey respondents when asked what three new or improved facilities should be developed in state parks. Fifty-eight percent requested some type of water amenity, including beaches; outdoor swimming pools or spray parks; fresh or saltwater swimming areas; canoeing, kayaking, rafting, or tubing areas; fishing or ice fishing areas; waterskiing and jet skiing areas; and motor boating or sailing areas. The same types of amenities were requested 59% of the time in local facilities. Communities responding to the online municipal employee survey showed a need for an increase in boating facilities, with 15% saying that no current boating facilities were available, but should be.

Objectives:

1. Support the acquisition of land that will provide for water-based recreation
2. Support the acquisition of land that will increase drinking water supply protection
3. Develop water-based recreational facilities, including swimming areas, spray parks, boating facilities, fishing areas, etc.

#### **Goal 4. Support the Creation and Renovation of Neighborhood Parks**

To ensure the future protection and maintenance of our parks and open spaces, residents must care about them. People will not care if they are not using them. Lack of time was cited by the vast majority of respondents as the reason why they are not participating more frequently in outdoor recreation (53% of respondents in the phone survey — the next highest response was other commitments getting in the way at only 16%). To get more people outside, facilities and amenities should be developed close to where people reside. This can be accomplished through the development of new and improvement of existing neighborhood parks.

When asked why people participate in outdoor recreation, the second most popular response was to be with friends and family (16%). People also said that they liked to be outdoors (8%) and wanted to have fun (6%). Neighborhood parks can satisfy this need. Parks and open spaces provide places for communities to gather, whether it be a family or neighborhood get together. Even in areas of the state where people have larger properties for activities such as gardening, residents are clamoring for common spaces to gather in.

Respondents to the phone survey were interested in improvements to neighborhood park facilities, such as dog parks, playgrounds, and picnic areas. Playgrounds and off-leash dog parks were the second and fifth most requested improvement, respectively, in community facilities. Community gardens, nature playgrounds, and spray parks were also desired at high rates.

Objectives:

1. Promote the development of neighborhood parks where none correctly exist



2. Develop amenities supported by neighborhood parks, such as playgrounds, off-leash dog parks, and community gardens
3. Support the acquisition of land for, and the development of, new neighborhood parks

### **Farmers' Markets and Urban Agriculture**

There are now 245 summer and 47 winter Farmers' Markets across the Commonwealth. This provides local growers an opportunity to sell their own fruits and vegetables to local residents. Many Farmers' Markets also have other locally-made farm products, such as baked goods, jams, maple products, honey, cheese, flowers, eggs, and more. Farmers' Market help to keep farmland as farms as farmers' profits are increased by selling directly to consumers.

The Massachusetts Department of Agricultural Resources (MDAR) launched the Urban Agriculture Program in the fall of 2013, one of the nation's first state-wide programs to support and promote commercial urban farming enterprises. Funding through the program targets infrastructure needs, innovative food production, zoning ordinances, technical assistance, land acquisition, and youth leadership development.

This program is also designed to build community partnerships; the Massachusetts Urban Farming Conference is a key component to strengthening this growing network. Convened by MDAR, in partnership with the Urban Farming Institute and City Growers, this annual, full-day event brings seasoned practitioners and multi-sector experts together with beginning urban farmers and entrepreneurs. The conference addresses our urban food systems, community revitalization, land and policy issues, and best practices for the viability of urban farm enterprises. As MDAR's Urban Agriculture Program grows, urban food production will provide tangible, measurable benefits to residents in urban centers, increasing access to healthy fresh food, improved public health, entrepreneurial opportunities, job training and youth employment, and community revitalization.

## Appendix A — Wetlands Component

SCORPs are required to include a wetlands priority component that is consistent with Section 303 of the Emergency Wetlands Resources Act of 1986. The wetlands priority component must show that the authors of the SCORP consulted with the state agency responsible for fish and wildlife resources, include a list of wetland types given priority status when acquiring land, and discuss outdoor recreation opportunities that utilize wetland resources.

Massachusetts is active in protecting, preserving, and restoring our wetlands. Wetlands work to reduce pollution and flooding while supporting ecosystems and providing cleaner water. Mass Audubon has estimated that fresh and salt water wetlands in Massachusetts provide \$2.3 billion in annual ecosystem service value. For example, the Army Corps of Engineers has estimated that wetlands in the Charles River Watershed prevent \$18 million in flood damage every year.

The filling of wetlands was once a significant issue in Massachusetts. Thankfully, wetlands loss has slowed over the past several decades. The Massachusetts Department of Environmental Protection (MassDEP) and the 351 local Conservation Commissions review thousands of applications annually from parties that wish to work in or near wetlands. This work has helped to protect wetlands from alterations.

The MassDEP continues to work hard to protect Massachusetts wetlands through mapping, permitting, monitoring and assessment, and outreach. In 2005, MassDEP released reliable and extensively field checked GIS-based maps of all wetlands in the Commonwealth based on aerial photography flown between 1990 and 2000. These maps have been used extensively by municipalities, state and federal agencies, non-profits, developers and the general public to plan for avoidance and minimization of wetland impacts. In the Fall of 2017, MassDEP will release the first ever update to these maps based on statewide aerial photos taken in 2005. Concurrent with the release of these maps, MassDEP will release a “Status and Trends” report that summarizes all of the natural and human caused wetland changes that occurred during the timeframe between the original and updated maps, as well as a summary of additional wetland changes and permit data through 2016. The results of the review demonstrate that although there have been individual losses there has also been an overall net gain of wetlands due to human and natural causes.

Additionally, MassDEP has been conducting monitoring and assessment of wetland conditions in accordance with Clean Water Act Section 305(b), and has posted reports on the condition of wetlands in the Chicopee, Northeast, and Central reporting basins on the MassDEP web site (Western MA report will be available in Spring of 2018). These reports can be found under the Wetlands – Monitoring and Assessment Section of the MassDEP web site and contain the following information: 1) Identification of the primary causes of ecological stress to forested wetlands; 2) Tools to help combat sources of stress, including community specific maps identifying key areas where installation of aquatic and/or terrestrial passage structures would help to improve ecological integrity of forested wetlands; 3) community specific important habitat maps prioritizing lands with high ecological integrity for preservation; and 4) Detailed lists of invasive plants documented during sampling and general locations where they were found for management efforts (non-invasive plant species are also documented). Additionally, the reports contain results of site assessments using plant based Indices of Biological Integrity to determine if wetland condition meets expected condition based on the surrounding landscape and documentation and assessment of physical disturbances observed in the field.

Wetland permitting remains robust, with MassDEP reviewing an average of 5,100 permit applications per year between 2012 and 2016, each requiring avoidance, minimization and mitigation of all wetland impacts. Average acreage of wetland loss per year between 2010 and 2012 was 21.1 acres per year, a 15.9 acre per year drop from the 2005-2009 timeframe. MassDEP is currently planning for a new updated wetland loss evaluation and in doing so is evaluating new GIS based feature extraction software that will be needed, since the software used to develop the wetland loss figures through 2012 has become obsolete. However, the wetland loss data, as well as violations identified through other sources have resulted in MassDEP ordering 2.51 acres of wetland restored, and \$152,000 issued in penalties to violators between 2012 and 2016.

Massachusetts' Division of Ecological Restoration (DER), within the Department of Fish and Game, works to restore and protect the Commonwealth's rivers, wetlands, and watersheds for the benefit of people and the environment. DER staff have extensive experience and qualifications in all aspects of river and wetland restoration planning and project management. In addition, DER frequently collaborates with other state and federal agencies that support restoration efforts, including the Division of Marine Fisheries, Division of Fisheries and Wildlife, Office of Coastal Zone Management, DEP, and the state's two National Estuary Programs.

Massachusetts is able to have such a successful restoration program due to strong technical, outreach, and funding partnerships with municipalities, landowners, non-profits, private companies, academic institutions, and government agencies. On average, state investment in restoration leverages three to five times its initial value from non-state sources and delivers important social and environmental benefits to Massachusetts' communities. Restoration funding also supports local and regional economies by generating an average employment demand of 12.5 jobs and \$1,750,000 in total economic output from each \$1 million spent on these projects.

DER has helped partners restore over 1,800 acres of wetlands and remove over 50 dams, opening up 235 river miles across Massachusetts. As of October 2017, over 100 ecological restoration projects have been completed, and over 60 projects are currently in development. Many of the completed project sites are now available for recreation by users across the Commonwealth.

The Department of Conservation and Recreation and DFG, the two state agencies that acquire land for conservation and recreation use, take wetlands into consideration when determining what land to acquire. When considering what parcels to acquire, DCR identifies any wetlands on the site as a resource attribute in its analysis given that they often provide habitat for rare species. Wetlands are also a part of BioMap 2's Core Habitat and Critical Natural Landscape designations, both of which are priority protection areas for DCR. A relatively intact wetland system in a more urbanized environment is critical in maintaining certain natural communities, so is also looked at favorably by DCR land acquisition staff.

DFG has its own method of determining which parcels of land to acquire. Palustrine and estuarine natural communities are given priority status, as are those wetlands that provide habitat for rare species that are dependent upon them. Any land that falls within BioMap 2's Wetland and Aquatic Core Habitats and Wetland and Aquatic Buffers are considered to be important land for acquisition, as is land with certified and potential vernal pool. Wetlands are considered when choosing sites for fishing and boating access as well. Collectively, state, municipal, and non-profit conservation partners have permanently conserved over 325,000 acres since 2000.

## Appendix B — Public Participation

The Division of Conservation Services solicited public input in a variety of ways. Three online surveys were available — one for municipal conservation and recreation providers, one for land trusts, and one for recreational users. The surveys were promoted through including email blasts, newspaper articles, and website postings.

DCS staff attended meetings across the Commonwealth, minutes of which are included below. The findings from these meetings, along with the online and phone surveys results, were used to identify the goals and objectives for this edition of the SCORP.

**Meeting minutes to be added**

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**Appendix C — Executive Summary from Issues & Answers, Inc.  
Phone Survey**

**To be added**

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